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Alameda County
Environmental Health

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**Re: Technical Report for RO#2447
Drive-Sampling, Soil Sampling & Analysis, Grab Groundwater Sampling &
Analysis, and Technical Reporting
50 Hegenberger Loop, Oakland, California.**

INTRODUCTION

At the request of Alameda County Health Care Agency, Environmental Health Services (EHS), The Consulting Group (TCG) prepared a Workplan for this third phase of investigation in June of 2008. This document is the report task for the project, after the fieldwork and laboratory tasks have been completed. Figures 1 and 2 show the location and layout of the site.

SCOPE-OF-WORK PROPOSED

The scope-of-work (SOW) for this third phase of work was:

- Drive-Sampling¹ of three holes (B-4 through B-6²) to a depth of 20 feet below grade (fbg),
- Soil sampling and analysis, and grab groundwater sampling and analysis from each Drive-Sampling holes,
- Analysis for: Gasoline Range Organics (GRO), the aromatics: Benzene, Toluene, Ethyl-Benzene, and Xylenes (BTEX), the Fuel Oxygenates (FOx), and Diesel Range Organics (DRO) and Motor Oil Range Organics (MORO) with Silica Gel,
- Review the Analytical Results and comparison to the Environmental Screening Levels (ESLs),
- Preparation a Technical Report that discusses: tasks performed, outlines observations, draws conclusions, and makes recommendations, as necessary.

¹ Drive-Sampling (D-S) is a term used by TCG and others to describe a technique used in subsurface investigation of soil, and/or water using a rig that advances the drill rod, stem, and sampling tube by a driving action through the soil instead of drilling the soil out. It is used to investigate shallower depths that do not require the construction of monitor wells. It creates far less cuttings that need to be handled and disposed of.

² Hole B-6 was approximately 19.8 fbg (D-S hole began approximately 20 feet south of final depth location at an angle of approximately 45 degrees (see Figures 2 through 5)



SITE BACKGROUND AND SETTING

Borings B1 through B3 were installed in late 2005. Soil samples indicated that GRO, in B3 at 7.5 feet below grade (fbg), was above its Environmental Screening Level (ESL) of 100 milligrams/kilogram (mg/kg) at 600 mg/kg, and that Ethyl-Benzene, in B3 at 7.5 fbg, was above its ESL of 2.3 mg/kg, at 8.3 mg/kg. Grab groundwater samples indicated the presence of GRO ranging from 53 micrograms/liter (ug/L) to 350 mg/L, with its ESL at 100 ug/L. Recommendation was to close the site. In response to 2006 and 2007 EHS requests for additional information to support site closure, supplemental investigations were undertaken that included:

- Boring Logs,
- Water sampling of irrigation well on-site,
- A 2,000-foot County and State well search, and
- More borings, with sampling of soil and groundwater for analysis.

These actions will be the subject of this document.

The site is located in the San Francisco Bay region approximately 0.5 miles east of the San Francisco Bay. The site sits approximately seven feet-above mean sea level (ft-amsl). The land slopes to the west towards the San Francisco Bay.

SITE GEOLOGY AND HYDROGEOLOGY

The site is located on Quaternary Alluvium. The upper 5 to 15 ft generally consist of unconsolidated gravel, sand, silt, and clay. Shallow groundwater in the area is brackish and cannot be used for drinking water. The regional direction of the shallow groundwater flow is towards the San Francisco Bay, but localized groundwater flow direction has been northerly.³

OBJECTIVES

The objective of this work is to obtain data upon which site closure will be completed. The data from these three drive-sample holes will be used in conjunction with previous data and other information available from the site. Typically, those data can include:

- a) Source definition,
- b) Quantity of materials released,
- c) Initial soil and ground water levels of concern,

³ There are no registered wells within two blocks of the site, including the one on-site well. Since there are no registered wells in the area, we are unable to determine or verify groundwater flow direction in the area. The regional flow is to the north-northwest on this side of route 880 according to the ACPWA. We will use their determination along with the fact that the holes will be either in the former tankpit footprint (1) down-gradient (1) of it, or cross-gradient (1).



- d) Mitigation actions taken, including natural attenuation,
- e) Pollutant soil levels now, compared to initial levels obtained from excavation bottoms and stockpiled soil,
- f) Field steps taken to isolate higher pollutant level soil from acceptable pollutant level soil,
- g) Projected future releases or pollutants or lack thereof, and
- h) Assessment and declaration of acceptable risk as a basis for agency approval of closure of this site.

The Drilling, and sampling and analyses were performed in accordance with the attached (Attachment 1) standard operating procedures (SOPs), the American Society of Testing Materials (ASTM), practice standards #E1903, State of California Requirements, Alameda County Public Works Agency (ACPWA), and the Alameda County Health Care Agency, Environmental Health Services (EHS) guidelines. Continuous coring, that is afforded by Drive-Sampling allowed for the viewing of the entire removed drilling core prior to choosing the sample locations.

The rationale for choosing a sample depth was

- The presence of pollution as determined by the field geologist,
- Change in lithology as determined by the field geologist,
- Discoloration with no odor as determined by the field geologist,
- Amount of moisture, using dry, moist, and wet relative interpretations.

SCOPE-OF-WORK PERFORMED

The tasks performed are described below, and the Standard Operating Procedures (SOP) for Sampling of Soil and Groundwater, Liquid Level Gauging, and Sample Labeling and Chain-of-Custody (COC) forms are in Attachment 1.

WORKPLAN AND PERMIT PREPARATION

A Workplan was prepared and submitted, on 04 June 2008, to EHS for review, comment, and approval. After discussions with EHS pertaining to Statement of Work and format, the Workplan was resubmitted by TCG on 18 August 2008, and approved by EHS on 30 October 2008.

As part of the permit application process⁴, TCG completed (Attachment 2):

- An ACPWA soil boring permit application, and
- Paid \$230 for the approved Boring permit.

⁴ The permit application is referred to as a “Boring Permit Application” even though it is for the “Drive-Sampling” technology.



The data quality objectives for this study were used to support the determination of lateral and vertical extent of migration of Chemicals Potential of Concern (COPC). These data were not intended to serve alone as the clearance data that would defend a no further action recommendation. Specific objectives of these data include US EPA, State of California, or local requirements for:

- a. Standard sampling protocol
- b. Standard analytical methods
- c. Standard data reporting

CONCRETE CORE-HOLES

Each drive-sampling location (see Figure 2) required the installation of core-holes. The (6 inch in diameter) concrete core-holes were cut by Precision Sampling, of Richmond, California (Precision), under TCG supervision and guidance.

DRIVE-SAMPLING

The (2 inch in diameter) drive-sample holes were installed by Precision, under TCG supervision and guidance. TCG chose the locations of drive-sampling holes⁵ based on location of the area of concern, discussions with EHS, topography in the immediate vicinity and estimated groundwater flow direction.

DETERMINING BOREHOLE B-6 FINAL LOCATION AND DEPTH

The Borehole B-6 location was drilled to the former tankpit (TP-1) location, which is presently covered by a doublewide mobile office trailer that was not to be moved. To remedy this, TCG designed a slant drilling procedure so that Precision could drill the Borehole at an angle of approximately 45 degrees toward the former TP-1 location starting just south of the mobile office spaces (see Figure 2). The equations used to determine the final location and depth of the Borehole (see Figures 2, 3, 4, and 5) were:

$\sin \theta = \text{opposite/hypotenuse}$, and

$$A^2 + B^2 = C^2.$$

Where:

$$\sin \theta = 45^\circ = 0.7071, \text{ opposite} = X \text{ ft, and Hypotenuse} = 28 \text{ ft}$$

$$0.7071 = X \text{ ft}/28 \text{ ft}$$

$$0.7071 \times 28 = X, \quad X = \mathbf{19.80 \text{ ft}}$$

⁵ All Drive-Sample hole locations and samples collected for analysis were approved by the EHS Site Inspector: Steven Plunkett.



$$A^2 + 19.80^2 = 28.00^2$$

$$A^2 = 784 - 392 = 392 \text{ ft}^2$$

$$A = 19.80 \text{ ft}$$

The final depth was calculated to be 19.80 fbg, and the final horizontal distance of 19.8 fbg was determined to be in the former TP-1 location (Figure 2).

LITHOLOGY

There was concrete at the top of all three holes that was 4 inches thick. Below this was a gravel baserock in a layer of about 4 inches. Once the core-holes in the concrete were in place, Precision was directed to D-S and TCG sampled using the continuous-core (4-ft butyrate liner runs) down to:

- 18 fbg in B-4,
- 20 fbg in B-5, and
- 28 feet at a 45-degree angle in B-6 for a total depth of 19.80 fbg.

The boring logs for all three borings are included in Attachment 2.

BOREHOLE B-4

Borehole B-4 was pushed to a depth of 18 fbg where the drill rig meet refusal. In Borehole B-4 below the baserock layer to about 3 feet 2 inches was green/tan silty clay that was discolored and odorous. Below this to about 7 feet was green clay that was highly plastic. A green layer of sand about 4 inches thick (7 to 7.3 fbg) that was odorous was observed below the clay. The material was moist at about 5 feet and again at about 7.5 feet. Green and black clay that was highly plastic was observed below the sand to a depth of about 11.5 feet. Groundwater was observed at 10.5 fbg. Below the green and black clay was green/gray silty sand from a depth of 11.5 feet to a depth of 12 feet. From 12 feet to 14 fbg feet, a tan/green sand was observed. From 14 to 17.5 fbg a tan/green clayey silt was present. From 17.5 to 18 fbg we observed a tan/green silty clay.

BOREHOLE B-5

Borehole B-5 was pushed to a depth of 20 fbg. In Borehole B-5 below the baserock layer to about 5 feet was green silty sand that was discolored and odorous. The material was moist at about 5 feet. Below the silty sand to about 9 feet was green/black silty clay followed by a green/tan clay that was highly plastic to a depth of around 12 feet. Groundwater was observed at around 10.5 fbg. From 12 feet to 13 feet there was a layer of black silty clay and below this to a depth of 16 feet was a layer of tan/black silty sand. From 16 feet to 19 feet was a layer of tan clayey silt and below the silt to a depth of 20 feet was a layer of silty clay.



BOREHOLE B-6

Borehole B-6 was pushed 28 feet at a 45 degree angle for a total vertical depth of approximately 19.8 fbg (sample drilled approximately 19.80 feet south of final depth location (see Figures 2 through 5). In Borehole B-6 below the baserock layer to about 3 feet of tube was black/green silty clay that was highly plastic. Following the silty clay to about 5 feet of butyrate tube was green/black silty clay mixed with gravel followed by a black/green clayey silt mixed with gravel and sand to 13 feet of tube. After the clayey silt, green/black clay that was highly plastic was observed to 15 feet of butyrate tube followed by green clayey silt of medium plasticity to 17 feet of butyrate tube. Green clayey sand was then observed to 19 feet followed by tan clayey silt to 21 feet of butyrate tube. From 21 to 22 feet of tube green/black gravelly sand was observed. From 22 feet to 24 feet of butyrate tube, tan clayey silt was observed and from 24 feet to 28 feet of tube tan clayey silt mixed with gravel and sand was observed.

SOIL SAMPLING

Soil samples were selected and collected for analysis after reviewing the entire core removed from the hole. The criterion for analyzing a sample was stated above. Soil sample locations and amounts were proposed by TCG and taken only with the approval of Steven Plunkett from the EHS. The original Workplan called for four soil samples from each boring. At the direction of Steven Plunkett from the EHS, TCG collected six soil samples from Borehole B-4, six soil samples from Borehole B-5, and seven Borehole samples from B-6. The soil samples and grab groundwater samples were analyzed for:

- GRO, BTEX, and FOx, and
 - DRO and MORO with SG.
1. In Borehole B-4, TCG collected soil samples at 4 fbg (sample B4-4), 7 fbg (sample B4-7), 10 fbg (sample B4-10), 11.5 fbg (sample B4-11.5), 15 fbg (sample B4-15), and 18 fbg (sample B4-18).
 2. In Borehole B-5, TCG collected soil samples at 4 fbg (sample B5-4), 7 fbg (sample B5-7), 13 fbg (sample B5-13), 15 fbg (sample B5-15), 19 fbg (sample B5-19), and 20 fbg (sample B5-20).
 3. In Borehole B-6, TCG collected soil samples at 1.5 feet of butyrate tube (fbt) [1.06 fbg] (sample B6-1.5), 8 fbt [5.66 fbg] (sample B6-8), 12 fbt [8.49 fbg] (sample B6-12), 16 fbt [11.31 fbg] (sample B6-16), 20 fbt [14.14 fbg] (sample B6-20), 24 fbt [16.97 fbg] (sample B6-24), and 28 fbt [19.80 fbg] (sample B6-28).

The samples were collected in butyrate sample tubing; the tube was cut, using tools that did not heat up the sample or introduce other materials in the 6 inches column of soil that made up a



sample. The sample tube was sealed with Teflon®-lined plastic caps, labeled, and placed on ice until delivery to the state-certified laboratory.

After the soil samples were collected, the open holes were allowed to recharge so that a grab groundwater sample from each hole could be collected. Grab groundwater samples were obtained using two amber 1-liters (extractibles) bottles and six 40-ml VOA vials (volatiles). A disposable bailer was used to obtain the grab groundwater sample that was placed in the appropriate containers and sealed, labeled, and placed on ice until delivery to the state-certified laboratory. The soil and grab groundwater samples were delivered to the laboratory under strict chain-of-custody (COC) procedures. Groundwater was found in each hole at approximately 10.5 fbg.

Cuttings from the D-S were handled as prescribed in SOP 2b (attached), and are on-site pending laboratory results.

The drive-sample holes were grouted after the collection of the grab groundwater samples according to requirements of the permit (Attachment 2) and SOP 2b.

CHEMICAL ANALYSIS

The soil and grab groundwater samples were picked up at the site by a Test America (TA) courier and delivered to their state-certified laboratory in Pleasanton, California. Nineteen soil samples were selected for analysis for DRO, GRO, MORO, BTEX, FOx, and the LUFT metals. The analytical methods employed for soil were the same as those for the grab groundwater samples with the exception of the soil extraction step.

SOIL SAMPLE ANALYSIS

The analytic results are discussed briefly below, tabulated by boring, in Tables 1 through 3, and the laboratory results and COC forms are included in Attachment 3.

Borehole B-4

Sample B4-4

Analytical results indicated that:

For PHCs:

- DRO⁶ was detected at 3.8 milligrams per kilogram (mg/kg) with an Reporting Limit (RL) of 1.0 mg/kg,
- GRO was detected at 0.93 mg/kg with an RL of 1.0 mg/kg, and

⁶ According to client, diesel was never stored on-site either underground or aboveground.



- MORO was ND with an RL of 50 mg/kg,

For aromatics:

- Benzene was ND with an RL of 0.0049 mg/kg,
- Toluene was ND with an RL of 0.0049 mg/kg,
- Ethylbenzene was ND with an RL of 0.0049 mg/kg, and
- Total Xylenes were detected at 0.011 mg/kg with an RL of 0.0099 mg/kg,

For FOx:

- Methyl tert Butyl Ether (MTBE) was ND with an RL of 0.0049 mg/kg,
- tert-Amyl methyl ether (TAME) was ND with an RL of 0.0049 mg/kg,
- Ethyl tert-butyl ether (ETBE) was ND with an RL of 0.0049 mg/kg,
- Di-isopropyl Ether (DIPE) was ND with an RL of 0.0049 mg/kg,
- Tert Butyl Alcohol (TBA) was ND with an RL of 0.0049 mg/kg,
- Ethylene DiBromide (EDB) was ND with an RL of 0.0049 mg/kg, and
- 1,2-Dichloroethane (1,2-DCA) was ND with an RL of 0.0049 mg/kg.

Sample B4-7

Analytical results indicated that:

For PHCs:

- DRO was detected at 26 mg/kg with an RL of 1.0 mg/kg,
- GRO was detected at 270 mg/kg with an RL of 0.96 mg/kg, and
- MORO was ND with an RL of 50 mg/kg.

For Aromatics:

- Benzene was ND with an RL of 0.96 mg/kg,
- Toluene was ND with an RL of 0.96 mg/kg,
- Ethylbenzene was ND with an RL of 0.96 mg/kg, and
- Total Xylenes were ND with an RL of 1.9 mg/kg.

For FOx:

- MTBE was ND with an RL of 0.96 mg/kg,
- TAME was ND with an RL of 0.96 mg/kg,
- ETBE was ND with an RL of 0.96 mg/kg,
- DIPE was ND with an RL of 0.96 mg/kg,
- TBA was ND with an RL of 1.9 mg/kg,
- EDB was ND with an RL of 0.96 mg/kg, and
- 1,2-DCA was ND with an RL of 0.96 mg/kg.



Sample B4-10

Analytical results indicated that:

For PHCs:

- DRO was detected at 1.9 mg/kg with an RL of 1.0 mg/kg,
- GRO was ND with an RL of 0.24 mg/kg, and
- MORO was ND with an RL of 50 mg/kg.

For Aromatics:

- Benzene was ND with an RL of 0.0048 mg/kg,
- Toluene was ND with an RL of 0.96 mg/kg,
- Ethylbenzene was ND with an RL of 0.0048 mg/kg, and
- Total Xylenes were ND with an RL of 0.0096 mg/kg.

For FOx

- MTBE was ND with an RL of 0.0048 mg/kg,
- TAME was ND with an RL of 0.0048 mg/kg,
- ETBE was ND with an RL of 0.0048 mg/kg,
- DIPE was ND with an RL of 0.0048 mg/kg,
- TBA was ND with an RL of 0.0096 mg/kg,
- EDB was ND with an RL of 0.0048 mg/kg, and
- 1,2-DCA was ND with an RL of 0.0048 mg/kg.

Sample B4-11.5

Analytical results indicated that:

For PHCs:

- DRO was detected at 4.1 mg/kg with an RL of 1.0 mg/kg,
- GRO was detected at 21 mg/kg with an RL of 1.2 mg/kg, and
- MORO was ND with an RL of 50 mg/kg.

For Aromatics:

- Benzene was ND with an RL of 0.023 mg/kg,
- Toluene was ND with an RL of 0.023 mg/kg,
- Ethylbenzene was detected at 0.11 mg/kg with an RL of 0.023 mg/kg,
- Total Xylenes were ND with an RL of 0.046 mg/kg, and
- TAME was ND with an RL of 0.023 mg/kg.

For FOx:

- MTBE was ND with an RL of 0.023 mg/kg,
- ETBE was ND with an RL of 0.023 mg/kg,
- DIPE was ND with an RL of 0.023 mg/kg,
- TBA was ND with an RL of 0.046 mg/kg,



- EDB was ND with an RL of 0.023 mg/kg, and
- 1,2-DCA was ND with an RL of 0.023 mg/kg.

Sample B4-15

Analytical results indicated that:

For PHCs:

- DRO was ND with an RL of 1.0 mg/kg,
- GRO was detected at 9.9 mg/kg with an RL of 1.1 mg/kg, and
- MORO was ND with an RL of 50 mg/kg.

For Aromatics:

- Benzene was ND with an RL of 0.022 mg/kg,
- Toluene was ND with an RL of 0.022 mg/kg,
- Ethylbenzene was detected at 0.050 mg/kg with an RL of 0.022 mg/kg, and
- Total Xylenes were ND with an RL of 0.043 mg/kg.

For FOx:

- MTBE was ND with an RL of 0.022 mg/kg,
- TAME was ND with an RL of 0.022 mg/kg,
- ETBE was ND with an RL of 0.022 mg/kg,
- DIPE was ND with an RL of 0.022 mg/kg,
- TBA was ND with an RL of 0.043 mg/kg,
- EDB was ND with an RL of 0.022 mg/kg, and
- 1,2-DCA was ND with an RL of 0.022 mg/kg.

Sample B4-18

Analytical results indicated that:

For PHCs:

- DRO was ND with an RL of 1.0 mg/kg,
- GRO was ND mg/kg with an RL of 0.23 mg/kg,
- MORO was ND with an RL of 50 mg/kg.

For Aromatics:

- Benzene was ND with an RL of 0.0047 mg/kg,
- Toluene was ND with an RL of 0.0047 mg/kg,
- Ethylbenzene was ND with an RL of 0.0047 mg/kg, and
- Total Xylenes were ND with an RL of 0.0093 mg/kg.

For FOx:

- MTBE was ND with an RL of 0.0047 mg/kg,
- TAME was ND with an RL of 0.0047 mg/kg,



- ETBE was ND with an RL of 0.0047 mg/kg,
- DIPE was ND with an RL of 0.0047 mg/kg,
- TBA was ND with an RL of 0.0093 mg/kg,
- EDB was ND with an RL of 0.0047 mg/kg, and
- 1,2-DCA was ND with an RL of 0.0047 mg/kg.

Borehole B-5

Sample B5-4

Analytical results indicated that:

For PHCs:

- DRO was ND with an RL of 1.0 mg/kg,
- GRO was detected at 0.40 mg/kg with an RL of 0.23 mg/kg, and
- MORO was ND with an RL of 50 mg/kg.

For Aromatics:

- Benzene was ND with an RL of 0.0047 mg/kg,
- Toluene was ND with an RL of 0.0047 mg/kg,
- Ethylbenzene was ND with an RL of 0.0047 mg/kg, and
- Total Xylenes were ND with an RL of 0.0094 mg/kg.

For FOx:

- MTBE was ND with an RL of 0.0047 mg/kg,
- TAME was ND with an RL of 0.0047 mg/kg,
- ETBE was ND with an RL of 0.0047 mg/kg,
- DIPE was ND with an RL of 0.0047 mg/kg,
- TBA was ND with an RL of 0.0094 mg/kg,
- EDB was ND with an RL of 0.0047 mg/kg, and
- 1,2-DCA was ND with an RL of 0.0047 mg/kg.

Sample B5-7

Analytical results indicated that:

For PHCs:

- DRO was detected at 2.7 mg/kg with an RL of 1.0 mg/kg,
- GRO was detected at 150 mg/kg with an RL of 50 mg/kg, and
- MORO was ND with an RL of 50 mg/kg.

For Aromatics:

- Benzene was ND with an RL of 0.99 mg/kg,
- Toluene was ND with an RL of 0.99 mg/kg,
- Ethylbenzene was ND with an RL of 0.99 mg/kg, and



- Total Xylenes were ND with an RL of 2.0 mg/kg.

For FOx:

- MTBE was ND with an RL of 0.99 mg/kg,
- TAME was ND with an RL of 0.99 mg/kg,
- ETBE was ND with an RL of 0.99 mg/kg,
- DIPE was ND with an RL of 0.99 mg/kg,
- TBA was ND with an RL of 2.0 mg/kg,
- EDB was ND with an RL of 0.99 mg/kg, and
- 1,2-DCA was ND with an RL of 0.99 mg/kg.

Sample B5-13

Analytical results indicated that:

For PHCs:

- DRO was ND with an RL of 1.0 mg/kg,
- GRO was detected at 0.48 mg/kg with an RL of 0.24 mg/kg, and
- MORO was ND with an RL of 50 mg/kg.

For Aromatics:

- Benzene was ND with an RL of 0.0049 mg/kg,
- Toluene was ND with an RL of 0.0049 mg/kg,
- Ethylbenzene was ND with an RL of 0.0049 mg/kg, and
- Total Xylenes were ND with an RL of 0.0098 mg/kg.

For FOx:

- MTBE was ND with an RL of 0.0049 mg/kg,
- TAME was ND with an RL of 0.0049 mg/kg,
- ETBE was ND with an RL of 0.0049 mg/kg,
- DIPE was ND with an RL of 0.0049 mg/kg,
- TBA was ND with an RL of 0.0098 mg/kg,
- EDB was ND with an RL of 0.0049 mg/kg, and
- 1,2-DCA was ND with an RL of 0.0049 mg/kg.

Sample B5-15

Analytical results indicated that:

For PHCs:

- DRO was detected at 3.1 mg/kg with an RL of 1.0 mg/kg,
- GRO was detected at 220 mg/kg with an RL of 49 mg/kg, and
- MORO was ND with an RL of 50 mg/kg.



For Aromatics:

- Benzene was ND with an RL of 0.99 mg/kg,
- Toluene was ND with an RL of 0.99 mg/kg,
- Ethylbenzene was ND with an RL of 0.99 mg/kg, and
- Total Xylenes were ND with an RL of 2.0 mg/kg.

For FOx:

- MTBE was ND with an RL of 0.99 mg/kg,
- TAME was ND with an RL of 0.99 mg/kg,
- ETBE was ND with an RL of 0.99 mg/kg,
- DIPE was ND with an RL of 0.99 mg/kg,
- TBA was ND with an RL of 2.0 mg/kg,
- EDB was ND with an RL of 0.99 mg/kg, and
- 1,2-DCA was ND with an RL of 0.99 mg/kg.

Sample B5-19

Analytical results indicated that:

For PHCs:

- DRO was detected at 1.4 mg/kg with an RL of 1.0 mg/kg,
- GRO was ND with an RL of 0.24 mg/kg, and
- MORO was ND with an RL of 50 mg/kg.

For Aromatics:

- Benzene was ND with an RL of 0.0048 mg/kg,
- Toluene was ND with an RL of 0.0048 mg/kg,
- Ethylbenzene was ND with an RL of 0.0048 mg/kg, and
- Total Xylenes were ND with an RL of 0.0097 mg/kg.

For FOx:

- MTBE was ND with an RL of 0.0048 mg/kg,
- TAME was ND with an RL of 0.0048 mg/kg,
- ETBE was ND with an RL of 0.0048 mg/kg,
- DIPE was ND with an RL of 0.0048 mg/kg,
- TBA was ND with an RL of 0.0097 mg/kg,
- EDB was ND with an RL of 0.0048 mg/kg, and
- 1,2-DCA was ND with an RL of 0.0048 mg/kg.

Sample B5-20

Analytical results indicated that:

For PHCs:

- DRO was detected at 1.7 mg/kg with an RL of 1.0 mg/kg,



- GRO was ND with an RL of 0.24 mg/kg, and
- MORO was ND with an RL of 50 mg/kg.

For Aromatics:

- Benzene was ND with an RL of 0.0048 mg/kg,
- Toluene was ND with an RL of 0.0048 mg/kg,
- Ethylbenzene was ND with an RL of 0.0048 mg/kg, and
- Total Xylenes were ND with an RL of 0.0097 mg/kg.

For FOx:

- MTBE was ND with an RL of 0.0048 mg/kg,
- TAME was ND with an RL of 0.0048 mg/kg,
- ETBE was ND with an RL of 0.0048 mg/kg,
- DIPE was ND with an RL of 0.0048 mg/kg,
- TBA was ND with an RL of 0.0097 mg/kg,
- EDB was ND with an RL of 0.0048 mg/kg, and
- 1,2-DCA was ND with an RL of 0.0048 mg/kg.

Borehole B-6

Sample B6-1.5

Analytical results indicated that:

For PHCs:

- DRO was detected at 1.9 mg/kg with an RL of 1.0 mg/kg,
- GRO was detected at 0.28 mg/kg with an RL of 0.23 mg/kg, and
- MORO was ND with an RL of 50 mg/kg.

For Aromatics:

- Benzene was ND with an RL of 0.0047 mg/kg,
- Toluene was ND with an RL of 0.0047 mg/kg,
- Ethylbenzene was ND with an RL of 0.0047 mg/kg, and
- Total Xylenes were ND with an RL of 0.0094 mg/kg.

