LIMITED PHASE II
ENVIRONMENTAL SITE ASSESSMENT REPORT

CLINTON DRIVE RECONSTRUCTION PROJECT
FROM HIRSCH ROAD TO HARVEY WILSON DRIVE
HOUSTON, HARRIS COUNTY, TEXAS

WBS NO. N-000804-0001-3

PREPARED FOR:

TRANSYSTEMS CORPORATION
ON BEHALF OF THE CITY OF HOUSTON

BY:

BERG ♦ OLIVER ASSOCIATES, INC.
HOUSTON, TEXAS

REPORT NO: 8321PT12
MAY 2012

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May 21, 2012

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RE: Limited Phase II Environmental Site Assessment (ESA) Report
Clinton Drive Reconstruction Project
From Hirsch Road to Harvey Wilson Drive
Houston, Harris County, Texas

BOA Project No.: 8321PT12

Mr. Gunkle:

EXECUTIVE SUMMARY

Berg◆Oliver Associates, Inc. is pleased to present our report summarizing the findings and conclusions of the Limited Phase II ESA conducted on the Clinton Drive Reconstruction Project in Houston, Harris County, Texas.

Conclusions

The following was indicated by the laboratory analytical results:

Soil Analytical

Based on the sampling and laboratory analytical results, no special handling practices of the soil is required. Additionally, the laboratory analytical results indicate that the soil is not hydrocarbon-affected and is not a concern to construction workers. As noted on the soil boring logs, a minor hydrocarbon odor was noted in soil boring SB-1 at 14-16 feet bgs and soil boring SB-16 at 8-10 feet bgs. However, the laboratory analytical results did not detect concentrations of concern.

Groundwater Analytical

Groundwater was not encountered to 16 feet bgs with the exception of the vicinity of soil boring/temporary well point SB-4/TWP-4. Some minor slightly wet very thin layers of silty sand (>moist, but not saturated) were encountered in other select borings, but the minor amount of groundwater present was not sufficient to yield water for sampling purposes. No odor or evidence of hydrocarbon impact was observed at these respective areas.

The groundwater laboratory analytical results for SB-4/TWP-4 were reported to be non-detect. Dewatering, if necessary, should not be a concern based on the laboratory analytical results.

Recommendations

Based on the laboratory analytical results and field observations of the Limited Phase II Environmental Site Assessment for the Clinton Drive Reconstruction project in Harris County, Texas, the following is noted:

- No special handling practices for soil and groundwater is required.
- Based on the soil laboratory analytical results, the soil was determined not to be a concern to construction workers. Confined space protocols still apply.

If you have any questions or comments, please contact either of us at 281-589-0898.

Regards,

Ben Price, PG
Vice President
Attachment

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1.0 INTRODUCTION

The Clinton Drive Reconstruction Project consists of replacing the existing road surface and storm sewer system at the project area. Other subsurface utilities also appear to be proposed for replacement as part of the project. Location maps (Key Map©® and United States Geological Survey Topographic Map), FIGURE 1A and 1B identifies the project area and are presented in the Figures attachments of this report. The project area will typically be referred to as the "project alignment" in this document.

2.0 SCOPE-OF-WORK

Berg♦Oliver Associates, Inc. (BOA) was retained by TranSystems Corporation. to evaluate whether the project alignment has been affected by two active and other historical gasoline service stations and other select regulatory facilities and/or listings along the project alignment as follows:

1. JL Proler Iron & Steel (4401 Clinton Drive)
2. Vacant/Old Comet Rice facility (4601 Clinton Drive)
3. Vacant Property/Brownfield site (4600 Clinton Drive)
4. Former Burbank Drum & Barrel facility (4815 Clinton Drive)
5. Lone Star Heat Treating (5212 Clinton Drive)
6. MSC-Metal Supply Co./former Earle M. Jorgensen facility (5311 Clinton Drive)
7. Griffin Dewatering Southwest (5306 Clinton Drive)
8. Stop-N-Joy-Valero gasoline service station (999 Lockwood Drive at Clinton)
9. Stripes No. 1006/Chevron gasoline service station (990 Lockwood Dr. at Clinton)
10. Old Bama Food Products facility (5515 Clinton Drive)
11. Former AFCO No. 010501 fleet fueling facility (6002 Clinton Drive)

Sampling and analyses was conducted to determine whether contamination is present at the project alignment and the concentration of the contaminant(s) in the soil and/or groundwater, if any. The following Phase II Assessment activities are performed:

- Conducted an investigation of facilities with the potential for environmental conditions as identified in a previously-conducted Phase I ESA for the project alignment.
- The notification potentially affected parties by the completion of a Texas 811. This notifies pipeline companies (if applicable) and utilities that may have subsurface equipment at the project area and initiates the identification of their locations.
- Soil sampling locations were placed at equidistant locations to provide adequate coverage of the investigated facilities. Soil samples were submitted for laboratory analytical testing based upon field observations (visual and olfactory) and field screening.
- Conducted continuous field screening of soil cores at 2.0-foot intervals utilizing a photo-ionization detector (PID) calibrated to 100 ppm isobutylene standard.

- Complete up to 18 soil borings at the project alignment. If groundwater is encountered during drilling, convert up to 7 soil borings to temporary well points for the collection of shallow groundwater. During the Phase II ESA sampling event, groundwater was encountered in one soil boring, SB-4/TWP-4.
- Submit soil samples for laboratory analyses of voliatile organic compounds (VOCs) and/or methyl tert-butyl ether/benzene, toluene, ethyl-benzene and total xylenes (MTBE/BTEX) and total petroleum hydrocarbons (TPH).
- Submit one groundwater sample for laboratory analyses of laboratory analyses of VOCs and TPH.
- Detail site assessment activities, review laboratory analytical results and present the results and conclusions in a Limited Phase II ESA investigation report.

3.0 PHASE II ASSESSMENT ACTIVITIES

On April 25 and 26, 2011, BOA completed eighteen soil borings, SB-1 through SB-18 at select locations along the project alignment. The soil borings were completed to a depth of 16 feet below ground surface (bgs). One of the eighteen soil borings, SB-4 was converted to temporary well point, TWP-4 for the collection of groundwater. Groundwater and/or sufficient groundwater water was not encountered in any of the other soil borings SB-1 through SB-3 and SB-5 through SB-18 to 16 feet bgs.

Soil borings were advanced utilizing direct push technologies inclusive of a truck-mounted hydraulically-driven sampling device consisting of a 2-inch diameter, 4-foot stainless steel sampling spoon. Soil samples were continuously collected at 2-foot intervals and field screened utilizing a photo-ionization detector (PID). PID field screening ranged from non-detect (0.0 ppm) to 10 ppm. Geologic stratigraphy (lithology) and subsurface characteristics were recorded by the field geologist. FIGURES 2 through 5 provide investigated site details and soil boring locations. Soil boring logs are presented in APPENDIX A.

Prior to the initial soil boring and between each 4-foot advancement, all sampling devices were thoroughly cleaned and decontaminated using a hospital grade detergent, water and distilled water. Soil samples were obtained by personnel utilizing appropriate sampling tools and wearing clean, disposable gloves. Disposable nitrile gloves were changed between each sample collection. Two discrete (grab) samples were collected from each 2-foot interval of the soil borings. One sample was placed in a disposable bag for head space screening. The second soil sample was placed in two separate 4-ounce sterile glass containers equipped with a Teflon-lined lids furnished by the testing laboratory. Each container was filled to capacity with soil to limit the amount of headspace present. All samples were labeled in the field and stored at approximately 4°C prior to submission to Accutest Laboratories in Houston, Texas for laboratory analyses. Chain-of-custody documentation accompanied the samples in accordance with standard quality assurance and quality control measures.

3.1 SOIL SAMPLING (4401 Clinton Drive)

Three soil borings, SB-1, SB-2 and SB-3 were advanced along the south side of JL Proler Iron & Steel (also known as JR Proler Steel Co.), a metals recycling and scrap reclamation facility (4401 Clinton Drive). PID readings ranged from non-detect (0.0 ppm) to 5 ppm. The soil sample interval exhibiting the greatest PID reading from each soil boring, if any, was submitted for laboratory analyses; and one soil sample was submitted from each soil boring. If no field screening detections were encountered in the soil boring, a default soil sample was submitted. No PID readings were detected in soil borings SB-2 and SB-3, and default soil samples were submitted for laboratory analytical testing. With the exception of a minor detection (5 ppm) at 14-16 feet below ground surface (bgs) in soil boring SB-1, no PID readings were encountered in soil cores. FIGURE 2 provides site details and soil boring locations. Groundwater was not encountered to 16 feet below ground surface.

The facility is located at the northeast corner of Clinton Drive and Hirsch Road. The facility was reported to have had a leaking petroleum storage tank (LPST) event and was reported to have groundwater impact (LPST ID No. 103798). The facility has since been issued a case closure concurrence by the TCEQ, stating "no further action is necessary" based on the information received. One 10,000 gallon diesel and two 8,000 gallon diesel steel USTs were reported to have been permanently removed from the ground at the facility. Two 2,000 gallon, contents not provided, steel USTs have been permanently been filled in-place (abandoned in-place) at the facility (Facility ID No. 16219).

3.2 SOIL SAMPLING (4601 and 4600 Clinton Drive)

Two soil borings, SB-4 and SB-5 were advanced along the southern property line of the old Comet Rice facility (4601 Clinton Drive). Soil boring, SB-6 was completed along the northern property line of a listed Brownfield site (4600 Clinton Drive). PID readings were non-detect (0 ppm) for the soil boring soil cores. Default soil samples were collected and submitted for laboratory analyses.

The old Comet Rice facility is situated on the northwest corner of Clinton Drive and Schweikhardt Street. The old rice facility remains in-place, and is vacant and in-active. Two 2,000 gallon diesel steel USTs have been permanently been removed from the ground at the facility (Fac. ID No. 15984). The Brownfield site is south/southeast of the old Comet Rice facility.

Soil boring SB-4 was converted to a temporary well point, TWP-4 to collect a groundwater sample. Groundwater was encountered at 9.5 feet bgs. FIGURE 3 provides site details and soil boring locations.

3.3 SOIL SAMPLING (4815 Clinton Drive)

Three soil borings, SB-7, SB-8 and SB-9 were advanced along the south property line of the former Burbank Barrel and Drum facility (4815 Clinton Drive). The facility sold new and reconditioned 55-gallon drums. The facility remains in-place, and is vacant and in-active. PID readings were non-detect (0 ppm) for the soil boring soil cores. Default soil samples were collected and submitted for laboratory analyses.

The facility is located on the north side of Clinton Drive to the northeast of Japhet Street. One 2,000 gallon gasoline steel UST has been permanently been removed from the ground at the facility (Fac. ID No. 37351). Groundwater was not encountered to 16 feet bgs. FIGURE 4 provides site details and soil boring locations.

3.4 SOIL SAMPLING (5212, 5306 and 5311 Clinton Drive)

One soil boring, SB-10 was advanced along the northern property line of Hahn & Clay (5100 Clinton Drive) that fronts the Lone Star Heat Treating facility (5212 Clinton Drive). Hahn & Clay had a PST listing (Fac. ID No. 40879) and also is addressed by this soil boring. Lone Star Heat Treating had an LPST event (LPST ID No. 108524) and required additional work. The facility has since been issued a case closure concurrence by the TCEQ. One 5,000 gallon used oil and two 2,500 gallon used oil steel USTs have been permanently been removed from the ground at the facility (Fac. ID No. 65781). Additionally, the facility also had a Texas Commission on Environmental Quality, Texas Voluntary Clean-Up Program listing (TxVCP ID No. 306).

One soil boring, SB-11 was advanced along the northern property line of Griffin Dewatering (5306 Clinton Drive). The facility had a Texas Commission on Environmental Quality, Texas Voluntary Clean-Up Program listing (TxVCP ID No. 643).

One soil boring, SB-12 was advanced along the southern property line of MSC-Metal Supply Co./former Earle M. Jorgensen Steel Co., Inc. (5311 Clinton Drive). Two 10,000 gallon diesel and one 1,000 gallon used oil steel have been permanently been removed from the ground at the facility (Fac. ID No. 20603). The facility also had a Texas Commission on Environmental Quality, Texas Voluntary Clean-Up Program listing (TxVCP ID No. 1763).

PID readings were non-detect (0 ppm) for all the soil boring soil cores. Default soil samples were collected and submitted for laboratory analyses. Groundwater was not encountered to 16 feet bgs. FIGURE 5 provides site details and soil boring locations.

3.5 SOIL SAMPLING (999 & 990 Lockwood Drive and 5515 Clinton Drive)

One soil boring, SB-13 was completed along the northern property line of Stop-N-Joy/Valero gasoline service station-convenience store (999 Lockwood Drive at Clinton). The property is located on the southwest corner of the Clinton and Lockwood Drives. The facility is active. The facility has had an LPST event referenced to former Stop-N-Go No. 2116 (LPST ID No. 116507) and was reported to have groundwater impact. The facility has since been issued a case closure concurrence by the TCEQ. Three 10,000 gallon gasoline, one 10,000 gallon diesel fiberglass reinforced plastic (FRP) USTs have been permanently been removed from the ground at the facility. Two 8,000 gallon gasoline composite (steel with plastic laminate and fiberglass coating) USTs are active at the facility (Fac. ID No. 39829). One of the tanks is anticipated to be compartmentalized.

Two soil borings, SB-14 and SB-15 were completed along the northern property line of Stripes No. 1006/Chevron gasoline service station-convenience store (990 Lockwood Drive at Clinton). The property is located on the southeast corner of the Clinton and Lockwood Drives. The facility is active. Two 12,000 gallon gasoline and one 12,000 gallon diesel composite USTs at the facility are active at the facility (Fac. ID No. 75024). One of the gasoline tanks is anticipated to be compartmentalized (typically mid and premium grade tanks).

One soil boring, SB-16 was completed along the southern property line of Bama Food Products (5515 Clinton Drive at Lockwood). The property is located on the northeast corner of the Clinton and Lockwood Drives. The facility is occupied but it is unclear whether the facility is still occupied by Bama Foods. One 10,000 gallon gasoline and two 6,000 gallon diesel steel USTs have been permanently been removed from the ground at the facility (Fac. ID No. 31198).

With the exception of a minor PID reading (10 ppm) at SB-16 at 8-10 feet bgs, PID readings were non-detect (0 ppm) for the remaining soil boring soil cores. Default soil samples were collected and submitted for laboratory analyses. Groundwater was not encountered to 16 feet bgs. FIGURE 6 provides site details and soil boring locations.

3.6 SOIL SAMPLING (6002 Clinton Drive)

Two soil borings, SB-17 and SB-18 were completed along the northern property line of the former AFCO No. 010501 fleet fueling facility (6002 Clinton Drive). The property is located south side of Clinton Drive between Gazin Street and Harvey Wilson Drive. The property is in-active. The majority of the structures at the facility have been demolished/removed and concrete remains in-place. The facility has had an LPST event (LPST ID No. 91436) and was reported to have Group 1 groundwater impact. The facility has since been issued a case closure concurrence by the TCEQ. Four 10,000 gallon gasoline and one 10,000 gallon diesel steel USTs have been permanently been removed from the ground at the facility. PID readings were non-detect (0 ppm) for the soil boring soil cores.

Default soil samples were collected and submitted for laboratory analyses. Groundwater was not encountered to 16 feet bgs. FIGURE 7 provides site details and soil boring locations.

3.4 GROUNDWATER SAMPLING

One of the eighteen soil borings was converted to temporary well point SB-4/TWP-4. After the completion of soil boring SB-4, a ¾-inch PVC temporary well point was placed in the boring. The temporary well point was developed by slowly purging the well with a peristaltic pump and purge water was co-mingled with drummed soil cuttings. After purging and recharge, groundwater samples were collected utilizing a dedicated plastic bailer. Groundwater was transferred from the bailer into glass 40 ml VOA viles equipped with Teflon-lined lids furnished by the testing laboratory. Each container was filled to capacity with groundwater to an inverted meniscus. All samples were labeled in the field and stored at approximately 4°C prior to submission to SPL Laboratories of Houston, Texas. Chain-of-custody documentation accompanied the samples in accordance with standard quality assurance and quality control measures. FIGURE 3 provide site details and temporary well point location. Soil boring logs for temporary well point and other soil borings are presented in APPENDIX A.

4.0 REGULATORY FRAMEWORK

The Texas Commission on Environmental Quality (TCEQ) administers the Environmental Protection Agency (EPA) regulations and enforcement in Texas. It has additionally established its own standards for environmental compliance. The Texas Risk Reduction Program (TRRP) administered by TCEQ, as provided for in 30 TAC Chapter 350, addresses levels of regulated compounds and allowable levels of such contaminants to protect human health, safety, and the environment. The TCEQ TRRP applies to closures, corrective actions, and remediation efforts subject to the jurisdiction of the TCEQ. The TRRP, whether residential or commercial, contains provisions for Remedy Standard A (no physical controls required) or Remedy Standard B (physical controls required). Implementation of Remedy Standard A or Remedy Standard B is a tiered process, as described in general terms below:

- Tier 1 is a risk-based analysis to derive non site-specific protective concentration limits (PCLs) for complete or reasonably anticipated to be complete exposure pathways. Tier 1 is based on default exposure factors and affected property parameters, and assumes exposure occurs at, above, or below the source area (i.e., no lateral transport) (TCEQ Subchapter D Section 350.75 (b)).
- Tier 2 is a risk-based analysis to derive site-specific PCLs for complete or reasonably anticipated to be completed exposure pathways utilizing site-specific exposure factors, as allowable, and/or affected property parameters and Tier 1 equations. Tier 2 PCLs may also include lateral transport considerations (TCEQ, Subchapter D Section 350.75 (c)).

- Tier 3 is a risk-based analysis to derive site-specific PCLs for complete or reasonably anticipated to be completed exposure pathways. Tier 3 PCLs are based on measured natural attenuation factors and/or natural attenuation factor models/equations other than those provided for Tier 1 or 2; and may also include site-specific exposure factors, as allowable, and/or affected property parameters (TCEQ, Subchapter D Section 350.75 (d)).

The below provided soil PCLs are concentrations which are protective of human health and the environment:

* $^{GW}Soil_{Ing}$ * Groundwater Soil Ingestion ($^{GW}Soil_{Ing}$) is the groundwater protection standard for either residential or commercial use. Concentration in soil is assumed protective of groundwater considering cross-medial contamination of groundwater from contaminated soil. This is the critical PCL for special handling practices of the soil for the project.

* $^{Tot}Soil_{Comb}$ * The Total Soil Combined ($^{Tot}Soil_{Comb}$) PCLs are a combined exposure standard for residential use. The PCL considers cross-media contamination of human ingestion, inhalation and dermal pathways. This is the critical PCL for construction worker exposure concentrations.

The following details groundwater PCLs:

* $^{GW}GW_{Ing}$ * Groundwater Ingestion ($^{GW}GW_{Ing}$) is the groundwater protection standard for either residential or commercial use. The $^{GW}GW_{Ing}$ PCLs are the same as the Federal Drinking Water Standards Maximum Concentration Limits (MCLs). This will be utilized to determine whether the groundwater is acceptable for surface discharge.

TABLE I summarizes the laboratory analytical data. The TCEQ TRRP does contain published standards for TPH in soils and groundwater. Elevated TPH concentrations are an indicator that additional analyses should be conducted. Initially, soil samples are analyzed by Texas Method 1005. If any of the concentrations exceed the C6-C12 or >C12-28 carbon ranges, the soil sample is then typically analyzed for speciated hydrocarbons by TCEQ Texas Method 1006. The resulting TPH 1006 concentrations are compared to Tier 1 PCLs based upon the concentrations of aliphatic and/or aromatic hydrocarbons present in the carbon range from C6 to C35. *VOCs and/or MTBE/BTEX concentrations will be the predominant environmental and exposure consideration of this project. The* $^{Tot}Soil_{Comb}$ *and* $^{GW}GW_{Ing}$ *PCLs are the action levels for this project. Areas with soil or groundwater*

sampling results exceeding the ${}^{Tot}Soil_{Comb}$ *and/or* ${}^{GW}GW_{Ing}$ *PCLs will be areas of environmental concern for the project.*

5.0 SOIL/GW LABORATORY ANALYTICAL RESULTS

A total of eighteen soil samples were collected from eighteen of the soil borings and soil samples were submitted to a certified laboratory for analyses. The soil samples were analyzed for total petroleum hydrocarbons (TPH) by Texas Commission on Environmental Quality (TCEQ) Texas Method 1005, volatile organic compounds (VOCs) or methyl tert-butyl ether/benzene, toluene, ethyl-benzene and total xylenes (MTBE/BTEX) by EPA Method SW846-8260. One groundwater sample was collected from one temporary well point, TWP-4 and submitted for VOCs and TPH analyses. The following details the laboratory methodology:

5.1 LABORATORY ANALYTICAL METHODS

Methyl tert-butyl ether/benzene, toluene, ethylbenzene, and xylene (MTBE/BTEX) and/or VOCs by SW-846 EPA Method 8260: This laboratory analysis employs a gas chromatograph (GC) equipped with a Mass Spectrometer (MS) detector to detect and quantify certain regulated, volatile organic compounds in a soil or water sample. Compounds on this list include certain chlorinated solvents used in dry cleaning and printing processes, refined petroleum products such as gasoline and diesel, and others. This method can also be used to test for BTEX compounds, which are a portion of the entire VOA list. These compounds are common components of most formulated gasolines, and their presence is a reliable indicator that a gasoline release has occurred.

Total Petroleum Hydrocarbons (TPH) by TCEQ Method 1005: This laboratory analysis utilizes a GC equipped with a flame ionization detector (FID) to quantify levels of petroleum compounds or derivatives in the range from C6 to C28, in a soil or groundwater medium. Results are reported in two to three distinct ranges, from C6 to C12, >C12 to C28 and >C28 to C35. This allows some interpretation as to the possible source of the release, based upon the indicated carbon range. Petroleum hydrocarbons are not necessarily hazardous or toxic. The analysis is designed to determine if TPH is present, and to quantify the level of petroleum hydrocarbons. This analysis is especially useful as a broad category procedure, and may indicate additional testing for the specific hazardous or toxic constituents which may be present and contribute to the TPH levels assessed. Some constituents of petroleum hydrocarbons may be hazardous or toxic, high levels of TPH require additional testing of the sample area.

5.2 SOIL LABORATORY ANALYTICAL RESULTS

Soil samples, SB-1 at 14-16 feet, SB-2 at 4-6 feet, SB-3 at 8-10 feet; SB-4 at 2-4 feet, SB-5 at 8-10 feet, SB-6 at 2-4 feet; SB-7 at 6-8 feet, SB-8 at 2-4 feet; SB-9 at 14-16 feet, SB-10 at 6-8 feet, SB-11 at 2-4 feet, SB-12 at 14-16 feet, SB-13 at 4-6 feet, SB-14 at 2-4 feet, SB-15 at 8-10 feet, SB-16 at 8-10 feet, SB-17 at

4-6 feet and SB-18 at 14-16 feet bgs were submitted for TPH, VOCs or MTBE/BTEX analyses from the soil borings (18 total). The resulting laboratory analytical data was compared to the TCEQ TRRP Total Soil Combined ($^{Tot}Soil_{Comb}$) Protective Concentration Limits (PCLs) and Groundwater Soil Ingestion ($^{GW}Soil_{Ing}$) PCLs.

5.2.1 LAB ANALYTICAL RESULTS (4401 Clinton Drive)

Three soil samples, SB-1 at 14-16 feet bgs, SB-2 at 4-6 feet bgs and SB-3 at 8-10 feet bgs, were submitted and analyzed for this location. The following was reported for VOCs constituents for the soil samples:

- With the exception of minor acetone detections (0.0265 mg/kg J and 0.0290 mg/kg J) and methylene chloride detections (0.0054 mg/kg JB and 0.0033 mg/kg J), all other VOC analytes were non-detect and were determined to range from <0.00055 mg/kg to <0.0070 mg/kg. Since the analytes detected are typically laboratory introduced, the detections are not a recognized environmental condition to the project.

The following was reported in the designated carbon ranges for the soil samples:

- TPH carbon ranges C_6-C_{12} were determined to be non-detect and ranged from <4.8 mg/kg to <4.9 mg/kg.
- TPH carbon ranges >C_{12}-C_{28} were determined to be non-detect and ranged from <4.8 mg/kg to <5.0 mg/kg.
- TPH carbon ranges >C_{28}-C_{35} were determined to be non-detect and ranged from <4.8 mg/kg to <5.0 mg/kg.

TPH concentrations were determined to be non-detect at this location. Generally, VOC constituents were not detected above the laboratory reporting limit. None of the soil laboratory analytical concentrations exceed the TCEQ $^{Tot}Soil_{Comb}$ PCLs and are not a health concern to construction workers. During construction activities air monitoring is not required, but may be utilized as a precautionary measure. The potential for environmental concern at the location appears to be low. TABLE I summarizes the laboratory analytical results. A copy of the laboratory analytical results is presented in APPENDIX B. Photographs of some of the field activities are presented in APPENDIX C.

5.2.2 LAB ANALYTICAL RESULTS (4601 and 4600 Clinton Dr.)

Three soil samples, SB-4 at 2-4 feet bgs, SB-5 at 8-10 feet bgs and SB-6 at 2-4 feet bgs, were submitted and analyzed for this location. The following was reported for VOCs constituents for the soil samples:

- With the exception of minor methylene chloride detections (0.0034 mg/kg J and 0.0032 mg/kg J), all other VOC analytes were non-detect and were determined to range from <0.00052 mg/kg to <0.0068 mg/kg. Since the analytes detected are typically laboratory introduced,

the detections are not a recognized environmental condition to the project.

The following was reported in the designated carbon ranges for the soil samples:

- TPH carbon ranges C_6-C_{12} were determined to be non-detect and ranged from <4.5 mg/kg to <4.9 mg/kg.
- TPH carbon ranges >C_{12}-C_{28} were determined to be non-detect and ranged from <4.5 mg/kg to <4.9 mg/kg.
- TPH carbon ranges >C_{28}-C_{35} were determined to be non-detect and ranged from <4.5 mg/kg to <4.9 mg/kg.

TPH concentrations were determined to be non-detect at this location. Generally, VOC constituents were not detected above the laboratory reporting limit. None of the soil laboratory analytical concentrations exceed the TCEQ $^{Tot}Soil_{Comb}$ PCLs and are not a health concern to construction workers. During construction activities air monitoring is not required, but may be utilized as a precautionary measure. The potential for environmental concern at the location appears to be low.

5.2.3 LAB ANALYTICAL RESULTS (4815 Clinton Dr.)

Three soil samples, SB-7 at 6-8 feet bgs, SB-8 at 2-4 feet bgs and SB-9 at 14-16 feet bgs, were submitted and analyzed for this location. The following was reported for individual MTBE/BTEX constituents for the soil samples:

- MTBE concentrations were determined to be non-detect and ranged from <0.00074 mg/kg to <0.00082 mg/kg.
- Benzene concentrations were determined to be non-detect and ranged from <0.00059 mg/kg to <0.00065 mg/kg.
- Toluene concentrations were determined to be non-detect and ranged from <0.00077 mg/kg to <0.00085 mg/kg.
- Ethyl-benzene concentrations were determined to be non-detect and ranged from <0.00077 mg/kg to <0.00085 mg/kg.
- Total xylene concentrations were determined to be non-detect and ranged from <0.0015 mg/kg to <0.0017 mg/kg.

The following was reported in the designated carbon ranges for the soil samples:

- TPH carbon ranges C_6-C_{12} were determined to be non-detect and ranged from <4.6 mg/kg to <5.1 mg/kg.
- TPH carbon ranges >C_{12}-C_{28} were determined to be non-detect and ranged from <4.7 mg/kg to <5.1 mg/kg.
- TPH carbon ranges >C_{28}-C_{35} were determined to be non-detect and ranged from <4.7 mg/kg to <5.1 mg/kg.

TPH concentrations were determined to be non-detect at this location.

Individual MTBE/BTEX constituents were determined to be non-detect at this location. TABLE I summarizes the laboratory analytical results.

5.2.4 LAB ANALYTICAL RESULTS (5212, 5306 & 5311 Clinton Dr.)

Three soil samples, SB-10 at 6-8 feet bgs, SB-11 at 2-4 feet bgs and SB-12 at 14-16 feet bgs, were submitted and analyzed for this location. The following was reported for VOCs constituents for the soil samples:

- With the exception of a minor acetone detection (0.0275 mg/kg J) and methylene chloride detections (0.0037 mg/kg J, 0.0052 mg/kg J and 0.0048 mg/kg JB), all other VOC analytes were non-detect and were determined to range from <0.00052 mg/kg to <0.0071 mg/kg. Since the analytes detected are typically laboratory introduced, the detections are not a recognized environmental condition to the project.

The following was reported in the designated carbon ranges for the soil samples:

- TPH carbon ranges C_6-C_{12} were determined to be non-detect and ranged from <4.8 mg/kg to <5.3 mg/kg.
- TPH carbon ranges >C_{12}-C_{28} were determined to be non-detect and ranged from <4.8 mg/kg to <5.3 mg/kg.
- TPH carbon ranges >C_{28}-C_{35} were determined to be non-detect and ranged from <4.8 mg/kg to <5.3 mg/kg.

TPH concentrations were determined to be non-detect at this location. Generally, VOC constituents were not detected above the laboratory reporting limit. None of the soil laboratory analytical concentrations exceed the TCEQ $^{Tot}Soil_{Comb}$ PCLs and are not a health concern to construction workers. During construction activities air monitoring is not required, but may be utilized as a precautionary measure. The potential for environmental concern at the location appears to be low.

5.2.5 LAB ANALYTICAL RESULTS (999 & 990 Lockwood Dr. & 5515 Clinton Dr.)

Four soil samples, SB-13 at 4-6 feet bgs, SB-14 at 2-4 feet bgs, SB-15 at 8-10 feet bgs and SB-16 at 8-10 feet bgs were submitted and analyzed for this location. The following was reported for individual MTBE/BTEX constituents for the soil samples:

- MTBE concentrations were determined to be non-detect and ranged from <0.00074 mg/kg to <0.00080 mg/kg.
- Benzene concentrations were determined to be non-detect and ranged from <0.00058 mg/kg to <0.00063 mg/kg.
- Toluene concentrations were determined to be non-detect and ranged from <0.00077 mg/kg to <0.00083 mg/kg.
- Ethyl-benzene concentrations were determined to be non-detect and

ranged from <0.00077 mg/kg to <0.00083 mg/kg.

- Total xylene concentrations were determined to be non-detect and ranged from <0.0015 mg/kg to <0.0016 mg/kg.

The following was reported in the designated carbon ranges for the soil samples:

- TPH carbon ranges C_6-C_{12} were determined to be non-detect and ranged from <4.8 mg/kg to <5.2 mg/kg.
- TPH carbon ranges >C_{12}-C_{28} were determined to be non-detect and ranged from <4.8 mg/kg to <5.2 mg/kg.
- TPH carbon ranges >C_{28}-C_{35} were determined to be non-detect and ranged from <4.8 mg/kg to <5.2 mg/kg.

TPH concentrations were determined to be non-detect at this location. Individual MTBE/BTEX constituents were determined to be non-detect at this location.

5.2.6 LAB ANALYTICAL RESULTS (6002 Clinton Drive)

Two soil samples, SB-17 at 4-6 feet bgs and SB-18 at 14-16 feet bgs, were submitted and analyzed for this location. The following was reported for individual MTBE/BTEX constituents for the soil samples:

- MTBE concentrations were determined to be non-detect and ranged from <0.00079 mg/kg to <0.00084 mg/kg.
- Benzene concentrations were determined to be non-detect and ranged from <0.00062 mg/kg to <0.00066 mg/kg.
- Toluene concentrations were determined to be non-detect and ranged from <0.00082 mg/kg to <0.00087 mg/kg.
- Ethyl-benzene concentrations were determined to be non-detect and ranged from <0.00081 mg/kg to <0.00087 mg/kg.
- Total xylene concentrations were determined to be non-detect and ranged from <0.0016 mg/kg to <0.0017 mg/kg.

The following was reported in the designated carbon ranges for the soil samples:

- TPH carbon ranges C_6-C_{12} were determined to be non-detect and ranged from <4.9 mg/kg to <5.0 mg/kg.
- TPH carbon ranges >C_{12}-C_{28} were determined to be non-detect and ranged from <4.9 mg/kg to <5.0 mg/kg.
- TPH carbon ranges >C_{28}-C_{35} were determined to be non-detect and ranged from <4.9 mg/kg to <5.0 mg/kg.

TPH concentrations were determined to be non-detect at this location. Individual MTBE/BTEX constituents were determined to be non-detect at this location.

5.3 GROUNDWATER LABORATORY ANALYTICAL RESULTS

A groundwater sample was collected from soil boring (SB-4) that was converted to temporary well point TWP-4; and analyzed for VOCs by EPA Method SW846-8260 and TPH by Texas Method 1005.

5.3.1 LAB ANALYTICAL RESULTS (4601 & 4600 Clinton Drive)

One groundwater sample, TWP-4 was collected from the above-noted location. The following was reported for individual VOC constituents for the groundwater sample:

- Groundwater concentrations were determined to be non-detect and ranged from <0.00020 mg/L to <0.010 mg/L.

The following was reported in the designated carbon ranges for the groundwater samples:

- TPH carbon ranges C_6-C_{12} was determined to be non-detect (<0.58 mg/L).
- TPH carbon ranges >C_{12}-C_{28} was determined to be non-detect (<0.90 mg/L).
- TPH carbon ranges >C_{28}-C_{35} was determined to be non-detect (<0.90 mg/L).

TPH and VOC concentrations were determined to be non-detect at this location. No VOCs or TPH concentrations were detected above TCEQ $^{GW}GW_{Ing}$ PCL and Federal Drinking Water Standard Maximum Concentration Limits (MCLs). Dewatering special management practices should not be required. Groundwater can be discharged to the surface without special handling practices of the generated water.

TABLE I summarizes the TPH and VOCs laboratory analytical results. A copy of the laboratory analytical results is presented in APPENDIX B.

6.0 AIR MONITORING/WASTE MANAGEMENT PRACTICES

Based on the results of the Phase II ESA, air monitoring is not warranted at these areas of the project. No other areas of the project alignment have been identified with environmental conditions. Confined space protocol still applies.

No "*special handling practices*" of the soil and groundwater are required for the investigated areas. No other areas of the project alignment have been identified with environmental conditions.

7.0 INVESTIGATIVE DERIVED WASTE

One composite soil sample of investigative derived waste (IDW), was collected from the contents of the 55-gallon drum of soil cores generated from the sampling

activities. The composite soil sample was analyzed for VOCs and TPH. Based on the laboratory analytical results, the soil will be disposed of as general waste. A copy of the laboratory analytical results is presented in APPENDIX B.

8.0 CONCLUSIONS

The purpose of the assessment was to determine the absence or presence and concentration levels of petroleum hydrocarbons in soil and/or groundwater. Phase II ESA activities were conducted in accordance with Berg♦Oliver Associates, Inc. proposal/workplan dated July 28, 2011. Phase II ESA activities also were conducted in accordance with the ASTM 1903 Standard Practice and the City of Houston criteria. The following was indicated by the laboratory analytical results:

Soil Analytical

Based on the sampling and laboratory analytical results, no special handling practices of the soil is required. Additionally, the laboratory analytical results indicate that the soil is not hydrocarbon-affected and is not a concern to construction workers. As noted on the soil boring logs, a minor hydrocarbon odor was noted in soil boring SB-1 at 14-16 feet bgs and soil boring SB-16 at 8-10 feet bgs. However, the laboratory analytical results did not detect concentrations of concern that varied from other laboratory analytical results.

Groundwater Analytical

Groundwater was not encountered to 16 feet bgs with the exception of the vicinity of SB-4/TWP-4. Some minor slightly wet very thin layers of silty sand (>moist, but not saturated) were encountered in other select borings, but the minor amount of groundwater present was not sufficient to yield water for sampling purposes. No odor or evidence of hydrocarbon impact was observed at these respective areas.

The groundwater laboratory analytical results for SB-4/TWP-4 were reported to be non-detect. Dewatering, if necessary, should not be a concern based on the laboratory analytical results.

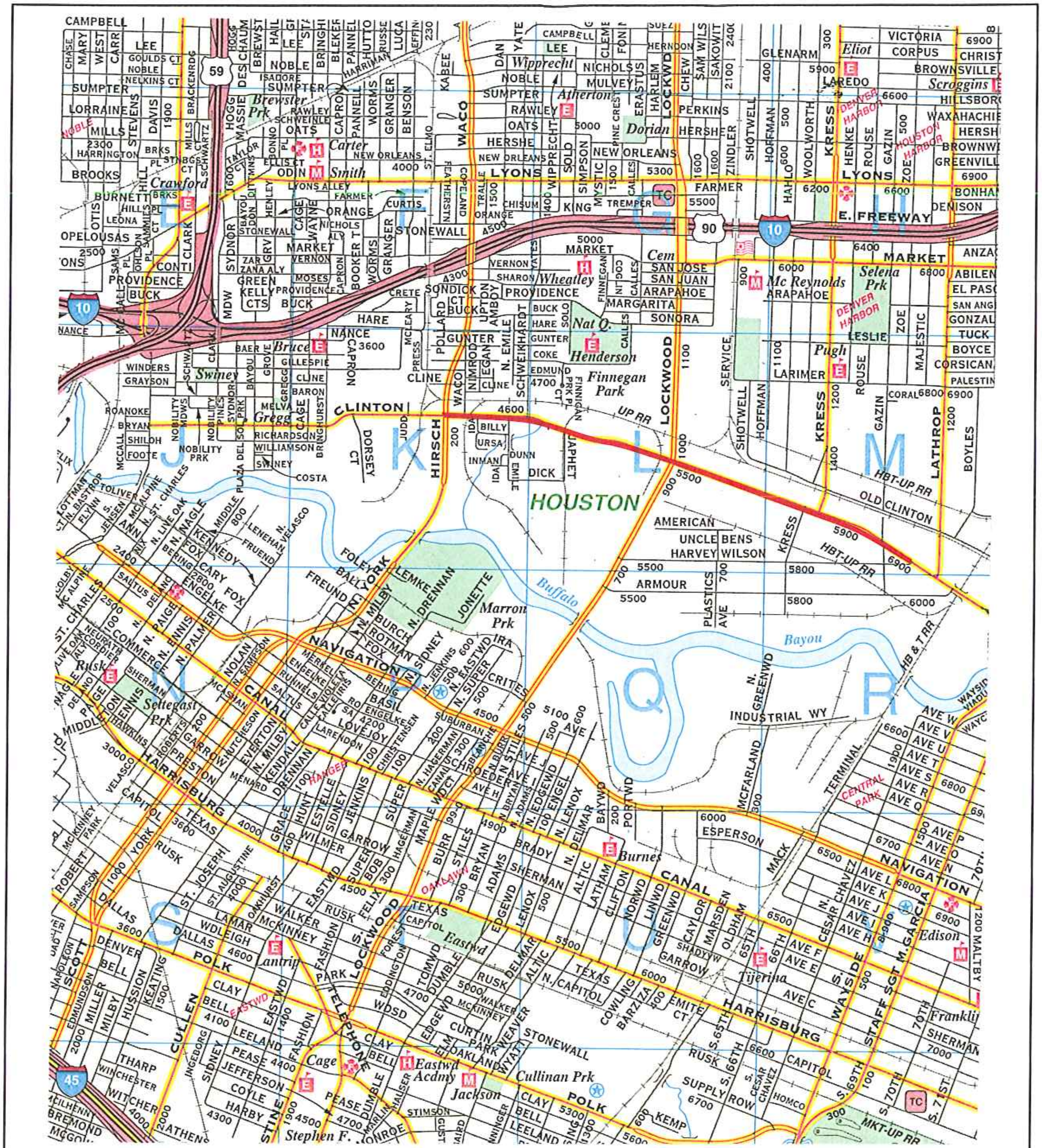
9.0 RECOMMENDATIONS

Based on the laboratory analytical results and field observations of the Limited Phase II Environmental Site Assessment for the Clinton Drive Reconstruction project in Harris County, Texas, the following is noted:

- No special handling practices for soil and groundwater is required.
- Based on the soil laboratory analytical results, the soil was determined not to be a concern to construction workers. Confined space protocols still apply.

FIGURES

FIGURE 1A



HARRIS COUNTY KEY MAP

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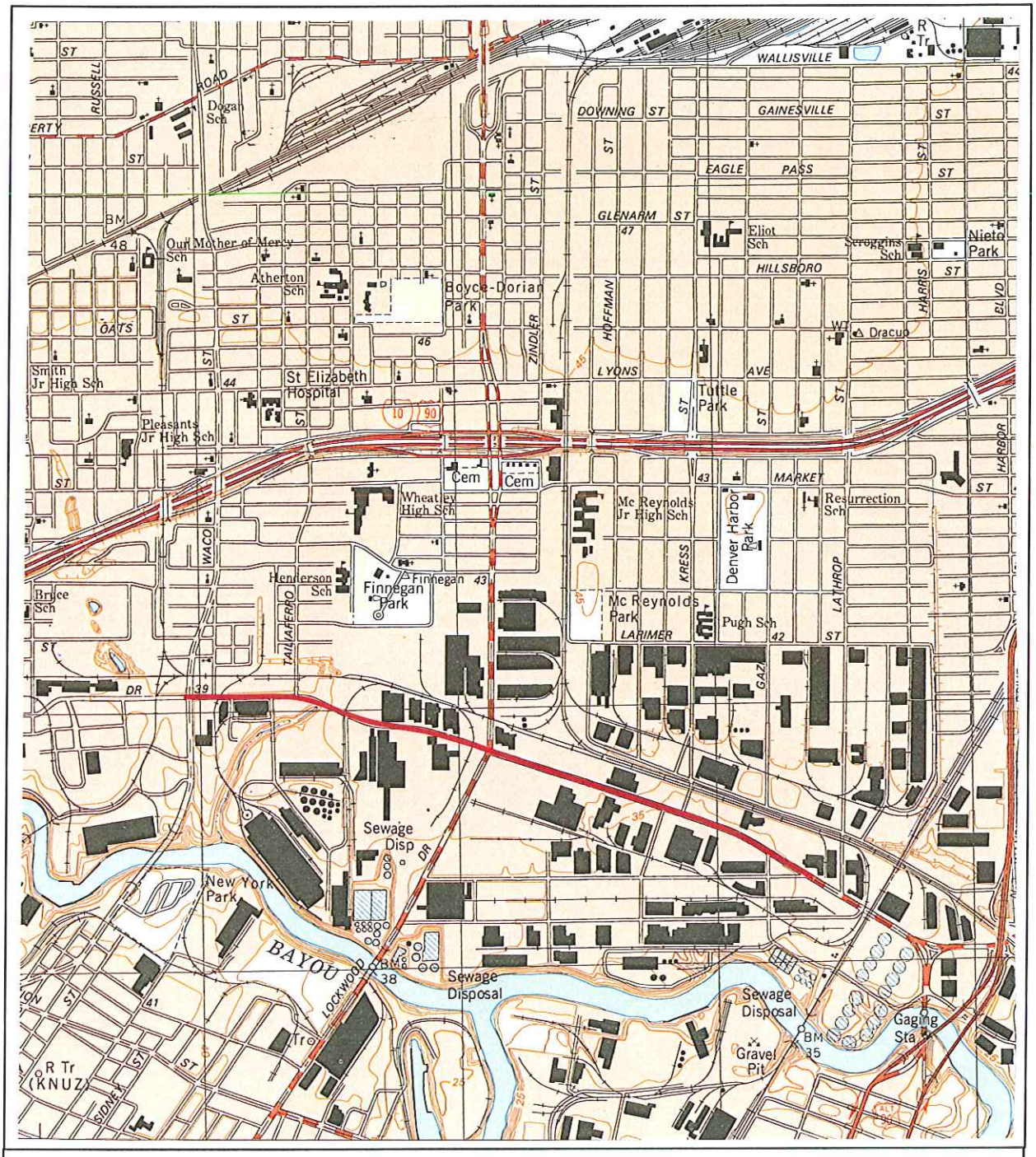
APPROXIMATE SCALE 1" = 1/2 MILE = 2,640'

FIGURE 1B



U.S. DEPARTMENT OF INTERIOR GEOLOGICAL SURVEY

SETTEGAST QUADRANGLE
HARRIS COUNTY, TEXAS

7.5 MINUTE SERIES (TOPOGRAPHIC)

BERG-OLIVER ASSOCIATES, INC.

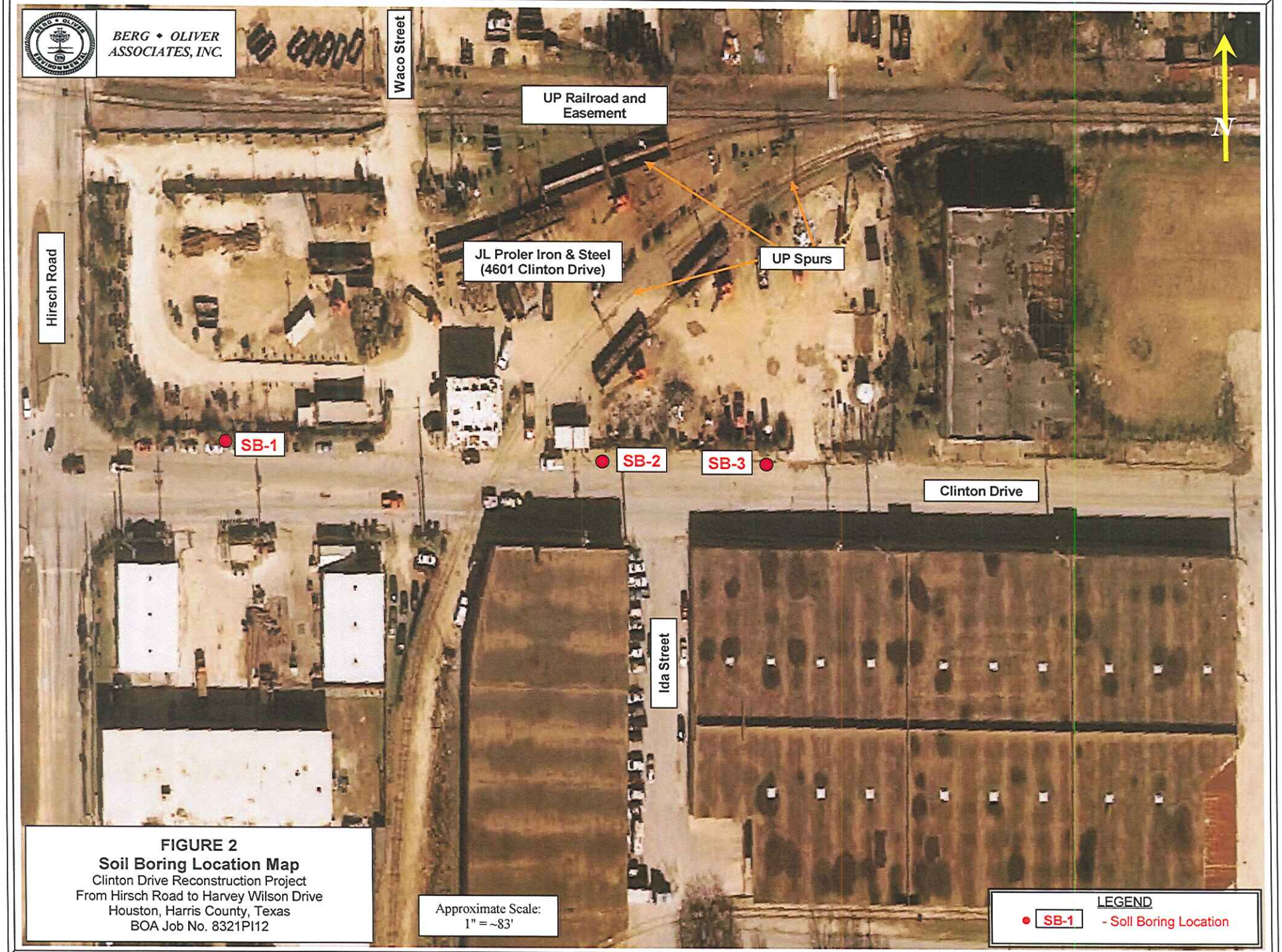


FIGURE 2
Soil Boring Location Map
Clinton Drive Reconstruction Project
From Hirsch Road to Harvey Wilson Drive
Houston, Harris County, Texas
BOA Job No. 8321PI12

FIGURE 3
Soil Boring Location Map
Clinton Drive Reconstruction Project
From Hirsch Road to Harvey Wilson Drive
Houston, Harris County, Texas
BOA Job No. 8321PI12

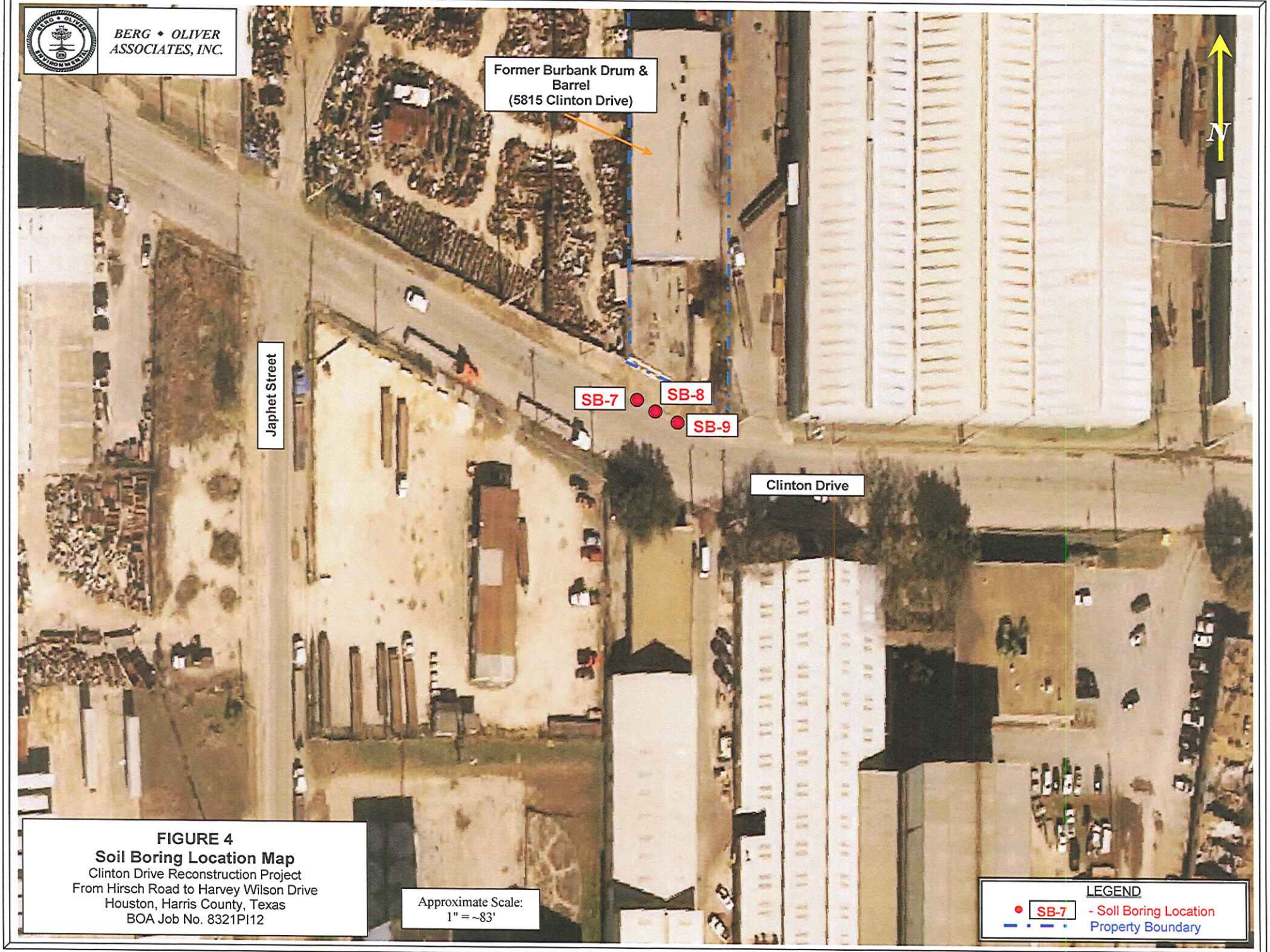


FIGURE 4
Soil Boring Location Map
Clinton Drive Reconstruction Project
From Hirsch Road to Harvey Wilson Drive
Houston, Harris County, Texas
BOA Job No. 8321PI12

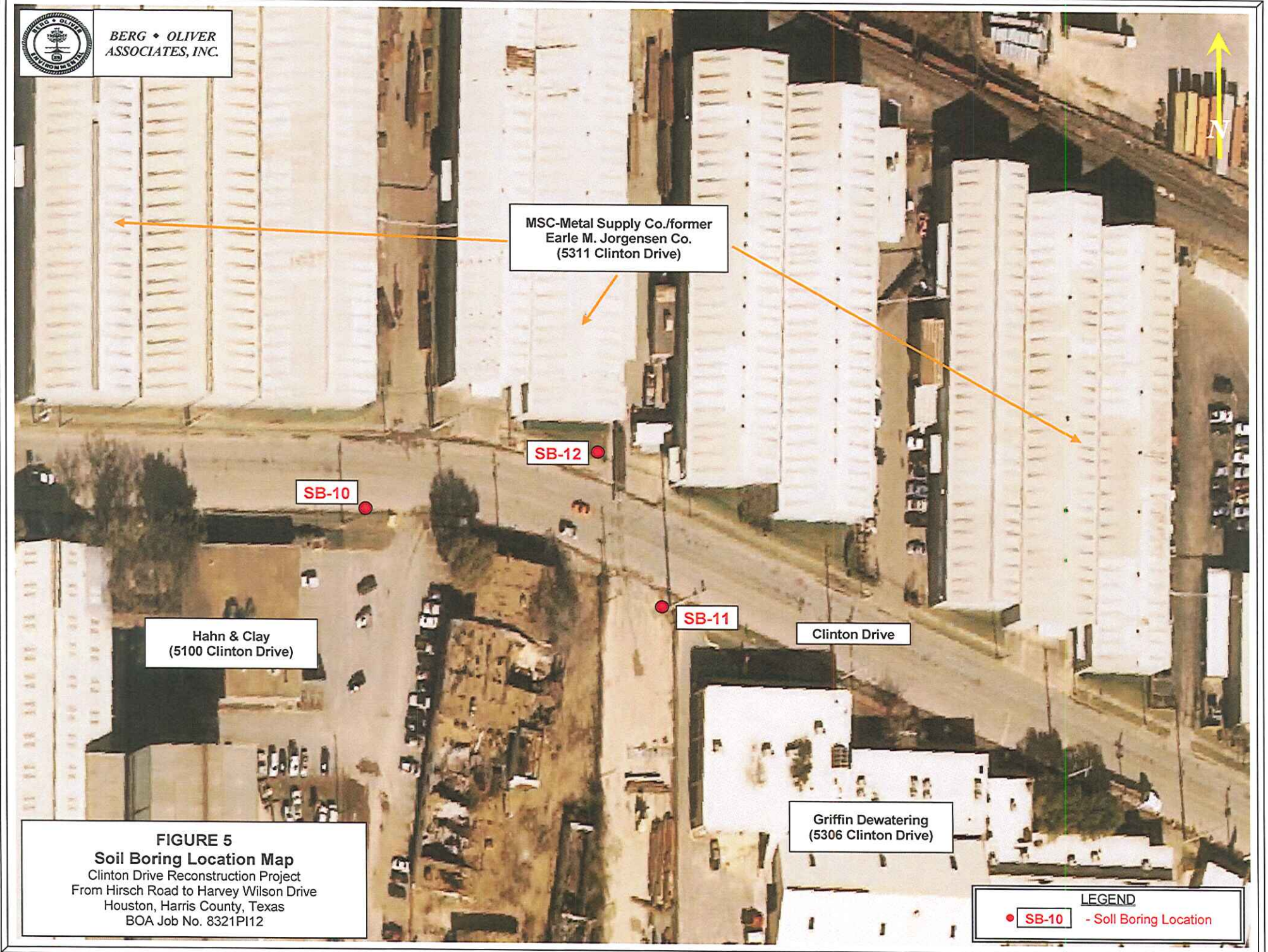


FIGURE 5
Soil Boring Location Map
Clinton Drive Reconstruction Project
From Hirsch Road to Harvey Wilson Drive
Houston, Harris County, Texas
BOA Job No. 8321PI12