For FOx:

- MTBE was ND with an RL of 0.0047 mg/kg,
- TAME was ND with an RL of 0.0047 mg/kg,
- ETBE was ND with an RL of 0.0047 mg/kg,
- DIPE was ND with an RL of 0.0047 mg/kg,
- TBA was ND with an RL of 0.0094 mg/kg,
- EDB was ND with an RL of 0.0047 mg/kg, and
- 1,2-DCA was ND with an RL of 0.0047 mg/kg.



Sample B6-8

Analytical results indicated that:

For PHCs:

- DRO was detected at 12 mg/kg with an RL of 1.0 mg/kg,
- GRO was detected at 430 mg/kg with an RL of 48 mg/kg, and
- MORO was ND with an RL of 50 mg/kg.

For Aromatics:

- Benzene was ND with an RL of 0.95 mg/kg,
- Toluene was ND with an RL of 0.95 mg/kg,
- Ethylbenzene was ND with an RL of 0.95 mg/kg, and
- Total Xylenes were ND with an RL of 1.9 mg/kg.

For FOx:

- MTBE was ND with an RL of 0.95 mg/kg,
- TAME was ND with an RL of 0.95 mg/kg,
- ETBE was ND with an RL of 0.95 mg/kg,
- DIPE was ND with an RL of 0.95 mg/kg,
- TBA was ND with an RL of 1.9 mg/kg,
- EDB was ND with an RL of 0.95 mg/kg, and
- 1,2-DCA was ND with an RL of 0.95 mg/kg.

Sample B6-12

Analytical results indicated that:

For PHCs:

- DRO was detected at 2.3 mg/kg with an RL of 1.0 mg/kg,
- GRO was detected at 1.3 mg/kg with an RL of 0.24 mg/kg, and
- MORO was ND with an RL of 50 mg/kg.

For Aromatics:

- Benzene was ND with an RL of 0.0048 mg/kg,
- Toluene was ND with an RL of 0.0048 mg/kg,
- Ethylbenzene was ND with an RL of 0.0048 mg/kg, and
- Total Xylenes were ND with an RL of 0.0096 mg/kg.

For FOx:

- MTBE was ND with an RL of 0.0048 mg/kg,
- TAME was ND with an RL of 0.0048 mg/kg,
- ETBE was ND with an RL of 0.0048 mg/kg,
- DIPE was ND with an RL of 0.95 mg/kg,
- TBA was ND with an RL of 0.0095 mg/kg,



- EDB was ND with an RL of 0.0048 mg/kg, and
- 1,2-DCA was ND with an RL of 0.0048 mg/kg.

Sample B6-16

Analytical results indicated that:

For PHCs:

- DRO was detected at 1.1 mg/kg with an RL of 1.0 mg/kg,
- GRO was ND with an RL of 0.24 mg/kg, and
- MORO was ND with an RL of 50 mg/kg.

For Aromatics:

- Benzene was ND with an RL of 0.0048 mg/kg,
- Toluene was ND with an RL of 0.0048 mg/kg,
- Ethylbenzene was ND with an RL of 0.0048 mg/kg, and
- Total Xylenes were ND with an RL of 0.0096 mg/kg.

For FOx:

- MTBE was ND with an RL of 0.0048 mg/kg,
- TAME was ND with an RL of 0.0048 mg/kg,
- ETBE was ND with an RL of 0.0048 mg/kg,
- DIPE was ND with an RL of 0.0048 mg/kg,
- TBA was ND with an RL of 0.0096 mg/kg,
- EDB was ND with an RL of 0.0048 mg/kg, and
- 1,2-DCA was ND with an RL of 0.0048 mg/kg.

Sample B6-20

Analytical results indicated that:

For PHCs:

- DRO was detected at 2.2 mg/kg with an RL of 1.0 mg/kg,
- GRO was ND with an RL of 0.24 mg/kg, and
- MORO was ND with an RL of 50 mg/kg.

For Aromatics:

- Benzene was ND with an RL of 0.0047 mg/kg,
- Toluene was ND with an RL of 0.0047 mg/kg,
- Ethylbenzene was ND with an RL of 0.0047 mg/kg, and
- Total Xylenes were ND with an RL of 0.0095 mg/kg.

For FOx:

- MTBE was ND with an RL of 0.0047 mg/kg,
- TAME was ND with an RL of 0.0047 mg/kg,



- ETBE was ND with an RL of 0.0047 mg/kg,
- DIPE was ND with an RL of 0.0047 mg/kg,
- TBA was ND with an RL of 0.0095 mg/kg,
- EDB was ND with an RL of 0.0047 mg/kg, and
- 1,2-DCA was ND with an RL of 0.0047 mg/kg.

Sample B6-24

Analytical results indicated that:

For PHCs:

- DRO was ND with an RL of 1.0 mg/kg,
- GRO was ND with an RL of 0.24 mg/kg, and
- MORO was ND with an RL of 50 mg/kg.

For Aromatics:

- Benzene was ND with an RL of 0.0047 mg/kg,
- Toluene was ND with an RL of 0.0048 mg/kg,
- Ethylbenzene was ND with an RL of 0.0048 mg/kg, and
- Total Xylenes were ND with an RL of 0.0096 mg/kg.

For FOx:

- MTBE was ND with an RL of 0.0048 mg/kg,
- TAME was ND with an RL of 0.0048 mg/kg,
- ETBE was ND with an RL of 0.0048 mg/kg,
- DIPE was ND with an RL of 0.0048 mg/kg,
- TBA was ND with an RL of 0.0096 mg/kg,
- EDB was ND with an RL of 0.0048 mg/kg, and
- 1,2-DCA was ND with an RL of 0.0048 mg/kg.

Sample B6-28

Analytical results indicated that:

For PHCs:

- DRO was ND with an RL of 1.0 mg/kg,
- GRO was ND with an RL of 0.25 mg/kg, and
- MORO was ND with an RL of 50 mg/kg.

For Aromatics:

- Benzene was ND with an RL of 0.0049 mg/kg,
- Toluene was ND with an RL of 0.0049 mg/kg,
- Ethylbenzene was ND with an RL of 0.0049 mg/kg, and
- Total Xylenes were ND with an RL of 0.0099 mg/kg.



For FOx:

- MTBE was ND with an RL of 0.0049 mg/kg,
- TAME was ND with an RL of 0.0049 mg/kg,
- ETBE was ND with an RL of 0.0049 mg/kg,
- DIPE was ND with an RL of 0.0049 mg/kg,
- TBA was ND with an RL of 0.0099 mg/kg,
- EDB was ND with an RL of 0.0049 mg/kg, and
- 1,2-DCA was ND with an RL of 0.0049 mg/kg.

GRAB GROUNDWATER SAMPLE ANALYSIS

The analytic results are discussed briefly below, tabulated, by boring, in Tables 1 through 3, and the laboratory results and COC forms are included in Attachment 3.

Borehole B-4 Groundwater (sample B4-W)

Analytical results indicated that:

For PHCs:

- DRO was detected at 340 micrograms per Liter (ug/L) with an RL of 50 ug/L,
- GRO was detected at 1200 ug/L with an RL of 50 ug/L, and
- MORO was ND with an RL of 500 ug/L.

For Aromatics:

- Benzene was detected at 4.0 ug/L with an RL of 0.50 ug/L,
- Toluene was ND with an RL of 0.50 ug/L,
- Ethylbenzene was detected at 28 ug/L with an RL of 0.50 ug/L, and
- Total Xylenes were detected at 1.5 ug/L with an RL of 1.0 ug/L.

For FOx:

- MTBE was ND with an RL of 0.50 ug/L,
- TAME was ND with an RL of 0.50 ug/L,
- ETBE was ND with an RL of 0.50 ug/L,
- DIPE was ND with an RL of 1.0 ug/L,
- TBA was ND with an RL of 5.0 ug/L,
- EDB was ND with an RL of 0.50 ug/L, and
- 1,2-DCA was ND with an RL of 0.50 ug/L.

Borehole B-5 Groundwater (sample B5-W)

Analytical results indicated that:

For PHCs:

- DRO was detected at 560 ug/L with an RL of 50 ug/L,
- GRO was detected at 4600 ug/L with an RL of 50 ug/L, and



- MORO was ND with an RL of 500 ug/L.

For Aromatics:

- Benzene was ND with an RL of 0.50 ug/L,
- Toluene was detected at 0.90 ug/L with an RL of 0.50 ug/L,
- Ethylbenzene was detected at 1.6 ug/L with an RL of 0.50 ug/L, and
- Total Xylenes were detected at 1.8 ug/L with an RL of 1.0 ug/L.

For FOx:

- MTBE was ND with an RL of 0.50 ug/L,
- TAME was ND with an RL of 0.50 ug/L,
- ETBE was ND with an RL of 0.50 ug/L,
- DIPE was ND with an RL of 1.0 ug/L,
- TBA was ND with an RL of 5.0 ug/L,
- EDB was ND with an RL of 0.50 ug/L, and
- 1,2-DCA was ND with an RL of 0.50 ug/L.

Borehole B-6 Groundwater (sample B6-W)

Analytical results indicated that:

For PHCs:

- DRO was detected at 250 ug/L with an RL of 50 ug/L,
- GRO was detected at 360 ug/L with an RL of 50 ug/L, and
- MORO was ND with an RL of 500 ug/L.

For Aromatics:

- Benzene was ND with an RL of 0.50 ug/L,
- Toluene was ND with an RL of 0.50 ug/L,
- Ethylbenzene was detected at 0.6 ug/L with an RL of 0.50 ug/L, and
- Total Xylenes were ND with an RL of 1.0 ug/L.

For FOx:

- MTBE was ND with an RL of 0.50 ug/L,
- TAME was ND with an RL of 0.50 ug/L,
- ETBE was ND with an RL of 0.50 ug/L,
- DIPE was ND with an RL of 1.0 ug/L,
- TBA was ND with an RL of 5.0 ug/L,
- EDB was ND with an RL of 0.50 ug/L, and
- 1,2-DCA was ND with an RL of 0.50 ug/L.



OBSERVATIONS, CONCLUSIONS, AND RECOMMENDATIONS

OBSERVATIONS

SOIL ISSUES

GRO, DRO⁷, Ethylbenzene, Xylenes, and MTBE were found in the soil samples. The residential soil ESL (rESL) for DRO and GRO is 83 mg/kg, the rESL for Ethylbenzene is 2.3 mg/kg, the rESL for total Xylenes is 2.3 mg/kg, and the rESL for MTBE is 0.023 mg/kg. Figures 6 through 8 illustrate the relationship between all six boreholes installed between 2005 and 2008. Figure 6 shows the plan view and cross-section line, Figure 7 illustrates the GRO contours in the soil, and Figure 8 illustrates the sample locations and results for GRO.

BOREHOLE B-4

GRO was detected above the rESL in sample B4-7 at 270 mg/kg. All other compounds were ND or below their rESLs in all other analysis at this depth and subsequent depths in this boring.

BOREHOLE B-5

GRO was detected above the rESL in sample B5-7 at 150 mg/kg, and in sample B5-15 at 220 mg/kg. All other compounds were ND or below their rESLs in all other analysis at these two depths and subsequent depths in this boring.

BOREHOLE B-6

GRO was detected above the rESL in sample B6-8 [5.66 fbg] at 430 mg/kg. All other compounds were ND or below their rESLs in all other analysis at this depth and subsequent depths in this boring.

GROUNDWATER ISSUES

GRO, DRO, Benzene, Ethylbenzene, and Xylenes, were found in the grab groundwater samples. The groundwater ESL (gwESL) for DRO and GRO is 100 ug/L, the gwESL for Benzene is 1.0 ug/L, the gwESL for Ethylbenzene is 30 ug/L, and the gwESL for total Xylenes is 20 ug/L. Figures 9 and 10 illustrate all six boreholes and their grab groundwater results for GRO. Figure 9 illustrates the borehole positions and GRO results, while Figure 10 shows the GRO results in cross-section. Figures 11 and 12 illustrate the recent three boreholes and their grab groundwater results for DRO. Figure 11 illustrates the borehole positions and DRO results, while Figure 12 shows the DRO results in cross-section.

⁷ According to the client, diesel was never stored on-site either underground or aboveground.



SAMPLE B4-W

DRO was detected above the gwESL at 340 ug/L, GRO was detected above the gwESL at 1200 ug/L, and Benzene was detected above the gwESL at 4.0 ug/L. All other compounds were ND or below their gwESLs.

SAMPLE B5-W

DRO was detected above the gwESL at 560 ug/L, and GRO was detected above the gwESL at 4600 ug/L. All other compounds were ND or below their gwESLs.

SAMPLE B6-W

DRO was detected above the gwESL at 250 ug/L, and GRO was detected above the gwESL at 360 ug/L. All other compounds were ND or below their gwESLs.

CONCLUSIONS

While some of the results from specific samples, directed by EHS for analysis, were numerically above groundwater ESL, the Agency clearly understands that groundwater results taken by “grab samples” from a soil sampling hole are used only as indicators and can not be used as a definitive finding of groundwater quality. The drive-sampling technique by definition pushes into the soil smearing organic containing clays and silts deeper into the hole and there is no sand pack or well volume purging, etc. to allow sampling of formation water. Overall, the soil did not show contamination greater than the results that were seen in 2005 and do not rise to the concentration needed to create the groundwater contamination seen. As for groundwater, the highest detections were on the western side of the study area in borings B4 and B5. The B6 results were consistent with B3 from 2005. These “grab samples” should be considered in the context that several orders of magnitude pollutant concentrations were not documented and other source contributors should be considered due to the locations of these samples⁸.

SOIL

The only compound found in the soil above its rESL is GRO. It was detected above the rESL at 7 fbg in B4, 7 fbg and 15 fbg in B5, and 5.66 fbg in B6. The soil from the vicinity of Tankpit #1 (TP#1) indicated exactly what we suggested it would “ND” below 11 fbg. In fact, the only detection in B6 that was above its rESL was at 5.66 fbg, which is not within TP#1.

There are sporadic detections of GRO in B3, B4, B5, and B6, but other than the 15-fbg detection in B5, all the detections of concern are above 7.5 fbg.

⁸ Since diesel was not stored on-site, its origin needs to be determined as it came from off-site, and may have brought other pollutants with it.



GROUNDWATER

DRO and GRO were detected in groundwater above their gwESLs in all three borings. Benzene was detected above its gwESL in groundwater from B4, but not B5 or B6. No other compounds were detected above their gwESLs in B4, B5, or B6.

The highest detections of GRO in groundwater occur on the western side of the study area, and they are lower as you move east in the study area. This indicates that something other than the two tankpits along the eastern side of the study area are a contributory source to the contamination found in the groundwater.

These data are offered to EHS to be considered in their soil and groundwater investigations on the parcels to the west or south of this property. The groundwater flow direction can only be a qualified assumption, based on ACPWA discussions with TCG. Tidal influence affects are known to affect groundwater flow directions at these elevations around SF Bay and these directions may change seasonally. The TCG assumption was: groundwater flows northerly, but 0.9 miles (4920 ft) to the west is the inner harbor and 0.15 miles (798 ft) to the south is the canal/stream that runs into the inner harbor. Both of these are considered by TCG as potential influences on localized groundwater flow direction.

RECOMMENDATIONS

The two tankpits could have been contributors to groundwater pollution in the past, but approved remedial actions have been taken such as tank removal, and the amount of soil pollution detected on-site between 2005 and 2008 is not sufficient to be the only contributor to the groundwater pollution detected (recognizing the water quality limitations of the recent “grab samples”).

With this in mind, site closure is justified due to:

1. Source on-site has been removed,
2. Natural-degradation of these petroleum-based compounds has been shown to work at sites in the Bay Area and has been recommended for sites of low-risk⁹,
3. This is a low risk site as the shallow groundwater is brackish and cannot be used for drinking water
4. The area has been capped (a routinely approved site mitigation tool) with a barrier (concrete) thereby retarding the percolation of surface water from rainfall,
5. When you consider the beneficial uses of this water: Agriculture is not to be supported by this small volume of water; marine life is likely not to be harmed due to the concentrations and soil pathway to the Bay, or as drinking water, it is restricted by sanitary and treatment regulatory requirements, and

⁹ LLNL Reports, 1995.



6. Therefore, a rational interpretation for the protection of beneficial uses of waters of the State has been stated by others in Senate Bill 1764 Advisory Committee Recommendations Report¹⁰ which would urge closure to allow Agency resources to be directed higher risk sites.

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CERTIFICATION AND LIMITATION

This report has been prepared by the staff of The Consulting Group (TCG) under the supervision of our registered engineer whose stamp and signature appear below.

This report has been prepared by TCG for the exclusive use of TCG and W. E. Lyons (client) and not for use by any other party. Any use by a third party of any of the information contained in this report shall be at their own risk and shall constitute a release and an agreement to defend and indemnify TCG from and against any and all liability in connection therewith whether arising out of TCG's negligence or otherwise.



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The results and findings contained in this report are based on certain information from sources outside the control of TCG. While exercising all reasonable diligence in the acceptance and use of information provided, TCG does not warrant or guarantee the accuracy thereof. The report was developed specifically for this project (50 Hegenberger Loop, Oakland, California) and should not be used for any other site.

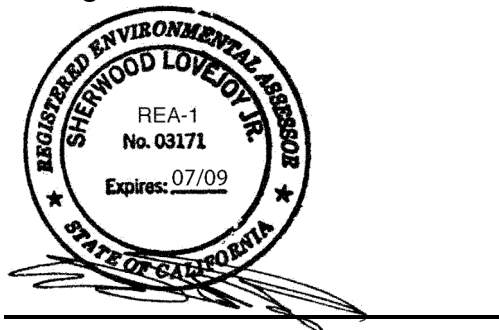
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TCG appreciates this opportunity to be of service to you and looks forward to working with you on this project. Please feel free to contact us at **415.381.2560** regarding any questions you may have concerning this proposal.

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TABLES

TABLE 1 - LUFT METALS AND PETROLEUM HYDROCARBONS ANALYTICAL RESULTS-Boring B4
Soil & Grab Groundwater Sampling and Analysis
Closure Program, 50 Hegenberger Loop, Oakland, California
TCGProject #085101

	Sample #						
	B4-4	B4-7	B4-10	B4-11.5	B4-15	B4-18	B4-W
Date	30-Dec-08	30-Dec-08	30-Dec-08	30-Dec-08	30-Dec-08	30-Dec-08	12/31/08
Depth (ft)	4.00	7.00	10.00	11.50	15.00	18.00	N/A
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Water
Constituent							
	Petroleum Hydrocarbons (mg/kg - soil) (ug/L - water)						
GRO	0.93	270	ND(0.24)	21	9.9	ND(0.23)	1200
DRO	130	26	1.9	4.1	ND(1)	ND(1)	340
MORO	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(500)
Oil & Grease	NA	NA	NA	NA	NA	NA	NA
	Aromatics & Fuel Oxygenates (mg/kg - soil) (ug/L - water)						
Benzene	ND(0.0049)	ND(0.96)	ND(0.0048)	ND(0.023)	ND(0.022)	ND(0.0047)	4
Toluene	ND(0.0049)	ND(0.96)	ND(0.0048)	ND(0.023)	ND(0.022)	ND(0.0047)	ND(0.5)
Ethyl-benzene	ND(0.0049)	ND(0.96)	ND(0.0048)	0.11	0.05	ND(0.0047)	28
Total Xylenes	0.011	ND(1.9)	ND(0.0096)	ND(0.046)	ND(0.043)	ND(0.0093)	1.5
Methyl tert-Butyl Ether (MTBE)	ND(0.0049)	ND(0.96)	ND(0.0048)	ND(0.023)	ND(0.022)	ND(0.0047)	ND(0.5)
tert-Butyl Alcohol (TBA)	ND(0.0099)	ND(1.9)	ND(0.0096)	ND(0.046)	ND(0.043)	ND(0.0093)	ND(5)
Di-isopropyl Ether (DIPE)	ND(0.0049)	ND(0.96)	ND(0.0048)	ND(0.023)	ND(0.022)	ND(0.0047)	ND(1)
Ethyl tert-Butyl Ether (ETBE)	ND(0.0049)	ND(0.96)	ND(0.0048)	ND(0.023)	ND(0.022)	ND(0.0047)	ND(0.5)
tert-Amyl methyl ether (TAME)	ND(0.0049)	ND(0.96)	ND(0.0048)	ND(0.023)	ND(0.022)	ND(0.0047)	ND(0.5)
1,2-DCA	ND(0.0049)	ND(0.96)	ND(0.0048)	ND(0.023)	ND(0.022)	ND(0.0047)	ND(0.5)
EDB	ND(0.0049)	ND(0.96)	ND(0.0048)	ND(0.023)	ND(0.022)	ND(0.0047)	ND(0.5)

Notes:

D-1 = sample designation
 ND = not detected (method detection limit)
 Results in milligrams per kilogram (mg/kg)
 NA = not analyzed
Bold = detection
Bold Italics = >ESL

TABLE 2 - LUFT METALS AND PETROLEUM HYDROCARBONS ANALYTICAL RESULTS-Boring B5
Soil & Grab Groundwater Sampling and Analysis
Closure Program, 50 Hegenberger Loop, Oakland, California
TCGProject #085101

	Sample #						
	B5-4	B5-7	B5-13	B5-15	B5-19	B5-20	B5-W
Date	12/30/08	12/30/08	12/30/08	12/30/08	12/30/08	12/30/08	31-Dec-08
Depth (ft)	4	7	13	15	19	20	N/A
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Water
Constituent	Petroleum Hydrocarbons (mg/kg - soil) (ug/L - water)						
GRO	0.4	150	0.48	220	ND(0.24)	ND(0.24)	4600
DRO	ND(1)	2.7	ND(1)	3.1	1.4	1.7	560
MORO	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(500)
Oil & Grease			NA	NA	NA	NA	NA
	Aromatics & Fuel Oxygenates (mg/kg - soil) (ug/L - water)						
Benzene	ND(0.0047)	ND(0.99)	ND(0.0049)	ND(0.99)	ND(0.0048)	ND(0.0048)	ND(0.5)
Toluene	ND(0.0047)	ND(0.99)	ND(0.0049)	ND(0.99)	ND(0.0048)	ND(0.0048)	0.9
Ethyl-benzene	ND(0.0047)	ND(0.99)	ND(0.0049)	ND(0.99)	ND(0.0048)	ND(0.0048)	1.6
Total Xylenes	ND(0.0094)	ND(2)	ND(0.0098)	ND(2)	ND(0.0097)	ND(0.0097)	1.8
Methyl tert-Butyl Ether (MTBE)	ND(0.0047)	ND(0.99)	ND(0.0049)	ND(0.99)	ND(0.0048)	ND(0.0048)	ND(0.5)
tert-Butyl Alcohol (TBA)	ND(0.0094)	ND(2)	ND(0.0098)	ND(2)	ND(0.0097)	ND(0.0097)	ND(5)
Di-isopropyl Ether (DIPE)	ND(0.0047)	ND(0.99)	ND(0.0049)	ND(0.99)	ND(0.0048)	ND(0.0048)	ND(1)
Ethyl tert-Butyl Ether (ETBE)	ND(0.0047)	ND(0.99)	ND(0.0049)	ND(0.99)	ND(0.0048)	ND(0.0048)	ND(0.5)
tert-Amyl methyl ether (TAME)	ND(0.0047)	ND(0.99)	ND(0.0049)	ND(0.99)	ND(0.0048)	ND(0.0048)	ND(0.5)
1,2-DCA	ND(0.0047)	ND(0.99)	ND(0.0049)	ND(0.99)	ND(0.0048)	ND(0.0048)	ND(0.5)
EDB	ND(0.0047)	ND(0.99)	ND(0.0049)	ND(0.99)	ND(0.0048)	ND(0.0048)	ND(0.5)

Notes:

W-1 = sample designation
 ND = not detected (method detection limit)
 Results in micrograms per liter (ug/L)
 NA = not analyzed
 N/A = not applicable
Bold = detection
Bold Italics = >ESL

TABLE 3 - LUFT METALS AND PETROLEUM HYDROCARBONS ANALYTICAL RESULTS-Boring B6
Soil & Grab Groundwater Sampling and Analysis
Closure Program, 50 Hegenberger Loop, Oakland, California
TCGProject #085101

	Sample #							
	B6-1.5	B6-8	B6-12	B6-16	B6-20	B6-24	B6-28	B6-W
Date	30-Dec-08	30-Dec-08	30-Dec-08	30-Dec-08	31-Dec-08	31-Dec-08	31-Dec-08	31-Dec-08
Depth (ft)	1.06	5.66	8.49	11.31	14.14	16.97	19.8	N/A
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Water
Constituent	Petroleum Hydrocarbons (mg/kg - soil) (ug/L - water)							
GRO	0.28	430	1.3	ND(0.24)	ND(0.24)	ND(0.24)	ND(0.25)	360
DRO	1.9	12	2.3	1.1	2.2	ND(1)	ND(1)	250
MORO	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(500)
Oil & Grease	NA	NA	NA	NA	NA	NA	NA	NA
	Aromatics & Fuel Oxygenates (mg/kg - soil) (ug/L - water)							
Benzene	ND(0.0047)	ND(0.95)	ND(0.0048)	ND(0.0048)	ND(0.0047)	ND(0.0048)	ND(0.0049)	ND(0.5)
Toluene	ND(0.0047)	ND(0.95)	ND(0.0048)	ND(0.0048)	ND(0.0047)	ND(0.0048)	ND(0.0049)	ND(0.5)
Ethyl-benzene	ND(0.0047)	ND(0.95)	ND(0.0048)	ND(0.0048)	ND(0.0047)	ND(0.0048)	ND(0.0049)	0.6
Total Xylenes	ND(0.0094)	ND(1.9)	ND(0.0095)	ND(0.0096)	ND(0.0095)	ND(0.0096)	ND(0.0099)	ND(1)
Methyl tert-Butyl Ether (MTBE)	ND(0.0047)	ND(0.95)	ND(0.0048)	ND(0.0048)	ND(0.0047)	ND(0.0048)	ND(0.0049)	ND(0.5)
tert-Butyl Alcohol (TBA)	ND(0.0094)	ND(1.9)	ND(0.0095)	ND(0.0096)	ND(0.0095)	ND(0.0096)	ND(0.0099)	ND(5)
Di-isopropyl Ether (DIPE)	ND(0.0047)	ND(0.95)	ND(0.0048)	ND(0.0048)	ND(0.0047)	ND(0.0048)	ND(0.0049)	ND(1)
Ethyl tert-Butyl Ether (ETBE)	ND(0.0047)	ND(0.95)	ND(0.0048)	ND(0.0048)	ND(0.0047)	ND(0.0048)	ND(0.0049)	ND(0.5)
tert-Amyl methyl ether (TAME)	ND(0.0047)	ND(0.95)	ND(0.0048)	ND(0.0048)	ND(0.0047)	ND(0.0048)	ND(0.0049)	ND(0.5)
1,2-DCA	ND(0.0047)	ND(0.95)	ND(0.0048)	ND(0.0048)	ND(0.0047)	ND(0.0048)	ND(0.0049)	ND(0.5)
EDB	ND(0.0047)	ND(0.95)	ND(0.0048)	ND(0.0048)	ND(0.0047)	ND(0.0048)	ND(0.0049)	ND(0.5)