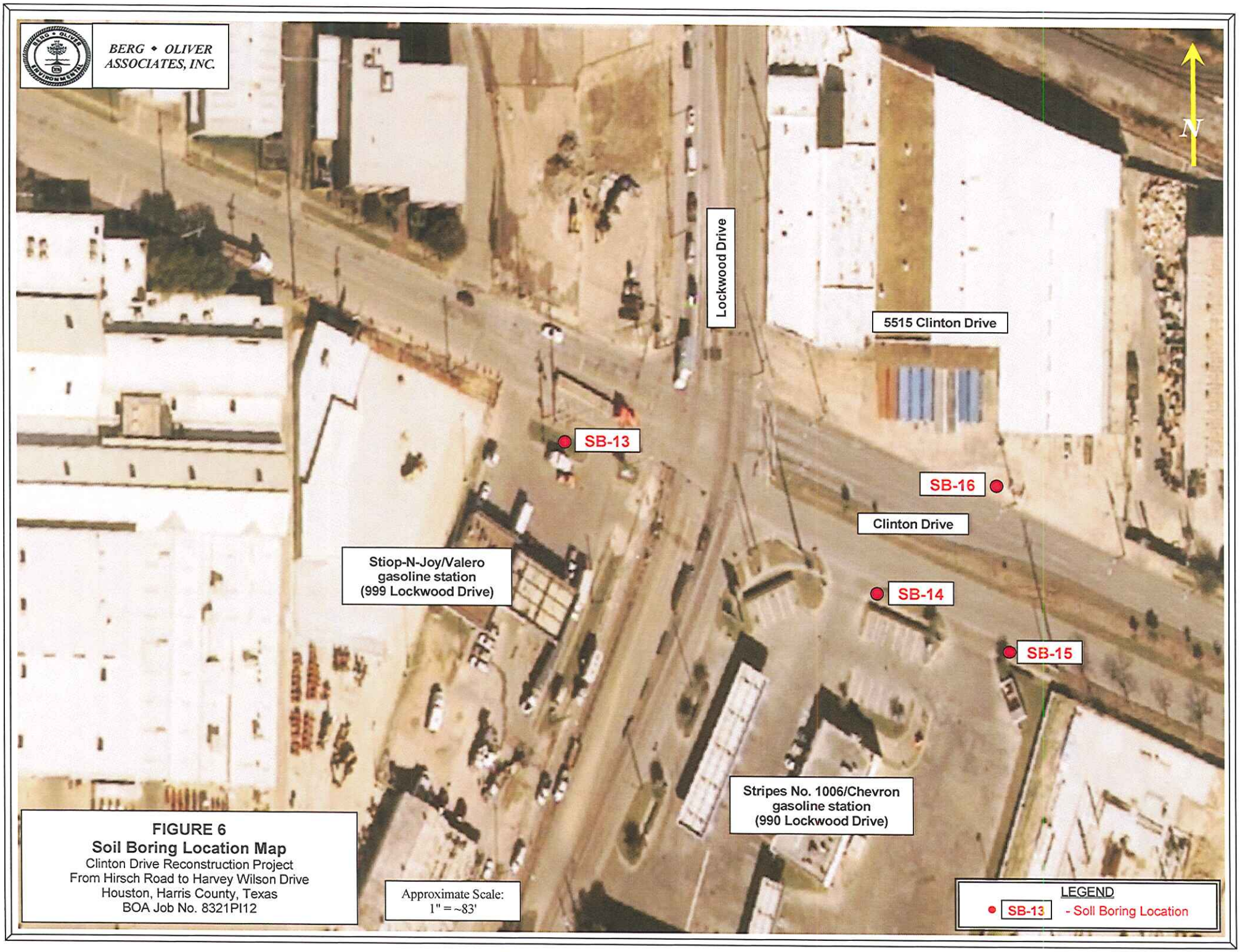


FIGURE 6
Soil Boring Location Map
Clinton Drive Reconstruction Project
From Hirsch Road to Harvey Wilson Drive
Houston, Harris County, Texas
BOA Job No. 8321PI12

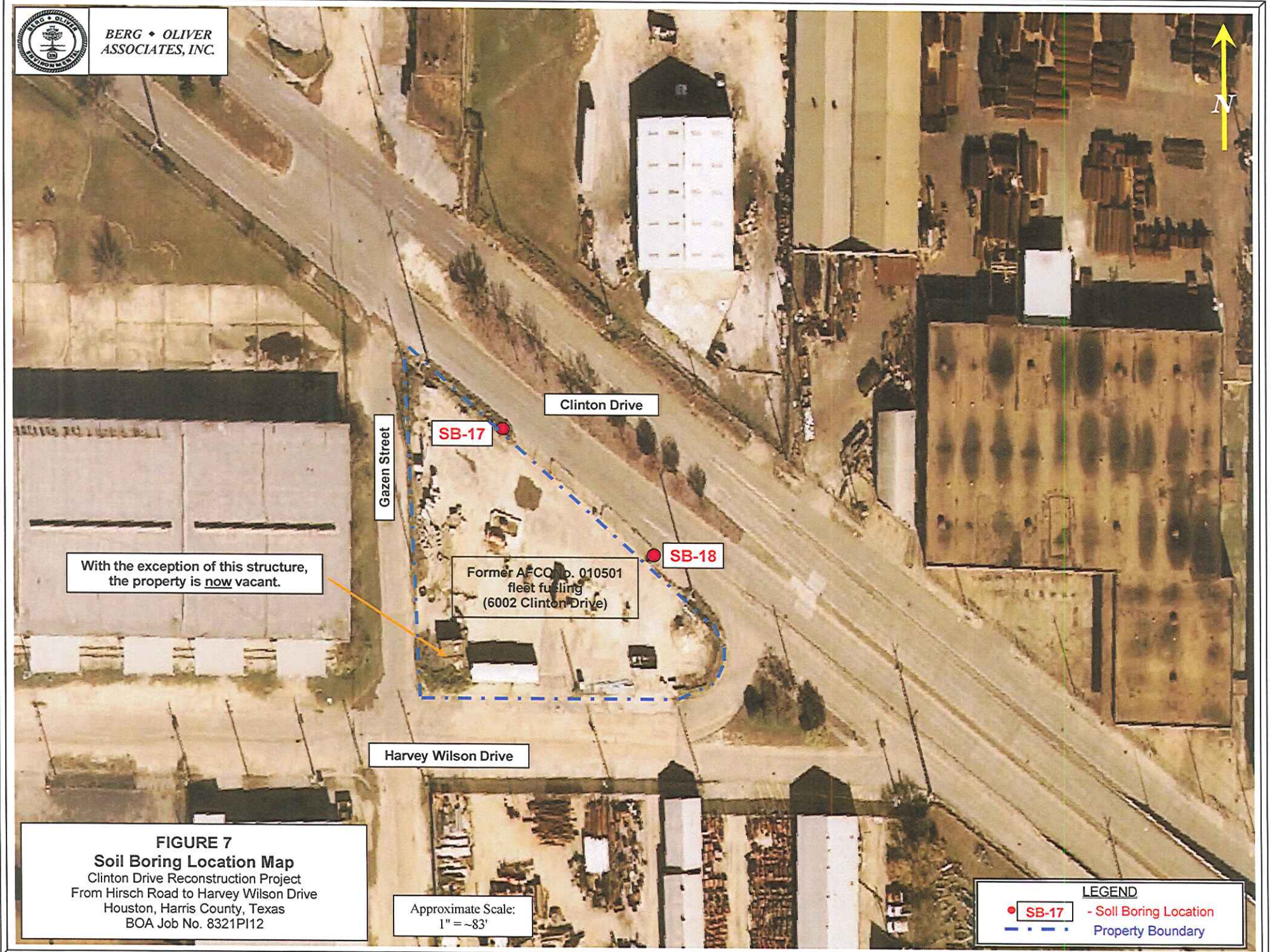


FIGURE 7
Soil Boring Location Map
Clinton Drive Reconstruction Project
From Hirsch Road to Harvey Wilson Drive
Houston, Harris County, Texas
BOA Job No. 8321PI12

TABLE

TABLE I

Accutest Laboratories Gulf Coast, Inc.		May 14, 2012 10:08 am
Job Number:	TC6964	
Account:	Berg Oliver Associates	
Project:	Clinton Drive/ 8321	
Project Number:	8321	
		Legend: Hit

Client Sample ID:		SB/TWP-4
Lab Sample ID:		TC6964-7
Date Sampled:		04/25/2012
Matrix:		Ground Water
GC/MS Volatiles (SW846 8260B)		
Acetone	mg/l	0.010 U
Benzene	mg/l	0.00025 U
Bromobenzene	mg/l	0.00027 U
Bromochloromethane	mg/l	0.00042 U
Bromodichloromethane	mg/l	0.00025 U
Bromoform	mg/l	0.00035 U
n-Butylbenzene	mg/l	0.00030 U
sec-Butylbenzene	mg/l	0.00034 U
tert-Butylbenzene	mg/l	0.00032 U
Chlorobenzene	mg/l	0.00022 U
Chloroethane	mg/l	0.00044 U
Chloroform	mg/l	0.00020 U
o-Chlorotoluene	mg/l	0.00028 U
p-Chlorotoluene	mg/l	0.00029 U
Carbon disulfide	mg/l	0.00036 U
Carbon tetrachloride	mg/l	0.00036 U
1,1-Dichloroethane	mg/l	0.00029 U
1,1-Dichloroethylene	mg/l	0.00040 U
1,1-Dichloropropene	mg/l	0.00033 U
1,2-Dibromo-3-chloropropane	mg/l	0.00087 U
1,2-Dibromoethane	mg/l	0.00027 U
1,2-Dichloroethane	mg/l	0.00020 U
1,2-Dichloropropane	mg/l	0.00025 U
1,3-Dichloropropane	mg/l	0.00021 U
2,2-Dichloropropane	mg/l	0.00037 U
Dibromochloromethane	mg/l	0.00029 U
Dichlorodifluoromethane	mg/l	0.00090 U
cis-1,2-Dichloroethylene	mg/l	0.00024 U
cis-1,3-Dichloropropene	mg/l	0.00020 U
m-Dichlorobenzene	mg/l	0.00025 U
o-Dichlorobenzene	mg/l	0.00028 U
p-Dichlorobenzene	mg/l	0.00029 U
trans-1,2-Dichloroethylene	mg/l	0.00030 U
trans-1,3-Dichloropropene	mg/l	0.00021 U
Ethylbenzene	mg/l	0.00025 U
2-Hexanone	mg/l	0.0024 U
Hexachlorobutadiene	mg/l	0.00066 U
Isopropylbenzene	mg/l	0.00027 U
p-Isopropyltoluene	mg/l	0.00034 U
4-Methyl-2-pentanone	mg/l	0.0019 U
Methyl bromide	mg/l	0.00031 U
Methyl chloride	mg/l	0.00027 U
Methylene bromide	mg/l	0.00030 U
Methylene chloride	mg/l	0.0010 U
Methyl ethyl ketone	mg/l	0.0018 U
Methyl Tert Butyl Ether	mg/l	0.00028 U
Naphthalene	mg/l	0.0010 U
n-Propylbenzene	mg/l	0.00027 U

Styrene	mg/l	0.00022 U									
1,1,1,2-Tetrachloroethane	mg/l	0.00024 U									
1,1,1-Trichloroethane	mg/l	0.00031 U									
1,1,2,2-Tetrachloroethane	mg/l	0.00038 U									
1,1,2-Trichloroethane	mg/l	0.00036 U									
1,2,3-Trichlorobenzene	mg/l	0.00051 U									
1,2,3-Trichloropropane	mg/l	0.00046 U									
1,2,4-Trichlorobenzene	mg/l	0.00033 U									
1,2,4-Trimethylbenzene	mg/l	0.00024 U									
1,3,5-Trimethylbenzene	mg/l	0.00027 U									
Tetrachloroethylene	mg/l	0.00033 U									
Toluene	mg/l	0.00026 U									
Trichloroethylene	mg/l	0.00036 U									
Trichlorofluoromethane	mg/l	0.00041 U									
Vinyl chloride	mg/l	0.00040 U									
Xylene (total)	mg/l	0.00071 U									
m,p-Xylene	mg/l	0.00048 U									
o-Xylene	mg/l	0.00023 U									
GC Semi-volatiles (TNRCC 1005)											
TPH (C6-C12)	mg/l	0.58 U									
TPH (>C12-C28)	mg/l	0.90 U									
TPH (>C28-C35)	mg/l	0.90 U									
TPH (C6-C35)	mg/l	0.58 U									

Client Sample ID:		**SB-10@6-8'**	**SB-11@2-4'**	**SB-12@14-16'**	**SB-13@4-6'**	**SB-14@2-4'**	**SB-15@8-10'**	**SB-16@8-10'**	**SB-17@4-6'**	**SB-18@14-16'**	**SB-1@14-16'**
Lab Sample ID:		**TC6964-11**	**TC6964-12**	**TC6964-13**	**TC6964-14**	**TC6964-15**	**TC6964-16**	**TC6964-17**	**TC6964-18**	**TC6964-19**	**TC6964-1**
Date Sampled:		**04/26/2012**	**04/26/2012**	**04/26/2012**	**04/26/2012**	**04/26/2012**	**04/26/2012**	**04/26/2012**	**04/26/2012**	**04/26/2012**	**04/25/2012**
Matrix:		**Soil**	**Soil**	**Soil**	**Soil**	**Soil**	**Soil**	**Soil**	**Soil**	**Soil**	**Soil**
GC/MS Volatiles (SW846 8260B)											
Benzene	mg/kg	0.00057 U	0.00064 U	0.00061 U	0.00058 U	0.00063 U	0.00063 U	0.00061 U	0.00062 U	0.00066 U	0.00062 U
Toluene	mg/kg	0.00075 U	0.00084 U	0.00081 U	0.00077 U	0.00083 U	0.00083 U	0.00080 U	0.00082 U	0.00087 U	0.00081 U
Ethylbenzene	mg/kg	0.00075 U	0.00084 U	0.00081 U	0.00077 U	0.00083 U	0.00083 U	0.00080 U	0.00081 U	0.00087 U	0.00081 U
Xylene (total)	mg/kg	0.0015 U	0.0016 U	0.0016 U	0.0015 U	0.0016 U	0.0016 U	0.0016 U	0.0016 U	0.0017 U	0.0016 U
Methyl Tert Butyl Ether	mg/kg	0.00072 U	0.00081 U	0.00078 U	0.00074 U	0.00080 U	0.00080 U	0.00077 U	0.00079 U	0.00084 U	0.00078 U
Acetone	mg/kg	0.011 U	0.0275 J	0.012 U	-	-	-	-	-	-	0.0265 J
Bromobenzene	mg/kg	0.00084 U	0.00094 U	0.00090 U	-	-	-	-	-	-	0.00091 U
Bromochloromethane	mg/kg	0.0010 U	0.0011 U	0.0011 U	-	-	-	-	-	-	0.0011 U
Bromodichloromethane	mg/kg	0.00063 U	0.00071 U	0.00068 U	-	-	-	-	-	-	0.00068 U
Bromoform	mg/kg	0.0011 U	0.0012 U	0.0011 U	-	-	-	-	-	-	0.0011 U
n-Butylbenzene	mg/kg	0.00095 U	0.0011 U	0.0010 U	-	-	-	-	-	-	0.0010 U
sec-Butylbenzene	mg/kg	0.00077 U	0.00086 U	0.00083 U	-	-	-	-	-	-	0.00083 U
tert-Butylbenzene	mg/kg	0.00076 U	0.00085 U	0.00082 U	-	-	-	-	-	-	0.00082 U
Chlorobenzene	mg/kg	0.00052 U	0.00058 U	0.00056 U	-	-	-	-	-	-	0.00056 U
Chloroethane	mg/kg	0.00099 U	0.0011 U	0.0011 U	-	-	-	-	-	-	0.0011 U
Chloroform	mg/kg	0.00072 U	0.00081 U	0.00077 U	-	-	-	-	-	-	0.00077 U
o-Chlorotoluene	mg/kg	0.00070 U	0.00079 U	0.00076 U	-	-	-	-	-	-	0.00076 U
p-Chlorotoluene	mg/kg	0.00099 U	0.0011 U	0.0011 U	-	-	-	-	-	-	0.0011 U
Carbon disulfide	mg/kg	0.00075 U	0.00084 U	0.00081 U	-	-	-	-	-	-	0.00081 U
Carbon tetrachloride	mg/kg	0.00074 U	0.00084 U	0.00080 U	-	-	-	-	-	-	0.00080 U
1,1-Dichloroethane	mg/kg	0.00074 U	0.00083 U	0.00079 U	-	-	-	-	-	-	0.00079 U
1,1-Dichloroethylene	mg/kg	0.00086 U	0.00097 U	0.00093 U	-	-	-	-	-	-	0.00093 U
1,1-Dichloropropene	mg/kg	0.0010 U	0.0012 U	0.0011 U	-	-	-	-	-	-	0.0011 U
1,2-Dibromo-3-chloropropane	mg/kg	0.0016 U	0.0018 U	0.0018 U	-	-	-	-	-	-	0.0018 U
1,2-Dibromoethane	mg/kg	0.00098 U	0.0011 U	0.0011 U	-	-	-	-	-	-	0.0011 U
1,2-Dichloroethane	mg/kg	0.00073 U	0.00082 U	0.00079 U	-	-	-	-	-	-	0.00079 U
1,2-Dichloropropane	mg/kg	0.00091 U	0.0010 U	0.00098 U	-	-	-	-	-	-	0.00098 U
1,3-Dichloropropane	mg/kg	0.00099 U	0.0011 U	0.0011 U	-	-	-	-	-	-	0.0011 U
2,2-Dichloropropane	mg/kg	0.00086 U	0.00096 U	0.00092 U	-	-	-	-	-	-	0.00093 U

Dibromochloromethane	mg/kg	0.00088 U	0.00099 U	0.00095 U	-	-	-	-	-	-	0.00095 U
Dichlorodifluoromethane	mg/kg	0.0043 U	0.0048 U	0.0046 U	-	-	-	-	-	-	0.0046 U
cis-1,2-Dichloroethylene	mg/kg	0.00099 U	0.0011 U	0.0011 U	-	-	-	-	-	-	0.0011 U
cis-1,3-Dichloropropene	mg/kg	0.00054 U	0.00061 U	0.00058 U	-	-	-	-	-	-	0.00059 U
m-Dichlorobenzene	mg/kg	0.00077 U	0.00086 U	0.00083 U	-	-	-	-	-	-	0.00083 U
o-Dichlorobenzene	mg/kg	0.00062 U	0.00069 U	0.00066 U	-	-	-	-	-	-	0.00066 U
p-Dichlorobenzene	mg/kg	0.00074 U	0.00084 U	0.00080 U	-	-	-	-	-	-	0.00080 U
trans-1,2-Dichloroethylene	mg/kg	0.00084 U	0.00095 U	0.00091 U	-	-	-	-	-	-	0.00091 U
trans-1,3-Dichloropropene	mg/kg	0.00069 U	0.00078 U	0.00075 U	-	-	-	-	-	-	0.00075 U
2-Hexanone	mg/kg	0.0045 U	0.0051 U	0.0049 U	-	-	-	-	-	-	0.0049 U
Hexachlorobutadiene	mg/kg	0.00091 U	0.0010 U	0.00098 U	-	-	-	-	-	-	0.00098 U
Isopropylbenzene	mg/kg	0.00070 U	0.00079 U	0.00076 U	-	-	-	-	-	-	0.00076 U
p-Isopropyltoluene	mg/kg	0.00055 U	0.00061 U	0.00059 U	-	-	-	-	-	-	0.00059 U
4-Methyl-2-pentanone	mg/kg	0.0049 U	0.0055 U	0.0053 U	-	-	-	-	-	-	0.0053 U
Methyl bromide	mg/kg	0.0012 U	0.0014 U	0.0013 U	-	-	-	-	-	-	0.0013 U
Methyl chloride	mg/kg	0.00095 U	0.0011 U	0.0010 U	-	-	-	-	-	-	0.0010 U
Methylene bromide	mg/kg	0.00078 U	0.00088 U	0.00084 U	-	-	-	-	-	-	0.00084 U
Methylene chloride	mg/kg	0.0037 JB	0.0052 J [a]	0.0048 JB	-	-	-	-	-	-	0.0054 JB
Methyl ethyl ketone	mg/kg	0.0063 U	0.0071 U	0.0068 U	-	-	-	-	-	-	0.0068 U
Naphthalene	mg/kg	0.0022 U	0.0024 U	0.0023 U	-	-	-	-	-	-	0.0023 U
n-Propylbenzene	mg/kg	0.00083 U	0.00093 U	0.00089 U	-	-	-	-	-	-	0.00089 U
Styrene	mg/kg	0.00066 U	0.00074 U	0.00071 U	-	-	-	-	-	-	0.00072 U
1,1,1,2-Tetrachloroethane	mg/kg	0.00092 U	0.0010 U	0.00099 U	-	-	-	-	-	-	0.0010 U
1,1,1-Trichloroethane	mg/kg	0.00093 U	0.0010 U	0.0010 U	-	-	-	-	-	-	0.0010 U
1,1,2,2-Tetrachloroethane	mg/kg	0.0013 U	0.0014 U	0.0014 U	-	-	-	-	-	-	0.0014 U
1,1,2-Trichloroethane	mg/kg	0.0010 U	0.0011 U	0.0011 U	-	-	-	-	-	-	0.0011 U
1,2,3-Trichlorobenzene	mg/kg	0.00094 U	0.0011 U	0.0010 U	-	-	-	-	-	-	0.0010 U
1,2,3-Trichloropropane	mg/kg	0.0018 U	0.0020 U	0.0019 U	-	-	-	-	-	-	0.0019 U
1,2,4-Trichlorobenzene	mg/kg	0.00091 U	0.0010 U	0.00098 U	-	-	-	-	-	-	0.00099 U
1,2,4-Trimethylbenzene	mg/kg	0.00069 U	0.00077 U	0.00074 U	-	-	-	-	-	-	0.00074 U
1,3,5-Trimethylbenzene	mg/kg	0.00064 U	0.00072 U	0.00069 U	-	-	-	-	-	-	0.00070 U
Tetrachloroethylene	mg/kg	0.0010 U	0.0011 U	0.0011 U	-	-	-	-	-	-	0.0011 U
Trichloroethylene	mg/kg	0.0010 U	0.0012 U	0.0011 U	-	-	-	-	-	-	0.0011 U
Trichlorofluoromethane	mg/kg	0.0012 U	0.0013 U	0.0012 U	-	-	-	-	-	-	0.0012 U
Vinyl chloride	mg/kg	0.0012 U	0.0013 U	0.0013 U	-	-	-	-	-	-	0.0013 U
m,p-Xylene	mg/kg	0.00087 U	0.00098 U	0.00094 U	-	-	-	-	-	-	0.00094 U
o-Xylene	mg/kg	0.00060 U	0.00067 U	0.00065 U	-	-	-	-	-	-	0.00065 U
GC Semi-volatiles (TNRCC 1005)											
TPH (C6-C12)	mg/kg	4.8 U	5.3 U	4.9 U	4.8 U	5.1 U	5.2 U	4.8 U	5.0 U	4.9 U	4.8 U
TPH (>C12-C28)	mg/kg	4.8 U	5.3 U	5.0 U	4.8 U	5.1 U	5.2 U	4.8 U	5.0 U	4.9 U	4.8 U
TPH (>C28-C35)	mg/kg	4.8 U	5.3 U	5.0 U	4.8 U	5.1 U	5.2 U	4.8 U	5.0 U	4.9 U	4.8 U
TPH (C6-C35)	mg/kg	4.8 U	5.3 U	4.9 U	4.8 U	5.1 U	5.2 U	4.8 U	5.0 U	4.9 U	4.8 U
General Chemistry											
Solids, Percent	%	83.3	78	83.2	83.6	79.5	78.8	85.1	81.2	79.8	81.2
Client Sample ID:		**SB-2@4-6'**	**SB-3@8-10'**	**SB-4@2-4'**	**SB-5@8-10'**	**SB-6@2-4'**	**SB-7@6-8'**	**SB-8@2-4'**	**SB-9@14-16'**		
Lab Sample ID:		**TC6964-2**	**TC6964-3**	**TC6964-4**	**TC6964-5**	**TC6964-6**	**TC6964-8**	**TC6964-9**	**TC6964-10**		
Date Sampled:		**04/25/2012**	**04/25/2012**	**04/25/2012**	**04/25/2012**	**04/25/2012**	**04/25/2012**	**04/25/2012**	**04/25/2012**		
Matrix:		**Soil**	**Soil**	**Soil**	**Soil**	**Soil**	**Soil**	**Soil**	**Soil**		
GC/MS Volatiles (SW846 8260B)											
Benzene	mg/kg	0.00061 U	0.00064 U	0.00062 U	0.00058 U	0.00058 U	0.00065 U	0.00059 U	0.00059 U		
Toluene	mg/kg	0.00080 U	0.00084 U	0.00082 U	0.00076 U	0.00076 U	0.00085 U	0.00077 U	0.00078 U		
Ethylbenzene	mg/kg	0.00079 U	0.00084 U	0.00081 U	0.00076 U	0.00076 U	0.00085 U	0.00077 U	0.00078 U		
Xylene (total)	mg/kg	0.0016 U	0.0016 U	0.0016 U	0.0015 U	0.0015 U	0.0017 U	0.0015 U	0.0015 U		
Acetone	mg/kg	0.0290 J	0.012 U	0.012 U	0.011 U	0.011 U	-	-	-		

Bromobenzene	mg/kg	0.00089 U	0.00094 U	0.00091 U	0.00085 U	0.00085 U	-	-	-		
Bromochloromethane	mg/kg	0.0011 U	0.0011 U	0.0011 U	0.0010 U	0.0010 U	-	-	-		
Bromodichloromethane	mg/kg	0.00067 U	0.00070 U	0.00068 U	0.00064 U	0.00064 U	-	-	-		
Bromoform	mg/kg	0.0011 U	0.0012 U	0.0012 U	0.0011 U	0.0011 U	-	-	-		
n-Butylbenzene	mg/kg	0.0010 U	0.0011 U	0.0010 U	0.00096 U	0.00096 U	-	-	-		
sec-Butylbenzene	mg/kg	0.00081 U	0.00086 U	0.00083 U	0.00077 U	0.00078 U	-	-	-		
tert-Butylbenzene	mg/kg	0.00081 U	0.00085 U	0.00083 U	0.00077 U	0.00077 U	-	-	-		
Chlorobenzene	mg/kg	0.00055 U	0.00058 U	0.00056 U	0.00052 U	0.00053 U	-	-	-		
Chloroethane	mg/kg	0.0011 U	0.0011 U	0.0011 U	0.0010 U	0.0010 U	-	-	-		
Chloroform	mg/kg	0.00076 U	0.00080 U	0.00078 U	0.00073 U	0.00073 U	-	-	-		
o-Chlorotoluene	mg/kg	0.00075 U	0.00079 U	0.00076 U	0.00071 U	0.00071 U	-	-	-		
p-Chlorotoluene	mg/kg	0.0010 U	0.0011 U	0.0011 U	0.0010 U	0.0010 U	-	-	-		
Carbon disulfide	mg/kg	0.00080 U	0.00084 U	0.00082 U	0.00076 U	0.00076 U	-	-	-		
Carbon tetrachloride	mg/kg	0.00079 U	0.00083 U	0.00081 U	0.00075 U	0.00076 U	-	-	-		
1,1-Dichloroethane	mg/kg	0.00078 U	0.00082 U	0.00080 U	0.00074 U	0.00075 U	-	-	-		
1,1-Dichloroethylene	mg/kg	0.00092 U	0.00097 U	0.00094 U	0.00087 U	0.00088 U	-	-	-		
1,1-Dichloropropene	mg/kg	0.0011 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U	-	-	-		
1,2-Dibromo-3-chloropropane	mg/kg	0.0017 U	0.0018 U	0.0018 U	0.0017 U	0.0017 U	-	-	-		
1,2-Dibromoethane	mg/kg	0.0010 U	0.0011 U	0.0011 U	0.00099 U	0.0010 U	-	-	-		
1,2-Dichloroethane	mg/kg	0.00078 U	0.00082 U	0.00080 U	0.00074 U	0.00075 U	-	-	-		
1,2-Dichloropropane	mg/kg	0.00097 U	0.0010 U	0.00099 U	0.00092 U	0.00093 U	-	-	-		
1,3-Dichloropropane	mg/kg	0.0010 U	0.0011 U	0.0011 U	0.0010 U	0.0010 U	-	-	-		
2,2-Dichloropropane	mg/kg	0.00091 U	0.00096 U	0.00093 U	0.00087 U	0.00087 U	-	-	-		
Dibromochloromethane	mg/kg	0.00093 U	0.00098 U	0.00095 U	0.00089 U	0.00089 U	-	-	-		
Dichlorodifluoromethane	mg/kg	0.0046 U	0.0048 U	0.0047 U	0.0044 U	0.0044 U	-	-	-		
cis-1,2-Dichloroethylene	mg/kg	0.0011 U	0.0011 U	0.0011 U	0.0010 U	0.0010 U	-	-	-		
cis-1,3-Dichloropropene	mg/kg	0.00058 U	0.00061 U	0.00059 U	0.00055 U	0.00055 U	-	-	-		
m-Dichlorobenzene	mg/kg	0.00081 U	0.00086 U	0.00083 U	0.00077 U	0.00078 U	-	-	-		
o-Dichlorobenzene	mg/kg	0.00065 U	0.00069 U	0.00067 U	0.00062 U	0.00063 U	-	-	-		
p-Dichlorobenzene	mg/kg	0.00079 U	0.00083 U	0.00081 U	0.00075 U	0.00076 U	-	-	-		
trans-1,2-Dichloroethylene	mg/kg	0.00089 U	0.00094 U	0.00092 U	0.00085 U	0.00086 U	-	-	-		
trans-1,3-Dichloropropene	mg/kg	0.00074 U	0.00078 U	0.00075 U	0.00070 U	0.00071 U	-	-	-		
2-Hexanone	mg/kg	0.0048 U	0.0051 U	0.0049 U	0.0046 U	0.0046 U	-	-	-		
Hexachlorobutadiene	mg/kg	0.00096 U	0.0010 U	0.00099 U	0.00092 U	0.00092 U	-	-	-		
Isopropylbenzene	mg/kg	0.00075 U	0.00079 U	0.00077 U	0.00071 U	0.00072 U	-	-	-		
p-Isopropyltoluene	mg/kg	0.00058 U	0.00061 U	0.00059 U	0.00055 U	0.00056 U	-	-	-		
4-Methyl-2-pentanone	mg/kg	0.0052 U	0.0055 U	0.0053 U	0.0050 U	0.0050 U	-	-	-		
Methyl bromide	mg/kg	0.0013 U	0.0014 U	0.0013 U	0.0012 U	0.0012 U	-	-	-		
Methyl chloride	mg/kg	0.0010 U	0.0011 U	0.0010 U	0.00096 U	0.00096 U	-	-	-		
Methylene bromide	mg/kg	0.00083 U	0.00087 U	0.00085 U	0.00079 U	0.00079 U	-	-	-		
Methylene chloride	mg/kg	0.0033 J	0.0030 U	0.0034 J	0.0032 J	0.0027 U	-	-	-		
Methyl ethyl ketone	mg/kg	0.0067 U	0.0070 U	0.0068 U	0.0064 U	0.0064 U	-	-	-		
Methyl Tert Butyl Ether	mg/kg	0.00077 U	0.00081 U	0.00079 U	0.00073 U	0.00073 U	0.00082 U	0.00074 U	0.00075 U		
Naphthalene	mg/kg	0.0023 U	0.0024 U	0.0023 U	0.0022 U	0.0022 U	-	-	-		
n-Propylbenzene	mg/kg	0.00088 U	0.00092 U	0.00090 U	0.00084 U	0.00084 U	-	-	-		
Styrene	mg/kg	0.00070 U	0.00074 U	0.00072 U	0.00067 U	0.00067 U	-	-	-		
1,1,1,2-Tetrachloroethane	mg/kg	0.00098 U	0.0010 U	0.0010 U	0.00093 U	0.00094 U	-	-	-		
1,1,1-Trichloroethane	mg/kg	0.00099 U	0.0010 U	0.0010 U	0.00094 U	0.00095 U	-	-	-		
1,1,2,2-Tetrachloroethane	mg/kg	0.0014 U	0.0014 U	0.0014 U	0.0013 U	0.0013 U	-	-	-		
1,1,2-Trichloroethane	mg/kg	0.0011 U	0.0011 U	0.0011 U	0.0010 U	0.0010 U	-	-	-		
1,2,3-Trichlorobenzene	mg/kg	0.0010 U	0.0011 U	0.0010 U	0.00095 U	0.00096 U	-	-	-		
1,2,3-Trichloropropane	mg/kg	0.0019 U	0.0020 U	0.0019 U	0.0018 U	0.0018 U	-	-	-		
1,2,4-Trichlorobenzene	mg/kg	0.00097 U	0.0010 U	0.00099 U	0.00092 U	0.00093 U	-	-	-		
1,2,4-Trimethylbenzene	mg/kg	0.00073 U	0.00077 U	0.00075 U	0.00070 U	0.00070 U	-	-	-		
1,3,5-Trimethylbenzene	mg/kg	0.00068 U	0.00072 U	0.00070 U	0.00065 U	0.00066 U	-	-	-		
Tetrachloroethylene	mg/kg	0.0011 U	0.0011 U	0.0011 U	0.0010 U	0.0010 U	-	-	-		
Trichloroethylene	mg/kg	0.0011 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U	-	-	-		
Trichlorofluoromethane	mg/kg	0.0012 U	0.0013 U	0.0013 U	0.0012 U	0.0012 U	-	-	-		
Vinyl chloride	mg/kg	0.0013 U	0.0013 U	0.0013 U	0.0012 U	0.0012 U	-	-	-		
m,p-Xylene	mg/kg	0.00092 U	0.00097 U	0.00095 U	0.00088 U	0.00088 U	-	-	-		
o-Xylene	mg/kg	0.00064 U	0.00067 U	0.00065 U	0.00061 U	0.00061 U	-	-	-		

GC Semi-volatiles (TNRCC 1005)											
TPH (C6-C12)	mg/kg	4.8 U	4.9 U	4.8 U	4.5 U	4.9 U	5.1 U	4.7 U	4.6 U		
TPH (>C12-C28)	mg/kg	4.9 U	5.0 U	4.8 U	4.5 U	4.9 U	5.1 U	4.8 U	4.7 U		
TPH (>C28-C35)	mg/kg	4.9 U	5.0 U	4.8 U	4.5 U	4.9 U	5.1 U	4.8 U	4.7 U		
TPH (C6-C35)	mg/kg	4.8 U	4.9 U	4.8 U	4.5 U	4.9 U	5.1 U	4.7 U	4.6 U		
General Chemistry											
Solids, Percent	%	82.4	81.9	83.3	88.2	85.3	80.5	86.4	86.9		

Footnotes:

[a] Suspected laboratory contaminant.

APPENDIX A

Soil Boring Logs

PROJECT NO: 8321PT12	☒ BOREHOLE ☐ MONITOR WELL
SITE NAME: Clinton Drive Reconstruction Project	BORING NUMBER : SB-1 TEMP. WELL NUMBER :
FACILITY ADDRESS: Fronting JL Proler Iron & Steel (4401 Clinton Drive)	
DRILLING COMPANY / METHOD / RIG: Alpine Services/Truck-Mounted Hydraulically-Driven Push Probe	
DRILLER: Dave	**DATE: (START/FINISH)** 04/25/2012 @ 7.55 to 9:15
LOGGED BY: T. Murphy	**TOP OF CASING ELEVATION:** N/Appl.

DEPTH (FEET)	PID	SAMPLE INTERVAL	STRATIGRAPHY Ground Surface	USCS	SOIL DESCRIPTION AND COMMENT (CLASSIFICATION, GRAIN SIZE, COLOR, MOISTURE, ODOR, OTHER)	NOTES
0	0.0			Fill/ CL	Asphalt & concrete (6"); Fill; Gravel and some brown sandy clay (6 inches to 1-foot bgs)	
	0.0			CL	Sandy clay; Brown sandy clay, fines, soft, dry to moist (1-foot to 5 feet bgs)	
5	0.0					
	0.0			CL	Sandy clay; Reddish-orange sandy clay, fines, soft, moist with calcareous concretions (4-8 feet bgs)	
	0.0					
10	0.0			CL	Sandy clay; Light brown and gray sandy clay, fines, soft, moist (8-16 feet bgs)	
	0.0					
15	5.0	X				SB-1 @ 14-16'; 9:15, 1-4 oz
20					Total Depth = 16 ft Note: No groundwater encountered to 16 feet bgs. A minor hydrocarbon odor was noted at 15 feet bgs.	
25						
30						
35						
40						
45						

FILTER SAND | BENTONITE SEAL | GROUT / CONCRETE SURFACE | ▼ WATER ENCOUNTERED

Berg ♦ Oliver Associates, Inc.

TOTAL DEPTH: 16'

SEAL MATERIAL: (TYPE/INTERVAL) Bentonite to surface

SURFACE COMPLETION: ☐ FLUSH W/CONCRETE ☐ RISER W/CONCRETE

SHEET 1 OF 1

PROJECT NO: 8321PT12	☒ BOREHOLE ☐ MONITOR WELL
SITE NAME: Clinton Drive Reconstruction Project	BORING NUMBER : SB-2 TEMP. WELL NUMBER :
FACILITY ADDRESS: Fronting JL Proler Iron & Steel (4401 Clinton Drive)	
DRILLING COMPANY / METHOD / RIG: Alpine Services/Truck-Mounted Hydraulically-Driven Push Probe	
DRILLER: Dave	**DATE: (START/FINISH)** 04/25/2012 @ 9:21 to 9:48
LOGGED BY: T. Murphy	**TOP OF CASING ELEVATION:** N/Appl.

DEPTH (FEET)	PID	SAMPLE INTERVAL	STRATIGRAPHY	USCS	SOIL DESCRIPTION AND COMMENT (CLASSIFICATION, GRAIN SIZE, COLOR, MOISTURE, ODOR, OTHER)	NOTES
			Ground Surface			
0	0.0			Fill/ SPO	Asphalt & concrete (6"); Fill; Gravel and gray sand, dry (6 inches to 2 feet bgs)	
	0.0					
5	0.0	X				SB-2 @ 4-6'; 9:25, 1-4 oz
	0.0			CL	Sandy clay; Light gray sandy clay, fines, soft, moist with Fe staining and manganese staining (4-8 feet bgs)	
	0.0					
10	0.0					
	0.0					
15	0.0			CL	Sandy clay; Light gray sandy clay, fines, soft, moist (13-16 feet bgs)	
20					Total Depth = 16 ft Note: No groundwater encountered to 16 feet bgs. A default soil sample was collected.	
25						
30						
35						
40						
45						

FILTER SAND | BENTONITE SEAL | GROUT / CONCRETE SURFACE | ▼ WATER ENCOUNTERED

Berg ♦ Oliver Associates, Inc.

TOTAL DEPTH: 16'

SEAL MATERIAL: (TYPE/INTERVAL) Bentonite to surface

SURFACE COMPLETION: ☐ FLUSH W/CONCRETE ☐ RISER W/CONCRETE

SHEET 1 OF 1

PROJECT NO: 8321PT12	☒ BOREHOLE ☐ MONITOR WELL
SITE NAME: Clinton Drive Reconstruction Project	BORING NUMBER : SB-3 TEMP. WELL NUMBER :
FACILITY ADDRESS: Fronting JL Proler Iron & Steel (4401 Clinton Drive)	
DRILLING COMPANY / METHOD / RIG: Alpine Services/Truck-Mounted Hydraulically-Driven Push Probe	
DRILLER: Dave	**DATE: (START/FINISH)** 04/25/2012 @ 10:00 to 10:40
LOGGED BY: T. Murphy	**TOP OF CASING ELEVATION:** N/Appl.

DEPTH (FEET)	PID	SAMPLE INTERVAL	STRATIGRAPHY (Ground Surface)	USCS	SOIL DESCRIPTION AND COMMENT (CLASSIFICATION, GRAIN SIZE, COLOR, MOISTURE, ODOR, OTHER)	NOTES
0	0.0			Fill	Asphalt & concrete (6"); Fill; Gravel (6 inches to 1-foot)	
	0.0			CL	Sandy clay; Light brown sandy clay, fines, soft, dry to moist (1-foot to 5 feet bgs)	
5	0.0					
	0.0					
	0.0	X				SB-3 @ 8-10'; 10:30, 1-4 oz
10	0.0			CL	Sandy clay; Light gray sandy clay, fines, soft, moist (5-16 feet bgs)	
	0.0					
15	0.0					
20					Total Depth = 16 ft Note: No groundwater encountered to 16 feet bgs. A default soil sample was collected.	
25						
30						
35						
40						
45						

FILTER SAND | BENTONITE SEAL | GROUT / CONCRETE SURFACE | ▼ WATER ENCOUNTERED

Berg ♦ Oliver Associates, Inc.

TOTAL DEPTH: 16'

SEAL MATERIAL: (TYPE/INTERVAL) Bentonite to surface

SURFACE COMPLETION: ☐ FLUSH W/CONCRETE ☐ RISER W/CONCRETE

SHEET 1 OF 1

PROJECT NO: 8321PT12	☒ BOREHOLE ☐ MONITOR WELL
SITE NAME: Clinton Drive Reconstruction Project	BORING NUMBER : SB-4 TEMP. WELL NUMBER : TWP-4
FACILITY ADDRESS: Fronting the vacant, old Comet Rice facility (4601 Clinton Drive)	
DRILLING COMPANY / METHOD / RIG: Alpine Services/Truck-Mounted Hydraulically-Driven Push Probe	
DRILLER: Dave	**DATE: (START/FINISH)** 04/25/2012 @ 10:50 to 11:21
LOGGED BY: T. Murphy	**TOP OF CASING ELEVATION:** N/Appl.

DEPTH (FEET)	PID	SAMPLE INTERVAL	STRATIGRAPHY (Ground Surface)	USCS	SOIL DESCRIPTION AND COMMENT (CLASSIFICATION, GRAIN SIZE, COLOR, MOISTURE, ODOR, OTHER)	NOTES
0	0.0			Fill/ CL	Asphalt & concrete (6"); Fill; Gravel with some light brown sandy clay (6 inches to 2 feet bgs)	SB-4 @ 2-4'; 10:54, 1-4 oz
	0.0			CL	Sandy clay; Light brown sandy clay, fines, soft, moist (2-5 feet bgs)	
5	0.0					
	0.0			CL	Sandy clay; Gray and reddish-orange sandy clay, fines, soft, moist (5-8 feet bgs)	
	0.0		▼			
10	0.0			SP	Clayey and Silty Sand; Gray, light brown (tan) and reddish-orange mixed grain size, saturated at 9.5 feet bgs (8-16 feet bgs)	
	0.0					
15	0.0					
20					Total Depth = 16 ft Note: A default soil sample was collected. Shallow groundwater was encountered at 9.5 feet bgs. A groundwater sample was collected at 11:36.	
25						
30						
35						
40						
45						

FILTER SAND | BENTONITE SEAL | GROUT / CONCRETE SURFACE | ▼ WATER ENCOUNTERED

Berg ♦ Oliver Associates, Inc.

TOTAL DEPTH: 16'

SEAL MATERIAL: (TYPE/INTERVAL) Bentonite to surface

SURFACE COMPLETION: ☐ FLUSH W/CONCRETE ☐ RISER W/CONCRETE

SHEET 1 OF 1

PROJECT NO: 8321PT12	☒ BOREHOLE ☐ MONITOR WELL
SITE NAME: Clinton Drive Reconstruction Project	**BORING NUMBER :** SB-5 **TEMP. WELL NUMBER :**
FACILITY ADDRESS: Fronting the vacant, old Comet Rice facility (4601 Clinton Drive)	
DRILLING COMPANY / METHOD / RIG: Alpine Services/Truck-Mounted Hydraulically-Driven Push Probe	
DRILLER: Dave	**DATE: (START/FINISH)** 04/25/2012 @ 12:07 to 12:30
LOGGED BY: T. Murphy	**TOP OF CASING ELEVATION:** N/Appl.

DEPTH (FEET)	PID	SAMPLE INTERVAL	STRATIGRAPHY (Ground Surface)	USCS	SOIL DESCRIPTION AND COMMENT (CLASSIFICATION, GRAIN SIZE, COLOR, MOISTURE, ODOR, OTHER)	NOTES
0	0.0			Fill/ CL	Asphalt & concrete (6"); Fill; Gravel with some light brown sandy clay (6 inches to 2 feet bgs)	
	0.0			CL	Sandy clay; Light brown sandy clay, fines, soft, moist (2-5 feet bgs)	
5	0.0					
	0.0			CL	Sandy clay; Gray and reddish-orange sandy clay, fines, soft, moist (5-9 feet bgs)	SB-5 @ 8-10'; 12:26, 1-4 oz
	0.0					
10	0.0					
	0.0			SC	Clayey and silty sand; Gray, light brown (tan) and reddish-orange clayey/silty sand, mixed grain size, moist (9-16 feet bgs)	
15	0.0					
20					Total Depth = 16 ft Note: No groundwater encountered to 16 feet bgs. A default soil sample was collected.	
25						
30						
35						
40						
45						

FILTER SAND | BENTONITE SEAL | GROUT / CONCRETE SURFACE | ▼ WATER ENCOUNTERED

Berg ♦ Oliver Associates, Inc.

TOTAL DEPTH: 16'

SEAL MATERIAL: (TYPE/INTERVAL) Bentonite to surface

SURFACE COMPLETION: ☐ FLUSH W/CONCRETE ☐ RISER W/CONCRETE

SHEET 1 OF 1

PROJECT NO: 8321PT12	☒ BOREHOLE ☐ MONITOR WELL
SITE NAME: Clinton Drive Reconstruction Project	BORING NUMBER : SB-6 TEMP. WELL NUMBER :
FACILITY ADDRESS: Fronting the vacant land, Brownfield Site, referred to as (4600 Clinton Drive)	
DRILLING COMPANY / METHOD / RIG: Alpine Services/Truck-Mounted Hydraulically-Driven Push Probe	
DRILLER: Dave	**DATE: (START/FINISH)** 04/25/2012 @ 12:39 to 13:06
LOGGED BY: T. Murphy	**TOP OF CASING ELEVATION:** N/Appl.

DEPTH (FEET)	PID	SAMPLE INTERVAL	STRATIGRAPHY (Ground Surface)	USCS	SOIL DESCRIPTION AND COMMENT (CLASSIFICATION, GRAIN SIZE, COLOR, MOISTURE, ODOR, OTHER)	NOTES
0	0.0			Fill	Asphalt & concrete (6"); Fill; Gravel (6 inches to 2 feet bgs)	
	0.0	X		CL	Sandy clay; Brownish-yellow sandy clay, fines, soft, moist (2-4 feet bgs)	SB-6 @ 2-4'; 12:43, 1-4 oz
5	0.0					
	0.0					
	0.0			SC	Clayey and silty sand; Light brown (tan) and gray clayey/silty sand, mixed grain size, moist (4-16 feet bgs)	
10	0.0					
	0.0					
15	0.0					
20					Total Depth = 16 ft Note: A default soil sample was collected.	
25						
30						
35						
40						
45						

FILTER SAND | BENTONITE SEAL | GROUT / CONCRETE SURFACE | ▼ WATER ENCOUNTERED

Berg ♦ Oliver Associates, Inc.

TOTAL DEPTH: 16'

SEAL MATERIAL: (TYPE/INTERVAL) Bentonite to surface

SURFACE COMPLETION: ☐ FLUSH W/CONCRETE ☐ RISER W/CONCRETE

SHEET 1 OF 1

PROJECT NO: 8321PT12	☒ BOREHOLE ☐ MONITOR WELL
SITE NAME: Clinton Drive Reconstruction Project	BORING NUMBER : SB-7 TEMP. WELL NUMBER :
FACILITY ADDRESS: Fronting the vacant/former Burbank Drum & Barrel facility (4815 Clinton Drive)	
DRILLING COMPANY / METHOD / RIG: Alpine Services/Truck-Mounted Hydraulically-Driven Push Probe	
DRILLER: Dave	**DATE: (START/FINISH)** 04/25/2012 @ 7:55 to 9:15
LOGGED BY: T. Murphy	**TOP OF CASING ELEVATION:** N/Appl.

DEPTH (FEET)	PID	SAMPLE INTERVAL	STRATIGRAPHY (Ground Surface)	USCS	SOIL DESCRIPTION AND COMMENT (CLASSIFICATION, GRAIN SIZE, COLOR, MOISTURE, ODOR, OTHER)	NOTES
0	0.0			Fill/ SW	Asphalt & concrete (6"); Fill; Gravel and light brown (tan) aggregate sand, moist, (6 inches to 3 feet bgs)	
	0.0					
5	0.0					
	0.0	X		CL	Sandy clay; Dark brown sandy clay, fines, soft, moist with calcareous concretions (3-11 feet bgs)	SB-7 @ 6-8'; 14:44, 1-4 oz
	0.0					
10	0.0					
	0.0			CL	Sandy clay; Light gray and reddish-orange sandy clay, fines, soft, moist (11-16 feet bgs)	
15	0.0					
20					Total Depth = 16 ft Note: No groundwater encountered to 16 feet bgs. A default soil sample was collected.	
25						
30						
35						
40						
45						

FILTER SAND | BENTONITE SEAL | GROUT / CONCRETE SURFACE | ▼ WATER ENCOUNTERED

Berg ♦ Oliver Associates, Inc.

TOTAL DEPTH: 16'

SEAL MATERIAL: (TYPE/INTERVAL) Bentonite to surface

SURFACE COMPLETION: ☐ FLUSH W/CONCRETE ☐ RISER W/CONCRETE

SHEET 1 OF 1

PROJECT NO: 8321PT12	☒ BOREHOLE ☐ MONITOR WELL
SITE NAME: Clinton Drive Reconstruction Project	BORING NUMBER : SB-8 TEMP. WELL NUMBER :
FACILITY ADDRESS: Fronting the vacant/former Burbank Drum & Barrel facility (4815 Clinton Drive)	
DRILLING COMPANY / METHOD / RIG: Alpine Services/Truck-Mounted Hydraulically-Driven Push Probe	
DRILLER: Dave	**DATE: (START/FINISH)** 04/25/2012 @ 15:01 to 15:25
LOGGED BY: T. Murphy	**TOP OF CASING ELEVATION:** N/Appl.

DEPTH (FEET)	PID	SAMPLE INTERVAL	STRATIGRAPHY	USCS	SOIL DESCRIPTION AND COMMENT (CLASSIFICATION, GRAIN SIZE, COLOR, MOISTURE, ODOR, OTHER)	NOTES
			Ground Surface			
0	0.0			Fill	Asphalt & concrete (6"); No recovery (6 inches to 2 feet bgs)	SB-8 @ 2-4': 15:07, 1-4 oz
	0.0					
5	0.0					
	0.0			CL	Sandy clay; Brown (2-4 feet), dark brown (4-5 feet), dark gray (5-6 feet) and light brown clay, fines, soft, moist with calcareous concretions (2-16 feet bgs)	
	0.0					
10	0.0					
	0.0					
15	0.0					
20					Total Depth = 16 ft Note: No groundwater encountered to 16 feet bgs. A default soil sample was collected.	
25						
30						
35						
40						
45						

FILTER SAND | BENTONITE SEAL | GROUT / CONCRETE SURFACE | ▼ WATER ENCOUNTERED

Berg ♦ Oliver Associates, Inc.

TOTAL DEPTH: 16'

SEAL MATERIAL: (TYPE/INTERVAL) Bentonite to surface

SURFACE COMPLETION: ☐ FLUSH W/CONCRETE ☐ RISER W/CONCRETE

SHEET 1 OF 1

PROJECT NO: 8321PT12	☒ BOREHOLE ☐ MONITOR WELL
SITE NAME: Clinton Drive Reconstruction Project	BORING NUMBER : SB-9 TEMP. WELL NUMBER :
FACILITY ADDRESS: Fronting the vacant/former Burbank Drum & Barrel facility (4815 Clinton Drive)	
DRILLING COMPANY / METHOD / RIG: Alpine Services/Truck-Mounted Hydraulically-Driven Push Probe	
DRILLER: Dave	**DATE: (START/FINISH)** 04/25/2012 @ 15:41 to 16:16
LOGGED BY: T. Murphy	**TOP OF CASING ELEVATION:** N/Appl.