Notes:
2EX-1 = sample designation
ND = not detected (method detection limit)
Results in milligrams per kilogram (mg/kg)
NA = not analyzed
Bold = detection
Bold Italics = >ESL



FIGURES



Work Area
15.11 mi



Work Area
1201 ft



Work Area
5138 ft



THE CONSULTING GROUP
394 Cecilia Way, Tiburon, CA 94920
Tel: 415.381.2560 / Fax: 415.381.1741

Job No.	085101
Date	27 May 2008
Drawn by	RC
Rev SL	Apprvd SL

50 Hegenburger Loop Oakland, CA.
Site Location

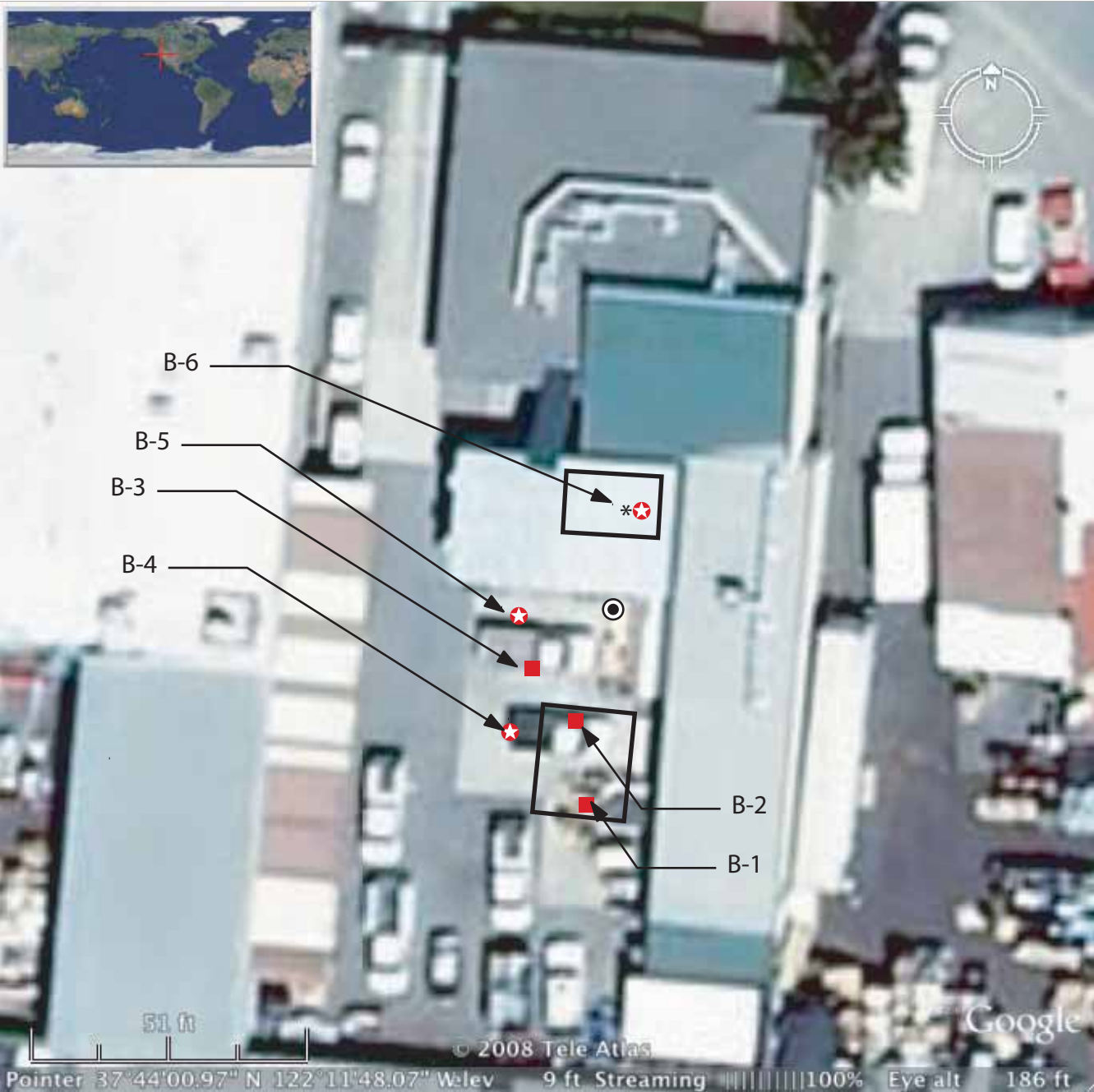
for: W.E. Lyons Construction
50 Hegenburger Loop, Oakland CA.

Project



Figure

1



- ⊙ = Entry point for Borehole B-6 (dug @ 45 degree angle)
- * = Final location for Borehole B-6 @ a depth of 19.8 feet below grade
- ★ = Borehole dug 12/30/08 and 12/31/08
- = Borehole dug 12/6/05

THE CONSULTING GROUP
 394 Cecilia Way, Tiburon, CA 94920
 Tel: 415.381.2560 / Fax: 415.381.1741

Job No.	085101
Date	15 Jan 2009
Drawn by	RC
Rev	SL
Apprvd	SL

50 Hegenburger Loop Oakland, CA.
Site Location with Boring Locations
 for: W.E. Lyons Construction
 50 Hegenburger Loop, Oakland CA.

Project



Figure

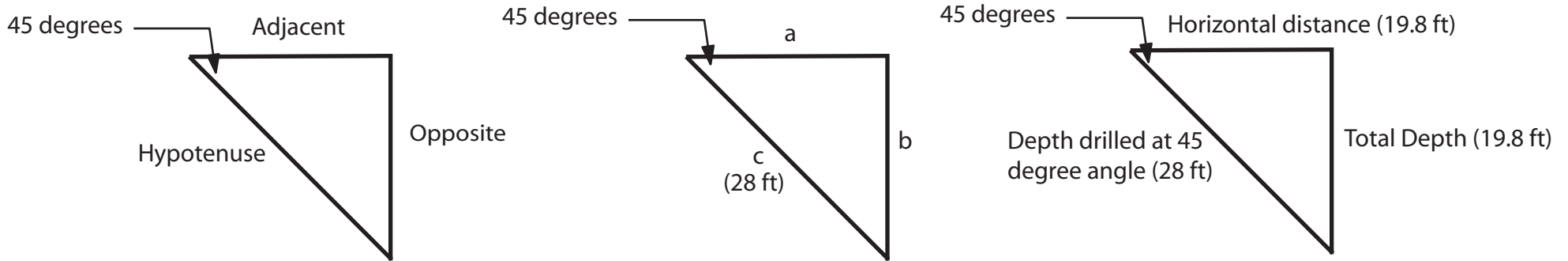
2



45 degree angle

Determining Final Depth and Location of Borehole B-6

In order to determine the final depth and location of B-6, TCG used the following equations: Sine of the angle is equal to the Opposite over the Adjacent and $a^2 + b^2 = c^2$. In this case B-6 was drilled at a 45 degree angle for 28 feet. Using the first equation and the fact the Sine of 45 degrees is = to 0.707 and the depth at this angle was drilled 28 feet, we determined the total depth to be 19.8 feet. Using this answer and the second equation we determined the horizontal distance from the drill point to be 19.8 feet.



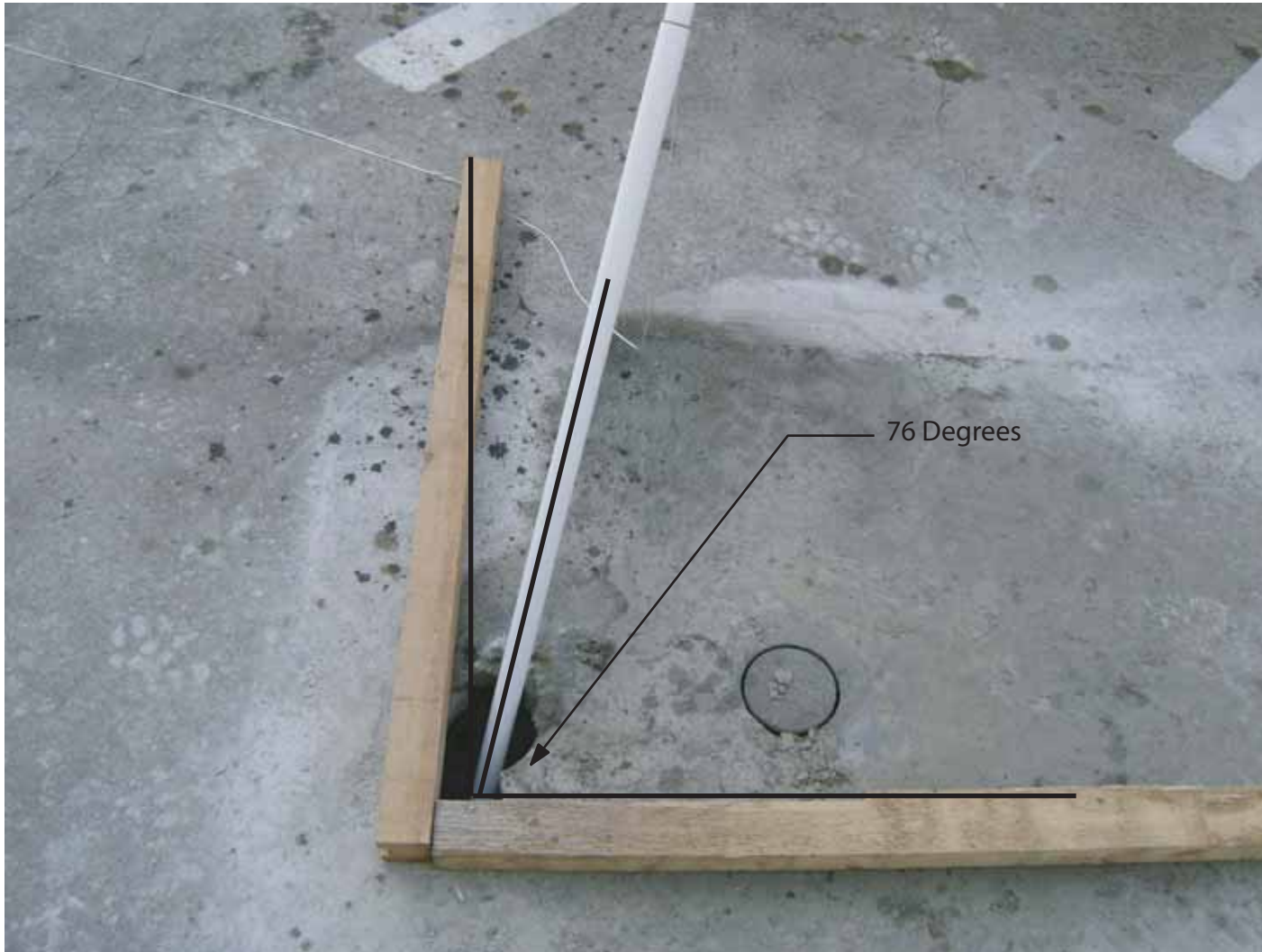
THE CONSULTING GROUP
 394 Cecilia Way, Tiburon, CA 94920
 Tel: 415.381.2560 / Fax: 415.381.1741

Job No.	085101
Date	15 Jan 2009
Drawn by	RC
Rev	SL
Apprvd	SL

50 Hegenburger Loop Oakland, CA.
Determining Final Depth and Location for B-6
 for: W.E. Lyons Construction
 50 Hegenburger Loop, Oakland CA.



Project
 Figure
3



Determining the horizontal angle from the entry point for Borehole B-6.



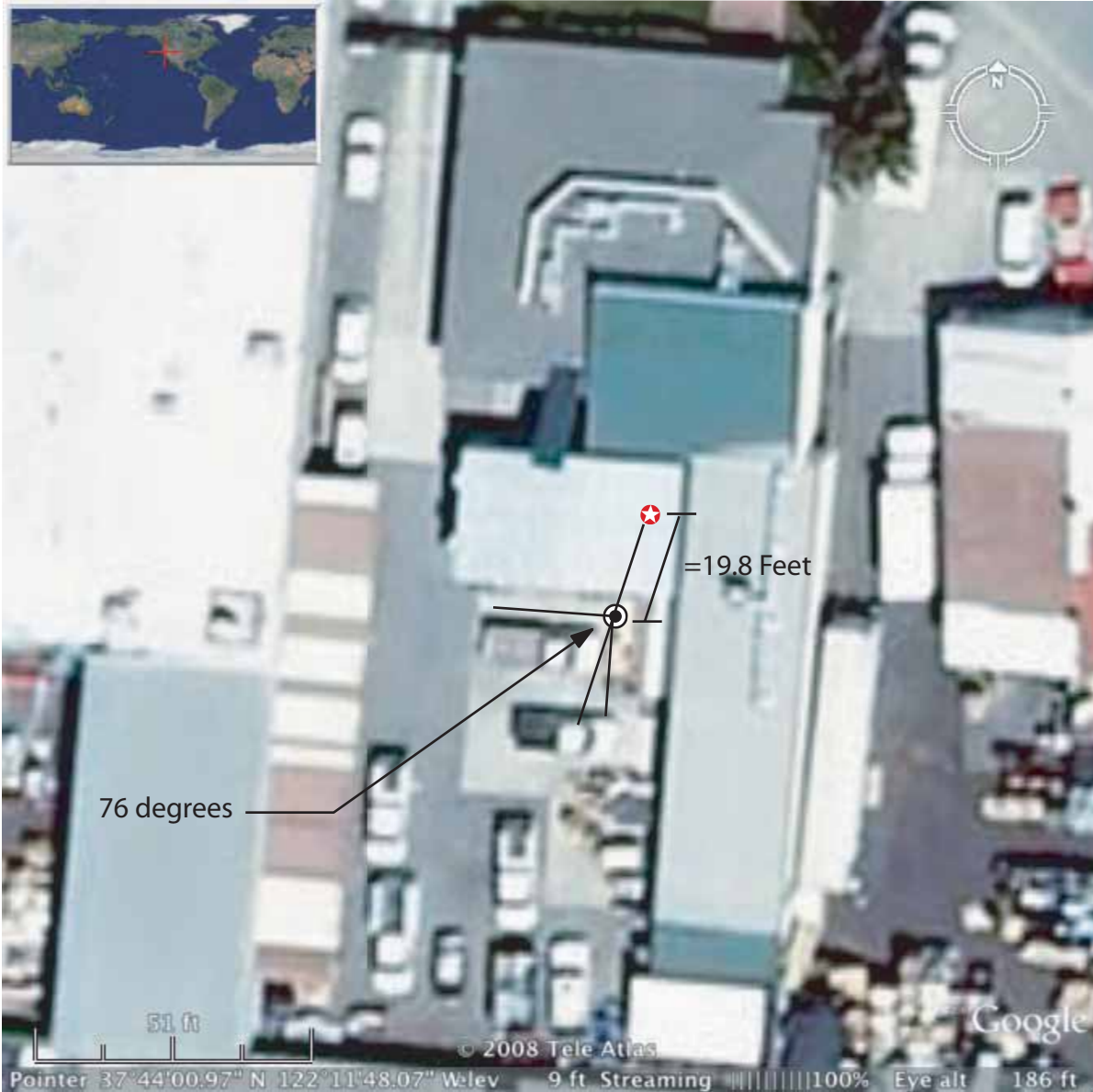
THE CONSULTING GROUP
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Job No.	085101
Date	15 Jan 2009
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50 Hegenburger Loop Oakland, CA.
Determining B-6 Location
 Project
 for: W.E. Lyons Construction
 50 Hegenburger Loop, Oakland CA.



Figure
4



★ = Final location for Borehole B-6 @ final depth of 19.8 feet below grade



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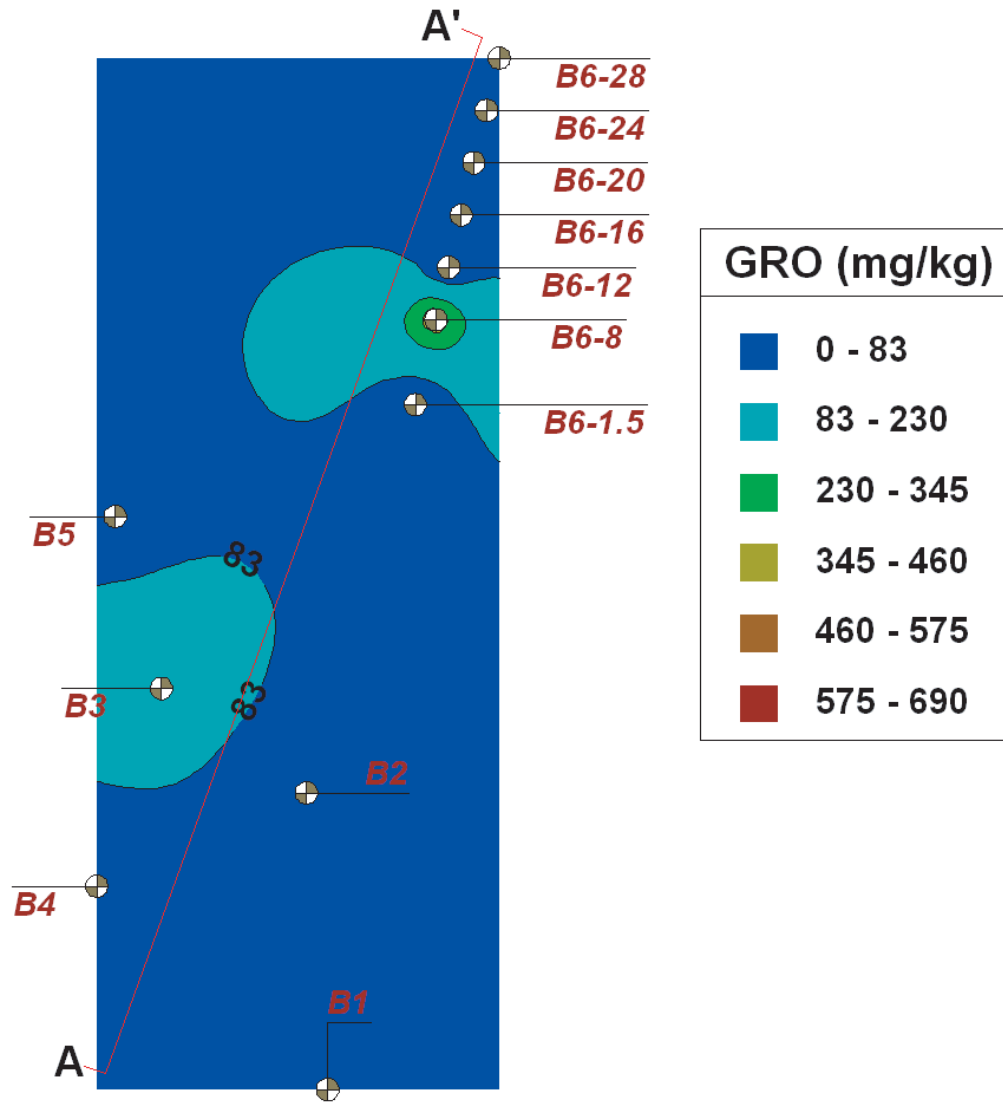
50 Hegenburger Loop Oakland, CA.
Determining B-6 Location

Project

for: W.E. Lyons Construction
 50 Hegenburger Loop, Oakland CA.



Figure
5



THE CONSULTING GROUP
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 Tel: 415.381.2560 / Fax: 415.381.1741

Job No.	085101
Date	28 Jan 2009
Drawn by	RC
Rev	SL
Apprvd	SL

**GRO Soil Sample Contour
 Concentrations in Plan View**

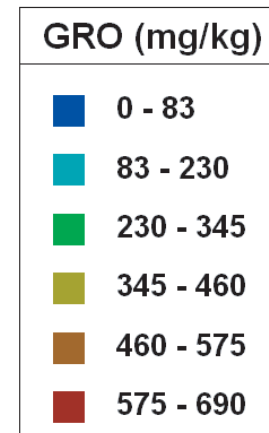
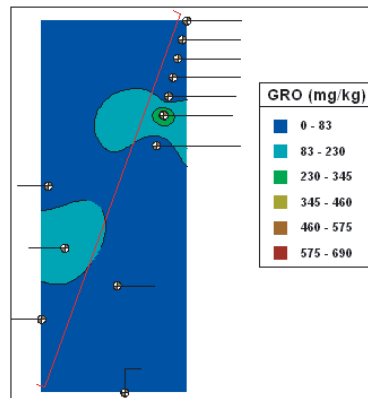
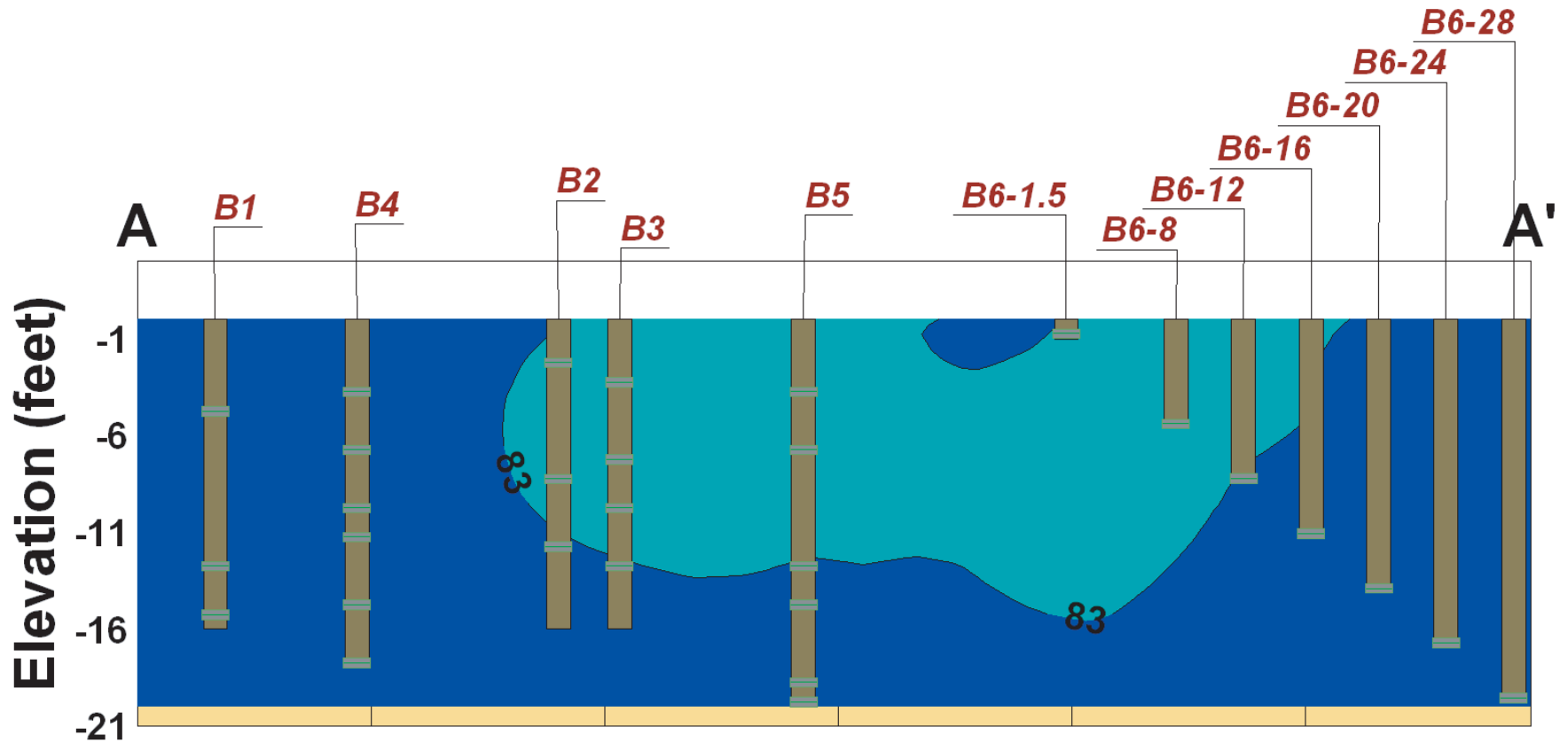
for: W.E. Lyons Construction
 50 Hegenburger Loop, Oakland CA.

Project



Figure

6



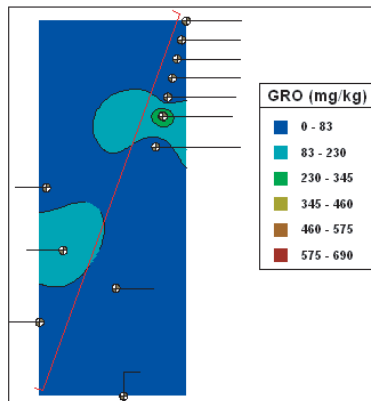
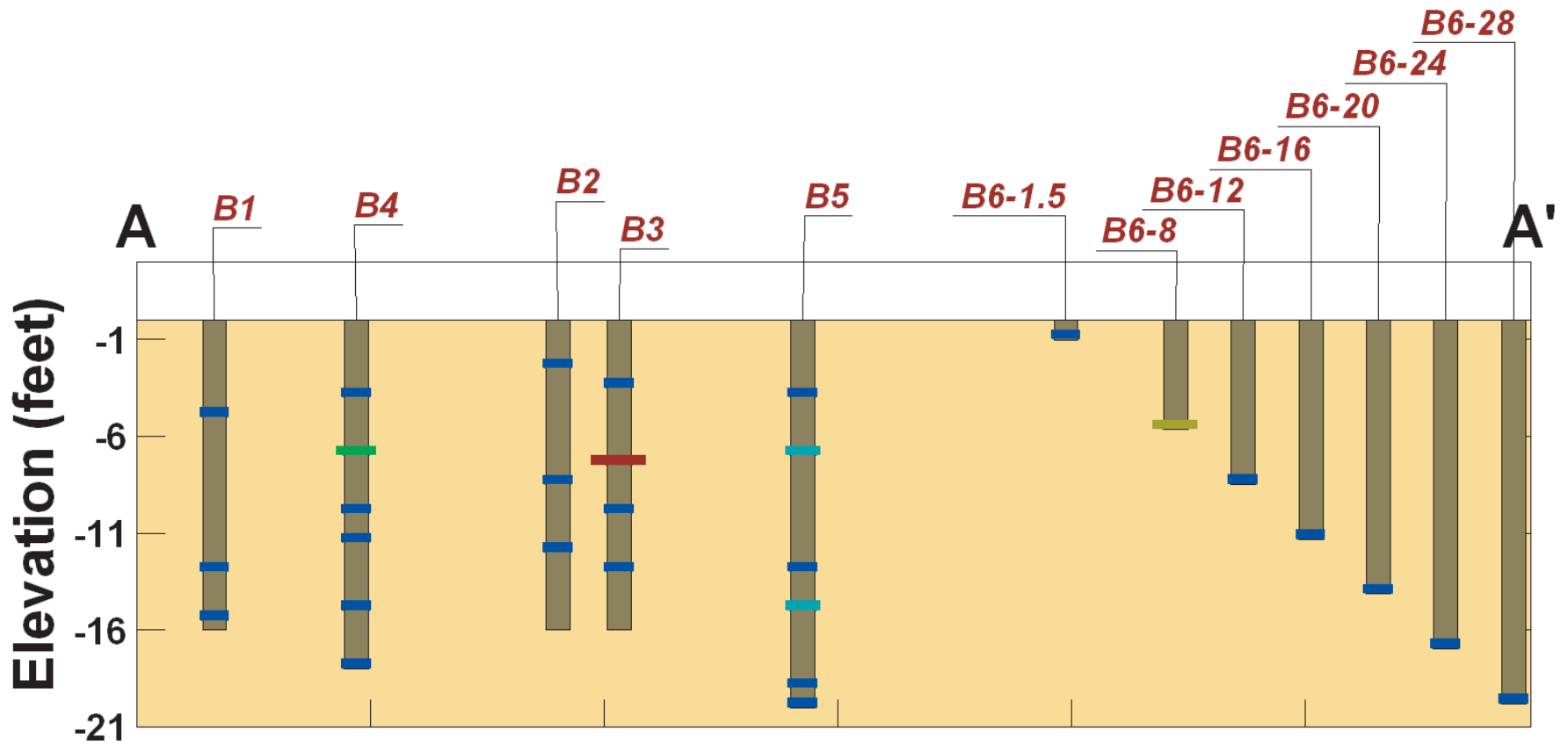
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 394 Cecilia Way, Tiburon, CA 94920
 Tel: 415.381.2560 / Fax: 415.381.1741

Job No.	085101
Date	28 Jan 2009
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GRO Soil Sample Contour
Concentrations in Cross Sectional View
 Project
 for: W.E. Lyons Construction
 50 Hegenburger Loop, Oakland CA.