DEPTH (FEET)	PID	SAMPLE INTERVAL	STRATIGRAPHY (Ground Surface)	USCS	SOIL DESCRIPTION AND COMMENT (CLASSIFICATION, GRAIN SIZE, COLOR, MOISTURE, ODOR, OTHER)	NOTES
0	0.0			Fill	Asphalt & concrete (6"); Gravel (6 inches to 1-foot bgs)	
	0.0			SW	Sand; Light brown (tan) aggregate sand, medium-grained, moist (1-foot to 5 feet bgs)	
5	0.0					
	0.0					
	0.0			CL	Sandy clay; Dark gray (5-6 feet) and light brown (6-16 feet) sandy clay, fines, soft, moist with calcareous concretions (5-16 feet bgs)	
10	0.0					
	0.0					
15	0.0	X				SB-9 @ 14-16'; 16:16, 1-4 oz
20					Total Depth = 16 ft Note: No groundwater encountered to 16 feet bgs. A default soil sample was collected.	
25						
30						
35						
40						
45						

FILTER SAND | BENTONITE SEAL | GROUT / CONCRETE SURFACE | ▼ WATER ENCOUNTERED

Berg ♦ Oliver Associates, Inc.

TOTAL DEPTH: 16'

SEAL MATERIAL: (TYPE/INTERVAL) Bentonite to surface

SURFACE COMPLETION: ☐ FLUSH W/CONCRETE ☐ RISER W/CONCRETE

SHEET 1 OF 1

PROJECT NO: 8321PT12	☒ BOREHOLE ☐ MONITOR WELL
SITE NAME: Clinton Drive Reconstruction Project	BORING NUMBER : SB-10 TEMP. WELL NUMBER :
FACILITY ADDRESS: Fronting Hahn & Clay (5100 Clinton Drive) fronting Lone Star Heat Treating (5212 Clinton Drive)	
DRILLING COMPANY / METHOD / RIG: Alpine Services/Truck-Mounted Hydraulically-Driven Push Probe	
DRILLER: Dave	**DATE: (START/FINISH)** 04/26/2012 @ 8:03 to 9:00
LOGGED BY: T. Murphy	**TOP OF CASING ELEVATION:** N/Appl.

DEPTH (FEET)	PID	SAMPLE INTERVAL	STRATIGRAPHY (Ground Surface)	USCS	SOIL DESCRIPTION AND COMMENT (CLASSIFICATION, GRAIN SIZE, COLOR, MOISTURE, ODOR, OTHER)	NOTES
0	0.0			Fill	Asphalt & concrete (6"); Gravel (6 inches to 1-foot bgs)	
	0.0					
5	0.0			CL	Sandy clay; Brown sandy clay, fines, soft, moist (1-foot to 9 feet bgs)	SB-10 @ 6-8'; 8:41, 1-4 oz
	0.0					
	0.0					
10	0.0			CL	Sandy clay; Reddish-orange sandy clay, fines, soft, moist (9-13 feet bgs)	
	0.0					
15	0.0			CL	Sandy clay; Light brown sandy clay, fines, soft, moist with sand lesne at 14-15 feet (13-16 feet bgs)	
20					Total Depth = 16 ft Note: No groundwater encountered to 16 feet bgs. A default soil sample was collected.	
25						
30						
35						
40						
45						

FILTER SAND | BENTONITE SEAL | GROUT / CONCRETE SURFACE | ▼ WATER ENCOUNTERED

Berg ♦ Oliver Associates, Inc.

TOTAL DEPTH: 16'

SEAL MATERIAL: (TYPE/INTERVAL) Bentonite to surface

SURFACE COMPLETION: ☐ FLUSH W/CONCRETE ☐ RISER W/CONCRETE

SHEET 1 OF 1

PROJECT NO: 8321PT12

SITE NAME: Clinton Drive Reconstruction Project

☒ BOREHOLE ☐ MONITOR WELL

BORING NUMBER: SB-11 TEMP. WELL NUMBER: _____

FACILITY ADDRESS: Fronting Griffin Dewatering (5306 Clinton Drive)

DRILLING COMPANY / METHOD / RIG: Alpine Services/Truck-Mounted Hydraulically-Driven Push Probe

DRILLER: Dave

DATE: (START/FINISH) 04/26/2012 @ 9:17 to 9:32

LOGGED BY: T. Murphy

TOP OF CASING ELEVATION: N/Appl.

DEPTH (FEET)	PID	SAMPLE INTERVAL	STRATIGRAPHY (Ground Surface)	USCS	SOIL DESCRIPTION AND COMMENT (CLASSIFICATION, GRAIN SIZE, COLOR, MOISTURE, ODOR, OTHER)	NOTES
0	0.0			Fill	Gravel (Surface to 1-foot bgs)	
	0.0					SB-11 @ 2-4'; 9:23, 1-4 oz
5	0.0			CL	Sandy clay; Brown sandy clay, fines, soft, moist (1-foot to 9 feet bgs)	
	0.0					
	0.0					
10	0.0			CL	Sandy clay; Reddish-orange sandy clay, fines, soft, moist (9-13 feet bgs)	
	0.0					
15	0.0			CL	Sandy clay; Light brown sandy clay, fines, soft, moist with sand lesne at 14-15 feet (13-16 feet bgs)	
20					Total Depth = 16 ft Note: No groundwater encountered to 16 feet bgs. A default soil sample was collected.	
25						
30						
35						
40						
45						

FILTER SAND | BENTONITE SEAL | GROUT / CONCRETE SURFACE | ▼ WATER ENCOUNTERED

Berg ♦ Oliver Associates, Inc.

TOTAL DEPTH: 16'

SEAL MATERIAL: (TYPE/INTERVAL) Bentonite to surface

SURFACE COMPLETION: ☐ FLUSH W/CONCRETE ☐ RISER W/CONCRETE

SHEET 1 OF 1

PROJECT NO: 8321PT12	☒ BOREHOLE ☐ MONITOR WELL
SITE NAME: Clinton Drive Reconstruction Project	BORING NUMBER : SB-12 TEMP. WELL NUMBER :
FACILITY ADDRESS: Fronting MSC/former Earle M. Jorgensen facility (5311 Clinton Drive)	
DRILLING COMPANY / METHOD / RIG: Alpine Services/Truck-Mounted Hydraulically-Driven Push Probe	
DRILLER: Dave	**DATE: (START/FINISH)** 04/26/2012 @ 9:40 to 10:10
LOGGED BY: T. Murphy	**TOP OF CASING ELEVATION:** N/Appl.

DEPTH (FEET)	PID	SAMPLE INTERVAL	STRATIGRAPHY (Ground Surface)	USCS	SOIL DESCRIPTION AND COMMENT (CLASSIFICATION, GRAIN SIZE, COLOR, MOISTURE, ODOR, OTHER)	NOTES
0	0.0			Fill	Topsoil (Surface to 5 inches bgs)	
	0.0			CL	Sandy clay; Brown sandy clay, fines, soft, moist (5 inches to 4 feet bgs)	
5	0.0					
	0.0			CL	Sandy clay; Light brown sandy clay, fines, soft, moist (4-9 feet bgs)	
	0.0					
10	0.0					
	0.0			CL	Sandy clay; Reddish-orange sandy clay, fines, soft, moist (9-16 feet bgs)	
15	0.0	X				SB-12 @ 14-16'; 10:10, 1-4 oz
20					Total Depth = 16 ft Note: No groundwater encountered to 16 feet bgs. A default soil sample was collected.	
25						
30						
35						
40						
45						

FILTER SAND | BENTONITE SEAL | GROUT / CONCRETE SURFACE | ▼ WATER ENCOUNTERED

Berg ♦ Oliver Associates, Inc.

TOTAL DEPTH: 16'

SEAL MATERIAL: (TYPE/INTERVAL) Bentonite to surface

SURFACE COMPLETION: ☐ FLUSH W/CONCRETE ☐ RISER W/CONCRETE

SHEET 1 OF 1

PROJECT NO: 8321PT12	☒ BOREHOLE ☐ MONITOR WELL
SITE NAME: Clinton Drive Reconstruction Project	BORING NUMBER : SB-13 TEMP. WELL NUMBER :
FACILITY ADDRESS: Fronting Stop-N-Joy/Valero service station (999 Lockwood Drive at Clinton Drive)	
DRILLING COMPANY / METHOD / RIG: Alpine Services/Truck-Mounted Hydraulically-Driven Push Probe	
DRILLER: Dave	**DATE: (START/FINISH)** 04/26/2012 @ 10:20 to 10:50
LOGGED BY: T. Murphy	**TOP OF CASING ELEVATION:** N/Appl.

DEPTH (FEET)	PID	SAMPLE INTERVAL	STRATIGRAPHY	USCS	SOIL DESCRIPTION AND COMMENT (CLASSIFICATION, GRAIN SIZE, COLOR, MOISTURE, ODOR, OTHER)	NOTES
0			Ground Surface			
	0.0			Fill	Topsoil (Surface to 3 inches bgs)	
	0.0			CL	Sandy clay; Light brown sandy clay, fines, soft, moist (3 inches to 7 feet bgs)	
5	0.0	X				SB-13 @ 4-6'; 10:34, 1-4 oz
	0.0					
	0.0					
10	0.0			CL	Sandy clay; Light brown and reddish-orange sandy clay, fines, soft, moist (7-16 feet bgs)	
	0.0					
15	0.0					
20					Total Depth = 16 ft Note: No groundwater encountered to 16 feet bgs. A default soil sample was collected.	
25						
30						
35						
40						
45						

FILTER SAND | BENTONITE SEAL | GROUT / CONCRETE SURFACE | ▼ WATER ENCOUNTERED

Berg ♦ Oliver Associates, Inc.

TOTAL DEPTH: 16'

SEAL MATERIAL: (TYPE/INTERVAL) Bentonite to surface

SURFACE COMPLETION: ☐ FLUSH W/CONCRETE ☐ RISER W/CONCRETE

SHEET 1 OF 1

PROJECT NO: 8321PT12	☒ BOREHOLE ☐ MONITOR WELL
SITE NAME: Clinton Drive Reconstruction Project	BORING NUMBER : SB-14 TEMP. WELL NUMBER :
FACILITY ADDRESS: Fronting Stipes No. 1006/Chevron service station (990 Lockwood Drive at Clinton Drive)	
DRILLING COMPANY / METHOD / RIG: Alpine Services/Truck-Mounted Hydraulically-Driven Push Probe	
DRILLER: Dave	**DATE: (START/FINISH)** 04/26/2012 @ 11:03 to 11:30
LOGGED BY: T. Murphy	**TOP OF CASING ELEVATION:** N/Appl.

DEPTH (FEET)	PID	SAMPLE INTERVAL	STRATIGRAPHY (Ground Surface)	USCS	SOIL DESCRIPTION AND COMMENT (CLASSIFICATION, GRAIN SIZE, COLOR, MOISTURE, ODOR, OTHER)	NOTES
0	0.0			Fill	Topsoil (Surface to 3 inches bgs)	
	0.0			CL	Sandy clay; Brown sandy clay, fines, soft, moist (3 inches to 7 feet bgs)	SB-14 @ 2-4'; 11:07, 1-4 oz
5	0.0					
	0.0					
	0.0					
10	0.0			CL	Sandy clay; Light brown and reddish-orange sandy clay, fines, soft, moist (7-16 feet bgs)	
	0.0					
15	0.0					
20					Total Depth = 16 ft Note: No groundwater encountered to 16 feet bgs. A default soil sample was collected.	
25						
30						
35						
40						
45						

FILTER SAND | BENTONITE SEAL | GROUT / CONCRETE SURFACE | ▼ WATER ENCOUNTERED

Berg ♦ Oliver Associates, Inc.

TOTAL DEPTH: 16'

SEAL MATERIAL: (TYPE/INTERVAL) Bentonite to surface

SURFACE COMPLETION: ☐ FLUSH W/CONCRETE ☐ RISER W/CONCRETE

SHEET 1 OF 1

PROJECT NO: 8321PT12	☒ BOREHOLE ☐ MONITOR WELL
SITE NAME: Clinton Drive Reconstruction Project	BORING NUMBER : SB-15 TEMP. WELL NUMBER :
FACILITY ADDRESS: Fronting Stipes No. 1006/Chevron service station (990 Lockwood Drive at Clinton Drive)	
DRILLING COMPANY / METHOD / RIG: Alpine Services/Truck-Mounted Hydraulically-Driven Push Probe	
DRILLER: Dave	**DATE: (START/FINISH)** 04/26/2012 @ 11:37 to 12:40
LOGGED BY: T. Murphy	**TOP OF CASING ELEVATION:** N/Appl.

DEPTH (FEET)	PID	SAMPLE INTERVAL	STRATIGRAPHY (Ground Surface)	USCS	SOIL DESCRIPTION AND COMMENT (CLASSIFICATION, GRAIN SIZE, COLOR, MOISTURE, ODOR, OTHER)	NOTES
0	0.0			Fill	Topsoil (Surface to 6 inches bgs) and light brown (tan) aggregate sand, moist (6 inches to 2 feet)	
	0.0					
5	0.0			CL	Sandy clay; Light brown sandy clay, fines, soft, moist (2 feet to 8 feet bgs)	
	0.0					
	0.0	X				SB-15 @ 8-10'; 12:30, 1-4 oz
10	0.0			CL	Sandy clay; Light brown and reddish-orange sandy clay, fines, soft, moist (8-16 feet bgs)	
	0.0					
15	0.0					
20					Total Depth = 16 ft Note: No groundwater encountered to 16 feet bgs. A default soil sample was collected.	
25						
30						
35						
40						
45						

FILTER SAND | BENTONITE SEAL | GROUT / CONCRETE SURFACE | ▼ WATER ENCOUNTERED

Berg ♦ Oliver Associates, Inc.

TOTAL DEPTH: 16'

SEAL MATERIAL: (TYPE/INTERVAL) Bentonite to surface

SURFACE COMPLETION: ☐ FLUSH W/CONCRETE ☐ RISER W/CONCRETE

SHEET 1 OF 1

PROJECT NO: 8321PT12

SITE NAME: Clinton Drive Reconstruction Project

☒ BOREHOLE ☐ MONITOR WELL

BORING NUMBER: SB-16 TEMP. WELL NUMBER: _____

FACILITY ADDRESS: Fronting 1515 Clinton Drive

DRILLING COMPANY / METHOD / RIG: Alpine Services/Truck-Mounted Hydraulically-Driven Push Probe

DRILLER: Dave

DATE: (START/FINISH) 04/26/2012 @ 12:50 to 13:35

LOGGED BY: T. Murphy

TOP OF CASING ELEVATION: N/Appl.

DEPTH (FEET)	PID	SAMPLE INTERVAL	STRATIGRAPHY (Ground Surface)	USCS	SOIL DESCRIPTION AND COMMENT (CLASSIFICATION, GRAIN SIZE, COLOR, MOISTURE, ODOR, OTHER)	NOTES
0	0.0			Fill	Asphalt & concrete (4")	
	0.0			CL	Sandy clay; Gray sandy clay, fines, soft, moist (4 inches to 6 feet bgs)	
5	0.0					
	0.0					
	10	X				SB-16 @ 8-10'; 13:31, 1-4 oz
10	0.2			CL	Sandy clay; Brown, reddish-orange and gray sandy clay, fines, soft, moist (6-16 feet bgs)	
	0.0					
15	0.0					
20					Total Depth = 16 ft Note: No groundwater encountered to 16 feet bgs. A minor hydrocarbon odor was noted at 9-10 feet.	
25						
30						
35						
40						
45						

FILTER SAND | BENTONITE SEAL | GROUT / CONCRETE SURFACE | ▼ WATER ENCOUNTERED

Berg ♦ Oliver Associates, Inc.

TOTAL DEPTH: 16'

SEAL MATERIAL: (TYPE/INTERVAL) Bentonite to surface

SURFACE COMPLETION: ☐ FLUSH W/CONCRETE ☐ RISER W/CONCRETE

SHEET 1 OF 1

PROJECT NO: 8321PT12	☒ BOREHOLE ☐ MONITOR WELL
SITE NAME: Clinton Drive Reconstruction Project	BORING NUMBER : SB-17 TEMP. WELL NUMBER :
FACILITY ADDRESS: Fronting the vacant/former AFCO No. 010501 fleet fueling facility (6002 Clinton Drive)	
DRILLING COMPANY / METHOD / RIG: Alpine Services/Truck-Mounted Hydraulically-Driven Push Probe	
DRILLER: Dave	**DATE: (START/FINISH)** 04/26/2012 @ 14:28 to 14:54
LOGGED BY: T. Murphy	**TOP OF CASING ELEVATION:** N/Appl.

DEPTH (FEET)	PID	SAMPLE INTERVAL	STRATIGRAPHY	USCS	SOIL DESCRIPTION AND COMMENT (CLASSIFICATION, GRAIN SIZE, COLOR, MOISTURE, ODOR, OTHER)	NOTES
0			Ground Surface			
	0.0			CL	Sandy clay; Brown sandy clay, fines, soft, moist (surface to 5 feet bgs)	
	0.0					SB-17 @ 4-6'; 14:33, 1-4 oz
5	0.0	X				
	0.0					
	0.0					
10	0.0			CL	Sandy clay; Brown and reddish-orange and gray sandy clay, fines, soft, moist (5-16 feet bgs)	
	0.0					
15	0.0					
20					Total Depth = 16 ft Note: No groundwater encountered to 16 feet bgs.	
25						
30						
35						
40						
45						

FILTER SAND | BENTONITE SEAL | GROUT / CONCRETE SURFACE | ▼ WATER ENCOUNTERED

Berg ♦ Oliver Associates, Inc.

TOTAL DEPTH: 16'

SEAL MATERIAL: (TYPE/INTERVAL) Bentonite to surface

SURFACE COMPLETION: ☐ FLUSH W/CONCRETE ☐ RISER W/CONCRETE

SHEET 1 OF 1

PROJECT NO: 8321PT12	☒ BOREHOLE ☐ MONITOR WELL
SITE NAME: Clinton Drive Reconstruction Project	BORING NUMBER : SB-18 TEMP. WELL NUMBER :

FACILITY ADDRESS: Fronting the vacant/former AFCO No. 010501 fleet fueling facility (6002 Clinton Drive)

DRILLING COMPANY / METHOD / RIG: Alpine Services/Truck-Mounted Hydraulically-Driven Push Probe

DRILLER: Dave **DATE: (START/FINISH)** 04/26/2012 @ 15:00 to 15:29

LOGGED BY: T. Murphy **TOP OF CASING ELEVATION:** N/Appl.

DEPTH (FEET)	PID	SAMPLE INTERVAL	STRATIGRAPHY (Ground Surface)	USCS	SOIL DESCRIPTION AND COMMENT (CLASSIFICATION, GRAIN SIZE, COLOR, MOISTURE, ODOR, OTHER)	NOTES
0	0.0			CL	Sandy clay; Brown sandy clay, fines, soft, moist (surface to 5 feet bgs)	
	0.0					
5	0.0					
	0.0					
	0.0					
10	0.0			CL	Sandy clay; Brown and reddish-orange and gray sandy clay, fines, soft, moist (5-16 feet bgs)	
	0.0					
15	0.0	X				SB-18 @ 14-16'; 15:29, 1-4 oz
20					Total Depth = 16 ft Note: No groundwater encountered to 16 feet bgs.	
25						
30						
35						
40						
45						

FILTER SAND | BENTONITE SEAL | GROUT / CONCRETE SURFACE | ▼ WATER ENCOUNTERED

Berg ♦ Oliver Associates, Inc.

TOTAL DEPTH: 16'

SEAL MATERIAL: (TYPE/INTERVAL) Bentonite to surface

SURFACE COMPLETION: ☐ FLUSH W/CONCRETE ☐ RISER W/CONCRETE

SHEET 1 OF 1

APPENDIX B

Laboratory Analytical Results

Gulf Coast
ACCUTEST
LABORATORIES

05/14/12

Technical Report for

Berg Oliver Associates

Clinton Drive/ 8321

8321

Accutest Job Number: TC6964

Sampling Dates: 04/25/12 - 04/26/12

Report to:

Berg Oliver Associates
14701 Saint Mary's Lane Suite 400
Houston, TX 77079
tmurphy@BergOliver.com

ATTN: Tom Murphy

Total number of pages in report: 122

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Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Paul K Canevaro

Paul Canevaro
Laboratory Director

Client Service contact: Georgia Jones 713-271-4700

Certifications: TX (T104704220-12-7) AR (11-028-0) AZ (AZ0769) FL (E87628) KS (E-10366) LA (85695/04004) OK (211-035)

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Sample Summary

Berg Oliver Associates

Job No: TC6964

Clinton Drive/ 8321
Project No: 8321

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
TC6964-1	04/25/12	09:15	04/27/12	SO	Soil	SB-1@14-16'
TC6964-2	04/25/12	09:52	04/27/12	SO	Soil	SB-2@4-6'
TC6964-3	04/25/12	10:30	04/27/12	SO	Soil	SB-3@8-10'
TC6964-4	04/25/12	10:54	04/27/12	SO	Soil	SB-4@2-4'
TC6964-5	04/25/12	12:26	04/27/12	SO	Soil	SB-5@8-10'
TC6964-6	04/25/12	12:43	04/27/12	SO	Soil	SB-6@2-4'
TC6964-7	04/25/12	11:36	04/27/12	AQ	Ground Water	SB/TWP-4
TC6964-8	04/25/12	14:44	04/27/12	SO	Soil	SB-7@6-8'
TC6964-9	04/25/12	15:07	04/27/12	SO	Soil	SB-8@2-4'
TC6964-10	04/25/12	16:16	04/27/12	SO	Soil	SB-9@14-16'
TC6964-11	04/26/12	08:41	04/27/12	SO	Soil	SB-10@6-8'
TC6964-12	04/26/12	09:23	04/27/12	SO	Soil	SB-11@2-4'
TC6964-13	04/26/12	10:10	04/27/12	SO	Soil	SB-12@14-16'

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary
(continued)

Berg Oliver Associates

Job No: TC6964

Clinton Drive/ 8321
Project No: 8321

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
TC6964-14	04/26/12	10:34	04/27/12	SO	Soil	SB-13@4-6'
TC6964-15	04/26/12	11:07	04/27/12	SO	Soil	SB-14@2-4'
TC6964-16	04/26/12	12:30	04/27/12	SO	Soil	SB-15@8-10'
TC6964-17	04/26/12	13:31	04/27/12	SO	Soil	SB-16@8-10'
TC6964-18	04/26/12	14:33	04/27/12	SO	Soil	SB-17@4-6'
TC6964-19	04/26/12	15:29	04/27/12	SO	Soil	SB-18@14-16'

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Gulf Coast ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-1@14-16'		
Lab Sample ID:	TC6964-1	Date Sampled:	04/25/12
Matrix:	SO - Soil	Date Received:	04/27/12
Method:	SW846 8260B SW846 5030A	Percent Solids:	81.2
Project:	Clinton Drive/ 8321		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q005633.D	1	05/03/12	LT	04/27/12 16:00	n/a	VQ224
Run #2							

	Initial Weight	Final Volume
Run #1	5.30 g	5.0 ml
Run #2		

VOA 8260 List

CAS No.	Compound	Result	MQL	SDL	Units	Q
67-64-1	Acetone	0.0265	0.046	0.012	mg/kg	J
71-43-2	Benzene	0.00062 U	0.0046	0.00062	mg/kg	
108-86-1	Bromobenzene	0.00091 U	0.0046	0.00091	mg/kg	
74-97-5	Bromochloromethane	0.0011 U	0.0046	0.0011	mg/kg	
75-27-4	Bromodichloromethane	0.00068 U	0.0046	0.00068	mg/kg	
75-25-2	Bromoform	0.0011 U	0.0046	0.0011	mg/kg	
104-51-8	n-Butylbenzene	0.0010 U	0.0046	0.0010	mg/kg	
135-98-8	sec-Butylbenzene	0.00083 U	0.0046	0.00083	mg/kg	
98-06-6	tert-Butylbenzene	0.00082 U	0.0046	0.00082	mg/kg	
108-90-7	Chlorobenzene	0.00056 U	0.0046	0.00056	mg/kg	
75-00-3	Chloroethane	0.0011 U	0.0046	0.0011	mg/kg	
67-66-3	Chloroform	0.00077 U	0.0046	0.00077	mg/kg	
95-49-8	o-Chlorotoluene	0.00076 U	0.0046	0.00076	mg/kg	
106-43-4	p-Chlorotoluene	0.0011 U	0.0046	0.0011	mg/kg	
75-15-0	Carbon disulfide	0.00081 U	0.0046	0.00081	mg/kg	
56-23-5	Carbon tetrachloride	0.00080 U	0.0046	0.00080	mg/kg	
75-34-3	1,1-Dichloroethane	0.00079 U	0.0046	0.00079	mg/kg	
75-35-4	1,1-Dichloroethylene	0.00093 U	0.0046	0.00093	mg/kg	
563-58-6	1,1-Dichloropropene	0.0011 U	0.0046	0.0011	mg/kg	
96-12-8	1,2-Dibromo-3-chloropropane	0.0018 U	0.0046	0.0018	mg/kg	
106-93-4	1,2-Dibromoethane	0.0011 U	0.0046	0.0011	mg/kg	
107-06-2	1,2-Dichloroethane	0.00079 U	0.0046	0.00079	mg/kg	
78-87-5	1,2-Dichloropropane	0.00098 U	0.0046	0.00098	mg/kg	
142-28-9	1,3-Dichloropropane	0.0011 U	0.0046	0.0011	mg/kg	
594-20-7	2,2-Dichloropropane	0.00093 U	0.0046	0.00093	mg/kg	
124-48-1	Dibromochloromethane	0.00095 U	0.0046	0.00095	mg/kg	
75-71-8	Dichlorodifluoromethane	0.0046 U	0.0046	0.0046	mg/kg	
156-59-2	cis-1,2-Dichloroethylene	0.0011 U	0.0046	0.0011	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	0.00059 U	0.0046	0.00059	mg/kg	
541-73-1	m-Dichlorobenzene	0.00083 U	0.0046	0.00083	mg/kg	
95-50-1	o-Dichlorobenzene	0.00066 U	0.0046	0.00066	mg/kg	
106-46-7	p-Dichlorobenzene	0.00080 U	0.0046	0.00080	mg/kg	

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-1@14-16'		
Lab Sample ID:	TC6964-1	Date Sampled:	04/25/12
Matrix:	SO - Soil	Date Received:	04/27/12
Method:	SW846 8260B SW846 5030A	Percent Solids:	81.2
Project:	Clinton Drive/ 8321		

VOA 8260 List

CAS No.	Compound	Result	MQL	SDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	0.00091 U	0.0046	0.00091	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	0.00075 U	0.0046	0.00075	mg/kg	
100-41-4	Ethylbenzene	0.00081 U	0.0046	0.00081	mg/kg	
591-78-6	2-Hexanone	0.0049 U	0.046	0.0049	mg/kg	
87-68-3	Hexachlorobutadiene	0.00098 U	0.0046	0.00098	mg/kg	
98-82-8	Isopropylbenzene	0.00076 U	0.0046	0.00076	mg/kg	
99-87-6	p-Isopropyltoluene	0.00059 U	0.0046	0.00059	mg/kg	
108-10-1	4-Methyl-2-pentanone	0.0053 U	0.046	0.0053	mg/kg	
74-83-9	Methyl bromide	0.0013 U	0.0046	0.0013	mg/kg	
74-87-3	Methyl chloride	0.0010 U	0.0046	0.0010	mg/kg	
74-95-3	Methylene bromide	0.00084 U	0.0046	0.00084	mg/kg	
75-09-2	Methylene chloride	0.0054	0.012	0.0029	mg/kg	JB
78-93-3	Methyl ethyl ketone	0.0068 U	0.046	0.0068	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	0.00078 U	0.0046	0.00078	mg/kg	
91-20-3	Naphthalene	0.0023 U	0.0046	0.0023	mg/kg	
103-65-1	n-Propylbenzene	0.00089 U	0.0046	0.00089	mg/kg	
100-42-5	Styrene	0.00072 U	0.0046	0.00072	mg/kg	
630-20-6	1,1,1,2-Tetrachloroethane	0.0010 U	0.0046	0.0010	mg/kg	
71-55-6	1,1,1-Trichloroethane	0.0010 U	0.0046	0.0010	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	0.0014 U	0.0046	0.0014	mg/kg	
79-00-5	1,1,2-Trichloroethane	0.0011 U	0.0046	0.0011	mg/kg	
87-61-6	1,2,3-Trichlorobenzene	0.0010 U	0.0046	0.0010	mg/kg	
96-18-4	1,2,3-Trichloropropane	0.0019 U	0.0046	0.0019	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	0.00099 U	0.0046	0.00099	mg/kg	
95-63-6	1,2,4-Trimethylbenzene	0.00074 U	0.0046	0.00074	mg/kg	
108-67-8	1,3,5-Trimethylbenzene	0.00070 U	0.0046	0.00070	mg/kg	
127-18-4	Tetrachloroethylene	0.0011 U	0.0046	0.0011	mg/kg	
108-88-3	Toluene	0.00081 U	0.0046	0.00081	mg/kg	
79-01-6	Trichloroethylene	0.0011 U	0.0046	0.0011	mg/kg	
75-69-4	Trichlorofluoromethane	0.0012 U	0.0046	0.0012	mg/kg	
75-01-4	Vinyl chloride	0.0013 U	0.0046	0.0013	mg/kg	
1330-20-7	Xylene (total)	0.0016 U	0.014	0.0016	mg/kg	
	m,p-Xylene	0.00094 U	0.0093	0.00094	mg/kg	
95-47-6	o-Xylene	0.00065 U	0.0046	0.00065	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		70-121%
2037-26-5	Toluene-D8	116%		76-132%
460-00-4	4-Bromofluorobenzene	104%		73-165%

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-1@14-16'		
Lab Sample ID:	TC6964-1	Date Sampled:	04/25/12
Matrix:	SO - Soil	Date Received:	04/27/12
Method:	SW846 8260B SW846 5030A	Percent Solids:	81.2
Project:	Clinton Drive/ 8321		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	82%		57-122%

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-1@14-16'		
Lab Sample ID:	TC6964-1	**Date Sampled:**	04/25/12
Matrix:	SO - Soil	**Date Received:**	04/27/12
Method:	TNRCC 1005 TX1005	**Percent Solids:**	81.2
Project:	Clinton Drive/ 8321		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LF071031.D	1	05/03/12	RM	04/30/12	OP23218	GLF1042
Run #2							

	Initial Weight	Final Volume
Run #1	10.6 g	10.0 ml
Run #2		

CAS No.	Compound	Result	MQL	SDL	Units	Q
	TPH (C6-C12)	4.8 U	29	4.8	mg/kg	
	TPH (>C12-C28)	4.8 U	29	4.8	mg/kg	
	TPH (>C28-C35)	4.8 U	29	4.8	mg/kg	
	TPH (C6-C35)	4.8 U	29	4.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	112%		70-130%
98-08-8	aaa-Trifluorotoluene	92%		70-130%

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-2@4-6'		
Lab Sample ID:	TC6964-2	Date Sampled:	04/25/12
Matrix:	SO - Soil	Date Received:	04/27/12
Method:	SW846 8260B SW846 5030A	Percent Solids:	82.4
Project:	Clinton Drive/ 8321		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R008058.D	1	05/03/12	LT	04/27/12 16:00	n/a	VR154
Run #2							

	Initial Weight	Final Volume
Run #1	5.31 g	5.0 ml
Run #2		

VOA 8260 List

CAS No.	Compound	Result	MQL	SDL	Units	Q
67-64-1	Acetone	0.0290	0.046	0.011	mg/kg	J
71-43-2	Benzene	0.00061 U	0.0046	0.00061	mg/kg	
108-86-1	Bromobenzene	0.00089 U	0.0046	0.00089	mg/kg	
74-97-5	Bromochloromethane	0.0011 U	0.0046	0.0011	mg/kg	
75-27-4	Bromodichloromethane	0.00067 U	0.0046	0.00067	mg/kg	
75-25-2	Bromoform	0.0011 U	0.0046	0.0011	mg/kg	
104-51-8	n-Butylbenzene	0.0010 U	0.0046	0.0010	mg/kg	
135-98-8	sec-Butylbenzene	0.00081 U	0.0046	0.00081	mg/kg	
98-06-6	tert-Butylbenzene	0.00081 U	0.0046	0.00081	mg/kg	
108-90-7	Chlorobenzene	0.00055 U	0.0046	0.00055	mg/kg	
75-00-3	Chloroethane	0.0011 U	0.0046	0.0011	mg/kg	
67-66-3	Chloroform	0.00076 U	0.0046	0.00076	mg/kg	
95-49-8	o-Chlorotoluene	0.00075 U	0.0046	0.00075	mg/kg	
106-43-4	p-Chlorotoluene	0.0010 U	0.0046	0.0010	mg/kg	
75-15-0	Carbon disulfide	0.00080 U	0.0046	0.00080	mg/kg	
56-23-5	Carbon tetrachloride	0.00079 U	0.0046	0.00079	mg/kg	
75-34-3	1,1-Dichloroethane	0.00078 U	0.0046	0.00078	mg/kg	
75-35-4	1,1-Dichloroethylene	0.00092 U	0.0046	0.00092	mg/kg	
563-58-6	1,1-Dichloropropene	0.0011 U	0.0046	0.0011	mg/kg	
96-12-8	1,2-Dibromo-3-chloropropane	0.0017 U	0.0046	0.0017	mg/kg	
106-93-4	1,2-Dibromoethane	0.0010 U	0.0046	0.0010	mg/kg	
107-06-2	1,2-Dichloroethane	0.00078 U	0.0046	0.00078	mg/kg	
78-87-5	1,2-Dichloropropane	0.00097 U	0.0046	0.00097	mg/kg	
142-28-9	1,3-Dichloropropane	0.0010 U	0.0046	0.0010	mg/kg	
594-20-7	2,2-Dichloropropane	0.00091 U	0.0046	0.00091	mg/kg	
124-48-1	Dibromochloromethane	0.00093 U	0.0046	0.00093	mg/kg	
75-71-8	Dichlorodifluoromethane	0.0046 U	0.0046	0.0046	mg/kg	
156-59-2	cis-1,2-Dichloroethylene	0.0011 U	0.0046	0.0011	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	0.00058 U	0.0046	0.00058	mg/kg	
541-73-1	m-Dichlorobenzene	0.00081 U	0.0046	0.00081	mg/kg	
95-50-1	o-Dichlorobenzene	0.00065 U	0.0046	0.00065	mg/kg	
106-46-7	p-Dichlorobenzene	0.00079 U	0.0046	0.00079	mg/kg	

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-2@4-6'		
Lab Sample ID:	TC6964-2	Date Sampled:	04/25/12
Matrix:	SO - Soil	Date Received:	04/27/12
Method:	SW846 8260B SW846 5030A	Percent Solids:	82.4
Project:	Clinton Drive/ 8321		

VOA 8260 List

CAS No.	Compound	Result	MQL	SDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	0.00089 U	0.0046	0.00089	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	0.00074 U	0.0046	0.00074	mg/kg	
100-41-4	Ethylbenzene	0.00079 U	0.0046	0.00079	mg/kg	
591-78-6	2-Hexanone	0.0048 U	0.046	0.0048	mg/kg	
87-68-3	Hexachlorobutadiene	0.00096 U	0.0046	0.00096	mg/kg	
98-82-8	Isopropylbenzene	0.00075 U	0.0046	0.00075	mg/kg	
99-87-6	p-Isopropyltoluene	0.00058 U	0.0046	0.00058	mg/kg	
108-10-1	4-Methyl-2-pentanone	0.0052 U	0.046	0.0052	mg/kg	
74-83-9	Methyl bromide	0.0013 U	0.0046	0.0013	mg/kg	
74-87-3	Methyl chloride	0.0010 U	0.0046	0.0010	mg/kg	
74-95-3	Methylene bromide	0.00083 U	0.0046	0.00083	mg/kg	
75-09-2	Methylene chloride	0.0033	0.011	0.0029	mg/kg	J
78-93-3	Methyl ethyl ketone	0.0067 U	0.046	0.0067	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	0.00077 U	0.0046	0.00077	mg/kg	
91-20-3	Naphthalene	0.0023 U	0.0046	0.0023	mg/kg	
103-65-1	n-Propylbenzene	0.00088 U	0.0046	0.00088	mg/kg	
100-42-5	Styrene	0.00070 U	0.0046	0.00070	mg/kg	
630-20-6	1,1,1,2-Tetrachloroethane	0.00098 U	0.0046	0.00098	mg/kg	
71-55-6	1,1,1-Trichloroethane	0.00099 U	0.0046	0.00099	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	0.0014 U	0.0046	0.0014	mg/kg	
79-00-5	1,1,2-Trichloroethane	0.0011 U	0.0046	0.0011	mg/kg	
87-61-6	1,2,3-Trichlorobenzene	0.0010 U	0.0046	0.0010	mg/kg	
96-18-4	1,2,3-Trichloropropane	0.0019 U	0.0046	0.0019	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	0.00097 U	0.0046	0.00097	mg/kg	
95-63-6	1,2,4-Trimethylbenzene	0.00073 U	0.0046	0.00073	mg/kg	
108-67-8	1,3,5-Trimethylbenzene	0.00068 U	0.0046	0.00068	mg/kg	
127-18-4	Tetrachloroethylene	0.0011 U	0.0046	0.0011	mg/kg	
108-88-3	Toluene	0.00080 U	0.0046	0.00080	mg/kg	
79-01-6	Trichloroethylene	0.0011 U	0.0046	0.0011	mg/kg	
75-69-4	Trichlorofluoromethane	0.0012 U	0.0046	0.0012	mg/kg	
75-01-4	Vinyl chloride	0.0013 U	0.0046	0.0013	mg/kg	
1330-20-7	Xylene (total)	0.0016 U	0.014	0.0016	mg/kg	
	m,p-Xylene	0.00092 U	0.0091	0.00092	mg/kg	
95-47-6	o-Xylene	0.00064 U	0.0046	0.00064	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	76%		70-121%
2037-26-5	Toluene-D8	91%		76-132%
460-00-4	4-Bromofluorobenzene	90%		73-165%

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-2@4-6'		
Lab Sample ID:	TC6964-2	Date Sampled:	04/25/12
Matrix:	SO - Soil	Date Received:	04/27/12
Method:	SW846 8260B SW846 5030A	Percent Solids:	82.4
Project:	Clinton Drive/ 8321		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	74%		57-122%

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-2@4-6'		
Lab Sample ID:	TC6964-2	Date Sampled:	04/25/12
Matrix:	SO - Soil	Date Received:	04/27/12
Method:	TNRCC 1005 TX1005	Percent Solids:	82.4
Project:	Clinton Drive/ 8321		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LB071032.D	1	05/03/12	RM	04/30/12	OP23218	GLB1043
Run #2							

	Initial Weight	Final Volume
Run #1	10.4 g	10.0 ml
Run #2		

CAS No.	Compound	Result	MQL	SDL	Units	Q
	TPH (C6-C12)	4.8 U	29	4.8	mg/kg	
	TPH (>C12-C28)	4.9 U	29	4.9	mg/kg	
	TPH (>C28-C35)	4.9 U	29	4.9	mg/kg	
	TPH (C6-C35)	4.8 U	29	4.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	109%		70-130%
98-08-8	aaa-Trifluorotoluene	101%		70-130%

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-3@8-10'		
Lab Sample ID:	TC6964-3	Date Sampled:	04/25/12
Matrix:	SO - Soil	Date Received:	04/27/12
Method:	SW846 8260B SW846 5030A	Percent Solids:	81.9
Project:	Clinton Drive/ 8321		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R008059.D	1	05/03/12	LT	04/27/12 16:00	n/a	VR154
Run #2							

	Initial Weight	Final Volume
Run #1	5.07 g	5.0 ml
Run #2		

VOA 8260 List

CAS No.	Compound	Result	MQL	SDL	Units	Q
67-64-1	Acetone	0.012 U	0.048	0.012	mg/kg	
71-43-2	Benzene	0.00064 U	0.0048	0.00064	mg/kg	
108-86-1	Bromobenzene	0.00094 U	0.0048	0.00094	mg/kg	
74-97-5	Bromochloromethane	0.0011 U	0.0048	0.0011	mg/kg	
75-27-4	Bromodichloromethane	0.00070 U	0.0048	0.00070	mg/kg	
75-25-2	Bromoform	0.0012 U	0.0048	0.0012	mg/kg	
104-51-8	n-Butylbenzene	0.0011 U	0.0048	0.0011	mg/kg	
135-98-8	sec-Butylbenzene	0.00086 U	0.0048	0.00086	mg/kg	
98-06-6	tert-Butylbenzene	0.00085 U	0.0048	0.00085	mg/kg	
108-90-7	Chlorobenzene	0.00058 U	0.0048	0.00058	mg/kg	
75-00-3	Chloroethane	0.0011 U	0.0048	0.0011	mg/kg	
67-66-3	Chloroform	0.00080 U	0.0048	0.00080	mg/kg	
95-49-8	o-Chlorotoluene	0.00079 U	0.0048	0.00079	mg/kg	
106-43-4	p-Chlorotoluene	0.0011 U	0.0048	0.0011	mg/kg	
75-15-0	Carbon disulfide	0.00084 U	0.0048	0.00084	mg/kg	
56-23-5	Carbon tetrachloride	0.00083 U	0.0048	0.00083	mg/kg	
75-34-3	1,1-Dichloroethane	0.00082 U	0.0048	0.00082	mg/kg	
75-35-4	1,1-Dichloroethylene	0.00097 U	0.0048	0.00097	mg/kg	
563-58-6	1,1-Dichloropropene	0.0012 U	0.0048	0.0012	mg/kg	
96-12-8	1,2-Dibromo-3-chloropropane	0.0018 U	0.0048	0.0018	mg/kg	
106-93-4	1,2-Dibromoethane	0.0011 U	0.0048	0.0011	mg/kg	
107-06-2	1,2-Dichloroethane	0.00082 U	0.0048	0.00082	mg/kg	
78-87-5	1,2-Dichloropropane	0.0010 U	0.0048	0.0010	mg/kg	
142-28-9	1,3-Dichloropropane	0.0011 U	0.0048	0.0011	mg/kg	
594-20-7	2,2-Dichloropropane	0.00096 U	0.0048	0.00096	mg/kg	
124-48-1	Dibromochloromethane	0.00098 U	0.0048	0.00098	mg/kg	
75-71-8	Dichlorodifluoromethane	0.0048 U	0.0048	0.0048	mg/kg	
156-59-2	cis-1,2-Dichloroethylene	0.0011 U	0.0048	0.0011	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	0.00061 U	0.0048	0.00061	mg/kg	
541-73-1	m-Dichlorobenzene	0.00086 U	0.0048	0.00086	mg/kg	
95-50-1	o-Dichlorobenzene	0.00069 U	0.0048	0.00069	mg/kg	
106-46-7	p-Dichlorobenzene	0.00083 U	0.0048	0.00083	mg/kg	

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-3@8-10'		
Lab Sample ID:	TC6964-3	Date Sampled:	04/25/12
Matrix:	SO - Soil	Date Received:	04/27/12
Method:	SW846 8260B SW846 5030A	Percent Solids:	81.9
Project:	Clinton Drive/ 8321		

VOA 8260 List

CAS No.	Compound	Result	MQL	SDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	0.00094 U	0.0048	0.00094	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	0.00078 U	0.0048	0.00078	mg/kg	
100-41-4	Ethylbenzene	0.00084 U	0.0048	0.00084	mg/kg	
591-78-6	2-Hexanone	0.0051 U	0.048	0.0051	mg/kg	
87-68-3	Hexachlorobutadiene	0.0010 U	0.0048	0.0010	mg/kg	
98-82-8	Isopropylbenzene	0.00079 U	0.0048	0.00079	mg/kg	
99-87-6	p-Isopropyltoluene	0.00061 U	0.0048	0.00061	mg/kg	
108-10-1	4-Methyl-2-pentanone	0.0055 U	0.048	0.0055	mg/kg	
74-83-9	Methyl bromide	0.0014 U	0.0048	0.0014	mg/kg	
74-87-3	Methyl chloride	0.0011 U	0.0048	0.0011	mg/kg	
74-95-3	Methylene bromide	0.00087 U	0.0048	0.00087	mg/kg	
75-09-2	Methylene chloride	0.0030 U	0.012	0.0030	mg/kg	
78-93-3	Methyl ethyl ketone	0.0070 U	0.048	0.0070	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	0.00081 U	0.0048	0.00081	mg/kg	
91-20-3	Naphthalene	0.0024 U	0.0048	0.0024	mg/kg	
103-65-1	n-Propylbenzene	0.00092 U	0.0048	0.00092	mg/kg	
100-42-5	Styrene	0.00074 U	0.0048	0.00074	mg/kg	
630-20-6	1,1,1,2-Tetrachloroethane	0.0010 U	0.0048	0.0010	mg/kg	
71-55-6	1,1,1-Trichloroethane	0.0010 U	0.0048	0.0010	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	0.0014 U	0.0048	0.0014	mg/kg	
79-00-5	1,1,2-Trichloroethane	0.0011 U	0.0048	0.0011	mg/kg	
87-61-6	1,2,3-Trichlorobenzene	0.0011 U	0.0048	0.0011	mg/kg	
96-18-4	1,2,3-Trichloropropane	0.0020 U	0.0048	0.0020	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	0.0010 U	0.0048	0.0010	mg/kg	
95-63-6	1,2,4-Trimethylbenzene	0.00077 U	0.0048	0.00077	mg/kg	
108-67-8	1,3,5-Trimethylbenzene	0.00072 U	0.0048	0.00072	mg/kg	
127-18-4	Tetrachloroethylene	0.0011 U	0.0048	0.0011	mg/kg	
108-88-3	Toluene	0.00084 U	0.0048	0.00084	mg/kg	
79-01-6	Trichloroethylene	0.0012 U	0.0048	0.0012	mg/kg	
75-69-4	Trichlorofluoromethane	0.0013 U	0.0048	0.0013	mg/kg	
75-01-4	Vinyl chloride	0.0013 U	0.0048	0.0013	mg/kg	
1330-20-7	Xylene (total)	0.0016 U	0.014	0.0016	mg/kg	
	m,p-Xylene	0.00097 U	0.0096	0.00097	mg/kg	
95-47-6	o-Xylene	0.00067 U	0.0048	0.00067	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	76%		70-121%
2037-26-5	Toluene-D8	88%		76-132%
460-00-4	4-Bromofluorobenzene	87%		73-165%

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-3@8-10'		
Lab Sample ID:	TC6964-3	Date Sampled:	04/25/12
Matrix:	SO - Soil	Date Received:	04/27/12
Method:	SW846 8260B SW846 5030A	Percent Solids:	81.9
Project:	Clinton Drive/ 8321		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	74%		57-122%

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-3@8-10'		
Lab Sample ID:	TC6964-3	Date Sampled:	04/25/12
Matrix:	SO - Soil	Date Received:	04/27/12
Method:	TNRCC 1005 TX1005	Percent Solids:	81.9
Project:	Clinton Drive/ 8321		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LF071033.D	1	05/03/12	RM	04/30/12	OP23218	GLF1042
Run #2							

	Initial Weight	Final Volume
Run #1	10.3 g	10.0 ml
Run #2		

CAS No.	Compound	Result	MQL	SDL	Units	Q
	TPH (C6-C12)	4.9 U	30	4.9	mg/kg	
	TPH (>C12-C28)	5.0 U	30	5.0	mg/kg	
	TPH (>C28-C35)	5.0 U	30	5.0	mg/kg	
	TPH (C6-C35)	4.9 U	30	4.9	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	109%		70-130%
98-08-8	aaa-Trifluorotoluene	87%		70-130%

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-4@2-4'		
Lab Sample ID:	TC6964-4	**Date Sampled:**	04/25/12
Matrix:	SO - Soil	**Date Received:**	04/27/12
Method:	SW846 8260B SW846 5030A	**Percent Solids:**	83.3
Project:	Clinton Drive/ 8321		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R008060.D	1	05/03/12	LT	04/27/12 16:09	n/a	VR154
Run #2							

	Initial Weight	Final Volume
Run #1	5.13 g	5.0 ml
Run #2		

VOA 8260 List

CAS No.	Compound	Result	MQL	SDL	Units	Q
67-64-1	Acetone	0.012 U	0.047	0.012	mg/kg	
71-43-2	Benzene	0.00062 U	0.0047	0.00062	mg/kg	
108-86-1	Bromobenzene	0.00091 U	0.0047	0.00091	mg/kg	
74-97-5	Bromochloromethane	0.0011 U	0.0047	0.0011	mg/kg	
75-27-4	Bromodichloromethane	0.00068 U	0.0047	0.00068	mg/kg	
75-25-2	Bromoform	0.0012 U	0.0047	0.0012	mg/kg	
104-51-8	n-Butylbenzene	0.0010 U	0.0047	0.0010	mg/kg	
135-98-8	sec-Butylbenzene	0.00083 U	0.0047	0.00083	mg/kg	
98-06-6	tert-Butylbenzene	0.00083 U	0.0047	0.00083	mg/kg	
108-90-7	Chlorobenzene	0.00056 U	0.0047	0.00056	mg/kg	
75-00-3	Chloroethane	0.0011 U	0.0047	0.0011	mg/kg	
67-66-3	Chloroform	0.00078 U	0.0047	0.00078	mg/kg	
95-49-8	o-Chlorotoluene	0.00076 U	0.0047	0.00076	mg/kg	
106-43-4	p-Chlorotoluene	0.0011 U	0.0047	0.0011	mg/kg	
75-15-0	Carbon disulfide	0.00082 U	0.0047	0.00082	mg/kg	
56-23-5	Carbon tetrachloride	0.00081 U	0.0047	0.00081	mg/kg	
75-34-3	1,1-Dichloroethane	0.00080 U	0.0047	0.00080	mg/kg	
75-35-4	1,1-Dichloroethylene	0.00094 U	0.0047	0.00094	mg/kg	
563-58-6	1,1-Dichloropropene	0.0011 U	0.0047	0.0011	mg/kg	
96-12-8	1,2-Dibromo-3-chloropropane	0.0018 U	0.0047	0.0018	mg/kg	
106-93-4	1,2-Dibromoethane	0.0011 U	0.0047	0.0011	mg/kg	
107-06-2	1,2-Dichloroethane	0.00080 U	0.0047	0.00080	mg/kg	
78-87-5	1,2-Dichloropropane	0.00099 U	0.0047	0.00099	mg/kg	
142-28-9	1,3-Dichloropropane	0.0011 U	0.0047	0.0011	mg/kg	
594-20-7	2,2-Dichloropropane	0.00093 U	0.0047	0.00093	mg/kg	
124-48-1	Dibromochloromethane	0.00095 U	0.0047	0.00095	mg/kg	
75-71-8	Dichlorodifluoromethane	0.0047 U	0.0047	0.0047	mg/kg	
156-59-2	cis-1,2-Dichloroethylene	0.0011 U	0.0047	0.0011	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	0.00059 U	0.0047	0.00059	mg/kg	
541-73-1	m-Dichlorobenzene	0.00083 U	0.0047	0.00083	mg/kg	
95-50-1	o-Dichlorobenzene	0.00067 U	0.0047	0.00067	mg/kg	
106-46-7	p-Dichlorobenzene	0.00081 U	0.0047	0.00081	mg/kg	

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-4@2-4'		
Lab Sample ID:	TC6964-4	Date Sampled:	04/25/12
Matrix:	SO - Soil	Date Received:	04/27/12
Method:	SW846 8260B SW846 5030A	Percent Solids:	83.3
Project:	Clinton Drive/ 8321		

VOA 8260 List

CAS No.	Compound	Result	MQL	SDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	0.00092 U	0.0047	0.00092	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	0.00075 U	0.0047	0.00075	mg/kg	
100-41-4	Ethylbenzene	0.00081 U	0.0047	0.00081	mg/kg	
591-78-6	2-Hexanone	0.0049 U	0.047	0.0049	mg/kg	
87-68-3	Hexachlorobutadiene	0.00099 U	0.0047	0.00099	mg/kg	
98-82-8	Isopropylbenzene	0.00077 U	0.0047	0.00077	mg/kg	
99-87-6	p-Isopropyltoluene	0.00059 U	0.0047	0.00059	mg/kg	
108-10-1	4-Methyl-2-pentanone	0.0053 U	0.047	0.0053	mg/kg	
74-83-9	Methyl bromide	0.0013 U	0.0047	0.0013	mg/kg	
74-87-3	Methyl chloride	0.0010 U	0.0047	0.0010	mg/kg	
74-95-3	Methylene bromide	0.00085 U	0.0047	0.00085	mg/kg	
75-09-2	Methylene chloride	0.0034	0.012	0.0029	mg/kg	J
78-93-3	Methyl ethyl ketone	0.0068 U	0.047	0.0068	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	0.00079 U	0.0047	0.00079	mg/kg	
91-20-3	Naphthalene	0.0023 U	0.0047	0.0023	mg/kg	
103-65-1	n-Propylbenzene	0.00090 U	0.0047	0.00090	mg/kg	
100-42-5	Styrene	0.00072 U	0.0047	0.00072	mg/kg	
630-20-6	1,1,1,2-Tetrachloroethane	0.0010 U	0.0047	0.0010	mg/kg	
71-55-6	1,1,1-Trichloroethane	0.0010 U	0.0047	0.0010	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	0.0014 U	0.0047	0.0014	mg/kg	
79-00-5	1,1,2-Trichloroethane	0.0011 U	0.0047	0.0011	mg/kg	
87-61-6	1,2,3-Trichlorobenzene	0.0010 U	0.0047	0.0010	mg/kg	
96-18-4	1,2,3-Trichloropropane	0.0019 U	0.0047	0.0019	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	0.00099 U	0.0047	0.00099	mg/kg	
95-63-6	1,2,4-Trimethylbenzene	0.00075 U	0.0047	0.00075	mg/kg	
108-67-8	1,3,5-Trimethylbenzene	0.00070 U	0.0047	0.00070	mg/kg	
127-18-4	Tetrachloroethylene	0.0011 U	0.0047	0.0011	mg/kg	
108-88-3	Toluene	0.00082 U	0.0047	0.00082	mg/kg	
79-01-6	Trichloroethylene	0.0011 U	0.0047	0.0011	mg/kg	
75-69-4	Trichlorofluoromethane	0.0013 U	0.0047	0.0013	mg/kg	
75-01-4	Vinyl chloride	0.0013 U	0.0047	0.0013	mg/kg	
1330-20-7	Xylene (total)	0.0016 U	0.014	0.0016	mg/kg	
	m,p-Xylene	0.00095 U	0.0094	0.00095	mg/kg	
95-47-6	o-Xylene	0.00065 U	0.0047	0.00065	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	76%		70-121%
2037-26-5	Toluene-D8	96%		76-132%
460-00-4	4-Bromofluorobenzene	95%		73-165%

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-4@2-4'		
Lab Sample ID:	TC6964-4	Date Sampled:	04/25/12
Matrix:	SO - Soil	Date Received:	04/27/12
Method:	SW846 8260B SW846 5030A	Percent Solids:	83.3
Project:	Clinton Drive/ 8321		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	75%		57-122%