Figure
7



GRO (mg/kg)	
Blue	0.00 - 83.00
Light Blue	83.00 - 230.00
Green	230.00 - 345.00
Yellow-Green	345.00 - 460.00
Brown	460.00 - 575.00
Red	575.00 - 690.00



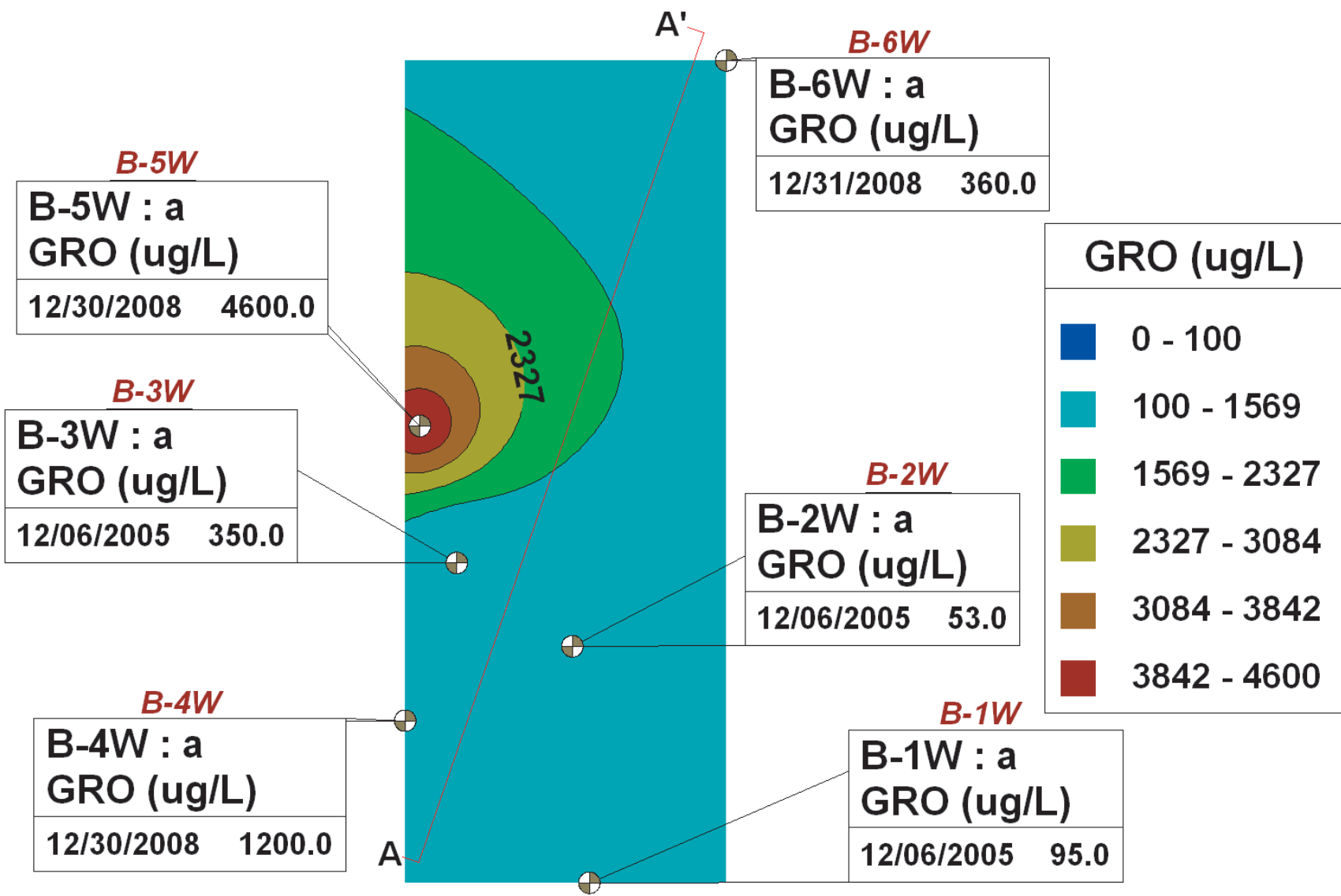
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GRO Individual Soil Sample Concentrations in Cross Sectional View
 Project
 for: W.E. Lyons Construction
 50 Hegenburger Loop, Oakland CA.



Figure
8



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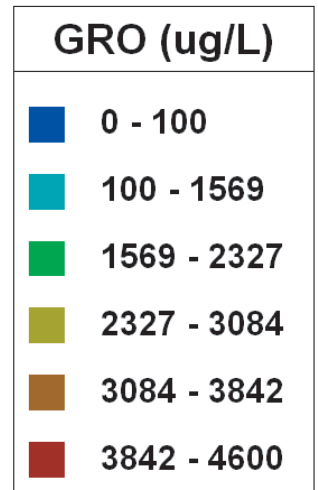
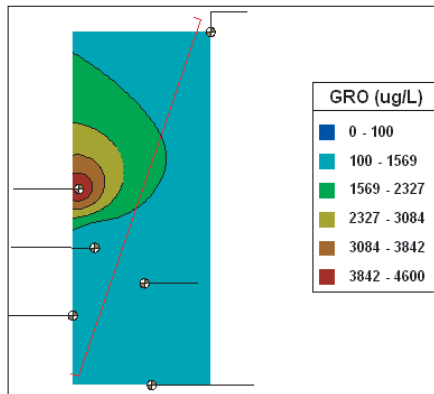
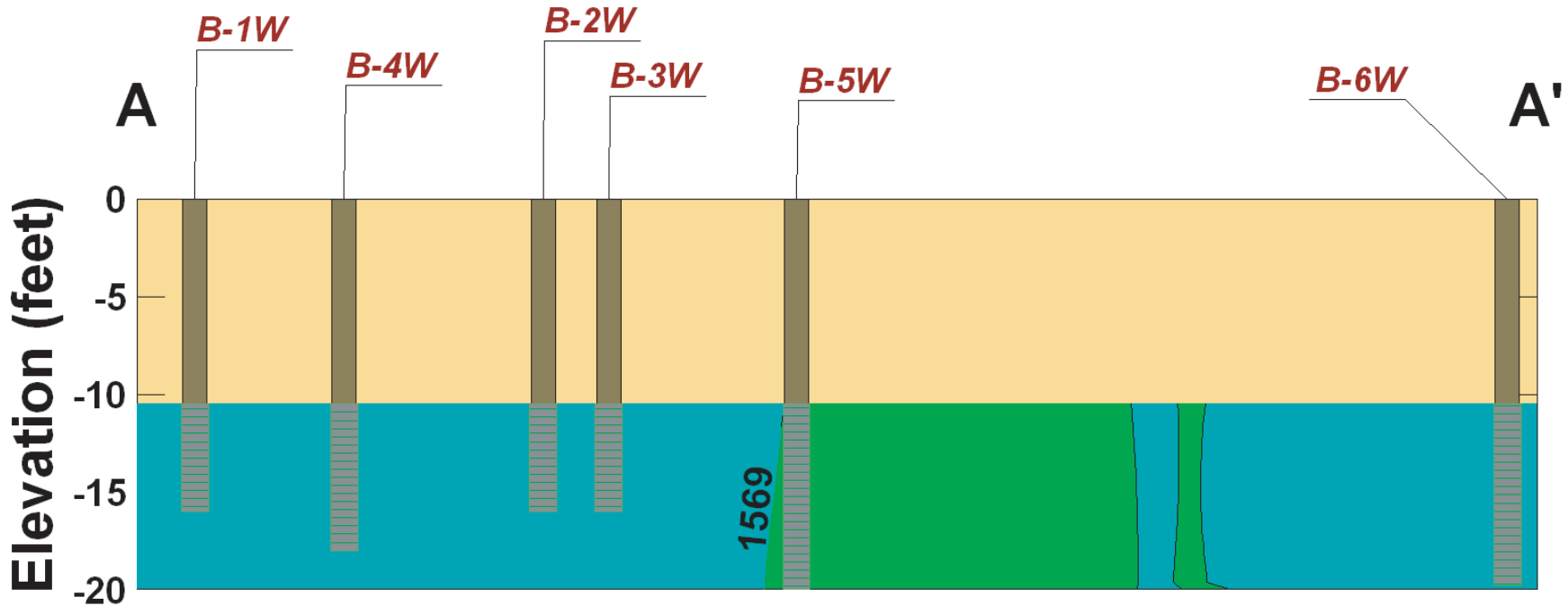
**GRO Water Sample Contour
 Concentrations in Plan View**
 for: W.E. Lyons Construction
 50 Hegenburger Loop, Oakland CA.

Project



Figure

9



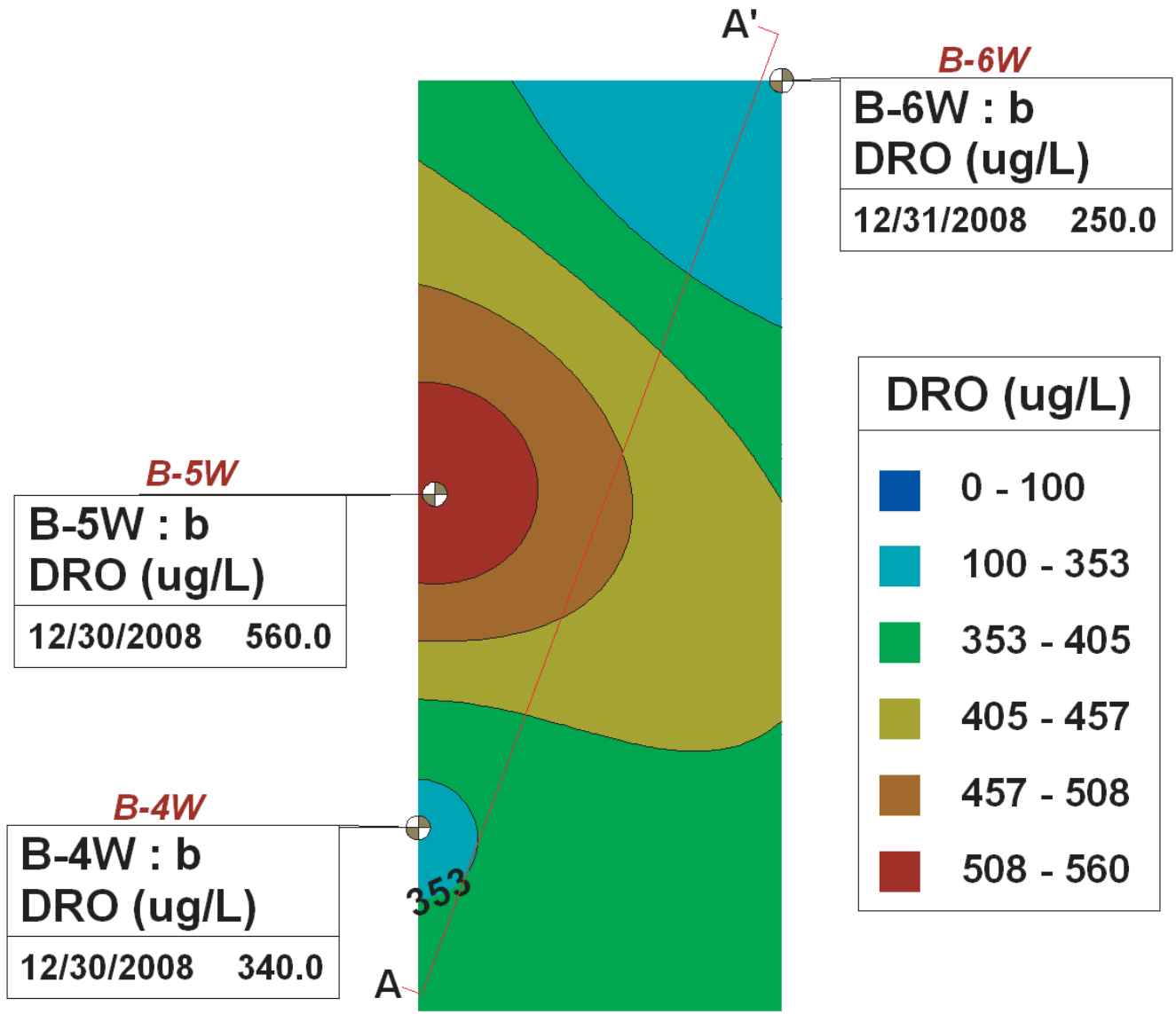
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GRO Water Sample Contour
Concentrations in Cross Sectional View
 for: W.E. Lyons Construction
 50 Hegenburger Loop, Oakland CA.



Project
 Figure
10



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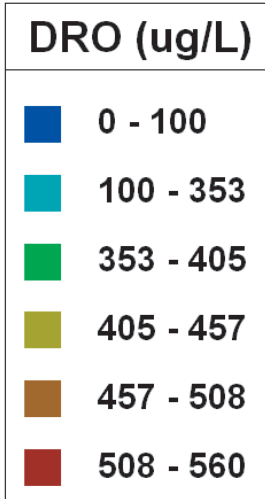
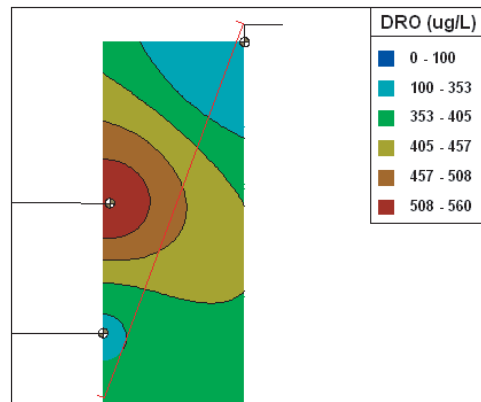
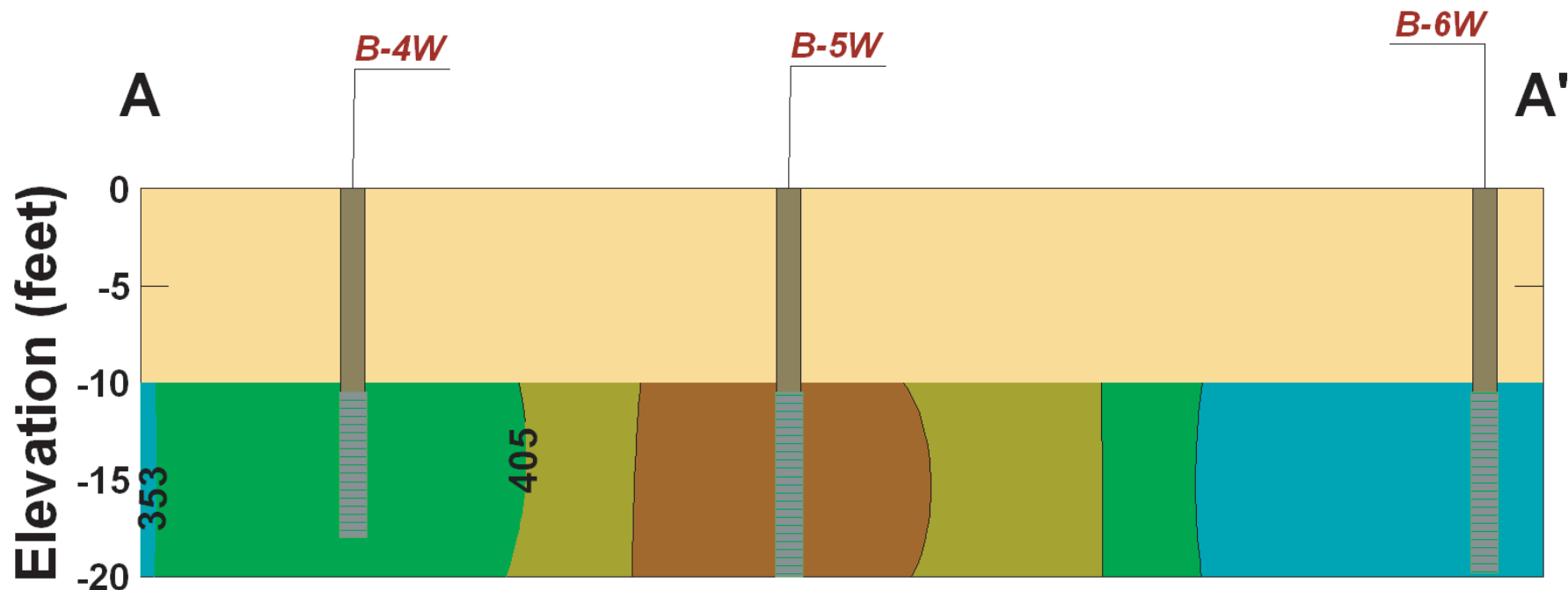
DRO Water Sample Contour Concentrations in Plan View
 for: W.E. Lyons Construction
 50 Hegenburger Loop, Oakland CA.

Project



Figure

11



THE CONSULTING GROUP
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 Tel: 415.381.2560 / Fax: 415.381.1741

Job No.	085101
Date	28 Jan 2009
Drawn by	RC
Rev	SL
Apprvd	SL

DRO Water Sample Contour
Concentrations in Cross Sectional View
 Project
 for: W.E. Lyons Construction
 50 Hegenburger Loop, Oakland CA.



Figure
12



ATTACHMENT 1



SOP 2b – SOIL & GRAB GROUNDWATER SAMPLING WITH GEOPROBE®

Soil samples for chemical analysis are collected in thin-walled Butyrate tubes. The tubes are 4 feet long by 2-inch diameter. The 4-foot core is reviewed and the location of a soil sample is selected by visual observation and photo-ionization detection (PID).

One soil sample collected at each sampling interval is analyzed in the field using a photo ionization detector (PID), a flame ionization detector (FID), or an explosion meter. The purpose of this field analysis is to qualitatively determine the presence or absence of hydrocarbons or halocarbons and to help establish which soil samples will be analyzed at the laboratory. The soil sample is sealed in a zip-lock plastic bag and placed in the sun to enhance volatilization of any hydrocarbons in the sample. The data is recorded on drill logs at the depth corresponding to the sampling point.

Other soil samples are collected to document the lithology and stratigraphy and estimate the relative permeability of the subsurface materials. All drive-sampling equipment are steam-cleaned before use at each site and between holes on-site to minimize the potential for cross-contamination.

The sampling equipment consists of Teflon® or steam-cleaned PVC bailer. Forty-milliliter (ml) glass volatile-organic-analysis (VOA) vials, with Teflon septa, are used as sample containers for volatile organic compound (VOC) analysis. For other analyses, the appropriate EPA-approved sampling containers are used.

The groundwater sample is decanted into each preserved VOA vial in such a manner that there is a meniscus at the top of the vial. The cap is quickly placed over the top of the vial and securely tightened. The VOA vial is then inverted and tapped to see if air bubbles are present. If none are present, the sample is labeled and refrigerated for delivery under chain-of-custody to the laboratory. Label information should include a sample identification number, job identification number, date, time, type of analysis requested, and the sampler's name.

A trip blank is prepared at the laboratory and placed in the transport cooler. It remains with the cooler and is placed on hold pending any anomalous results. A field blank is prepared in the field when sampling equipment is not dedicated. The field blank is prepared after a pump or bailer used in a well is steam-cleaned, before use in a second well, and is analyzed along with the other samples. The field blank demonstrates the quality of in-field cleaning procedures to prevent cross-contamination.

To minimize the potential for cross-contamination between wells, all the well purging and water sampling equipment that is not dedicated to a well is triple-rinsed between each well. As a second precautionary measure, samples are collected in order of least to highest concentrations as established by previous analyses.



All the soil is put in DOT-approved drums (drilling cuttings) for storage pending analytical results. Once results are available, soil disposal is determined. The soil is disposed of at the appropriate landfill(s) or re-used according to State, regional and/or local requirements.

Drive-sample holes that will not be completed as monitoring wells are destroyed, following the guidelines of the State of California Department of Water Resources Bulletin 74-90, and any local guidelines or regulations.



SOP-8 - LIQUID LEVEL GAUGING USING WATER LEVEL METER OR INTERFACE PROBE

The complete list of field equipment for liquid level gauging is assembled in the Technical office prior to departure to the field. This includes the probe(s), light filter(s), and product bailer(s) to be used for liquid levels (tested in test well before departure). The field kit also includes cleaning supplies (buckets, TSP, spray bottles, and deionized water) to clean the equipment between gauging wells.

When using the water level probe to gauge liquid levels, the probe tip is lowered into the well until the unit sounds. The top-of-casing (TOC) point is determined. This point is marked with a dot or a groove, is an obvious high point on the casing, or is the north side of the casing. The place on the probe-cord that corresponds with this TOC point is marked and an engineer's tape is used to measure the distance between the probe end and marking on the cord. This measurement is then recorded on the liquid level data sheet as depth to water (DTW).

When using the interface probe to gauge liquid levels, clamping it to the metal stovepipe or another metal object nearby first grounds the probe. When no ground is available, reproducible measurements can be obtained by clipping the ground lead to the handle of the interface probe case. After grounding the probe, the top of the well casing is fitted with a light filter to insure that sunlight does not interfere with the operation of the probe's optical mechanisms. The probe tip is then lowered into the well and submerged in the groundwater. An oscillating (beeping) tone indicates that the probe is in water. The probe is slowly raised either until the oscillating tone ceases or becomes a solid tone. In either case, this is the depth-to-groundwater (DTW) measurement. The solid tone indicates that floating hydrocarbons are present on top of the groundwater. To determine the thickness of the floating hydrocarbons, the probe is slowly raised until the solid tone ceases. This is the depth-to-floating hydrocarbon (DTFH) measurement. The process of lowering and raising the probe must be repeated several times to insure accurate measurements. DTW and DTFH measurements are recorded in hundredths of feet on the liquid level data sheet. When floating hydrocarbons are found in a well, a bottom-loading product bailer must be lowered partially through the water/liquid hydrocarbon interface to confirm the thickness of floating hydrocarbons on the water surface. This measurement is recorded on the data sheet as liquid hydrocarbon thickness (PT).

In order to avoid cross contamination of wells during the liquid level gauging process, wells are gauged in a clean to dirty order (where this information is available). In addition, any gauging equipment is cleaned with TSP and water and thoroughly rinsed with deionized water before daily use, before gauging another well on a site, and at the completion of daily use.



SOP-10 - SAMPLE LABELING & CHAIN-OF-CUSTODY

To ensure correct analysis and integrity of any sample, correct sample labeling and the accompaniment of a chain-of-custody (COC) form with all samples from the field to the designated analytic laboratory is mandatory. The label of a sample must include, at a minimum, the following items:

- Sample identification number
- Location of sample collection
- Date and time of sample collection
- Name of sampler
- Analysis required

Once this data has been put on the sample container, it must be transferred to the COC. A COC accompanies every shipment of samples and establishes the documentation necessary to trace sample possession, as well as evidence of collection, shipment, laboratory receipt, analysis requested and laboratory custody until the time of disposal. The COC form must include, at a minimum, the following items:

- Sample identification number
- Location of sample collection
- Date and time of sample collection
- Analysis required
- Sample type
- Sample container type
- Preservative used, if any
- Names of all samplers
- Signatures of personnel relinquishing and receiving samples
- Laboratory name and address
- Laboratory sample number and log number (recorded by laboratory personnel)
- Company contact name and project number
- Sample condition and temperature (recorded by laboratory personnel)

Sample transfer and shipment is always accompanied by a COC. The initial preparation of the COC occurs in the office and completed in the field by the personnel collecting the samples. Each sample is assigned a unique identification number that represents the specific sampling location. The identification numbers are entered on the COC accompanied by the requested analysis, preservative used, if any, type of sample collected, and type of sample container. Any special instructions are included here.

If the field personnel deliver the samples to the laboratory, they will at that time sign the COC form and relinquish the samples. At this point, the Quality Control Coordinator, or the representative for the laboratory, will check to make sure all samples are present and note the



condition and integrity of each sample. After all samples have been documented as received by the laboratory personnel, they will sign the COC form and issue the delivering personnel a copy. The laboratory with the analytic data report should also return a copy of the signed COC form.

If the samples are delivered by courier, or other commercial carrier, the container of samples shall be sealed, and a custody tape will be applied to the container to seal it and to signal any tampering with the container. The courier will sign the COC taking ownership of the samples that the samplers have relinquished by also signing the COC. The receipt form the courier will be attached to the COC copy retained by the relinquishing personnel and serve as an extension of the COC.

Any changes to a COC must be initialed and copies of the revised COC must be distributed to all appropriate personnel.



ATTACHMENT 2

Subject: Alameda County PWA Permits Application Confirmation
Date: Monday, December 15, 2008 2:54 PM
From: wells@acpwa.org
To: <slovejoyjr@tcg-international.com>
Conversation: Alameda County PWA Permits Application Confirmation

Thank you for your Permit Application.
Your Application Confirmation Id is: 1229381645842
Submit Date is: Mon Dec 15 14:54:05 PST 2008
Project Site City/Location: Oakland / 50 Hegenberger Loop
Project Start Date: 12/30/2008 Completion Date: 12/30/2008
Requested Inspection Date: 12/30/2008

NOTE: This only confirms receipt of the application, this is NOT an approved Permit.

REMINDER: We must receive a site map from you or your permit will not be approved.

If you have already submitted your site map and required documents, please disregard the reminder.

You will be notified separately once the receipt of your map is logged.

If any required documents are missing, you will be contacted by the Water Resources Unit.

To view application status, go to the Tracking <https://www.acgov.org/pwapermitsecomm_app/TrackAppServlet?email=slovejoyjr@tcg-international.com&appid=1229381645842> page.

***If above 'Tracking' link does not work for you, copy and paste this url directly to browser:*

https://www.acgov.org/pwapermitsecomm_app/TrackAppServlet?email=slovejoyjr@tcg-international.com=1229381645842

If you have questions, contact us at wells@acpwa.org, please include your application confirmation number.

Thank you,
Public Works Agency - Water Resources

Your Application:

Project Information
City of Project Site: Oakland Site Location: 50 Hegenberger Loop
Start Date: 12/30/2008 Completion Date: 12/30/2008

Requested Inspection Date: 12/30/2008

Applicant Information

Business / Name: The Consulting Group - Sherwood Lovejoy, Jr. Phone
Number: 415-381-1741 x

Address: 394 Cecilia Way, PO Box 1369
Tiburon, CA 94920

Work Applying for Permit

Work Type Driller # of Wells Fees Cost

Borehole(s) for Geo Probes-Sampling 24 to 72 hours only Precision

Sampling - Lic# 636387 3 \$ 230.00 per site \$ 230.00

Application Total: \$ 230.00

Subject: Alameda County PWA Wells Permits Application Sitemap Received
Date: Monday, December 15, 2008 2:55 PM
From: wells@acpwa.org
To: <slovejoyjr@tcg-international.com>
Conversation: Alameda County PWA Wells Permits Application Sitemap Received

Your Application Id is: 1229381645842
Application Date is: 12/15/2008
Project at: 50 Hegenberger Loop in 50 Hegenberger Loop Project Start
Date: 12/30/2008 Completion Date: 12/30/2008

This email is to confirm that your Sitemap for the above project has been received.

Once your application is processed, you will receive notification via e-mail with the Permit(s) attached. To view application status, go to the Tracking <https://www.acgov.org/pwapermitsecomm_app/TrackAppServlet?email=slovejoyjr@tcg-international.com&appid=1229381645842> page. ***If above 'Tracking' link does not work for you, copy and paste this url directly to browser:*

https://www.acgov.org/pwapermitsecomm_app/TrackAppServlet?email=slovejoyjr@tcg-international.com=1229381645842

If you have questions, please contact us at wells@acpwa.org with your application id in the subject of the email.

Thank you,
Public Works Agency-Water Resources

Subject: FW: Alameda County Well Permit Approval Notification
Date: Thursday, December 18, 2008 12:31 PM
From: Ryan Cozart <rcozart@tcg-international.com>
To: Sherwood Lovejoy <slovejoyjr@tcg-international.com>
Conversation: Alameda County Well Permit Approval Notification

----- Forwarded Message

From: <wells@acpwa.org>
Date: Tue, 16 Dec 2008 16:15:02 -0800 (PST)
To: <slovejoyjr@tcg-international.com>
Cc: <rcozart@tcg-international.com>, <ridgerat10@aol.com>, <ridgerat10@aol.com>, <tcg@tcg-international.com>
Subject: Alameda County Well Permit Approval Notification

Thank you for your Online Request for Wells Permits.
Your Application Id is: 1229381645842
Application submitted on: 12/15/2008
Project Site City/Location: Oakland / 50 Hegenberger Loop
Project Start Date: 12/30/2008 Completion Date: 12/30/2008

Your Permit Application has been approved.
Permit Number(s) Issued: W2008-0952 Valid from 12/30/2008 to 12/30/2008

Requested Inspection Date: 12/30/2008

You have a tentative inspection scheduled on 12/30/2008 at 1:00 PM.
You must contact your assigned inspector, Vicky Hamlin <mailto:vickyh@acpwa.org> at (510) 670-5443, to confirm.

Attached are 2 PDF files, one serves as your receipt and permit(s), please print for your record.

The other includes the General Conditions and Instructions you must follow.

Note: You need to have the free Adobe Reader <<http://www.adobe.com/products/acrobat/readstep2.html>> to open the pdf file.

Conditions of Permit:

Please follow and comply with conditions and instructions listed in the

general conditions document.

In addition, you must comply with all specific conditions listed in your permit.

If you need further assistance regarding your permit, please visit our website at: <http://www.acgov.org/pwa/wells/> or contact us at wells@acpwa.org, and include your application id number.

Thank you,
Public Works Agency-Water Resources

----- End of Forwarded Message

50 Hegenburger Loop Oakland, CA.

PROJECT NO: 085101

BORING NO: B-4

PROJECT NAME: W.E. Lyons

DATE BEGAN: 12/30/2008

DATE FINISHED: 12/30/2008

FIELD GEOLOGIST: Ryan Cozart

DRILLER:

NORTH:

EAST:

GROUND SURFACE ELEVATION:

GWL DATE/TIME:

GWL DEPTH: 10.5

DRILLING METHOD: Drive Sampling

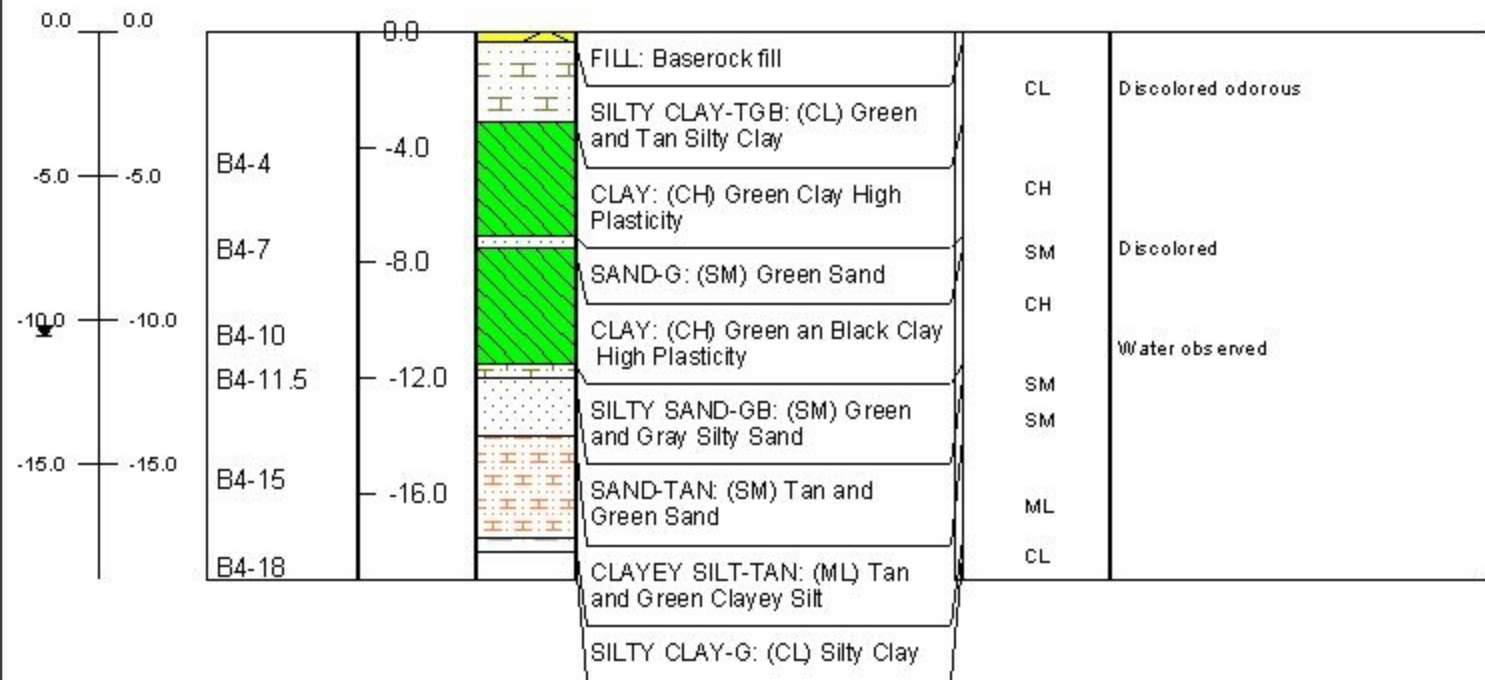
DRILL EQUIP: Geoprobe

GWL EQUIP: Visual

CONTRACTOR: Precision Sampling

CHECKED BY: WL

ELEV (FT.)	DEPTH (FT.)	SAMPLE TYPE AND NO.	REC (FT.)	PROFILE	DESCRIPTION	USCS	REMARKS
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50 Hegenburger Loop Oakland, CA.

PROJECT NO: 085101

BORING NO: B-5

PROJECT NAME: W.E. Lyons

DATE BEGAN: 12/30/2008

DATE FINISHED: 12/30/2008

FIELD GEOLOGIST: Ryan Cozart

DRILLER:

NORTH:

EAST:

GROUND SURFACE ELEVATION:

GWL DATE/TIME:

GWL DEPTH: 10.5

DRILLING METHOD: Drive Sampling

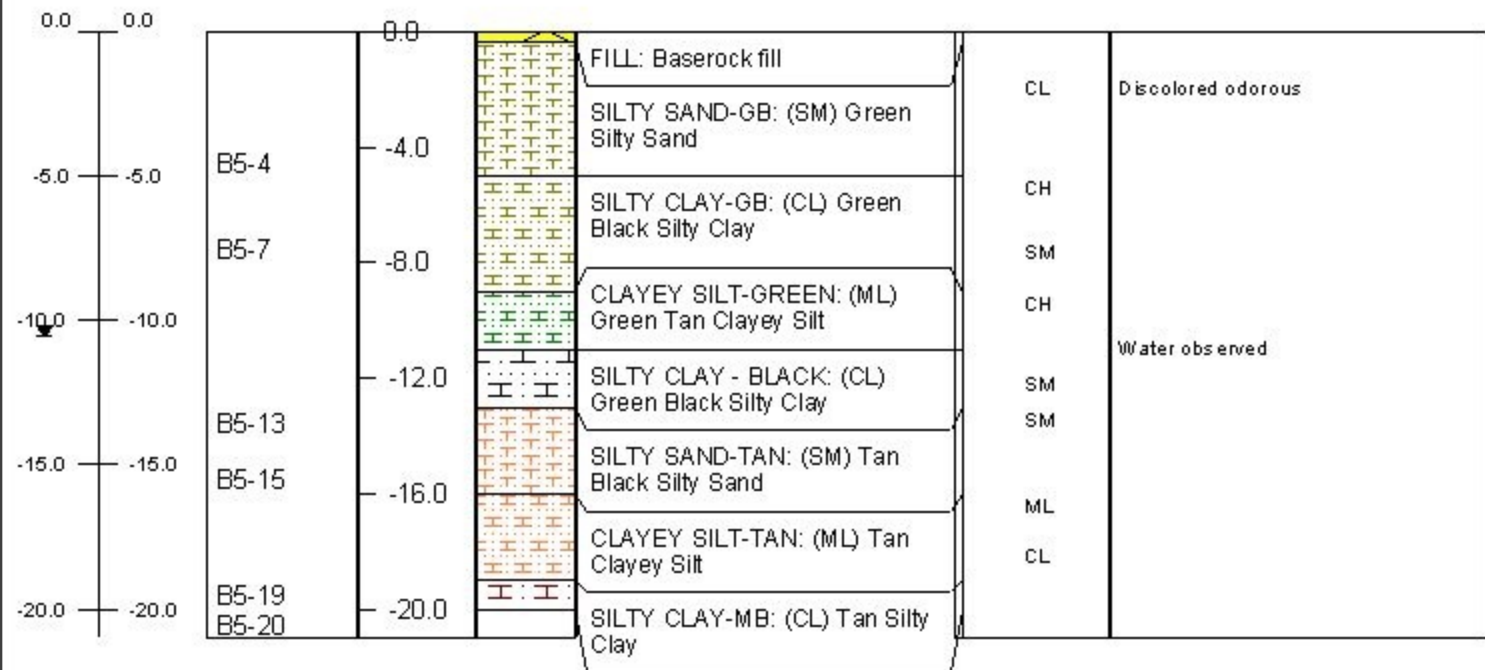
DRILL EQUIP: Geoprobe

GWL EQUIP: Visual

CONTRACTOR: Precision Sampling

CHECKED BY: WL

ELEV (FT.)	DEPTH (FT.)	SAMPLE TYPE AND NO.	REC (FT.)	PROFILE	DESCRIPTION	USCS	REMARKS
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50 Hegenburger Loop Oakland, CA.

PROJECT NO: 085101

BORING NO: B-6

PROJECT NAME: W.E. Lyons

DATE BEGAN: 12/31/2008

DATE FINISHED: 12/31/2008

FIELD GEOLOGIST: Ryan Cozart

DRILLER:

NORTH:

EAST:

GROUND SURFACE ELEVATION:

GWL DATE/TIME:

GWL DEPTH: 12.5 ft

DRILLING METHOD: Drive Sampling

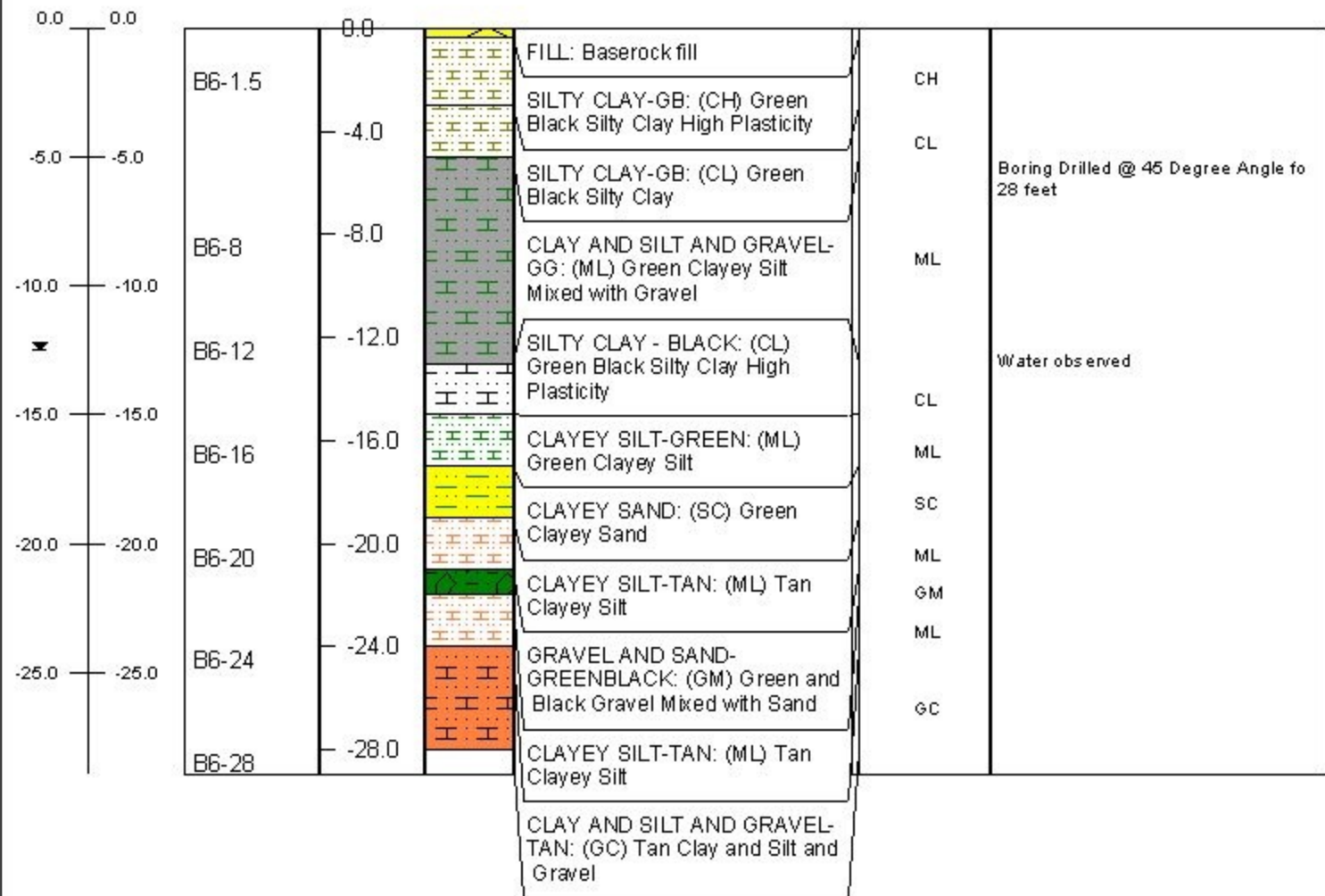
DRILL EQUIP: Geoprobe

GWL EQUIP: Visual

CONTRACTOR: Precision Sampling

CHECKED BY: WL

ELEV (FT.)	DEPTH (FT.)	SAMPLE TYPE AND NO.	REC (FT.)	PROFILE	DESCRIPTION	USCS	REMARKS
------------	-------------	---------------------	-----------	---------	-------------	------	---------





ATTACHMENT 3

ANALYTICAL REPORT

Job Number: 720-17507-1

Job Description: WE LYONS

For:

TCG (The Consulting Group)

394 Cecilia Way

Tiburon, CA 94920-2105

Attention: Mr. Woody Lovejoy



Approved for release.
Melissa Brewer
Project Manager I
1/8/2009 4:38 PM

Melissa Brewer
Project Manager I
melissa.brewer@testamericainc.com
01/08/2009

Job Narrative
720-J17507-1

Comments

No additional comments.

Receipt

All samples were received in good condition within temperature requirements.

GC/MS VOA

No analytical or quality issues were noted.

GC VOA

No analytical or quality issues were noted.

GC Semi VOA

Method 8015B: Concentrations reported represent individual or discrete peaks: 17507-3, 720-17507-10, 720-17507-12, 720-17507-13, 720-17507-14, 720-17507-19, 720-17507-20.

Method 8015B: Capric acid surrogate recovery for the following samples was outside control limits: B4-7 (720-17507-2), B6-8 (720-17507-11). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No other analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

EXECUTIVE SUMMARY - Detections

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Lab Sample ID	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
720-17507-1	B4-4				
Gasoline Range Organics (GRO)-C5-C12		0.93	0.25	mg/Kg	8260B/CA_LUFTMS
Xylenes, Total		0.011	0.0099	mg/Kg	8260B/CA_LUFTMS
<i>Silica Gel Cleanup</i>					
Diesel Range Organics [C10-C28]		3.8	1.0	mg/Kg	8015B
720-17507-2	B4-7				
Gasoline Range Organics (GRO)-C5-C12		270	48	mg/Kg	8260B/CA_LUFTMS
<i>Silica Gel Cleanup</i>					
Diesel Range Organics [C10-C28]		26	1.0	mg/Kg	8015B
720-17507-3	B4-10				
<i>Silica Gel Cleanup</i>					
Diesel Range Organics [C10-C28]		1.9	1.0	mg/Kg	8015B
720-17507-4	B4-11.5				
Gasoline Range Organics (GRO)-C5-C12		21	1.2	mg/Kg	8260B/CA_LUFTMS
Ethylbenzene		0.11	0.023	mg/Kg	8260B/CA_LUFTMS
<i>Silica Gel Cleanup</i>					
Diesel Range Organics [C10-C28]		4.1	1.0	mg/Kg	8015B
720-17507-5	B4-15				
Gasoline Range Organics (GRO)-C5-C12		9.9	1.1	mg/Kg	8260B/CA_LUFTMS
Ethylbenzene		0.050	0.022	mg/Kg	8260B/CA_LUFTMS
720-17507-6	B5-4				
Gasoline Range Organics (GRO)-C5-C12		0.40	0.23	mg/Kg	8260B/CA_LUFTMS
720-17507-7	B5-7				
Gasoline Range Organics (GRO)-C5-C12		150	50	mg/Kg	8260B/CA_LUFTMS
<i>Silica Gel Cleanup</i>					
Diesel Range Organics [C10-C28]		2.7	1.0	mg/Kg	8015B

EXECUTIVE SUMMARY - Detections

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Lab Sample ID Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
720-17507-8 Gasoline Range Organics (GRO)-C5-C12	B5-13	0.48	0.24	mg/Kg	8260B/CA_LUFTMS
720-17507-9 Gasoline Range Organics (GRO)-C5-C12	B5-15	220	49	mg/Kg	8260B/CA_LUFTMS
<i>Silica Gel Cleanup</i> Diesel Range Organics [C10-C28]		3.1	1.0	mg/Kg	8015B
720-17507-10 Gasoline Range Organics (GRO)-C5-C12	B6-1.5	0.28	0.23	mg/Kg	8260B/CA_LUFTMS
<i>Silica Gel Cleanup</i> Diesel Range Organics [C10-C28]		1.9	1.0	mg/Kg	8015B
720-17507-11 Gasoline Range Organics (GRO)-C5-C12	B6-8	430	48	mg/Kg	8260B/CA_LUFTMS
<i>Silica Gel Cleanup</i> Diesel Range Organics [C10-C28]		12	1.0	mg/Kg	8015B
720-17507-12 Gasoline Range Organics (GRO)-C5-C12	B6-12	1.3	0.24	mg/Kg	8260B/CA_LUFTMS
<i>Silica Gel Cleanup</i> Diesel Range Organics [C10-C28]		2.3	1.0	mg/Kg	8015B
720-17507-13 <i>Silica Gel Cleanup</i> Diesel Range Organics [C10-C28]	B6-16	1.1	1.0	mg/Kg	8015B
720-17507-14 <i>Silica Gel Cleanup</i> Diesel Range Organics [C10-C28]	B6-20	2.2	1.0	mg/Kg	8015B

EXECUTIVE SUMMARY - Detections

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Lab Sample ID	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
720-17507-15	B4-W				
Gasoline Range Organics (GRO)-C5-C12		1200	50	ug/L	8260B/CA_LUFTMS
Benzene		4.0	0.50	ug/L	8260B/CA_LUFTMS
Ethylbenzene		28	0.50	ug/L	8260B/CA_LUFTMS
Xylenes, Total		1.5	1.0	ug/L	8260B/CA_LUFTMS
<i>Silica Gel Cleanup</i>					
Diesel Range Organics [C10-C28]		340	50	ug/L	8015B
720-17507-16	B5-W				
Gasoline Range Organics (GRO)-C5-C12		4600	50	ug/L	8260B/CA_LUFTMS
Toluene		0.90	0.50	ug/L	8260B/CA_LUFTMS
Ethylbenzene		1.6	0.50	ug/L	8260B/CA_LUFTMS
Xylenes, Total		1.8	1.0	ug/L	8260B/CA_LUFTMS
<i>Silica Gel Cleanup</i>					
Diesel Range Organics [C10-C28]		560	50	ug/L	8015B
720-17507-17	B6-W				
Gasoline Range Organics (GRO)-C5-C12		360	50	ug/L	8260B/CA_LUFTMS
Ethylbenzene		0.60	0.50	ug/L	8260B/CA_LUFTMS
<i>Silica Gel Cleanup</i>					
Diesel Range Organics [C10-C28]		250	50	ug/L	8015B
720-17507-19	B5-19				
<i>Silica Gel Cleanup</i>					
Diesel Range Organics [C10-C28]		1.4	1.0	mg/Kg	8015B
720-17507-20	B5-20				
<i>Silica Gel Cleanup</i>					
Diesel Range Organics [C10-C28]		1.7	1.0	mg/Kg	8015B

METHOD SUMMARY

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Volatile Organic Compounds by GC/MS	TAL SF	SW846 8260B/CA_LUFTMS	
Purge and Trap	TAL SF		SW846 5030B
Diesel Range Organics (DRO) (GC)	TAL SF	SW846 8015B	
Ultrasonic Extraction	TAL SF		SW846 3550B
Matrix: Water			
Volatile Organic Compounds by GC/MS	TAL SF	SW846 8260B/CA_LUFTMS	
Purge and Trap	TAL SF		SW846 5030B
Diesel Range Organics (DRO) (GC)	TAL SF	SW846 8015B	
Liquid-Liquid Extraction (Separatory Funnel)	TAL SF		SW846 3510C SGC

Lab References:

TAL SF = TestAmerica San Francisco

Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

SAMPLE SUMMARY

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
720-17507-1	B4-4	Solid	12/30/2008 0000	12/31/2008 1520
720-17507-2	B4-7	Solid	12/30/2008 0000	12/31/2008 1520
720-17507-3	B4-10	Solid	12/30/2008 0000	12/31/2008 1520
720-17507-4	B4-11.5	Solid	12/30/2008 0000	12/31/2008 1520
720-17507-5	B4-15	Solid	12/30/2008 0000	12/31/2008 1520
720-17507-6	B5-4	Solid	12/30/2008 0000	12/31/2008 1520
720-17507-7	B5-7	Solid	12/30/2008 0000	12/31/2008 1520
720-17507-8	B5-13	Solid	12/30/2008 0000	12/31/2008 1520
720-17507-9	B5-15	Solid	12/30/2008 0000	12/31/2008 1520
720-17507-10	B6-1.5	Solid	12/30/2008 0000	12/31/2008 1520
720-17507-11	B6-8	Solid	12/30/2008 0000	12/31/2008 1520
720-17507-12	B6-12	Solid	12/30/2008 0000	12/31/2008 1520
720-17507-13	B6-16	Solid	12/30/2008 0000	12/31/2008 1520
720-17507-14	B6-20	Solid	12/31/2008 0000	12/31/2008 1520
720-17507-15	B4-W	Water	12/30/2008 0000	12/31/2008 1520
720-17507-16	B5-W	Water	12/30/2008 0000	12/31/2008 1520
720-17507-17	B6-W	Water	12/31/2008 0000	12/31/2008 1520
720-17507-18	B4-18	Solid	12/30/2008 0000	12/31/2008 1520
720-17507-19	B5-19	Solid	12/30/2008 0000	12/31/2008 1520
720-17507-20	B5-20	Solid	12/30/2008 0000	12/31/2008 1520
720-17507-21	B6-24	Solid	12/31/2008 0000	12/31/2008 1520
720-17507-22	B6-28	Solid	12/31/2008 0000	12/31/2008 1520

Analytical Data

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Client Sample ID: B4-4

Lab Sample ID: 720-17507-1

Date Sampled: 12/30/2008 0000

Client Matrix: Solid

Date Received: 12/31/2008 1520

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method: 8260B/CA_LUFTMS Analysis Batch: 720-45603 Instrument ID: Varian 3900A
Preparation: 5030B Prep Batch: 720-45604 Lab File ID: e:\data\2009\010709\sa-so-
Dilution: 1.0 Initial Weight/Volume: 5.06 g
Date Analyzed: 01/07/2009 1302 Final Weight/Volume: 10 mL
Date Prepared: 01/07/2009 0800

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Gasoline Range Organics (GRO)-C5-C12		0.93		0.25
Benzene		ND		0.0049
Toluene		ND		0.0049
Ethylbenzene		ND		0.0049
Xylenes, Total		0.011		0.0099
TAME		ND		0.0049
Ethyl tert-butyl ether		ND		0.0049
MTBE		ND		0.0049
DIPE		ND		0.0049
TBA		ND		0.0099
EDB		ND		0.0049
1,2-Dichloroethane		ND		0.0049
Surrogate		%Rec		Acceptance Limits
Toluene-d8 (Surr)		99		74 - 118
1,2-Dichloroethane-d4 (Surr)		97		54 - 134

Analytical Data

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Client Sample ID: B4-7

Lab Sample ID: 720-17507-2

Date Sampled: 12/30/2008 0000

Client Matrix: Solid

Date Received: 12/31/2008 1520

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method: 8260B/CA_LUFTMS Analysis Batch: 720-45524 Instrument ID: Saturn 2100
Preparation: 5030B-Medium Prep Batch: 720-45541 Lab File ID: d:\data\200901\010209\sa-s
Dilution: 200 Initial Weight/Volume: 5.22 g
Date Analyzed: 01/02/2009 2200 Final Weight/Volume: 10 mL
Date Prepared: 01/02/2009 1800