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-4@2-4'		
Lab Sample ID:	TC6964-4	Date Sampled:	04/25/12
Matrix:	SO - Soil	Date Received:	04/27/12
Method:	TNRCC 1005 TX1005	Percent Solids:	83.3
Project:	Clinton Drive/ 8321		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LB071034.D	1	05/03/12	RM	04/30/12	OP23218	GLB1043
Run #2							

	Initial Weight	Final Volume
Run #1	10.3 g	10.0 ml
Run #2		

CAS No.	Compound	Result	MQL	SDL	Units	Q
	TPH (C6-C12)	4.8 U	29	4.8	mg/kg	
	TPH (>C12-C28)	4.8 U	29	4.8	mg/kg	
	TPH (>C28-C35)	4.8 U	29	4.8	mg/kg	
	TPH (C6-C35)	4.8 U	29	4.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	106%		70-130%
98-08-8	aaa-Trifluorotoluene	102%		70-130%

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-5@8-10'		
Lab Sample ID:	TC6964-5	Date Sampled:	04/25/12
Matrix:	SO - Soil	Date Received:	04/27/12
Method:	SW846 8260B SW846 5030A	Percent Solids:	88.2
Project:	Clinton Drive/ 8321		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R008061.D	1	05/03/12	LT	04/27/12 16:09	n/a	VR154
Run #2							

	Initial Weight	Final Volume
Run #1	5.21 g	5.0 ml
Run #2		

VOA 8260 List

CAS No.	Compound	Result	MQL	SDL	Units	Q
67-64-1	Acetone	0.011 U	0.044	0.011	mg/kg	
71-43-2	Benzene	0.00058 U	0.0044	0.00058	mg/kg	
108-86-1	Bromobenzene	0.00085 U	0.0044	0.00085	mg/kg	
74-97-5	Bromochloromethane	0.0010 U	0.0044	0.0010	mg/kg	
75-27-4	Bromodichloromethane	0.00064 U	0.0044	0.00064	mg/kg	
75-25-2	Bromoform	0.0011 U	0.0044	0.0011	mg/kg	
104-51-8	n-Butylbenzene	0.00096 U	0.0044	0.00096	mg/kg	
135-98-8	sec-Butylbenzene	0.00077 U	0.0044	0.00077	mg/kg	
98-06-6	tert-Butylbenzene	0.00077 U	0.0044	0.00077	mg/kg	
108-90-7	Chlorobenzene	0.00052 U	0.0044	0.00052	mg/kg	
75-00-3	Chloroethane	0.0010 U	0.0044	0.0010	mg/kg	
67-66-3	Chloroform	0.00073 U	0.0044	0.00073	mg/kg	
95-49-8	o-Chlorotoluene	0.00071 U	0.0044	0.00071	mg/kg	
106-43-4	p-Chlorotoluene	0.0010 U	0.0044	0.0010	mg/kg	
75-15-0	Carbon disulfide	0.00076 U	0.0044	0.00076	mg/kg	
56-23-5	Carbon tetrachloride	0.00075 U	0.0044	0.00075	mg/kg	
75-34-3	1,1-Dichloroethane	0.00074 U	0.0044	0.00074	mg/kg	
75-35-4	1,1-Dichloroethylene	0.00087 U	0.0044	0.00087	mg/kg	
563-58-6	1,1-Dichloropropene	0.0011 U	0.0044	0.0011	mg/kg	
96-12-8	1,2-Dibromo-3-chloropropane	0.0017 U	0.0044	0.0017	mg/kg	
106-93-4	1,2-Dibromoethane	0.00099 U	0.0044	0.00099	mg/kg	
107-06-2	1,2-Dichloroethane	0.00074 U	0.0044	0.00074	mg/kg	
78-87-5	1,2-Dichloropropane	0.00092 U	0.0044	0.00092	mg/kg	
142-28-9	1,3-Dichloropropane	0.0010 U	0.0044	0.0010	mg/kg	
594-20-7	2,2-Dichloropropane	0.00087 U	0.0044	0.00087	mg/kg	
124-48-1	Dibromochloromethane	0.00089 U	0.0044	0.00089	mg/kg	
75-71-8	Dichlorodifluoromethane	0.0044 U	0.0044	0.0044	mg/kg	
156-59-2	cis-1,2-Dichloroethylene	0.0010 U	0.0044	0.0010	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	0.00055 U	0.0044	0.00055	mg/kg	
541-73-1	m-Dichlorobenzene	0.00077 U	0.0044	0.00077	mg/kg	
95-50-1	o-Dichlorobenzene	0.00062 U	0.0044	0.00062	mg/kg	
106-46-7	p-Dichlorobenzene	0.00075 U	0.0044	0.00075	mg/kg	

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-5@8-10'		
Lab Sample ID:	TC6964-5	Date Sampled:	04/25/12
Matrix:	SO - Soil	Date Received:	04/27/12
Method:	SW846 8260B SW846 5030A	Percent Solids:	88.2
Project:	Clinton Drive/ 8321		

VOA 8260 List

CAS No.	Compound	Result	MQL	SDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	0.00085 U	0.0044	0.00085	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	0.00070 U	0.0044	0.00070	mg/kg	
100-41-4	Ethylbenzene	0.00076 U	0.0044	0.00076	mg/kg	
591-78-6	2-Hexanone	0.0046 U	0.044	0.0046	mg/kg	
87-68-3	Hexachlorobutadiene	0.00092 U	0.0044	0.00092	mg/kg	
98-82-8	Isopropylbenzene	0.00071 U	0.0044	0.00071	mg/kg	
99-87-6	p-Isopropyltoluene	0.00055 U	0.0044	0.00055	mg/kg	
108-10-1	4-Methyl-2-pentanone	0.0050 U	0.044	0.0050	mg/kg	
74-83-9	Methyl bromide	0.0012 U	0.0044	0.0012	mg/kg	
74-87-3	Methyl chloride	0.00096 U	0.0044	0.00096	mg/kg	
74-95-3	Methylene bromide	0.00079 U	0.0044	0.00079	mg/kg	
75-09-2	Methylene chloride	0.0032	0.011	0.0027	mg/kg	J
78-93-3	Methyl ethyl ketone	0.0064 U	0.044	0.0064	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	0.00073 U	0.0044	0.00073	mg/kg	
91-20-3	Naphthalene	0.0022 U	0.0044	0.0022	mg/kg	
103-65-1	n-Propylbenzene	0.00084 U	0.0044	0.00084	mg/kg	
100-42-5	Styrene	0.00067 U	0.0044	0.00067	mg/kg	
630-20-6	1,1,1,2-Tetrachloroethane	0.00093 U	0.0044	0.00093	mg/kg	
71-55-6	1,1,1-Trichloroethane	0.00094 U	0.0044	0.00094	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	0.0013 U	0.0044	0.0013	mg/kg	
79-00-5	1,1,2-Trichloroethane	0.0010 U	0.0044	0.0010	mg/kg	
87-61-6	1,2,3-Trichlorobenzene	0.00095 U	0.0044	0.00095	mg/kg	
96-18-4	1,2,3-Trichloropropane	0.0018 U	0.0044	0.0018	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	0.00092 U	0.0044	0.00092	mg/kg	
95-63-6	1,2,4-Trimethylbenzene	0.00070 U	0.0044	0.00070	mg/kg	
108-67-8	1,3,5-Trimethylbenzene	0.00065 U	0.0044	0.00065	mg/kg	
127-18-4	Tetrachloroethylene	0.0010 U	0.0044	0.0010	mg/kg	
108-88-3	Toluene	0.00076 U	0.0044	0.00076	mg/kg	
79-01-6	Trichloroethylene	0.0011 U	0.0044	0.0011	mg/kg	
75-69-4	Trichlorofluoromethane	0.0012 U	0.0044	0.0012	mg/kg	
75-01-4	Vinyl chloride	0.0012 U	0.0044	0.0012	mg/kg	
1330-20-7	Xylene (total)	0.0015 U	0.013	0.0015	mg/kg	
	m,p-Xylene	0.00088 U	0.0087	0.00088	mg/kg	
95-47-6	o-Xylene	0.00061 U	0.0044	0.00061	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	76%		70-121%
2037-26-5	Toluene-D8	95%		76-132%
460-00-4	4-Bromofluorobenzene	92%		73-165%

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-5@8-10'		
Lab Sample ID:	TC6964-5	**Date Sampled:**	04/25/12
Matrix:	SO - Soil	**Date Received:**	04/27/12
Method:	SW846 8260B SW846 5030A	**Percent Solids:**	88.2
Project:	Clinton Drive/ 8321		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	70%		57-122%

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-5@8-10'		
Lab Sample ID:	TC6964-5	Date Sampled:	04/25/12
Matrix:	SO - Soil	Date Received:	04/27/12
Method:	TNRCC 1005 TX1005	Percent Solids:	88.2
Project:	Clinton Drive/ 8321		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LF071035.D	1	05/03/12	RM	04/30/12	OP23218	GLF1042
Run #2							

	Initial Weight	Final Volume
Run #1	10.5 g	10.0 ml
Run #2		

CAS No.	Compound	Result	MQL	SDL	Units	Q
	TPH (C6-C12)	4.5 U	27	4.5	mg/kg	
	TPH (>C12-C28)	4.5 U	27	4.5	mg/kg	
	TPH (>C28-C35)	4.5 U	27	4.5	mg/kg	
	TPH (C6-C35)	4.5 U	27	4.5	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	109%		70-130%
98-08-8	aaa-Trifluorotoluene	87%		70-130%

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-6@2-4'		
Lab Sample ID:	TC6964-6	Date Sampled:	04/25/12
Matrix:	SO - Soil	Date Received:	04/27/12
Method:	SW846 8260B SW846 5030A	Percent Solids:	85.3
Project:	Clinton Drive/ 8321		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R008062.D	1	05/03/12	LT	04/27/12 16:09	n/a	VR154
Run #2							

	Initial Weight	Final Volume
Run #1	5.36 g	5.0 ml
Run #2		

VOA 8260 List

CAS No.	Compound	Result	MQL	SDL	Units	Q
67-64-1	Acetone	0.011 U	0.044	0.011	mg/kg	
71-43-2	Benzene	0.00058 U	0.0044	0.00058	mg/kg	
108-86-1	Bromobenzene	0.00085 U	0.0044	0.00085	mg/kg	
74-97-5	Bromochloromethane	0.0010 U	0.0044	0.0010	mg/kg	
75-27-4	Bromodichloromethane	0.00064 U	0.0044	0.00064	mg/kg	
75-25-2	Bromoform	0.0011 U	0.0044	0.0011	mg/kg	
104-51-8	n-Butylbenzene	0.00096 U	0.0044	0.00096	mg/kg	
135-98-8	sec-Butylbenzene	0.00078 U	0.0044	0.00078	mg/kg	
98-06-6	tert-Butylbenzene	0.00077 U	0.0044	0.00077	mg/kg	
108-90-7	Chlorobenzene	0.00053 U	0.0044	0.00053	mg/kg	
75-00-3	Chloroethane	0.0010 U	0.0044	0.0010	mg/kg	
67-66-3	Chloroform	0.00073 U	0.0044	0.00073	mg/kg	
95-49-8	o-Chlorotoluene	0.00071 U	0.0044	0.00071	mg/kg	
106-43-4	p-Chlorotoluene	0.0010 U	0.0044	0.0010	mg/kg	
75-15-0	Carbon disulfide	0.00076 U	0.0044	0.00076	mg/kg	
56-23-5	Carbon tetrachloride	0.00076 U	0.0044	0.00076	mg/kg	
75-34-3	1,1-Dichloroethane	0.00075 U	0.0044	0.00075	mg/kg	
75-35-4	1,1-Dichloroethylene	0.00088 U	0.0044	0.00088	mg/kg	
563-58-6	1,1-Dichloropropene	0.0011 U	0.0044	0.0011	mg/kg	
96-12-8	1,2-Dibromo-3-chloropropane	0.0017 U	0.0044	0.0017	mg/kg	
106-93-4	1,2-Dibromoethane	0.0010 U	0.0044	0.0010	mg/kg	
107-06-2	1,2-Dichloroethane	0.00075 U	0.0044	0.00075	mg/kg	
78-87-5	1,2-Dichloropropane	0.00093 U	0.0044	0.00093	mg/kg	
142-28-9	1,3-Dichloropropane	0.0010 U	0.0044	0.0010	mg/kg	
594-20-7	2,2-Dichloropropane	0.00087 U	0.0044	0.00087	mg/kg	
124-48-1	Dibromochloromethane	0.00089 U	0.0044	0.00089	mg/kg	
75-71-8	Dichlorodifluoromethane	0.0044 U	0.0044	0.0044	mg/kg	
156-59-2	cis-1,2-Dichloroethylene	0.0010 U	0.0044	0.0010	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	0.00055 U	0.0044	0.00055	mg/kg	
541-73-1	m-Dichlorobenzene	0.00078 U	0.0044	0.00078	mg/kg	
95-50-1	o-Dichlorobenzene	0.00063 U	0.0044	0.00063	mg/kg	
106-46-7	p-Dichlorobenzene	0.00076 U	0.0044	0.00076	mg/kg	

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-6@2-4'		
Lab Sample ID:	TC6964-6	Date Sampled:	04/25/12
Matrix:	SO - Soil	Date Received:	04/27/12
Method:	SW846 8260B SW846 5030A	Percent Solids:	85.3
Project:	Clinton Drive/ 8321		

VOA 8260 List

CAS No.	Compound	Result	MQL	SDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	0.00086 U	0.0044	0.00086	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	0.00071 U	0.0044	0.00071	mg/kg	
100-41-4	Ethylbenzene	0.00076 U	0.0044	0.00076	mg/kg	
591-78-6	2-Hexanone	0.0046 U	0.044	0.0046	mg/kg	
87-68-3	Hexachlorobutadiene	0.00092 U	0.0044	0.00092	mg/kg	
98-82-8	Isopropylbenzene	0.00072 U	0.0044	0.00072	mg/kg	
99-87-6	p-Isopropyltoluene	0.00056 U	0.0044	0.00056	mg/kg	
108-10-1	4-Methyl-2-pentanone	0.0050 U	0.044	0.0050	mg/kg	
74-83-9	Methyl bromide	0.0012 U	0.0044	0.0012	mg/kg	
74-87-3	Methyl chloride	0.00096 U	0.0044	0.00096	mg/kg	
74-95-3	Methylene bromide	0.00079 U	0.0044	0.00079	mg/kg	
75-09-2	Methylene chloride	0.0027 U	0.011	0.0027	mg/kg	
78-93-3	Methyl ethyl ketone	0.0064 U	0.044	0.0064	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	0.00073 U	0.0044	0.00073	mg/kg	
91-20-3	Naphthalene	0.0022 U	0.0044	0.0022	mg/kg	
103-65-1	n-Propylbenzene	0.00084 U	0.0044	0.00084	mg/kg	
100-42-5	Styrene	0.00067 U	0.0044	0.00067	mg/kg	
630-20-6	1,1,1,2-Tetrachloroethane	0.00094 U	0.0044	0.00094	mg/kg	
71-55-6	1,1,1-Trichloroethane	0.00095 U	0.0044	0.00095	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	0.0013 U	0.0044	0.0013	mg/kg	
79-00-5	1,1,2-Trichloroethane	0.0010 U	0.0044	0.0010	mg/kg	
87-61-6	1,2,3-Trichlorobenzene	0.00096 U	0.0044	0.00096	mg/kg	
96-18-4	1,2,3-Trichloropropane	0.0018 U	0.0044	0.0018	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	0.00093 U	0.0044	0.00093	mg/kg	
95-63-6	1,2,4-Trimethylbenzene	0.00070 U	0.0044	0.00070	mg/kg	
108-67-8	1,3,5-Trimethylbenzene	0.00066 U	0.0044	0.00066	mg/kg	
127-18-4	Tetrachloroethylene	0.0010 U	0.0044	0.0010	mg/kg	
108-88-3	Toluene	0.00076 U	0.0044	0.00076	mg/kg	
79-01-6	Trichloroethylene	0.0011 U	0.0044	0.0011	mg/kg	
75-69-4	Trichlorofluoromethane	0.0012 U	0.0044	0.0012	mg/kg	
75-01-4	Vinyl chloride	0.0012 U	0.0044	0.0012	mg/kg	
1330-20-7	Xylene (total)	0.0015 U	0.013	0.0015	mg/kg	
	m,p-Xylene	0.00088 U	0.0087	0.00088	mg/kg	
95-47-6	o-Xylene	0.00061 U	0.0044	0.00061	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	77%		70-121%
2037-26-5	Toluene-D8	94%		76-132%
460-00-4	4-Bromofluorobenzene	91%		73-165%

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-6@2-4'		
Lab Sample ID:	TC6964-6	Date Sampled:	04/25/12
Matrix:	SO - Soil	Date Received:	04/27/12
Method:	SW846 8260B SW846 5030A	Percent Solids:	85.3
Project:	Clinton Drive/ 8321		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	74%		57-122%

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-6@2-4'		
Lab Sample ID:	TC6964-6	**Date Sampled:**	04/25/12
Matrix:	SO - Soil	**Date Received:**	04/27/12
Method:	TNRCC 1005 TX1005	**Percent Solids:**	85.3
Project:	Clinton Drive/ 8321		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LB071036.D	1	05/03/12	RM	04/30/12	OP23218	GLB1043
Run #2							

	Initial Weight	Final Volume
Run #1	10.0 g	10.0 ml
Run #2		

CAS No.	Compound	Result	MQL	SDL	Units	Q
	TPH (C6-C12)	4.9 U	29	4.9	mg/kg	
	TPH (>C12-C28)	4.9 U	29	4.9	mg/kg	
	TPH (>C28-C35)	4.9 U	29	4.9	mg/kg	
	TPH (C6-C35)	4.9 U	29	4.9	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	113%		70-130%
98-08-8	aaa-Trifluorotoluene	112%		70-130%

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB/TWP-4		
Lab Sample ID:	TC6964-7	Date Sampled:	04/25/12
Matrix:	AQ - Ground Water	Date Received:	04/27/12
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Clinton Drive/ 8321		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G010517.D	1	05/04/12	MH	n/a	n/a	VG461
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	MQL	SDL	Units	Q
67-64-1	Acetone	0.010 U	0.050	0.010	mg/l	
71-43-2	Benzene	0.00025 U	0.0010	0.00025	mg/l	
108-86-1	Bromobenzene	0.00027 U	0.0010	0.00027	mg/l	
74-97-5	Bromochloromethane	0.00042 U	0.0010	0.00042	mg/l	
75-27-4	Bromodichloromethane	0.00025 U	0.0010	0.00025	mg/l	
75-25-2	Bromoform	0.00035 U	0.0010	0.00035	mg/l	
104-51-8	n-Butylbenzene	0.00030 U	0.0010	0.00030	mg/l	
135-98-8	sec-Butylbenzene	0.00034 U	0.0010	0.00034	mg/l	
98-06-6	tert-Butylbenzene	0.00032 U	0.0010	0.00032	mg/l	
108-90-7	Chlorobenzene	0.00022 U	0.0010	0.00022	mg/l	
75-00-3	Chloroethane	0.00044 U	0.0010	0.00044	mg/l	
67-66-3	Chloroform	0.00020 U	0.0010	0.00020	mg/l	
95-49-8	o-Chlorotoluene	0.00028 U	0.0010	0.00028	mg/l	
106-43-4	p-Chlorotoluene	0.00029 U	0.0010	0.00029	mg/l	
75-15-0	Carbon disulfide	0.00036 U	0.0010	0.00036	mg/l	
56-23-5	Carbon tetrachloride	0.00036 U	0.0010	0.00036	mg/l	
75-34-3	1,1-Dichloroethane	0.00029 U	0.0010	0.00029	mg/l	
75-35-4	1,1-Dichloroethylene	0.00040 U	0.0010	0.00040	mg/l	
563-58-6	1,1-Dichloropropene	0.00033 U	0.0010	0.00033	mg/l	
96-12-8	1,2-Dibromo-3-chloropropane	0.00087 U	0.0020	0.00087	mg/l	
106-93-4	1,2-Dibromoethane	0.00027 U	0.0010	0.00027	mg/l	
107-06-2	1,2-Dichloroethane	0.00020 U	0.0010	0.00020	mg/l	
78-87-5	1,2-Dichloropropane	0.00025 U	0.0010	0.00025	mg/l	
142-28-9	1,3-Dichloropropane	0.00021 U	0.0010	0.00021	mg/l	
594-20-7	2,2-Dichloropropane	0.00037 U	0.0010	0.00037	mg/l	
124-48-1	Dibromochloromethane	0.00029 U	0.0010	0.00029	mg/l	
75-71-8	Dichlorodifluoromethane	0.00090 U	0.0020	0.00090	mg/l	
156-59-2	cis-1,2-Dichloroethylene	0.00024 U	0.0010	0.00024	mg/l	
10061-01-5	cis-1,3-Dichloropropene	0.00020 U	0.0010	0.00020	mg/l	
541-73-1	m-Dichlorobenzene	0.00025 U	0.0010	0.00025	mg/l	
95-50-1	o-Dichlorobenzene	0.00028 U	0.0010	0.00028	mg/l	
106-46-7	p-Dichlorobenzene	0.00029 U	0.0010	0.00029	mg/l	

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB/TWP-4		
Lab Sample ID:	TC6964-7	Date Sampled:	04/25/12
Matrix:	AQ - Ground Water	Date Received:	04/27/12
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Clinton Drive/ 8321		

VOA 8260 List

CAS No.	Compound	Result	MQL	SDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	0.00030 U	0.0010	0.00030	mg/l	
10061-02-6	trans-1,3-Dichloropropene	0.00021 U	0.0010	0.00021	mg/l	
100-41-4	Ethylbenzene	0.00025 U	0.0010	0.00025	mg/l	
591-78-6	2-Hexanone	0.0024 U	0.010	0.0024	mg/l	
87-68-3	Hexachlorobutadiene	0.00066 U	0.0010	0.00066	mg/l	
98-82-8	Isopropylbenzene	0.00027 U	0.0010	0.00027	mg/l	
99-87-6	p-Isopropyltoluene	0.00034 U	0.0010	0.00034	mg/l	
108-10-1	4-Methyl-2-pentanone	0.0019 U	0.010	0.0019	mg/l	
74-83-9	Methyl bromide	0.00031 U	0.0010	0.00031	mg/l	
74-87-3	Methyl chloride	0.00027 U	0.0010	0.00027	mg/l	
74-95-3	Methylene bromide	0.00030 U	0.0010	0.00030	mg/l	
75-09-2	Methylene chloride	0.0010 U	0.0050	0.0010	mg/l	
78-93-3	Methyl ethyl ketone	0.0018 U	0.010	0.0018	mg/l	
1634-04-4	Methyl Tert Butyl Ether	0.00028 U	0.0010	0.00028	mg/l	
91-20-3	Naphthalene	0.0010 U	0.0050	0.0010	mg/l	
103-65-1	n-Propylbenzene	0.00027 U	0.0010	0.00027	mg/l	
100-42-5	Styrene	0.00022 U	0.0010	0.00022	mg/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.00024 U	0.0010	0.00024	mg/l	
71-55-6	1,1,1-Trichloroethane	0.00031 U	0.0010	0.00031	mg/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.00038 U	0.0010	0.00038	mg/l	
79-00-5	1,1,2-Trichloroethane	0.00036 U	0.0010	0.00036	mg/l	
87-61-6	1,2,3-Trichlorobenzene	0.00051 U	0.0010	0.00051	mg/l	
96-18-4	1,2,3-Trichloropropane	0.00046 U	0.0010	0.00046	mg/l	
120-82-1	1,2,4-Trichlorobenzene	0.00033 U	0.0010	0.00033	mg/l	
95-63-6	1,2,4-Trimethylbenzene	0.00024 U	0.0010	0.00024	mg/l	
108-67-8	1,3,5-Trimethylbenzene	0.00027 U	0.0010	0.00027	mg/l	
127-18-4	Tetrachloroethylene	0.00033 U	0.0010	0.00033	mg/l	
108-88-3	Toluene	0.00026 U	0.0010	0.00026	mg/l	
79-01-6	Trichloroethylene	0.00036 U	0.0010	0.00036	mg/l	
75-69-4	Trichlorofluoromethane	0.00041 U	0.0010	0.00041	mg/l	
75-01-4	Vinyl chloride	0.00040 U	0.0010	0.00040	mg/l	
1330-20-7	Xylene (total)	0.00071 U	0.0030	0.00071	mg/l	
	m,p-Xylene	0.00048 U	0.0020	0.00048	mg/l	
95-47-6	o-Xylene	0.00023 U	0.0010	0.00023	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	92%		79-122%
17060-07-0	1,2-Dichloroethane-D4	101%		75-121%
2037-26-5	Toluene-D8	94%		87-119%

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB/TWP-4		
Lab Sample ID:	TC6964-7	**Date Sampled:**	04/25/12
Matrix:	AQ - Ground Water	**Date Received:**	04/27/12
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Clinton Drive/ 8321		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	92%		80-133%

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB/TWP-4		
Lab Sample ID:	TC6964-7	**Date Sampled:**	04/25/12
Matrix:	AQ - Ground Water	**Date Received:**	04/27/12
Method:	TNRCC 1005 TX1005	**Percent Solids:**	n/a
Project:	Clinton Drive/ 8321		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LB070900.D	1	05/01/12	RM	04/30/12	OP23203	GLB1039
Run #2							

	Initial Volume	Final Volume
Run #1	30.3 ml	3.0 ml
Run #2		

CAS No.	Compound	Result	MQL	SDL	Units	Q
	TPH (C6-C12)	0.58 U	2.5	0.58	mg/l	
	TPH (>C12-C28)	0.90 U	2.5	0.90	mg/l	
	TPH (>C28-C35)	0.90 U	2.5	0.90	mg/l	
	TPH (C6-C35)	0.58 U	2.5	0.58	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	109%		70-130%
98-08-8	aaa-Trifluorotoluene	106%		70-130%

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-7@6-8'		
Lab Sample ID:	TC6964-8	Date Sampled:	04/25/12
Matrix:	SO - Soil	Date Received:	04/27/12
Method:	SW846 8260B SW846 5030A	Percent Solids:	80.5
Project:	Clinton Drive/ 8321		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R008018.D	1	05/01/12	LT	04/27/12 16:07	n/a	VR153
Run #2							

	Initial Weight	Final Volume
Run #1	5.10 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	MQL	SDL	Units	Q
71-43-2	Benzene	0.00065 U	0.0049	0.00065	mg/kg	
108-88-3	Toluene	0.00085 U	0.0049	0.00085	mg/kg	
100-41-4	Ethylbenzene	0.00085 U	0.0049	0.00085	mg/kg	
1330-20-7	Xylene (total)	0.0017 U	0.015	0.0017	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	0.00082 U	0.0049	0.00082	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	79%		70-121%
2037-26-5	Toluene-D8	85%		76-132%
460-00-4	4-Bromofluorobenzene	79%		73-165%
17060-07-0	1,2-Dichloroethane-D4	73%		57-122%

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-7@6-8'		
Lab Sample ID:	TC6964-8	**Date Sampled:**	04/25/12
Matrix:	SO - Soil	**Date Received:**	04/27/12
Method:	TNRCC 1005 TX1005	**Percent Solids:**	80.5
Project:	Clinton Drive/ 8321		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LB071038.D	1	05/03/12	RM	04/30/12	OP23218	GLB1043
Run #2							