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Gasoline Range Organics (GRO)-C5-C12		270		48
Benzene		ND		0.96
Toluene		ND		0.96
Ethylbenzene		ND		0.96
Xylenes, Total		ND		1.9
TAME		ND		0.96
Ethyl tert-butyl ether		ND		0.96
MTBE		ND		0.96
DIPE		ND		0.96
TBA		ND		1.9
EDB		ND		0.96
1,2-Dichloroethane		ND		0.96
Surrogate		%Rec		Acceptance Limits
Toluene-d8 (Surr)		86		70 - 130
1,2-Dichloroethane-d4 (Surr)		95		70 - 130

Analytical Data

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Client Sample ID: B4-10

Lab Sample ID: 720-17507-3

Date Sampled: 12/30/2008 0000

Client Matrix: Solid

Date Received: 12/31/2008 1520

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method: 8260B/CA_LUFTMS Analysis Batch: 720-45558 Instrument ID: Varian 3900A
Preparation: 5030B Prep Batch: 720-45538 Lab File ID: e:\data\2009\sa-so-17507-a
Dilution: 1.0 Initial Weight/Volume: 5.22 g
Date Analyzed: 01/02/2009 1530 Final Weight/Volume: 10 mL
Date Prepared: 01/02/2009 0800

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Gasoline Range Organics (GRO)-C5-C12		ND		0.24
Benzene		ND		0.0048
Toluene		ND		0.0048
Ethylbenzene		ND		0.0048
Xylenes, Total		ND		0.0096
TAME		ND		0.0048
Ethyl tert-butyl ether		ND		0.0048
MTBE		ND		0.0048
DIPE		ND		0.0048
TBA		ND		0.0096
EDB		ND		0.0048
1,2-Dichloroethane		ND		0.0048
Surrogate		%Rec		Acceptance Limits
Toluene-d8 (Surr)		101		74 - 118
1,2-Dichloroethane-d4 (Surr)		99		54 - 134

Analytical Data

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Client Sample ID: B4-11.5

Lab Sample ID: 720-17507-4

Date Sampled: 12/30/2008 0000

Client Matrix: Solid

Date Received: 12/31/2008 1520

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method: 8260B/CA_LUFTMS Analysis Batch: 720-45558 Instrument ID: Varian 3900A
Preparation: 5030B Prep Batch: 720-45538 Lab File ID: e:\data\2009\sa-so-17507-a
Dilution: 1.0 Initial Weight/Volume: 1.08 g
Date Analyzed: 01/02/2009 2002 Final Weight/Volume: 10 mL
Date Prepared: 01/02/2009 0800

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Gasoline Range Organics (GRO)-C5-C12		21		1.2
Benzene		ND		0.023
Toluene		ND		0.023
Ethylbenzene		0.11		0.023
Xylenes, Total		ND		0.046
TAME		ND		0.023
Ethyl tert-butyl ether		ND		0.023
MTBE		ND		0.023
DIPE		ND		0.023
TBA		ND		0.046
EDB		ND		0.023
1,2-Dichloroethane		ND		0.023
Surrogate		%Rec		Acceptance Limits
Toluene-d8 (Surr)		101		74 - 118
1,2-Dichloroethane-d4 (Surr)		71		54 - 134

Analytical Data

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Client Sample ID: B4-15

Lab Sample ID: 720-17507-5

Date Sampled: 12/30/2008 0000

Client Matrix: Solid

Date Received: 12/31/2008 1520

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method: 8260B/CA_LUFTMS Analysis Batch: 720-45558 Instrument ID: Varian 3900A
Preparation: 5030B Prep Batch: 720-45538 Lab File ID: e:\data\2009\sa-so-17507-a
Dilution: 1.0 Initial Weight/Volume: 1.15 g
Date Analyzed: 01/02/2009 2025 Final Weight/Volume: 10 mL
Date Prepared: 01/02/2009 0800

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Gasoline Range Organics (GRO)-C5-C12		9.9		1.1
Benzene		ND		0.022
Toluene		ND		0.022
Ethylbenzene		0.050		0.022
Xylenes, Total		ND		0.043
TAME		ND		0.022
Ethyl tert-butyl ether		ND		0.022
MTBE		ND		0.022
DIPE		ND		0.022
TBA		ND		0.043
EDB		ND		0.022
1,2-Dichloroethane		ND		0.022
Surrogate		%Rec		Acceptance Limits
Toluene-d8 (Surr)		95		74 - 118
1,2-Dichloroethane-d4 (Surr)		66		54 - 134

Analytical Data

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Client Sample ID: B5-4

Lab Sample ID: 720-17507-6

Date Sampled: 12/30/2008 0000

Client Matrix: Solid

Date Received: 12/31/2008 1520

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method: 8260B/CA_LUFTMS Analysis Batch: 720-45585 Instrument ID: Saturn 2100
Preparation: 5030B Prep Batch: 720-45588 Lab File ID: d:\data\200901\010609\sa-s
Dilution: 1.0 Initial Weight/Volume: 5.33 g
Date Analyzed: 01/06/2009 1031 Final Weight/Volume: 10 mL
Date Prepared: 01/06/2009 0900

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Gasoline Range Organics (GRO)-C5-C12		0.40		0.23
Benzene		ND		0.0047
Toluene		ND		0.0047
Ethylbenzene		ND		0.0047
Xylenes, Total		ND		0.0094
TAME		ND		0.0047
Ethyl tert-butyl ether		ND		0.0047
MTBE		ND		0.0047
DIPE		ND		0.0047
TBA		ND		0.0094
EDB		ND		0.0047
1,2-Dichloroethane		ND		0.0047
Surrogate		%Rec		Acceptance Limits
Toluene-d8 (Surr)		82		74 - 118
1,2-Dichloroethane-d4 (Surr)		91		54 - 134

Analytical Data

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Client Sample ID: B5-7

Lab Sample ID: 720-17507-7

Date Sampled: 12/30/2008 0000

Client Matrix: Solid

Date Received: 12/31/2008 1520

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method: 8260B/CA_LUFTMS Analysis Batch: 720-45524 Instrument ID: Saturn 2100
Preparation: 5030B-Medium Prep Batch: 720-45541 Lab File ID: d:\data\200901\010209\sa-s
Dilution: 200 Initial Weight/Volume: 5.03 g
Date Analyzed: 01/02/2009 1920 Final Weight/Volume: 10 mL
Date Prepared: 01/02/2009 1800

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Gasoline Range Organics (GRO)-C5-C12		150		50
Benzene		ND		0.99
Toluene		ND		0.99
Ethylbenzene		ND		0.99
Xylenes, Total		ND		2.0
TAME		ND		0.99
Ethyl tert-butyl ether		ND		0.99
MTBE		ND		0.99
DIPE		ND		0.99
TBA		ND		2.0
EDB		ND		0.99
1,2-Dichloroethane		ND		0.99
Surrogate		%Rec		Acceptance Limits
Toluene-d8 (Surr)		89		70 - 130
1,2-Dichloroethane-d4 (Surr)		98		70 - 130

Analytical Data

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Client Sample ID: B5-13

Lab Sample ID: 720-17507-8

Date Sampled: 12/30/2008 0000

Client Matrix: Solid

Date Received: 12/31/2008 1520

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method: 8260B/CA_LUFTMS Analysis Batch: 720-45585 Instrument ID: Saturn 2100
Preparation: 5030B Prep Batch: 720-45588 Lab File ID: d:\data\200901\010609\sa-s
Dilution: 1.0 Initial Weight/Volume: 5.12 g
Date Analyzed: 01/06/2009 1218 Final Weight/Volume: 10 mL
Date Prepared: 01/06/2009 0900

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Gasoline Range Organics (GRO)-C5-C12		0.48		0.24
Benzene		ND		0.0049
Toluene		ND		0.0049
Ethylbenzene		ND		0.0049
Xylenes, Total		ND		0.0098
TAME		ND		0.0049
Ethyl tert-butyl ether		ND		0.0049
MTBE		ND		0.0049
DIPE		ND		0.0049
TBA		ND		0.0098
EDB		ND		0.0049
1,2-Dichloroethane		ND		0.0049
Surrogate		%Rec		Acceptance Limits
Toluene-d8 (Surr)		88		74 - 118
1,2-Dichloroethane-d4 (Surr)		92		54 - 134

Analytical Data

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Client Sample ID: B5-15

Lab Sample ID: 720-17507-9

Date Sampled: 12/30/2008 0000

Client Matrix: Solid

Date Received: 12/31/2008 1520

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method: 8260B/CA_LUFTMS Analysis Batch: 720-45524 Instrument ID: Saturn 2100
Preparation: 5030B-Medium Prep Batch: 720-45541 Lab File ID: d:\data\200901\010209\sa-s
Dilution: 200 Initial Weight/Volume: 5.07 g
Date Analyzed: 01/02/2009 2014 Final Weight/Volume: 10 mL
Date Prepared: 01/02/2009 1800

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Gasoline Range Organics (GRO)-C5-C12		220		49
Benzene		ND		0.99
Toluene		ND		0.99
Ethylbenzene		ND		0.99
Xylenes, Total		ND		2.0
TAME		ND		0.99
Ethyl tert-butyl ether		ND		0.99
MTBE		ND		0.99
DIPE		ND		0.99
TBA		ND		2.0
EDB		ND		0.99
1,2-Dichloroethane		ND		0.99
Surrogate		%Rec		Acceptance Limits
Toluene-d8 (Surr)		87		70 - 130
1,2-Dichloroethane-d4 (Surr)		89		70 - 130

Analytical Data

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Client Sample ID: B6-1.5

Lab Sample ID: 720-17507-10

Date Sampled: 12/30/2008 0000

Client Matrix: Solid

Date Received: 12/31/2008 1520

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method: 8260B/CA_LUFTMS Analysis Batch: 720-45603 Instrument ID: Varian 3900A
Preparation: 5030B Prep Batch: 720-45604 Lab File ID: e:\data\2009\010709\sa-so-
Dilution: 1.0 Initial Weight/Volume: 5.34 g
Date Analyzed: 01/07/2009 1411 Final Weight/Volume: 10 mL
Date Prepared: 01/07/2009 0800

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Gasoline Range Organics (GRO)-C5-C12		0.28		0.23
Benzene		ND		0.0047
Toluene		ND		0.0047
Ethylbenzene		ND		0.0047
Xylenes, Total		ND		0.0094
TAME		ND		0.0047
Ethyl tert-butyl ether		ND		0.0047
MTBE		ND		0.0047
DIPE		ND		0.0047
TBA		ND		0.0094
EDB		ND		0.0047
1,2-Dichloroethane		ND		0.0047
Surrogate		%Rec		Acceptance Limits
Toluene-d8 (Surr)		100		74 - 118
1,2-Dichloroethane-d4 (Surr)		98		54 - 134

Analytical Data

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Client Sample ID: B6-8

Lab Sample ID: 720-17507-11

Date Sampled: 12/30/2008 0000

Client Matrix: Solid

Date Received: 12/31/2008 1520

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method: 8260B/CA_LUFTMS Analysis Batch: 720-45524 Instrument ID: Saturn 2100
Preparation: 5030B-Medium Prep Batch: 720-45541 Lab File ID: d:\data\200901\010209\sa-s
Dilution: 200 Initial Weight/Volume: 5.25 g
Date Analyzed: 01/02/2009 2040 Final Weight/Volume: 10 mL
Date Prepared: 01/02/2009 1800

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Gasoline Range Organics (GRO)-C5-C12		430		48
Benzene		ND		0.95
Toluene		ND		0.95
Ethylbenzene		ND		0.95
Xylenes, Total		ND		1.9
TAME		ND		0.95
Ethyl tert-butyl ether		ND		0.95
MTBE		ND		0.95
DIPE		ND		0.95
TBA		ND		1.9
EDB		ND		0.95
1,2-Dichloroethane		ND		0.95
Surrogate		%Rec		Acceptance Limits
Toluene-d8 (Surr)		89		70 - 130
1,2-Dichloroethane-d4 (Surr)		92		70 - 130

Analytical Data

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Client Sample ID: B6-12

Lab Sample ID: 720-17507-12

Date Sampled: 12/30/2008 0000

Client Matrix: Solid

Date Received: 12/31/2008 1520

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method: 8260B/CA_LUFTMS Analysis Batch: 720-45603 Instrument ID: Varian 3900A
Preparation: 5030B Prep Batch: 720-45604 Lab File ID: e:\data\2009\010709\sa-so-
Dilution: 1.0 Initial Weight/Volume: 5.26 g
Date Analyzed: 01/07/2009 1433 Final Weight/Volume: 10 mL
Date Prepared: 01/07/2009 0800

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Gasoline Range Organics (GRO)-C5-C12		1.3		0.24
Benzene		ND		0.0048
Toluene		ND		0.0048
Ethylbenzene		ND		0.0048
Xylenes, Total		ND		0.0095
TAME		ND		0.0048
Ethyl tert-butyl ether		ND		0.0048
MTBE		ND		0.0048
DIPE		ND		0.0048
TBA		ND		0.0095
EDB		ND		0.0048
1,2-Dichloroethane		ND		0.0048
Surrogate		%Rec		Acceptance Limits
Toluene-d8 (Surr)		100		74 - 118
1,2-Dichloroethane-d4 (Surr)		75		54 - 134

Analytical Data

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Client Sample ID: B6-16

Lab Sample ID: 720-17507-13

Date Sampled: 12/30/2008 0000

Client Matrix: Solid

Date Received: 12/31/2008 1520

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method: 8260B/CA_LUFTMS Analysis Batch: 720-45558 Instrument ID: Varian 3900A
Preparation: 5030B Prep Batch: 720-45538 Lab File ID: e:\data\2009\sa-so-17507-a
Dilution: 1.0 Initial Weight/Volume: 5.22 g
Date Analyzed: 01/02/2009 1638 Final Weight/Volume: 10 mL
Date Prepared: 01/02/2009 0800

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Gasoline Range Organics (GRO)-C5-C12		ND		0.24
Benzene		ND		0.0048
Toluene		ND		0.0048
Ethylbenzene		ND		0.0048
Xylenes, Total		ND		0.0096
TAME		ND		0.0048
Ethyl tert-butyl ether		ND		0.0048
MTBE		ND		0.0048
DIPE		ND		0.0048
TBA		ND		0.0096
EDB		ND		0.0048
1,2-Dichloroethane		ND		0.0048
Surrogate		%Rec		Acceptance Limits
Toluene-d8 (Surr)		98		74 - 118
1,2-Dichloroethane-d4 (Surr)		99		54 - 134

Analytical Data

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Client Sample ID: B6-20

Lab Sample ID: 720-17507-14

Date Sampled: 12/31/2008 0000

Client Matrix: Solid

Date Received: 12/31/2008 1520

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method: 8260B/CA_LUFTMS Analysis Batch: 720-45558 Instrument ID: Varian 3900A
Preparation: 5030B Prep Batch: 720-45538 Lab File ID: e:\data\2009\sa-so-17507-a
Dilution: 1.0 Initial Weight/Volume: 5.29 g
Date Analyzed: 01/02/2009 1701 Final Weight/Volume: 10 mL
Date Prepared: 01/02/2009 0800

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Gasoline Range Organics (GRO)-C5-C12		ND		0.24
Benzene		ND		0.0047
Toluene		ND		0.0047
Ethylbenzene		ND		0.0047
Xylenes, Total		ND		0.0095
TAME		ND		0.0047
Ethyl tert-butyl ether		ND		0.0047
MTBE		ND		0.0047
DIPE		ND		0.0047
TBA		ND		0.0095
EDB		ND		0.0047
1,2-Dichloroethane		ND		0.0047
Surrogate		%Rec		Acceptance Limits
Toluene-d8 (Surr)		101		74 - 118
1,2-Dichloroethane-d4 (Surr)		98		54 - 134

Analytical Data

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Client Sample ID: B4-W

Lab Sample ID: 720-17507-15

Date Sampled: 12/30/2008 0000

Client Matrix: Water

Date Received: 12/31/2008 1520

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method: 8260B/CA_LUFTMS Analysis Batch: 720-45523 Instrument ID: Saturn 2100
Preparation: 5030B Lab File ID: d:\data\200901\010209\sa-
Dilution: 1.0 Initial Weight/Volume: 10 mL
Date Analyzed: 01/02/2009 1640 Final Weight/Volume: 10 mL
Date Prepared: 01/02/2009 1640

Analyte	Result (ug/L)	Qualifier	RL
Gasoline Range Organics (GRO)-C5-C12	1200		50
Benzene	4.0		0.50
Toluene	ND		0.50
Ethylbenzene	28		0.50
Xylenes, Total	1.5		1.0
DIPE	ND		1.0
TBA	ND		5.0
MTBE	ND		0.50
TAME	ND		0.50
Ethyl tert-butyl ether	ND		0.50
EDB	ND		0.50
1,2-Dichloroethane	ND		0.50
Surrogate	%Rec		Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	87		67 - 126
Toluene-d8 (Surr)	79		78 - 112

Analytical Data

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Client Sample ID: B5-W

Lab Sample ID: 720-17507-16

Date Sampled: 12/30/2008 0000

Client Matrix: Water

Date Received: 12/31/2008 1520

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method: 8260B/CA_LUFTMS Analysis Batch: 720-45523 Instrument ID: Saturn 2100
Preparation: 5030B Lab File ID: d:\data\200901\010209\sa-
Dilution: 1.0 Initial Weight/Volume: 10 mL
Date Analyzed: 01/02/2009 1706 Final Weight/Volume: 10 mL
Date Prepared: 01/02/2009 1706

Analyte	Result (ug/L)	Qualifier	RL
Gasoline Range Organics (GRO)-C5-C12	4600		50
Benzene	ND		0.50
Toluene	0.90		0.50
Ethylbenzene	1.6		0.50
Xylenes, Total	1.8		1.0
DIPE	ND		1.0
TBA	ND		5.0
MTBE	ND		0.50
TAME	ND		0.50
Ethyl tert-butyl ether	ND		0.50
EDB	ND		0.50
1,2-Dichloroethane	ND		0.50
Surrogate	%Rec		Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	93		67 - 126
Toluene-d8 (Surr)	79		78 - 112

Analytical Data

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Client Sample ID: B6-W

Lab Sample ID: 720-17507-17

Date Sampled: 12/31/2008 0000

Client Matrix: Water

Date Received: 12/31/2008 1520

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method: 8260B/CA_LUFTMS Analysis Batch: 720-45523 Instrument ID: Saturn 2100
Preparation: 5030B Lab File ID: d:\data\200901\010209\sa-
Dilution: 1.0 Initial Weight/Volume: 10 mL
Date Analyzed: 01/02/2009 1733 Final Weight/Volume: 10 mL
Date Prepared: 01/02/2009 1733

Analyte	Result (ug/L)	Qualifier	RL
Gasoline Range Organics (GRO)-C5-C12	360		50
Benzene	ND		0.50
Toluene	ND		0.50
Ethylbenzene	0.60		0.50
Xylenes, Total	ND		1.0
DIPE	ND		1.0
TBA	ND		5.0
MTBE	ND		0.50
TAME	ND		0.50
Ethyl tert-butyl ether	ND		0.50
EDB	ND		0.50
1,2-Dichloroethane	ND		0.50
Surrogate	%Rec		Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	87		67 - 126
Toluene-d8 (Surr)	84		78 - 112

Analytical Data

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Client Sample ID: B4-18

Lab Sample ID: 720-17507-18

Date Sampled: 12/30/2008 0000

Client Matrix: Solid

Date Received: 12/31/2008 1520

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method: 8260B/CA_LUFTMS Analysis Batch: 720-45558 Instrument ID: Varian 3900A
Preparation: 5030B Prep Batch: 720-45538 Lab File ID: e:\data\2009\sa-so-17507-a
Dilution: 1.0 Initial Weight/Volume: 5.35 g
Date Analyzed: 01/02/2009 1854 Final Weight/Volume: 10 mL
Date Prepared: 01/02/2009 0800

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Gasoline Range Organics (GRO)-C5-C12		ND		0.23
Benzene		ND		0.0047
Toluene		ND		0.0047
Ethylbenzene		ND		0.0047
Xylenes, Total		ND		0.0093
TAME		ND		0.0047
Ethyl tert-butyl ether		ND		0.0047
MTBE		ND		0.0047
DIPE		ND		0.0047
TBA		ND		0.0093
EDB		ND		0.0047
1,2-Dichloroethane		ND		0.0047
Surrogate		%Rec		Acceptance Limits
Toluene-d8 (Surr)		91		74 - 118
1,2-Dichloroethane-d4 (Surr)		76		54 - 134

Analytical Data

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Client Sample ID: B5-19

Lab Sample ID: 720-17507-19
Client Matrix: Solid

Date Sampled: 12/30/2008 0000
Date Received: 12/31/2008 1520

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-45558	Instrument ID: Varian 3900A
Preparation:	5030B	Prep Batch: 720-45538	Lab File ID: e:\data\2009\sa-so-17507-a
Dilution:	1.0		Initial Weight/Volume: 5.18 g
Date Analyzed:	01/02/2009 1723		Final Weight/Volume: 10 mL
Date Prepared:	01/02/2009 0800		

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
<hr/>				
Gasoline Range Organics (GRO)-C5-C12		ND		0.24
Benzene		ND		0.0048
Toluene		ND		0.0048
Ethylbenzene		ND		0.0048
Xylenes, Total		ND		0.0097
TAME		ND		0.0048
Ethyl tert-butyl ether		ND		0.0048
MTBE		ND		0.0048
DIPE		ND		0.0048
TBA		ND		0.0097
EDB		ND		0.0048
1,2-Dichloroethane		ND		0.0048
<hr/>				
Surrogate		%Rec		Acceptance Limits
Toluene-d8 (Surr)		100		74 - 118
1,2-Dichloroethane-d4 (Surr)		89		54 - 134

Analytical Data

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Client Sample ID: B5-20

Lab Sample ID: 720-17507-20

Date Sampled: 12/30/2008 0000

Client Matrix: Solid

Date Received: 12/31/2008 1520

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method: 8260B/CA_LUFTMS Analysis Batch: 720-45558 Instrument ID: Varian 3900A
Preparation: 5030B Prep Batch: 720-45538 Lab File ID: e:\data\2009\sa-so-17507-a
Dilution: 1.0 Initial Weight/Volume: 5.18 g
Date Analyzed: 01/02/2009 1746 Final Weight/Volume: 10 mL
Date Prepared: 01/02/2009 0800

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Gasoline Range Organics (GRO)-C5-C12		ND		0.24
Benzene		ND		0.0048
Toluene		ND		0.0048
Ethylbenzene		ND		0.0048
Xylenes, Total		ND		0.0097
TAME		ND		0.0048
Ethyl tert-butyl ether		ND		0.0048
MTBE		ND		0.0048
DIPE		ND		0.0048
TBA		ND		0.0097
EDB		ND		0.0048
1,2-Dichloroethane		ND		0.0048
Surrogate		%Rec		Acceptance Limits
Toluene-d8 (Surr)		100		74 - 118
1,2-Dichloroethane-d4 (Surr)		88		54 - 134

Analytical Data

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Client Sample ID: B6-24

Lab Sample ID: 720-17507-21

Date Sampled: 12/31/2008 0000

Client Matrix: Solid

Date Received: 12/31/2008 1520

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method: 8260B/CA_LUFTMS Analysis Batch: 720-45558 Instrument ID: Varian 3900A
Preparation: 5030B Prep Batch: 720-45538 Lab File ID: e:\data\2009\sa-so-17507-a
Dilution: 1.0 Initial Weight/Volume: 5.19 g
Date Analyzed: 01/02/2009 1809 Final Weight/Volume: 10 mL
Date Prepared: 01/02/2009 0800

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Gasoline Range Organics (GRO)-C5-C12		ND		0.24
Benzene		ND		0.0048
Toluene		ND		0.0048
Ethylbenzene		ND		0.0048
Xylenes, Total		ND		0.0096
TAME		ND		0.0048
Ethyl tert-butyl ether		ND		0.0048
MTBE		ND		0.0048
DIPE		ND		0.0048
TBA		ND		0.0096
EDB		ND		0.0048
1,2-Dichloroethane		ND		0.0048
Surrogate		%Rec		Acceptance Limits
Toluene-d8 (Surr)		95		74 - 118
1,2-Dichloroethane-d4 (Surr)		80		54 - 134

Analytical Data

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Client Sample ID: B6-28

Lab Sample ID: 720-17507-22

Date Sampled: 12/31/2008 0000

Client Matrix: Solid

Date Received: 12/31/2008 1520

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method: 8260B/CA_LUFTMS Analysis Batch: 720-45558 Instrument ID: Varian 3900A
Preparation: 5030B Prep Batch: 720-45538 Lab File ID: e:\data\2009\sa-so-17507-a
Dilution: 1.0 Initial Weight/Volume: 5.07 g
Date Analyzed: 01/02/2009 1831 Final Weight/Volume: 10 mL
Date Prepared: 01/02/2009 0800

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Gasoline Range Organics (GRO)-C5-C12		ND		0.25
Benzene		ND		0.0049
Toluene		ND		0.0049
Ethylbenzene		ND		0.0049
Xylenes, Total		ND		0.0099
TAME		ND		0.0049
Ethyl tert-butyl ether		ND		0.0049
MTBE		ND		0.0049
DIPE		ND		0.0049
TBA		ND		0.0099
EDB		ND		0.0049
1,2-Dichloroethane		ND		0.0049
Surrogate		%Rec		Acceptance Limits
Toluene-d8 (Surr)		98		74 - 118
1,2-Dichloroethane-d4 (Surr)		97		54 - 134

Analytical Data

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Client Sample ID: B4-4

Lab Sample ID: 720-17507-1

Date Sampled: 12/30/2008 0000

Client Matrix: Solid

Date Received: 12/31/2008 1520

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method:	8015B	Analysis Batch: 720-45625	Instrument ID:	HP DRO5
Preparation:	3550B	Prep Batch: 720-45490	Lab File ID:	N/A
Dilution:	1.0		Initial Weight/Volume:	30.03 g
Date Analyzed:	01/05/2009 1149		Final Weight/Volume:	5 mL
Date Prepared:	01/02/2009 1235		Injection Volume:	
			Column ID:	PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		3.8		1.0
Motor Oil Range Organics [C24-C36]		ND		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	82	41 - 105

Analytical Data

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Client Sample ID: B4-7

Lab Sample ID: 720-17507-2

Date Sampled: 12/30/2008 0000

Client Matrix: Solid

Date Received: 12/31/2008 1520

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method:	8015B	Analysis Batch: 720-45625	Instrument ID:	HP DRO5
Preparation:	3550B	Prep Batch: 720-45490	Lab File ID:	N/A
Dilution:	1.0		Initial Weight/Volume:	30.00 g
Date Analyzed:	01/05/2009 1553		Final Weight/Volume:	5 mL
Date Prepared:	01/02/2009 1235		Injection Volume:	
			Column ID:	PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		26		1.0
Motor Oil Range Organics [C24-C36]		ND		50

Surrogate	%Rec		Acceptance Limits
Capric Acid (Surr)	8	X	0 - 5
p-Terphenyl	75		41 - 105

Analytical Data

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Client Sample ID: B4-10

Lab Sample ID: 720-17507-3

Date Sampled: 12/30/2008 0000

Client Matrix: Solid

Date Received: 12/31/2008 1520

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method:	8015B	Analysis Batch: 720-45625	Instrument ID:	HP DRO5
Preparation:	3550B	Prep Batch: 720-45490	Lab File ID:	N/A
Dilution:	1.0		Initial Weight/Volume:	30.07 g
Date Analyzed:	01/05/2009 1243		Final Weight/Volume:	5 mL
Date Prepared:	01/02/2009 1235		Injection Volume:	
			Column ID:	PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		1.9		1.0
Motor Oil Range Organics [C24-C36]		ND		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	85	41 - 105

Analytical Data

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Client Sample ID: B4-11.5

Lab Sample ID: 720-17507-4

Date Sampled: 12/30/2008 0000

Client Matrix: Solid

Date Received: 12/31/2008 1520

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method:	8015B	Analysis Batch: 720-45625	Instrument ID:	HP DRO5
Preparation:	3550B	Prep Batch: 720-45490	Lab File ID:	N/A
Dilution:	1.0		Initial Weight/Volume:	30.05 g
Date Analyzed:	01/05/2009 1310		Final Weight/Volume:	5 mL
Date Prepared:	01/02/2009 1235		Injection Volume:	
			Column ID:	PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		4.1		1.0
Motor Oil Range Organics [C24-C36]		ND		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	72	41 - 105

Analytical Data

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Client Sample ID: B4-15

Lab Sample ID: 720-17507-5

Date Sampled: 12/30/2008 0000

Client Matrix: Solid

Date Received: 12/31/2008 1520

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method:	8015B	Analysis Batch: 720-45625	Instrument ID:	HP DRO5
Preparation:	3550B	Prep Batch: 720-45490	Lab File ID:	N/A
Dilution:	1.0		Initial Weight/Volume:	30.05 g
Date Analyzed:	01/05/2009 1338		Final Weight/Volume:	5 mL
Date Prepared:	01/02/2009 1235		Injection Volume:	
			Column ID:	PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		ND		1.0
Motor Oil Range Organics [C24-C36]		ND		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	85	41 - 105

Analytical Data

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Client Sample ID: B5-4

Lab Sample ID: 720-17507-6

Date Sampled: 12/30/2008 0000

Client Matrix: Solid

Date Received: 12/31/2008 1520

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method:	8015B	Analysis Batch: 720-45625	Instrument ID:	HP DRO5
Preparation:	3550B	Prep Batch: 720-45490	Lab File ID:	N/A
Dilution:	1.0		Initial Weight/Volume:	30.05 g
Date Analyzed:	01/05/2009 1620		Final Weight/Volume:	5 mL
Date Prepared:	01/02/2009 1235		Injection Volume:	
			Column ID:	PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		ND		1.0
Motor Oil Range Organics [C24-C36]		ND		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	80	41 - 105

Analytical Data

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Client Sample ID: B5-7

Lab Sample ID: 720-17507-7

Date Sampled: 12/30/2008 0000

Client Matrix: Solid

Date Received: 12/31/2008 1520

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method:	8015B	Analysis Batch: 720-45625	Instrument ID:	HP DRO5
Preparation:	3550B	Prep Batch: 720-45490	Lab File ID:	N/A
Dilution:	1.0		Initial Weight/Volume:	30.06 g
Date Analyzed:	01/05/2009 1647		Final Weight/Volume:	5 mL
Date Prepared:	01/02/2009 1235		Injection Volume:	
			Column ID:	PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		2.7		1.0
Motor Oil Range Organics [C24-C36]		ND		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	1	0 - 5
p-Terphenyl	84	41 - 105

Analytical Data

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Client Sample ID: B5-13

Lab Sample ID: 720-17507-8

Date Sampled: 12/30/2008 0000

Client Matrix: Solid

Date Received: 12/31/2008 1520

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method:	8015B	Analysis Batch: 720-45625	Instrument ID:	HP DRO5
Preparation:	3550B	Prep Batch: 720-45490	Lab File ID:	N/A
Dilution:	1.0		Initial Weight/Volume:	30.07 g
Date Analyzed:	01/05/2009 1714		Final Weight/Volume:	5 mL
Date Prepared:	01/02/2009 1235		Injection Volume:	
			Column ID:	PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		ND		1.0
Motor Oil Range Organics [C24-C36]		ND		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	85	41 - 105

Analytical Data

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Client Sample ID: B5-15

Lab Sample ID: 720-17507-9

Date Sampled: 12/30/2008 0000

Client Matrix: Solid

Date Received: 12/31/2008 1520

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method:	8015B	Analysis Batch: 720-45625	Instrument ID:	HP DRO5
Preparation:	3550B	Prep Batch: 720-45490	Lab File ID:	N/A
Dilution:	1.0		Initial Weight/Volume:	30.04 g
Date Analyzed:	01/05/2009 1526		Final Weight/Volume:	5 mL
Date Prepared:	01/02/2009 1235		Injection Volume:	
			Column ID:	PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		3.1		1.0
Motor Oil Range Organics [C24-C36]		ND		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	74	41 - 105

Analytical Data

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Client Sample ID: B6-1.5

Lab Sample ID: 720-17507-10

Date Sampled: 12/30/2008 0000

Client Matrix: Solid

Date Received: 12/31/2008 1520

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method:	8015B	Analysis Batch: 720-45625	Instrument ID:	HP DRO5
Preparation:	3550B	Prep Batch: 720-45490	Lab File ID:	N/A
Dilution:	1.0		Initial Weight/Volume:	30.04 g
Date Analyzed:	01/05/2009 1149		Final Weight/Volume:	5 mL
Date Prepared:	01/02/2009 1235		Injection Volume:	
			Column ID:	PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		1.9		1.0
Motor Oil Range Organics [C24-C36]		ND		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	75	41 - 105

Analytical Data

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Client Sample ID: B6-8

Lab Sample ID: 720-17507-11

Date Sampled: 12/30/2008 0000

Client Matrix: Solid

Date Received: 12/31/2008 1520

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method:	8015B	Analysis Batch: 720-45625	Instrument ID:	HP DRO5
Preparation:	3550B	Prep Batch: 720-45490	Lab File ID:	N/A
Dilution:	1.0		Initial Weight/Volume:	30.02 g
Date Analyzed:	01/05/2009 1553		Final Weight/Volume:	5 mL
Date Prepared:	01/02/2009 1235		Injection Volume:	
			Column ID:	PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		12		1.0
Motor Oil Range Organics [C24-C36]		ND		50

Surrogate	%Rec		Acceptance Limits
Capric Acid (Surr)	6	X	0 - 5
p-Terphenyl	71		41 - 105

Analytical Data

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Client Sample ID: B6-12

Lab Sample ID: 720-17507-12

Date Sampled: 12/30/2008 0000

Client Matrix: Solid

Date Received: 12/31/2008 1520

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method:	8015B	Analysis Batch: 720-45625	Instrument ID:	HP DRO5
Preparation:	3550B	Prep Batch: 720-45490	Lab File ID:	N/A
Dilution:	1.0		Initial Weight/Volume:	30.04 g
Date Analyzed:	01/05/2009 1243		Final Weight/Volume:	5 mL
Date Prepared:	01/02/2009 1235		Injection Volume:	
			Column ID:	PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		2.3		1.0
Motor Oil Range Organics [C24-C36]		ND		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	85	41 - 105

Analytical Data

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Client Sample ID: B6-16

Lab Sample ID: 720-17507-13

Date Sampled: 12/30/2008 0000

Client Matrix: Solid

Date Received: 12/31/2008 1520

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method:	8015B	Analysis Batch: 720-45625	Instrument ID:	HP DRO5
Preparation:	3550B	Prep Batch: 720-45490	Lab File ID:	N/A
Dilution:	1.0		Initial Weight/Volume:	30.03 g
Date Analyzed:	01/05/2009 1310		Final Weight/Volume:	5 mL
Date Prepared:	01/02/2009 1235		Injection Volume:	
			Column ID:	PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		1.1		1.0
Motor Oil Range Organics [C24-C36]		ND		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	77	41 - 105

Analytical Data

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Client Sample ID: B6-20

Lab Sample ID: 720-17507-14

Date Sampled: 12/31/2008 0000

Client Matrix: Solid

Date Received: 12/31/2008 1520

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method:	8015B	Analysis Batch: 720-45625	Instrument ID:	HP DRO5
Preparation:	3550B	Prep Batch: 720-45490	Lab File ID:	N/A
Dilution:	1.0		Initial Weight/Volume:	30.05 g
Date Analyzed:	01/05/2009 1338		Final Weight/Volume:	5 mL
Date Prepared:	01/02/2009 1235		Injection Volume:	
			Column ID:	PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		2.2		1.0
Motor Oil Range Organics [C24-C36]		ND		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	72	41 - 105

Analytical Data

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Client Sample ID: B4-W

Lab Sample ID: 720-17507-15

Date Sampled: 12/30/2008 0000

Client Matrix: Water

Date Received: 12/31/2008 1520

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method:	8015B	Analysis Batch: 720-45526	Instrument ID: HP DRO5
Preparation:	3510C SGC	Prep Batch: 720-45459	Lab File ID: N/A
Dilution:	1.0		Initial Weight/Volume: 250 mL
Date Analyzed:	01/02/2009 1551		Final Weight/Volume: 1 mL
Date Prepared:	12/31/2008 1737		Injection Volume:
			Column ID: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	340		50
Motor Oil Range Organics [C24-C36]	ND		500

Surrogate	%Rec	Acceptance Limits
p-Terphenyl	76	46 - 114
Capric Acid (Surr)	1	0 - 5

Analytical Data

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Client Sample ID: B5-W

Lab Sample ID: 720-17507-16

Date Sampled: 12/30/2008 0000

Client Matrix: Water

Date Received: 12/31/2008 1520

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method:	8015B	Analysis Batch: 720-45526	Instrument ID:	HP DRO5
Preparation:	3510C SGC	Prep Batch: 720-45459	Lab File ID:	N/A
Dilution:	1.0		Initial Weight/Volume:	250 mL
Date Analyzed:	01/02/2009 1619		Final Weight/Volume:	1 mL
Date Prepared:	12/31/2008 1737		Injection Volume:	
			Column ID:	PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	560		50
Motor Oil Range Organics [C24-C36]	ND		500

Surrogate	%Rec	Acceptance Limits
p-Terphenyl	83	46 - 114
Capric Acid (Surr)	1	0 - 5

Analytical Data

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Client Sample ID: B6-W

Lab Sample ID: 720-17507-17

Date Sampled: 12/31/2008 0000

Client Matrix: Water

Date Received: 12/31/2008 1520

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method:	8015B	Analysis Batch: 720-45526	Instrument ID: HP DRO5
Preparation:	3510C SGC	Prep Batch: 720-45459	Lab File ID: N/A
Dilution:	1.0		Initial Weight/Volume: 250 mL
Date Analyzed:	01/02/2009 1646		Final Weight/Volume: 1 mL
Date Prepared:	12/31/2008 1737		Injection Volume:
			Column ID: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	250		50
Motor Oil Range Organics [C24-C36]	ND		500

Surrogate	%Rec	Acceptance Limits
p-Terphenyl	81	46 - 114
Capric Acid (Surr)	1	0 - 5

Analytical Data

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Client Sample ID: B4-18

Lab Sample ID: 720-17507-18

Date Sampled: 12/30/2008 0000

Client Matrix: Solid

Date Received: 12/31/2008 1520

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method:	8015B	Analysis Batch: 720-45625	Instrument ID:	HP DRO5
Preparation:	3550B	Prep Batch: 720-45490	Lab File ID:	N/A
Dilution:	1.0		Initial Weight/Volume:	30.02 g
Date Analyzed:	01/05/2009 1741		Final Weight/Volume:	5 mL
Date Prepared:	01/02/2009 1240		Injection Volume:	
			Column ID:	PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		ND		1.0
Motor Oil Range Organics [C24-C36]		ND		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	91	41 - 105

Analytical Data

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Client Sample ID: B5-19

Lab Sample ID: 720-17507-19

Date Sampled: 12/30/2008 0000

Client Matrix: Solid

Date Received: 12/31/2008 1520

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method:	8015B	Analysis Batch: 720-45625	Instrument ID:	HP DRO5
Preparation:	3550B	Prep Batch: 720-45490	Lab File ID:	N/A
Dilution:	1.0		Initial Weight/Volume:	30.08 g
Date Analyzed:	01/05/2009 1620		Final Weight/Volume:	5 mL
Date Prepared:	01/02/2009 1235		Injection Volume:	
			Column ID:	PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		1.4		1.0
Motor Oil Range Organics [C24-C36]		ND		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	83	41 - 105

Analytical Data

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Client Sample ID: B5-20

Lab Sample ID: 720-17507-20

Date Sampled: 12/30/2008 0000

Client Matrix: Solid

Date Received: 12/31/2008 1520

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method:	8015B	Analysis Batch: 720-45625	Instrument ID:	HP DRO5
Preparation:	3550B	Prep Batch: 720-45490	Lab File ID:	N/A
Dilution:	1.0		Initial Weight/Volume:	30.01 g
Date Analyzed:	01/05/2009 1741		Final Weight/Volume:	5 mL
Date Prepared:	01/02/2009 1235		Injection Volume:	
			Column ID:	PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		1.7		1.0
Motor Oil Range Organics [C24-C36]		ND		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	79	41 - 105

Analytical Data

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Client Sample ID: B6-24

Lab Sample ID: 720-17507-21

Date Sampled: 12/31/2008 0000

Client Matrix: Solid

Date Received: 12/31/2008 1520

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method:	8015B	Analysis Batch: 720-45625	Instrument ID:	HP DRO5
Preparation:	3550B	Prep Batch: 720-45490	Lab File ID:	N/A
Dilution:	1.0		Initial Weight/Volume:	30.06 g
Date Analyzed:	01/05/2009 1808		Final Weight/Volume:	5 mL
Date Prepared:	01/02/2009 1235		Injection Volume:	
			Column ID:	PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		ND		1.0
Motor Oil Range Organics [C24-C36]		ND		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	81	41 - 105

Analytical Data

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Client Sample ID: B6-28

Lab Sample ID: 720-17507-22

Date Sampled: 12/31/2008 0000

Client Matrix: Solid

Date Received: 12/31/2008 1520

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method:	8015B	Analysis Batch: 720-45625	Instrument ID:	HP DRO5
Preparation:	3550B	Prep Batch: 720-45490	Lab File ID:	N/A
Dilution:	1.0		Initial Weight/Volume:	30.05 g
Date Analyzed:	01/05/2009 1808		Final Weight/Volume:	5 mL
Date Prepared:	01/02/2009 1235		Injection Volume:	
			Column ID:	PRIMARY

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	RL
Diesel Range Organics [C10-C28]		ND		1.0
Motor Oil Range Organics [C24-C36]		ND		50

Surrogate	%Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	82	41 - 105

DATA REPORTING QUALIFIERS

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Lab Section	Qualifier	Description
GC Semi VOA	X	Surrogate exceeds the control limits

Quality Control Results

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:720-45523					
LCS 720-45523/4	Lab Control Spike	T	Water	8260B/CA_LUFT	
LCSD 720-45523/2	Lab Control Spike Duplicate	T	Water	8260B/CA_LUFT	
MB 720-45523/5	Method Blank	T	Water	8260B/CA_LUFT	
720-17507-15	B4-W	T	Water	8260B/CA_LUFT	
720-17507-16	B5-W	T	Water	8260B/CA_LUFT	
720-17507-17	B6-W	T	Water	8260B/CA_LUFT	
Analysis Batch:720-45524					
LCS 720-45541/2-A	Lab Control Spike	T	Solid	8260B/CA_LUFT	720-45541
LCSD 720-45541/3-A	Lab Control Spike Duplicate	T	Solid	8260B/CA_LUFT	720-45541
MB 720-45541/1-A	Method Blank	T	Solid	8260B/CA_LUFT	720-45541
720-17507-2	B4-7	T	Solid	8260B/CA_LUFT	720-45541
720-17507-7	B5-7	T	Solid	8260B/CA_LUFT	720-45541
720-17507-9	B5-15	T	Solid	8260B/CA_LUFT	720-45541
720-17507-11	B6-8	T	Solid	8260B/CA_LUFT	720-45541
Prep Batch: 720-45538					
LCS 720-45538/4-A	Lab Control Spike	T	Solid	5030B	
LCSD 720-45538/5-A	Lab Control Spike Duplicate	T	Solid	5030B	
MB 720-45538/1-A	Method Blank	T	Solid	5030B	
720-17507-3	B4-10	T	Solid	5030B	
720-17507-3MS	Matrix Spike	T	Solid	5030B	
720-17507-3MSD	Matrix Spike Duplicate	T	Solid	5030B	
720-17507-4	B4-11.5	T	Solid	5030B	
720-17507-5	B4-15	T	Solid	5030B	
720-17507-13	B6-16	T	Solid	5030B	
720-17507-14	B6-20	T	Solid	5030B	
720-17507-18	B4-18	T	Solid	5030B	
720-17507-19	B5-19	T	Solid	5030B	
720-17507-20	B5-20	T	Solid	5030B	
720-17507-21	B6-24	T	Solid	5030B	
720-17507-22	B6-28	T	Solid	5030B	
Prep Batch: 720-45541					
LCS 720-45541/2-A	Lab Control Spike	T	Solid	5030B	
LCSD 720-45541/3-A	Lab Control Spike Duplicate	T	Solid	5030B	
MB 720-45541/1-A	Method Blank	T	Solid	5030B	
720-17507-2	B4-7	T	Solid	5030B	
720-17507-7	B5-7	T	Solid	5030B	
720-17507-9	B5-15	T	Solid	5030B	
720-17507-11	B6-8	T	Solid	5030B	

Quality Control Results

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:720-45558					
LCS 720-45538/4-A	Lab Control Spike	T	Solid	8260B/CA_LUFT	720-45538
LCSD 720-45538/5-A	Lab Control Spike Duplicate	T	Solid	8260B/CA_LUFT	720-45538
MB 720-45538/1-A	Method Blank	T	Solid	8260B/CA_LUFT	720-45538
720-17507-3	B4-10	T	Solid	8260B/CA_LUFT	720-45538
720-17507-3MS	Matrix Spike	T	Solid	8260B/CA_LUFT	720-45538
720-17507-3MSD	Matrix Spike Duplicate	T	Solid	8260B/CA_LUFT	720-45538
720-17507-4	B4-11.5	T	Solid	8260B/CA_LUFT	720-45538
720-17507-5	B4-15	T	Solid	8260B/CA_LUFT	720-45538
720-17507-13	B6-16	T	Solid	8260B/CA_LUFT	720-45538
720-17507-14	B6-20	T	Solid	8260B/CA_LUFT	720-45538
720-17507-18	B4-18	T	Solid	8260B/CA_LUFT	720-45538
720-17507-19	B5-19	T	Solid	8260B/CA_LUFT	720-45538
720-17507-20	B5-20	T	Solid	8260B/CA_LUFT	720-45538
720-17507-21	B6-24	T	Solid	8260B/CA_LUFT	720-45538
720-17507-22	B6-28	T	Solid	8260B/CA_LUFT	720-45538
Analysis Batch:720-45585					
LCS 720-45588/2-A	Lab Control Spike	T	Solid	8260B/CA_LUFT	720-45588
LCSD 720-45588/3-A	Lab Control Spike Duplicate	T	Solid	8260B/CA_LUFT	720-45588
MB 720-45588/1-A	Method Blank	T	Solid	8260B/CA_LUFT	720-45588
720-17507-6	B5-4	T	Solid	8260B/CA_LUFT	720-45588
720-17507-8	B5-13	T	Solid	8260B/CA_LUFT	720-45588
Prep Batch: 720-45588					
LCS 720-45588/2-A	Lab Control Spike	T	Solid	5030B	
LCSD 720-45588/3-A	Lab Control Spike Duplicate	T	Solid	5030B	
MB 720-45588/1-A	Method Blank	T	Solid	5030B	
720-17507-6	B5-4	T	Solid	5030B	
720-17507-8	B5-13	T	Solid	5030B	
Analysis Batch:720-45603					
LCS 720-45604/2-A	Lab Control Spike	T	Solid	8260B/CA_LUFT	720-45604
LCSD 720-45604/3-A	Lab Control Spike Duplicate	T	Solid	8260B/CA_LUFT	720-45604
MB 720-45604/1-A	Method Blank	T	Solid	8260B/CA_LUFT	720-45604
720-17507-1	B4-4	T	Solid	8260B/CA_LUFT	720-45604
720-17507-1MS	Matrix Spike	T	Solid	8260B/CA_LUFT	720-45604
720-17507-1MSD	Matrix Spike Duplicate	T	Solid	8260B/CA_LUFT	720-45604
720-17507-10	B6-1.5	T	Solid	8260B/CA_LUFT	720-45604
720-17507-12	B6-12	T	Solid	8260B/CA_LUFT	720-45604

Quality Control Results

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

QC Association Summary

<u>Lab Sample ID</u>	<u>Client Sample ID</u>	<u>Report Basis</u>	<u>Client Matrix</u>	<u>Method</u>	<u>Prep Batch</u>
GC/MS VOA					
Prep Batch: 720-45604					
LCS 720-45604/2-A	Lab Control Spike	T	Solid	5030B	
LCSD 720-45604/3-A	Lab Control Spike Duplicate	T	Solid	5030B	
MB 720-45604/1-A	Method Blank	T	Solid	5030B	
720-17507-1	B4-4	T	Solid	5030B	
720-17507-1MS	Matrix Spike	T	Solid	5030B	
720-17507-1MSD	Matrix Spike Duplicate	T	Solid	5030B	
720-17507-10	B6-1.5	T	Solid	5030B	
720-17507-12	B6-12	T	Solid	5030B	

Report Basis

T = Total

Quality Control Results

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Prep Batch: 720-45459					
LCS 720-45459/2-A	Lab Control Spike	A	Water	3510C SGC	
LCSD 720-45459/3-A	Lab Control Spike Duplicate	A	Water	3510C SGC	
MB 720-45459/1-A	Method Blank	A	Water	3510C SGC	
720-17507-15	B4-W	A	Water	3510C SGC	
720-17507-16	B5-W	A	Water	3510C SGC	
720-17507-17	B6-W	A	Water	3510C SGC	
Prep Batch: 720-45490					
LCS 720-45490/2-A	Lab Control Spike	A	Solid	3550B	
LCSD 720-45490/3-A	Lab Control Spike Duplicate	A	Solid	3550B	
MB 720-45490/1-A	Method Blank	A	Solid	3550B	
720-17507-1	B4-4	A	Solid	3550B	
720-17507-2	B4-7	A	Solid	3550B	
720-17507-3	B4-10	A	Solid	3550B	
720-17507-4	B4-11.5	A	Solid	3550B	
720-17507-5	B4-15	A	Solid	3550B	
720-17507-6	B5-4	A	Solid	3550B	
720-17507-7	B5-7	A	Solid	3550B	
720-17507-8	B5-13	A	Solid	3550B	
720-17507-9	B5-15	A	Solid	3550B	
720-17507-10	B6-1.5	A	Solid	3550B	
720-17507-11	B6-8	A	Solid	3550B	
720-17507-12	B6-12	A	Solid	3550B	
720-17507-13	B6-16	A	Solid	3550B	
720-17507-14	B6-20	A	Solid	3550B	
720-17507-18	B4-18	A	Solid	3550B	
720-17507-19	B5-19	A	Solid	3550B	
720-17507-19MS	Matrix Spike	A	Solid	3550B	
720-17507-19MSD	Matrix Spike Duplicate	A	Solid	3550B	
720-17507-20	B5-20	A	Solid	3550B	
720-17507-21	B6-24	A	Solid	3550B	
720-17507-22	B6-28	A	Solid	3550B	
Analysis Batch:720-45526					
LCS 720-45459/2-A	Lab Control Spike	A	Water	8015B	720-45459
LCSD 720-45459/3-A	Lab Control Spike Duplicate	A	Water	8015B	720-45459
MB 720-45459/1-A	Method Blank	A	Water	8015B	720-45459
720-17507-15	B4-W	A	Water	8015B	720-45459
720-17507-16	B5-W	A	Water	8015B	720-45459
720-17507-17	B6-W	A	Water	8015B	720-45459

Quality Control Results

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Analysis Batch:720-45625					
LCS 720-45490/2-A	Lab Control Spike	A	Solid	8015B	720-45490
LCSD 720-45490/3-A	Lab Control Spike Duplicate	A	Solid	8015B	720-45490
MB 720-45490/1-A	Method Blank	A	Solid	8015B	720-45490
720-17507-1	B4-4	A	Solid	8015B	720-45490
720-17507-2	B4-7	A	Solid	8015B	720-45490
720-17507-3	B4-10	A	Solid	8015B	720-45490
720-17507-4	B4-11.5	A	Solid	8015B	720-45490
720-17507-5	B4-15	A	Solid	8015B	720-45490
720-17507-6	B5-4	A	Solid	8015B	720-45490
720-17507-7	B5-7	A	Solid	8015B	720-45490
720-17507-8	B5-13	A	Solid	8015B	720-45490
720-17507-9	B5-15	A	Solid	8015B	720-45490
720-17507-10	B6-1.5	A	Solid	8015B	720-45490
720-17507-11	B6-8	A	Solid	8015B	720-45490
720-17507-12	B6-12	A	Solid	8015B	720-45490
720-17507-13	B6-16	A	Solid	8015B	720-45490
720-17507-14	B6-20	A	Solid	8015B	720-45490
720-17507-18	B4-18	A	Solid	8015B	720-45490
720-17507-19	B5-19	A	Solid	8015B	720-45490
720-17507-19MS	Matrix Spike	A	Solid	8015B	720-45490
720-17507-19MSD	Matrix Spike Duplicate	A	Solid	8015B	720-45490
720-17507-20	B5-20	A	Solid	8015B	720-45490
720-17507-21	B6-24	A	Solid	8015B	720-45490
720-17507-22	B6-28	A	Solid	8015B	720-45490

Report Basis

A = Silica Gel Cleanup

Quality Control Results

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Method Blank - Batch: 720-45523

Method: 8260B/CA_LUFTMS
Preparation: 5030B

Lab Sample ID: MB 720-45523/5
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 01/02/2009 1140
Date Prepared: 01/02/2009 1140

Analysis Batch: 720-45523
Prep Batch: N/A
Units: ug/L

Instrument ID: Saturn 2100
Lab File ID: d:\data\200901\010209\mb
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	Result	Qual	RL
Gasoline Range Organics (GRO)-C5-C12	ND		50
Benzene	ND		0.50
Toluene	ND		0.50
Ethylbenzene	ND		0.50
Xylenes, Total	ND		1.0
MTBE	ND		0.50
TAME	ND		0.50
DIPE	ND		1.0
Ethyl tert-butyl ether	ND		0.50
TBA	ND		5.0
EDB	ND		0.50
1,2-Dichloroethane	ND		0.50
Surrogate	% Rec	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	92	67 - 126	
Toluene-d8 (Surr)	82	78 - 112	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

**Lab Control Spike/
Lab Control Spike Duplicate Recovery Report - Batch: 720-45523**

**Method: 8260B/CA_LUFTMS
Preparation: 5030B**

LCS Lab Sample ID: LCS 720-45523/4
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 01/02/2009 1314
Date Prepared: 01/02/2009 1314

Analysis Batch: 720-45523
Prep Batch: N/A
Units: ug/L

Instrument ID: Saturn 2100
Lab File ID: d:\data\200901\010209\ls-v
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

LCSD Lab Sample ID: LCSD 720-45523/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 01/02/2009 1341
Date Prepared: 01/02/2009 1341

Analysis Batch: 720-45523
Prep Batch: N/A
Units: ug/L

Instrument ID: Saturn 2100
Lab File ID: d:\data\200901\010209\ld-w
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Gasoline Range Organics (GRO)-C5-C12	64	64	43 - 95	0	20		
Benzene	81	82	67 - 120	2	20		
Toluene	74	76	73 - 122	3	20		
MTBE	85	81	61 - 134	5	20		
Surrogate	LCS % Rec		LCSD % Rec		Acceptance Limits		
1,2-Dichloroethane-d4 (Surr)	79		81		67 - 126		
Toluene-d8 (Surr)	79		81		78 - 112		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Method Blank - Batch: 720-45538

Method: 8260B/CA_LUFTMS
Preparation: 5030B

Lab Sample ID: MB 720-45538/1-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 01/02/2009 1258
Date Prepared: 01/02/2009 0800

Analysis Batch: 720-45558
Prep Batch: 720-45538
Units: mg/Kg

Instrument ID: Varian 3900A
Lab File ID: e:\data\2009\mb-so-9-0102
Initial Weight/Volume: 5 g
Final Weight/Volume: 10 mL

Analyte	Result	Qual	RL
Gasoline Range Organics (GRO)-C5-C12	ND		0.25
Benzene	ND		0.0050
Toluene	ND		0.0050
Ethylbenzene	ND		0.0050
Xylenes, Total	ND		0.010
MTBE	ND		0.0050
TAME	ND		0.0050
DIPE	ND		0.0050
Ethyl tert-butyl ether	ND		0.0050
TBA	ND		0.010
EDB	ND		0.0050
1,2-Dichloroethane	ND		0.0050
Surrogate	% Rec		Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	91		54 - 134
Toluene-d8 (Surr)	99		74 - 118

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

**Lab Control Spike/
Lab Control Spike Duplicate Recovery Report - Batch: 720-45538**

**Method: 8260B/CA_LUFTMS
Preparation: 5030B**

LCS Lab Sample ID: LCS 720-45538/4-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 01/02/2009 1435
Date Prepared: 01/02/2009 0800

Analysis Batch: 720-45558
Prep Batch: 720-45538
Units: mg/Kg

Instrument ID: Varian 3900A
Lab File ID: e:\data\2009\ls-so-9-01020
Initial Weight/Volume: 5 g
Final Weight/Volume: 10 mL

LCSD Lab Sample ID: LCSD 720-45538/5-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 01/02/2009 1458
Date Prepared: 01/02/2009 0800

Analysis Batch: 720-45558
Prep Batch: 720-45538
Units: mg/Kg

Instrument ID: Varian 3900A
Lab File ID: e:\data\2009\ld-so-9-010201
Initial Weight/Volume: 5 g
Final Weight/Volume: 10 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Gasoline Range Organics (GRO)-C5-C12	78	78	43 - 95	0	20		
Benzene	98	109	65 - 116	10	20		
Toluene	81	87	69 - 121	8	20		
MTBE	82	89	73 - 131	8	20		
Surrogate	LCS % Rec		LCSD % Rec		Acceptance Limits		
1,2-Dichloroethane-d4 (Surr)	87		93		54 - 134		
Toluene-d8 (Surr)	99		104		74 - 118		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 720-45538**

**Method: 8260B/CA_LUFTMS
Preparation: 5030B**

MS Lab Sample ID: 720-17507-3
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 01/02/2009 1553
Date Prepared: 01/02/2009 0800

Analysis Batch: 720-45558
Prep Batch: 720-45538

Instrument ID: Varian 3900A
Lab File ID: e:\data\2009\sa-so-17507-
Initial Weight/Volume: 5.16 g
Final Weight/Volume: 10 mL

MSD Lab Sample ID: 720-17507-3
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 01/02/2009 1615
Date Prepared: 01/02/2009 0800

Analysis Batch: 720-45558
Prep Batch: 720-45538

Instrument ID: Varian 3900A
Lab File ID: e:\data\2009\sa-so-17507-
Initial Weight/Volume: 5.22 g
Final Weight/Volume: 10 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Gasoline Range Organics (GRO)-C5-C12	76	75	43 - 95	3	20		
Benzene	103	101	55 - 140	3	20		
Toluene	81	83	61 - 138	2	20		
MTBE	90	89	49 - 161	1	20		
Surrogate	MS % Rec		MSD % Rec		Acceptance Limits		
1,2-Dichloroethane-d4 (Surr)	91		74		54 - 134		
Toluene-d8 (Surr)	100		102		74 - 118		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Method Blank - Batch: 720-45541

Method: 8260B/CA_LUFTMS
Preparation: 5030B

Lab Sample ID: MB 720-45541/1-A
Client Matrix: Solid
Dilution: 200
Date Analyzed: 01/02/2009 1800
Date Prepared: 01/02/2009 1800

Analysis Batch: 720-45524
Prep Batch: 720-45541
Units: mg/Kg

Instrument ID: Saturn 2100
Lab File ID: d:\data\200901\010209\mb
Initial Weight/Volume: 5.0 g
Final Weight/Volume: 10 mL

Analyte	Result	Qual	RL
Gasoline Range Organics (GRO)-C5-C12	ND		50
Benzene	ND		1.0
Toluene	ND		1.0
Ethylbenzene	ND		1.0
Xylenes, Total	ND		2.0
MTBE	ND		1.0
TAME	ND		1.0
DIPE	ND		1.0
Ethyl tert-butyl ether	ND		1.0
TBA	ND		2.0
EDB	ND		1.0
1,2-Dichloroethane	ND		1.0
Surrogate	% Rec		Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	98		70 - 130
Toluene-d8 (Surr)	90		70 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

**Lab Control Spike/
Lab Control Spike Duplicate Recovery Report - Batch: 720-45541**

**Method: 8260B/CA_LUFTMS
Preparation: 5030B**

LCS Lab Sample ID: LCS 720-45541/2-A
Client Matrix: Solid
Dilution: 200
Date Analyzed: 01/02/2009 1826
Date Prepared: 01/02/2009 1800

Analysis Batch: 720-45524
Prep Batch: 720-45541
Units: mg/Kg

Instrument ID: Saturn 2100
Lab File ID: d:\data\200901\010209\ls-s
Initial Weight/Volume: 5.0 g
Final Weight/Volume: 10 mL

LCSD Lab Sample ID: LCSD 720-45541/3-A
Client Matrix: Solid
Dilution: 200
Date Analyzed: 01/02/2009 1853
Date Prepared: 01/02/2009 1800

Analysis Batch: 720-45524
Prep Batch: 720-45541
Units: mg/Kg

Instrument ID: Saturn 2100
Lab File ID: d:\data\200901\010209\ld-sc
Initial Weight/Volume: 5.0 g
Final Weight/Volume: 10 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Benzene	90	96	74 - 121	6	20		
Toluene	95	101	86 - 121	6	20		
MTBE	90	100	84 - 127	10	20		
Surrogate	LCS % Rec		LCSD % Rec		Acceptance Limits		
1,2-Dichloroethane-d4 (Surr)	94		100		70 - 130		
Toluene-d8 (Surr)	94		94		70 - 130		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Method Blank - Batch: 720-45588

Lab Sample ID: MB 720-45588/1-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 01/06/2009 0901
Date Prepared: 01/06/2009 0900

Analysis Batch: 720-45585
Prep Batch: 720-45588
Units: mg/Kg

Method: 8260B/CA_LUFTMS Preparation: 5030B

Instrument ID: Saturn 2100
Lab File ID: d:\data\200901\010609\mb
Initial Weight/Volume: 5.0 g
Final Weight/Volume: 10 mL

Analyte	Result	Qual	RL
Gasoline Range Organics (GRO)-C5-C12	ND		0.25
Benzene	ND		0.0050
Toluene	ND		0.0050
Ethylbenzene	ND		0.0050
Xylenes, Total	ND		0.010
MTBE	ND		0.0050
TAME	ND		0.0050
DIPE	ND		0.0050
Ethyl tert-butyl ether	ND		0.0050
TBA	ND		0.010
EDB	ND		0.0050
1,2-Dichloroethane	ND		0.0050
Surrogate	% Rec	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	91	54 - 134	
Toluene-d8 (Surr)	84	74 - 118	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

**Lab Control Spike/
Lab Control Spike Duplicate Recovery Report - Batch: 720-45588**

**Method: 8260B/CA_LUFTMS
Preparation: 5030B**

LCS Lab Sample ID: LCS 720-45588/2-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 01/06/2009 0931
Date Prepared: 01/06/2009 0900

Analysis Batch: 720-45585
Prep Batch: 720-45588
Units: mg/Kg

Instrument ID: Saturn 2100
Lab File ID: d:\data\200901\010609\ls-s
Initial Weight/Volume: 5.0 g
Final Weight/Volume: 10 mL

LCSD Lab Sample ID: LCSD 720-45588/3-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 01/06/2009 0958
Date Prepared: 01/06/2009 0900

Analysis Batch: 720-45585
Prep Batch: 720-45588
Units: mg/Kg

Instrument ID: Saturn 2100
Lab File ID: d:\data\200901\010609\ld-sc
Initial Weight/Volume: 5.0 g
Final Weight/Volume: 10 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Gasoline Range Organics (GRO)-C5-C12	58	60	43 - 95	4	20		
Benzene	85	85	65 - 116	0	20		
Toluene	76	75	69 - 121	2	20		
MTBE	85	85	73 - 131	0	20		
Surrogate	LCS % Rec		LCSD % Rec		Acceptance Limits		
1,2-Dichloroethane-d4 (Surr)	81		83		54 - 134		
Toluene-d8 (Surr)	82		80		74 - 118		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Method Blank - Batch: 720-45604

Method: 8260B/CA_LUFTMS
Preparation: 5030B

Lab Sample ID: MB 720-45604/1-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 01/07/2009 0933
Date Prepared: 01/07/2009 0800

Analysis Batch: 720-45603
Prep Batch: 720-45604
Units: mg/Kg

Instrument ID: Varian 3900A
Lab File ID: e:\data\2009\010709\mb-w:
Initial Weight/Volume: 5 g
Final Weight/Volume: 10 mL

Analyte	Result	Qual	RL
Gasoline Range Organics (GRO)-C5-C12	ND		0.25
Benzene	ND		0.0050
Toluene	ND		0.0050
Ethylbenzene	ND		0.0050
Xylenes, Total	ND		0.010
MTBE	ND		0.0050
TAME	ND		0.0050
DIPE	ND		0.0050
Ethyl tert-butyl ether	ND		0.0050
TBA	ND		0.010
EDB	ND		0.0050
1,2-Dichloroethane	ND		0.0050
Surrogate	% Rec		Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	97		54 - 134
Toluene-d8 (Surr)	100		74 - 118

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

**Lab Control Spike/
Lab Control Spike Duplicate Recovery Report - Batch: 720-45604**

**Method: 8260B/CA_LUFTMS
Preparation: 5030B**

LCS Lab Sample ID: LCS 720-45604/2-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 01/07/2009 1143
Date Prepared: 01/07/2009 0800

Analysis Batch: 720-45603
Prep Batch: 720-45604
Units: mg/Kg

Instrument ID: Varian 3900A
Lab File ID: e:\data\2009\010709\ls-so-
Initial Weight/Volume: 5 g
Final Weight/Volume: 10 mL

LCSD Lab Sample ID: LCSD 720-45604/3-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 01/07/2009 1205
Date Prepared: 01/07/2009 0800

Analysis Batch: 720-45603
Prep Batch: 720-45604
Units: mg/Kg

Instrument ID: Varian 3900A
Lab File ID: e:\data\2009\010709\ld-so-8
Initial Weight/Volume: 5 g
Final Weight/Volume: 10 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Gasoline Range Organics (GRO)-C5-C12	54	57	43 - 95	5	20		
Benzene	106	103	65 - 116	3	20		
Toluene	86	86	69 - 121	0	20		
MTBE	95	89	73 - 131	7	20		
Surrogate	LCS % Rec		LCSD % Rec		Acceptance Limits		
1,2-Dichloroethane-d4 (Surr)	79		82		54 - 134		
Toluene-d8 (Surr)	94		99		74 - 118		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 720-45604**

**Method: 8260B/CA_LUFTMS
Preparation: 5030B**

MS Lab Sample ID: 720-17507-1
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 01/07/2009 1325
Date Prepared: 01/07/2009 0800

Analysis Batch: 720-45603
Prep Batch: 720-45604

Instrument ID: Varian 3900A
Lab File ID: e:\data\2009\010709\sa-s
Initial Weight/Volume: 5.15 g
Final Weight/Volume: 10 mL

MSD Lab Sample ID: 720-17507-1
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 01/07/2009 1348
Date Prepared: 01/07/2009 0800

Analysis Batch: 720-45603
Prep Batch: 720-45604

Instrument ID: Varian 3900A
Lab File ID: e:\data\2009\010709\sa-so
Initial Weight/Volume: 5.27 g
Final Weight/Volume: 10 mL

Analyte	<u>% Rec.</u>		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Gasoline Range Organics (GRO)-C5-C12	50	61	43 - 95	11	20		
Benzene	109	100	55 - 140	10	20		
Toluene	89	81	61 - 138	11	20		
MTBE	118	102	49 - 161	17	20		
Surrogate	MS % Rec		MSD % Rec	Acceptance Limits			
1,2-Dichloroethane-d4 (Surr)	86		103	54 - 134			
Toluene-d8 (Surr)	109		96	74 - 118			

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Method Blank - Batch: 720-45459

Lab Sample ID: MB 720-45459/1-A
 Client Matrix: Water
 Dilution: 1.0
 Date Analyzed: 01/01/2009 0024
 Date Prepared: 12/31/2008 1035

Analysis Batch: 720-45526
 Prep Batch: 720-45459
 Units: ug/L

**Method: 8015B
 Preparation: 3510C SGC
 Silica Gel Cleanup**

Instrument ID: HP DRO5
 Lab File ID: N/A
 Initial Weight/Volume: 250 mL
 Final Weight/Volume: 1 mL
 Injection Volume:
 Column ID: PRIMARY

Analyte	Result	Qual	RL
Diesel Range Organics [C10-C28]	ND		50
Motor Oil Range Organics [C24-C36]	ND		500
Surrogate	% Rec		Acceptance Limits
Capric Acid (Surr)	0		0 - 5
p-Terphenyl	80		46 - 114

**Lab Control Spike/
 Lab Control Spike Duplicate Recovery Report - Batch: 720-45459**

LCS Lab Sample ID: LCS 720-45459/2-A
 Client Matrix: Water
 Dilution: 1.0
 Date Analyzed: 12/31/2008 2331
 Date Prepared: 12/31/2008 1035

Analysis Batch: 720-45526
 Prep Batch: 720-45459
 Units: ug/L

**Method: 8015B
 Preparation: 3510C SGC
 Silica Gel Cleanup**

Instrument ID: HP DRO5
 Lab File ID: N/A
 Initial Weight/Volume: 250 mL
 Final Weight/Volume: 1 mL
 Injection Volume:
 Column ID: PRIMARY

LCSD Lab Sample ID: LCSD 720-45459/3-A
 Client Matrix: Water
 Dilution: 1.0
 Date Analyzed: 12/31/2008 2358
 Date Prepared: 12/31/2008 1035

Analysis Batch: 720-45526
 Prep Batch: 720-45459
 Units: ug/L

Instrument ID: HP DRO5
 Lab File ID: N/A
 Initial Weight/Volume: 250 mL
 Final Weight/Volume: 1 mL
 Injection Volume:
 Column ID: PRIMARY

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Diesel Range Organics [C10-C28]	68	64	41 - 103	6	30		
Surrogate		LCS % Rec	LCSD % Rec			Acceptance Limits	
p-Terphenyl		76	75			46 - 114	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Method Blank - Batch: 720-45490

Lab Sample ID: MB 720-45490/1-A
 Client Matrix: Solid
 Dilution: 1.0
 Date Analyzed: 01/05/2009 1055
 Date Prepared: 01/02/2009 1235

Analysis Batch: 720-45625
 Prep Batch: 720-45490
 Units: mg/Kg

**Method: 8015B
 Preparation: 3550B
 Silica Gel Cleanup**

Instrument ID: HP DRO5
 Lab File ID: N/A
 Initial Weight/Volume: 30.01 g
 Final Weight/Volume: 5 mL
 Injection Volume:
 Column ID: PRIMARY

Analyte	Result	Qual	RL
Diesel Range Organics [C10-C28]	ND		1.0
Motor Oil Range Organics [C24-C36]	ND		50

Surrogate	% Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	96	41 - 105

**Lab Control Spike/
 Lab Control Spike Duplicate Recovery Report - Batch: 720-45490**

LCS Lab Sample ID: LCS 720-45490/2-A
 Client Matrix: Solid
 Dilution: 1.0
 Date Analyzed: 01/05/2009 1001
 Date Prepared: 01/02/2009 1235

Analysis Batch: 720-45625
 Prep Batch: 720-45490
 Units: mg/Kg

Instrument ID: HP DRO5
 Lab File ID: N/A
 Initial Weight/Volume: 30.04 g
 Final Weight/Volume: 5 mL
 Injection Volume:
 Column ID: PRIMARY

LCSD Lab Sample ID: LCSD 720-45490/3-A
 Client Matrix: Solid
 Dilution: 1.0
 Date Analyzed: 01/05/2009 1028
 Date Prepared: 01/02/2009 1235

Analysis Batch: 720-45625
 Prep Batch: 720-45490
 Units: mg/Kg

Instrument ID: HP DRO5
 Lab File ID: N/A
 Initial Weight/Volume: 30.05 g
 Final Weight/Volume: 5 mL
 Injection Volume:
 Column ID: PRIMARY

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Diesel Range Organics [C10-C28]	75	80	50 - 130	6	30		
Surrogate	LCS % Rec		LCSD % Rec	Acceptance Limits			
p-Terphenyl	94	91	91	41 - 105			

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 720-45490**

**Method: 8015B
Preparation: 3550B
Silica Gel Cleanup**

MS Lab Sample ID: 720-17507-19
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 01/05/2009 1647
Date Prepared: 01/02/2009 1235

Analysis Batch: 720-45625
Prep Batch: 720-45490

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.08 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

MSD Lab Sample ID: 720-17507-19
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 01/05/2009 1714
Date Prepared: 01/02/2009 1235

Analysis Batch: 720-45625
Prep Batch: 720-45490

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 30.03 g
Final Weight/Volume: 5 mL
Injection Volume:
Column ID: PRIMARY

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Diesel Range Organics [C10-C28]	65	67	50 - 130	2	30		
Surrogate		MS % Rec	MSD % Rec			Acceptance Limits	
p-Terphenyl		76	78			41 - 105	

Calculations are performed before rounding to avoid round-off errors in calculated results.



The Consulting Group

Chain of Custody

720-17507

394 Cecilia Way • Tiburon CA 94920-2105
 Phone: 415.381.2560 • Fax: 415.981.1741
 Email: tcg@tcg-international.com

Reference #: 113989
 Date: 12/31/08 12/31/08
 Page 1 of 2

TCG Personnel						Analysis Request																		
Project Manager: Woody Lovejoy						TPH EPA - <input type="checkbox"/> 80158021 <input checked="" type="checkbox"/> 8260B <input checked="" type="checkbox"/> Gas w/ <input type="checkbox"/> BTEX <input type="checkbox"/> MTBE	Purgeable Aromatics BTEX EPA - <input type="checkbox"/> 8021 <input type="checkbox"/> 8260B	TEPH 8015M <input checked="" type="checkbox"/> Silica Gel <input checked="" type="checkbox"/> Diesel <input type="checkbox"/> Motor Oil <input type="checkbox"/> Other	Fuel Tests 8260B: <input checked="" type="checkbox"/> Gas <input checked="" type="checkbox"/> BTEX <input checked="" type="checkbox"/> Five Oxy <input checked="" type="checkbox"/> DCA, EDB <input type="checkbox"/> Ethanol	Purgeable Halocarbons (HVOCs) EPA 8021	Volatile Organics GC/MS (VOCs) <input checked="" type="checkbox"/> EPA 8260B <input type="checkbox"/> 624	Semivolatiles GC/MS <input checked="" type="checkbox"/> EPA 8270 <input type="checkbox"/> 625	Oil and Grease <input type="checkbox"/> Petroleum (EPA 1664) <input checked="" type="checkbox"/> Total	Pesticides <input checked="" type="checkbox"/> EPA 8081 <input type="checkbox"/> 608 PCBs <input checked="" type="checkbox"/> EPA 8082 <input type="checkbox"/> 608	PNAs by <input type="checkbox"/> 8270 <input type="checkbox"/> 8310	CAM17 Metals (60107470/1)	Metals: <input type="checkbox"/> Lead <input checked="" type="checkbox"/> LUFT <input type="checkbox"/> RCRA <input type="checkbox"/> Other:	<input type="checkbox"/> WET (STLC) <input type="checkbox"/> TCLP	<input type="checkbox"/> Hexavalent Chromium <input type="checkbox"/> pH (24h hold time for H ₂ O)	<input type="checkbox"/> Spec Cond. <input type="checkbox"/> Alkalinity <input type="checkbox"/> TSS <input type="checkbox"/> TDS	Anions: <input type="checkbox"/> Cl <input type="checkbox"/> SO ₄ <input type="checkbox"/> NO ₃ <input type="checkbox"/> <input type="checkbox"/> F <input type="checkbox"/> Br <input type="checkbox"/> NO ₂ <input type="checkbox"/> PO ₄	Aroclor 1260 / 1268	TEPH-DRO and TEPH-ho, SG Strip	Number of Containers
Sampler: Ryan Cozart																								
Client Information																								
Client: WEL Prtnershp. 50 Hegenberger Lp, Oakland																								
Tele: 510.568.4829 PM: Gary Lyons																								
Fax: Cell: 510.772.2499																								
Sample ID	Date	Time	Matrix	Pres.																				
1. B4-4	12/30/08		S	N			X	X														1		
2. B4-7	12/30/08		S	N			X	X														1		
3. B4-10	12/30/08		S	N			X	X														1		
4. B4-115	12/30/08		S	N			X	X														1		
5. B4-15	12/30/08		S	N			X	X														1		
6. B5-4	12/30/08		S	N			X	X														1		
7. B5-7	12/30/08		S	N			X	X														1		
8. B5-13	12/30/08		S	N			X	X														1		
9. B5-15	12/30/08		S	N			X	X														1		

Project Info.		Sample Receipt	
Project Name: WE Lyons	# of Containers: <u>89</u>	Project#: 085101	Head Space: NA
PO#:	Temp: <u>1.7</u>	Credit Card#:	Conforms to record:
TAT	<input checked="" type="checkbox"/> 5 Day	<input type="checkbox"/> 72h	<input type="checkbox"/> 48h
Report:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Level 3	<input type="checkbox"/> Level 4
Special Instructions / Comments:	<input checked="" type="checkbox"/> State Tank Fund EDF		
<input checked="" type="checkbox"/> Global ID: T06019708237	<input checked="" type="checkbox"/> Log Code: TCGT		
Bill TCG	Email TCG		

1) Relinquished by:

Ryan Cozart 205
 Signature Time
12/31/08
 Date

Ryan Cozart
 Printed Name Date

TCG
 Company

1) Received by:

[Signature] 1405
 Signature Time
12/31/08
 Date

F. Lewis
 Printed Name Date

TASP
 Company

2) Relinquished by:

[Signature] 1520
 Signature Time
12/31/08
 Date

F. Lewis
 Printed Name Date

TASP
 Company

2) Received by:

[Signature] 1520
 Signature Time
12/31/08
 Date

T. Bullone
 Printed Name Date

TASIF
 Company

3) Relinquished by:

Signature Time
 Printed Name Date
 Company

3) Received by:

Signature Time
 Printed Name Date
 Company

720-17507

113989

6 - v=9's
2 - AL

TCG Personnel

Project Manager: Woody Lovejoy

Sampler: Ryan Cozart

Client Information

Client: WE Lyons 50 Hegenberger, Oakland

Project Manager: Gary Lyons

Cell:

Analysis Request

TPH EPA - 8015/8021 8260B
 Gas w/ BTEX MTBE

Purgeable Aromatics
 BTEX EPA - 8021 8260B

TEPH 8015M Silica Gel
 Diesel Motor Oil Other:

Fuel Tests 8260B: Gas BTEX
 Five Oxy OCA, EDB Ethand

Purgeable Halocarbons (HVOCs) EPA 8021

Volatile Organics GC/MS (VOCs)
 EPA 8260B 624

Semivolatiles GC/MS
 EPA 8270 625

Oil and Grease Petroleum (EPA 1664) Total

Pesticides EPA 8081 608
 EPA 8082 608

PNAs by 8270 8310

CAM17 Metals (6010/7470/1)

Metals: Lead LUFT RCRA
 Other:

WET (STLC)
 TCLP

Hexavalent Chromium
 pH (24h hold time for H₂O)

Spec Cond. Alkalinity
 TSS TDS

Anions: Cl SO₄ NO₃
 F Br NO₂ PO₄

Aroclor 1260 / 1268

Sample ID	Date	Time	Matrix	Pres	TPH EPA	Purgeable Aromatics	TEPH 8015M	Fuel Tests	Purgeable Halocarbons	Volatile Organics GC/MS	Semivolatiles GC/MS	Oil and Grease	Pesticides	PNAs	CAM17 Metals	Metals	WET (STLC)	Hexavalent Chromium	Spec Cond.	Anions	Aroclor	Number of Containers	
10. B6-15	12/30/08		S	N			X	X															1
11. B6-8	12/30/08		S	N			X	X															1
12. B6-12	12/30/08		S	N			X	X															1
13. B6-16	12/30/08		S	N			X	X															1
14. B6-20	12/31/08		S	N			X	X															1
15. B4-W	12/30/08		W	N			X	X															8
16. B5-W	12/30/08		W	N			X	X															8
17. B6-W	12/30/08		W	N			X	X															8
18. B4-18	12/31/08		S	N			X	X															1
19. B5-19	12/30/08		S	N			X	X															1
20. B5-20	12/30/08		S	N			X	X															1
21. B6-24	12/31/08		S	N			X	X															1
22. B6-28	12/31/08		S	N			X	X															1

Project Info **Sample Receipt**

Project Name: WE Lyons # of Containers: 38
 Project#: 085101 Head Space: NA

PO#: Temp: Conforms to record:

Credit Card#: Conforms to record:

1) Relinquished by:

R Cozart 208
 Signature Time
 Ryan Cozart 12/30/08
 Printed Name Date

TCG Company

2) Relinquished by:

T Lewis 12/31/08
 Signature Time
 T. Lewis 12/31/08
 Printed Name Date

TASP Company

3) Relinquished by:

Signature Time
 Printed Name Date
 Company

TAT 5 Day 72h 48h 24h Other:

Report: Routine Level 3 Level 4 EDD State Tank Fund EDF
 Special Instructions / Comments:

Global ID: T06019708237
 Log Code: TCGT

Bill TCG
 Email TCG.

1) Received by:

T Lewis 12/31/08
 Signature Time
 T. Lewis 12/31/08
 Printed Name Date

TASP Company

2) Received by:

T Bulluck 15:20
 Signature Time
 T. Bulluck 12/31/08
 Printed Name Date

TASP Company

3) Received by:

Signature Time
 Printed Name Date
 Company

Login Sample Receipt Check List

Client: TCG (The Consulting Group)

Job Number: 720-17507-1

Login Number: 17507
Creator: Bullock, Tracy
List Number: 1

List Source: TestAmerica San Francisco

Question	T / F / NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	