	Initial Weight	Final Volume
Run #1	10.2 g	10.0 ml
Run #2		

CAS No.	Compound	Result	MQL	SDL	Units	Q
	TPH (C6-C12)	5.1 U	31	5.1	mg/kg	
	TPH (> C12-C28)	5.1 U	31	5.1	mg/kg	
	TPH (> C28-C35)	5.1 U	31	5.1	mg/kg	
	TPH (C6-C35)	5.1 U	31	5.1	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	117%		70-130%
98-08-8	aaa-Trifluorotoluene	108%		70-130%

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-8@2-4'		
Lab Sample ID:	TC6964-9	Date Sampled:	04/25/12
Matrix:	SO - Soil	Date Received:	04/27/12
Method:	SW846 8260B SW846 5030A	Percent Solids:	86.4
Project:	Clinton Drive/ 8321		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q005607.D	1	05/02/12	LT	04/27/12 16:07	n/a	VQ223
Run #2							

	Initial Weight	Final Volume
Run #1	5.24 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	MQL	SDL	Units	Q
71-43-2	Benzene	0.00059 U	0.0044	0.00059	mg/kg	
108-88-3	Toluene	0.00077 U	0.0044	0.00077	mg/kg	
100-41-4	Ethylbenzene	0.00077 U	0.0044	0.00077	mg/kg	
1330-20-7	Xylene (total)	0.0015 U	0.013	0.0015	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	0.00074 U	0.0044	0.00074	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		70-121%
2037-26-5	Toluene-D8	117%		76-132%
460-00-4	4-Bromofluorobenzene	97%		73-165%
17060-07-0	1,2-Dichloroethane-D4	85%		57-122%

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-8@2-4'		
Lab Sample ID:	TC6964-9	Date Sampled:	04/25/12
Matrix:	SO - Soil	Date Received:	04/27/12
Method:	TNRCC 1005 TX1005	Percent Solids:	86.4
Project:	Clinton Drive/ 8321		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LF071039.D	1	05/03/12	RM	04/30/12	OP23218	GLF1042
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	10.0 ml
Run #2		

CAS No.	Compound	Result	MQL	SDL	Units	Q
	TPH (C6-C12)	4.7 U	29	4.7	mg/kg	
	TPH (> C12-C28)	4.8 U	29	4.8	mg/kg	
	TPH (> C28-C35)	4.8 U	29	4.8	mg/kg	
	TPH (C6-C35)	4.7 U	29	4.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	104%		70-130%
98-08-8	aaa-Trifluorotoluene	87%		70-130%

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-9@14-16'		
Lab Sample ID:	TC6964-10	**Date Sampled:**	04/25/12
Matrix:	SO - Soil	**Date Received:**	04/27/12
Method:	SW846 8260B SW846 5030A	**Percent Solids:**	86.9
Project:	Clinton Drive/ 8321		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q005608.D	1	05/02/12	LT	04/27/12 16:07	n/a	VQ223
Run #2							

	Initial Weight	Final Volume
Run #1	5.14 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	MQL	SDL	Units	Q
71-43-2	Benzene	0.00059 U	0.0045	0.00059	mg/kg	
108-88-3	Toluene	0.00078 U	0.0045	0.00078	mg/kg	
100-41-4	Ethylbenzene	0.00078 U	0.0045	0.00078	mg/kg	
1330-20-7	Xylene (total)	0.0015 U	0.013	0.0015	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	0.00075 U	0.0045	0.00075	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		70-121%
2037-26-5	Toluene-D8	115%		76-132%
460-00-4	4-Bromofluorobenzene	97%		73-165%
17060-07-0	1,2-Dichloroethane-D4	83%		57-122%

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-9@14-16'		
Lab Sample ID:	TC6964-10	Date Sampled:	04/25/12
Matrix:	SO - Soil	Date Received:	04/27/12
Method:	TNRCC 1005 TX1005	Percent Solids:	86.9
Project:	Clinton Drive/ 8321		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	JF29798.D	1	05/03/12	NW	05/02/12	OP23241	GJF406
Run #2							

	Initial Weight	Final Volume
Run #1	10.3 g	10.0 ml
Run #2		

CAS No.	Compound	Result	MQL	SDL	Units	Q
	TPH (C6-C12)	4.6 U	28	4.6	mg/kg	
	TPH (>C12-C28)	4.7 U	28	4.7	mg/kg	
	TPH (>C28-C35)	4.7 U	28	4.7	mg/kg	
	TPH (C6-C35)	4.6 U	28	4.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	123%		70-130%
98-08-8	aaa-Trifluorotoluene	111%		70-130%

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-10@6-8'		
Lab Sample ID:	TC6964-11	Date Sampled:	04/26/12
Matrix:	SO - Soil	Date Received:	04/27/12
Method:	SW846 8260B SW846 5030A	Percent Solids:	83.3
Project:	Clinton Drive/ 8321		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q005637.D	1	05/03/12	LT	04/27/12 16:01	n/a	VQ224
Run #2							

	Initial Weight	Final Volume
Run #1	5.58 g	5.0 ml
Run #2		

VOA 8260 List

CAS No.	Compound	Result	MQL	SDL	Units	Q
67-64-1	Acetone	0.011 U	0.043	0.011	mg/kg	
71-43-2	Benzene	0.00057 U	0.0043	0.00057	mg/kg	
108-86-1	Bromobenzene	0.00084 U	0.0043	0.00084	mg/kg	
74-97-5	Bromochloromethane	0.0010 U	0.0043	0.0010	mg/kg	
75-27-4	Bromodichloromethane	0.00063 U	0.0043	0.00063	mg/kg	
75-25-2	Bromoform	0.0011 U	0.0043	0.0011	mg/kg	
104-51-8	n-Butylbenzene	0.00095 U	0.0043	0.00095	mg/kg	
135-98-8	sec-Butylbenzene	0.00077 U	0.0043	0.00077	mg/kg	
98-06-6	tert-Butylbenzene	0.00076 U	0.0043	0.00076	mg/kg	
108-90-7	Chlorobenzene	0.00052 U	0.0043	0.00052	mg/kg	
75-00-3	Chloroethane	0.00099 U	0.0043	0.00099	mg/kg	
67-66-3	Chloroform	0.00072 U	0.0043	0.00072	mg/kg	
95-49-8	o-Chlorotoluene	0.00070 U	0.0043	0.00070	mg/kg	
106-43-4	p-Chlorotoluene	0.00099 U	0.0043	0.00099	mg/kg	
75-15-0	Carbon disulfide	0.00075 U	0.0043	0.00075	mg/kg	
56-23-5	Carbon tetrachloride	0.00074 U	0.0043	0.00074	mg/kg	
75-34-3	1,1-Dichloroethane	0.00074 U	0.0043	0.00074	mg/kg	
75-35-4	1,1-Dichloroethylene	0.00086 U	0.0043	0.00086	mg/kg	
563-58-6	1,1-Dichloropropene	0.0010 U	0.0043	0.0010	mg/kg	
96-12-8	1,2-Dibromo-3-chloropropane	0.0016 U	0.0043	0.0016	mg/kg	
106-93-4	1,2-Dibromoethane	0.00098 U	0.0043	0.00098	mg/kg	
107-06-2	1,2-Dichloroethane	0.00073 U	0.0043	0.00073	mg/kg	
78-87-5	1,2-Dichloropropane	0.00091 U	0.0043	0.00091	mg/kg	
142-28-9	1,3-Dichloropropane	0.00099 U	0.0043	0.00099	mg/kg	
594-20-7	2,2-Dichloropropane	0.00086 U	0.0043	0.00086	mg/kg	
124-48-1	Dibromochloromethane	0.00088 U	0.0043	0.00088	mg/kg	
75-71-8	Dichlorodifluoromethane	0.0043 U	0.0043	0.0043	mg/kg	
156-59-2	cis-1,2-Dichloroethylene	0.00099 U	0.0043	0.00099	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	0.00054 U	0.0043	0.00054	mg/kg	
541-73-1	m-Dichlorobenzene	0.00077 U	0.0043	0.00077	mg/kg	
95-50-1	o-Dichlorobenzene	0.00062 U	0.0043	0.00062	mg/kg	
106-46-7	p-Dichlorobenzene	0.00074 U	0.0043	0.00074	mg/kg	

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-10@6-8'		
Lab Sample ID:	TC6964-11	Date Sampled:	04/26/12
Matrix:	SO - Soil	Date Received:	04/27/12
Method:	SW846 8260B SW846 5030A	Percent Solids:	83.3
Project:	Clinton Drive/ 8321		

VOA 8260 List

CAS No.	Compound	Result	MQL	SDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	0.00084 U	0.0043	0.00084	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	0.00069 U	0.0043	0.00069	mg/kg	
100-41-4	Ethylbenzene	0.00075 U	0.0043	0.00075	mg/kg	
591-78-6	2-Hexanone	0.0045 U	0.043	0.0045	mg/kg	
87-68-3	Hexachlorobutadiene	0.00091 U	0.0043	0.00091	mg/kg	
98-82-8	Isopropylbenzene	0.00070 U	0.0043	0.00070	mg/kg	
99-87-6	p-Isopropyltoluene	0.00055 U	0.0043	0.00055	mg/kg	
108-10-1	4-Methyl-2-pentanone	0.0049 U	0.043	0.0049	mg/kg	
74-83-9	Methyl bromide	0.0012 U	0.0043	0.0012	mg/kg	
74-87-3	Methyl chloride	0.00095 U	0.0043	0.00095	mg/kg	
74-95-3	Methylene bromide	0.00078 U	0.0043	0.00078	mg/kg	
75-09-2	Methylene chloride	0.0037	0.011	0.0027	mg/kg	JB
78-93-3	Methyl ethyl ketone	0.0063 U	0.043	0.0063	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	0.00072 U	0.0043	0.00072	mg/kg	
91-20-3	Naphthalene	0.0022 U	0.0043	0.0022	mg/kg	
103-65-1	n-Propylbenzene	0.00083 U	0.0043	0.00083	mg/kg	
100-42-5	Styrene	0.00066 U	0.0043	0.00066	mg/kg	
630-20-6	1,1,1,2-Tetrachloroethane	0.00092 U	0.0043	0.00092	mg/kg	
71-55-6	1,1,1-Trichloroethane	0.00093 U	0.0043	0.00093	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	0.0013 U	0.0043	0.0013	mg/kg	
79-00-5	1,1,2-Trichloroethane	0.0010 U	0.0043	0.0010	mg/kg	
87-61-6	1,2,3-Trichlorobenzene	0.00094 U	0.0043	0.00094	mg/kg	
96-18-4	1,2,3-Trichloropropane	0.0018 U	0.0043	0.0018	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	0.00091 U	0.0043	0.00091	mg/kg	
95-63-6	1,2,4-Trimethylbenzene	0.00069 U	0.0043	0.00069	mg/kg	
108-67-8	1,3,5-Trimethylbenzene	0.00064 U	0.0043	0.00064	mg/kg	
127-18-4	Tetrachloroethylene	0.0010 U	0.0043	0.0010	mg/kg	
108-88-3	Toluene	0.00075 U	0.0043	0.00075	mg/kg	
79-01-6	Trichloroethylene	0.0010 U	0.0043	0.0010	mg/kg	
75-69-4	Trichlorofluoromethane	0.0012 U	0.0043	0.0012	mg/kg	
75-01-4	Vinyl chloride	0.0012 U	0.0043	0.0012	mg/kg	
1330-20-7	Xylene (total)	0.0015 U	0.013	0.0015	mg/kg	
	m,p-Xylene	0.00087 U	0.0086	0.00087	mg/kg	
95-47-6	o-Xylene	0.00060 U	0.0043	0.00060	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		70-121%
2037-26-5	Toluene-D8	114%		76-132%
460-00-4	4-Bromofluorobenzene	97%		73-165%

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-10@6-8'		
Lab Sample ID:	TC6964-11	Date Sampled:	04/26/12
Matrix:	SO - Soil	Date Received:	04/27/12
Method:	SW846 8260B SW846 5030A	Percent Solids:	83.3
Project:	Clinton Drive/ 8321		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	89%		57-122%

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-10@6-8'		
Lab Sample ID:	TC6964-11	Date Sampled:	04/26/12
Matrix:	SO - Soil	Date Received:	04/27/12
Method:	TNRCC 1005 TX1005	Percent Solids:	83.3
Project:	Clinton Drive/ 8321		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LB071040.D	1	05/03/12	RM	04/30/12	OP23218	GLB1043
Run #2							

	Initial Weight	Final Volume
Run #1	10.4 g	10.0 ml
Run #2		

CAS No.	Compound	Result	MQL	SDL	Units	Q
	TPH (C6-C12)	4.8 U	29	4.8	mg/kg	
	TPH (>C12-C28)	4.8 U	29	4.8	mg/kg	
	TPH (>C28-C35)	4.8 U	29	4.8	mg/kg	
	TPH (C6-C35)	4.8 U	29	4.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	97%		70-130%
98-08-8	aaa-Trifluorotoluene	94%		70-130%

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-11@2-4'		
Lab Sample ID:	TC6964-12	**Date Sampled:**	04/26/12
Matrix:	SO - Soil	**Date Received:**	04/27/12
Method:	SW846 8260B SW846 5030A	**Percent Solids:**	78.0
Project:	Clinton Drive/ 8321		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q005627.D	1	05/03/12	LT	04/27/12 16:01	n/a	VQ224
Run #2							

	Initial Weight	Final Volume
Run #1	5.31 g	5.0 ml
Run #2		

VOA 8260 List

CAS No.	Compound	Result	MQL	SDL	Units	Q
67-64-1	Acetone	0.0275	0.048	0.012	mg/kg	J
71-43-2	Benzene	0.00064 U	0.0048	0.00064	mg/kg	
108-86-1	Bromobenzene	0.00094 U	0.0048	0.00094	mg/kg	
74-97-5	Bromochloromethane	0.0011 U	0.0048	0.0011	mg/kg	
75-27-4	Bromodichloromethane	0.00071 U	0.0048	0.00071	mg/kg	
75-25-2	Bromoform	0.0012 U	0.0048	0.0012	mg/kg	
104-51-8	n-Butylbenzene	0.0011 U	0.0048	0.0011	mg/kg	
135-98-8	sec-Butylbenzene	0.00086 U	0.0048	0.00086	mg/kg	
98-06-6	tert-Butylbenzene	0.00085 U	0.0048	0.00085	mg/kg	
108-90-7	Chlorobenzene	0.00058 U	0.0048	0.00058	mg/kg	
75-00-3	Chloroethane	0.0011 U	0.0048	0.0011	mg/kg	
67-66-3	Chloroform	0.00081 U	0.0048	0.00081	mg/kg	
95-49-8	o-Chlorotoluene	0.00079 U	0.0048	0.00079	mg/kg	
106-43-4	p-Chlorotoluene	0.0011 U	0.0048	0.0011	mg/kg	
75-15-0	Carbon disulfide	0.00084 U	0.0048	0.00084	mg/kg	
56-23-5	Carbon tetrachloride	0.00084 U	0.0048	0.00084	mg/kg	
75-34-3	1,1-Dichloroethane	0.00083 U	0.0048	0.00083	mg/kg	
75-35-4	1,1-Dichloroethylene	0.00097 U	0.0048	0.00097	mg/kg	
563-58-6	1,1-Dichloropropene	0.0012 U	0.0048	0.0012	mg/kg	
96-12-8	1,2-Dibromo-3-chloropropane	0.0018 U	0.0048	0.0018	mg/kg	
106-93-4	1,2-Dibromoethane	0.0011 U	0.0048	0.0011	mg/kg	
107-06-2	1,2-Dichloroethane	0.00082 U	0.0048	0.00082	mg/kg	
78-87-5	1,2-Dichloropropane	0.0010 U	0.0048	0.0010	mg/kg	
142-28-9	1,3-Dichloropropane	0.0011 U	0.0048	0.0011	mg/kg	
594-20-7	2,2-Dichloropropane	0.00096 U	0.0048	0.00096	mg/kg	
124-48-1	Dibromochloromethane	0.00099 U	0.0048	0.00099	mg/kg	
75-71-8	Dichlorodifluoromethane	0.0048 U	0.0048	0.0048	mg/kg	
156-59-2	cis-1,2-Dichloroethylene	0.0011 U	0.0048	0.0011	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	0.00061 U	0.0048	0.00061	mg/kg	
541-73-1	m-Dichlorobenzene	0.00086 U	0.0048	0.00086	mg/kg	
95-50-1	o-Dichlorobenzene	0.00069 U	0.0048	0.00069	mg/kg	
106-46-7	p-Dichlorobenzene	0.00084 U	0.0048	0.00084	mg/kg	

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-11@2-4'		
Lab Sample ID:	TC6964-12	Date Sampled:	04/26/12
Matrix:	SO - Soil	Date Received:	04/27/12
Method:	SW846 8260B SW846 5030A	Percent Solids:	78.0
Project:	Clinton Drive/ 8321		

VOA 8260 List

CAS No.	Compound	Result	MQL	SDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	0.00095 U	0.0048	0.00095	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	0.00078 U	0.0048	0.00078	mg/kg	
100-41-4	Ethylbenzene	0.00084 U	0.0048	0.00084	mg/kg	
591-78-6	2-Hexanone	0.0051 U	0.048	0.0051	mg/kg	
87-68-3	Hexachlorobutadiene	0.0010 U	0.0048	0.0010	mg/kg	
98-82-8	Isopropylbenzene	0.00079 U	0.0048	0.00079	mg/kg	
99-87-6	p-Isopropyltoluene	0.00061 U	0.0048	0.00061	mg/kg	
108-10-1	4-Methyl-2-pentanone	0.0055 U	0.048	0.0055	mg/kg	
74-83-9	Methyl bromide	0.0014 U	0.0048	0.0014	mg/kg	
74-87-3	Methyl chloride	0.0011 U	0.0048	0.0011	mg/kg	
74-95-3	Methylene bromide	0.00088 U	0.0048	0.00088	mg/kg	
75-09-2	Methylene chloride [a]	0.0052	0.012	0.0030	mg/kg	J
78-93-3	Methyl ethyl ketone	0.0071 U	0.048	0.0071	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	0.00081 U	0.0048	0.00081	mg/kg	
91-20-3	Naphthalene	0.0024 U	0.0048	0.0024	mg/kg	
103-65-1	n-Propylbenzene	0.00093 U	0.0048	0.00093	mg/kg	
100-42-5	Styrene	0.00074 U	0.0048	0.00074	mg/kg	
630-20-6	1,1,1,2-Tetrachloroethane	0.0010 U	0.0048	0.0010	mg/kg	
71-55-6	1,1,1-Trichloroethane	0.0010 U	0.0048	0.0010	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	0.0014 U	0.0048	0.0014	mg/kg	
79-00-5	1,1,2-Trichloroethane	0.0011 U	0.0048	0.0011	mg/kg	
87-61-6	1,2,3-Trichlorobenzene	0.0011 U	0.0048	0.0011	mg/kg	
96-18-4	1,2,3-Trichloropropane	0.0020 U	0.0048	0.0020	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	0.0010 U	0.0048	0.0010	mg/kg	
95-63-6	1,2,4-Trimethylbenzene	0.00077 U	0.0048	0.00077	mg/kg	
108-67-8	1,3,5-Trimethylbenzene	0.00072 U	0.0048	0.00072	mg/kg	
127-18-4	Tetrachloroethylene	0.0011 U	0.0048	0.0011	mg/kg	
108-88-3	Toluene	0.00084 U	0.0048	0.00084	mg/kg	
79-01-6	Trichloroethylene	0.0012 U	0.0048	0.0012	mg/kg	
75-69-4	Trichlorofluoromethane	0.0013 U	0.0048	0.0013	mg/kg	
75-01-4	Vinyl chloride	0.0013 U	0.0048	0.0013	mg/kg	
1330-20-7	Xylene (total)	0.0016 U	0.014	0.0016	mg/kg	
	m,p-Xylene	0.00098 U	0.0097	0.00098	mg/kg	
95-47-6	o-Xylene	0.00067 U	0.0048	0.00067	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		70-121%
2037-26-5	Toluene-D8	116%		76-132%
460-00-4	4-Bromofluorobenzene	99%		73-165%

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-11@2-4'	Date Sampled:	04/26/12
Lab Sample ID:	TC6964-12	Date Received:	04/27/12
Matrix:	SO - Soil	Percent Solids:	78.0
Method:	SW846 8260B SW846 5030A		
Project:	Clinton Drive/ 8321		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	83%		57-122%

(a) Suspected laboratory contaminant.

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-11@2-4'		
Lab Sample ID:	TC6964-12	**Date Sampled:**	04/26/12
Matrix:	SO - Soil	**Date Received:**	04/27/12
Method:	TNRCC 1005 TX1005	**Percent Solids:**	78.0
Project:	Clinton Drive/ 8321		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LF071041.D	1	05/03/12	RM	04/30/12	OP23218	GLF1042
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	10.0 ml
Run #2		

CAS No.	Compound	Result	MQL	SDL	Units	Q
	TPH (C6-C12)	5.3 U	32	5.3	mg/kg	
	TPH (>C12-C28)	5.3 U	32	5.3	mg/kg	
	TPH (>C28-C35)	5.3 U	32	5.3	mg/kg	
	TPH (C6-C35)	5.3 U	32	5.3	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	105%		70-130%
98-08-8	aaa-Trifluorotoluene	89%		70-130%

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-12@14-16'		
Lab Sample ID:	TC6964-13	Date Sampled:	04/26/12
Matrix:	SO - Soil	Date Received:	04/27/12
Method:	SW846 8260B SW846 5030A	Percent Solids:	83.2
Project:	Clinton Drive/ 8321		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q005638.D	1	05/03/12	LT	04/27/12 16:01	n/a	VQ224
Run #2							

	Initial Weight	Final Volume
Run #1	5.18 g	5.0 ml
Run #2		

VOA 8260 List

CAS No.	Compound	Result	MQL	SDL	Units	Q
67-64-1	Acetone	0.012 U	0.046	0.012	mg/kg	
71-43-2	Benzene	0.00061 U	0.0046	0.00061	mg/kg	
108-86-1	Bromobenzene	0.00090 U	0.0046	0.00090	mg/kg	
74-97-5	Bromochloromethane	0.0011 U	0.0046	0.0011	mg/kg	
75-27-4	Bromodichloromethane	0.00068 U	0.0046	0.00068	mg/kg	
75-25-2	Bromoform	0.0011 U	0.0046	0.0011	mg/kg	
104-51-8	n-Butylbenzene	0.0010 U	0.0046	0.0010	mg/kg	
135-98-8	sec-Butylbenzene	0.00083 U	0.0046	0.00083	mg/kg	
98-06-6	tert-Butylbenzene	0.00082 U	0.0046	0.00082	mg/kg	
108-90-7	Chlorobenzene	0.00056 U	0.0046	0.00056	mg/kg	
75-00-3	Chloroethane	0.0011 U	0.0046	0.0011	mg/kg	
67-66-3	Chloroform	0.00077 U	0.0046	0.00077	mg/kg	
95-49-8	o-Chlorotoluene	0.00076 U	0.0046	0.00076	mg/kg	
106-43-4	p-Chlorotoluene	0.0011 U	0.0046	0.0011	mg/kg	
75-15-0	Carbon disulfide	0.00081 U	0.0046	0.00081	mg/kg	
56-23-5	Carbon tetrachloride	0.00080 U	0.0046	0.00080	mg/kg	
75-34-3	1,1-Dichloroethane	0.00079 U	0.0046	0.00079	mg/kg	
75-35-4	1,1-Dichloroethylene	0.00093 U	0.0046	0.00093	mg/kg	
563-58-6	1,1-Dichloropropene	0.0011 U	0.0046	0.0011	mg/kg	
96-12-8	1,2-Dibromo-3-chloropropane	0.0018 U	0.0046	0.0018	mg/kg	
106-93-4	1,2-Dibromoethane	0.0011 U	0.0046	0.0011	mg/kg	
107-06-2	1,2-Dichloroethane	0.00079 U	0.0046	0.00079	mg/kg	
78-87-5	1,2-Dichloropropane	0.00098 U	0.0046	0.00098	mg/kg	
142-28-9	1,3-Dichloropropane	0.0011 U	0.0046	0.0011	mg/kg	
594-20-7	2,2-Dichloropropane	0.00092 U	0.0046	0.00092	mg/kg	
124-48-1	Dibromochloromethane	0.00095 U	0.0046	0.00095	mg/kg	
75-71-8	Dichlorodifluoromethane	0.0046 U	0.0046	0.0046	mg/kg	
156-59-2	cis-1,2-Dichloroethylene	0.0011 U	0.0046	0.0011	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	0.00058 U	0.0046	0.00058	mg/kg	
541-73-1	m-Dichlorobenzene	0.00083 U	0.0046	0.00083	mg/kg	
95-50-1	o-Dichlorobenzene	0.00066 U	0.0046	0.00066	mg/kg	
106-46-7	p-Dichlorobenzene	0.00080 U	0.0046	0.00080	mg/kg	

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-12@14-16'		
Lab Sample ID:	TC6964-13	Date Sampled:	04/26/12
Matrix:	SO - Soil	Date Received:	04/27/12
Method:	SW846 8260B SW846 5030A	Percent Solids:	83.2
Project:	Clinton Drive/ 8321		

VOA 8260 List

CAS No.	Compound	Result	MQL	SDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	0.00091 U	0.0046	0.00091	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	0.00075 U	0.0046	0.00075	mg/kg	
100-41-4	Ethylbenzene	0.00081 U	0.0046	0.00081	mg/kg	
591-78-6	2-Hexanone	0.0049 U	0.046	0.0049	mg/kg	
87-68-3	Hexachlorobutadiene	0.00098 U	0.0046	0.00098	mg/kg	
98-82-8	Isopropylbenzene	0.00076 U	0.0046	0.00076	mg/kg	
99-87-6	p-Isopropyltoluene	0.00059 U	0.0046	0.00059	mg/kg	
108-10-1	4-Methyl-2-pentanone	0.0053 U	0.046	0.0053	mg/kg	
74-83-9	Methyl bromide	0.0013 U	0.0046	0.0013	mg/kg	
74-87-3	Methyl chloride	0.0010 U	0.0046	0.0010	mg/kg	
74-95-3	Methylene bromide	0.00084 U	0.0046	0.00084	mg/kg	
75-09-2	Methylene chloride	0.0048	0.012	0.0029	mg/kg	JB
78-93-3	Methyl ethyl ketone	0.0068 U	0.046	0.0068	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	0.00078 U	0.0046	0.00078	mg/kg	
91-20-3	Naphthalene	0.0023 U	0.0046	0.0023	mg/kg	
103-65-1	n-Propylbenzene	0.00089 U	0.0046	0.00089	mg/kg	
100-42-5	Styrene	0.00071 U	0.0046	0.00071	mg/kg	
630-20-6	1,1,1,2-Tetrachloroethane	0.00099 U	0.0046	0.00099	mg/kg	
71-55-6	1,1,1-Trichloroethane	0.0010 U	0.0046	0.0010	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	0.0014 U	0.0046	0.0014	mg/kg	
79-00-5	1,1,2-Trichloroethane	0.0011 U	0.0046	0.0011	mg/kg	
87-61-6	1,2,3-Trichlorobenzene	0.0010 U	0.0046	0.0010	mg/kg	
96-18-4	1,2,3-Trichloropropane	0.0019 U	0.0046	0.0019	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	0.00098 U	0.0046	0.00098	mg/kg	
95-63-6	1,2,4-Trimethylbenzene	0.00074 U	0.0046	0.00074	mg/kg	
108-67-8	1,3,5-Trimethylbenzene	0.00069 U	0.0046	0.00069	mg/kg	
127-18-4	Tetrachloroethylene	0.0011 U	0.0046	0.0011	mg/kg	
108-88-3	Toluene	0.00081 U	0.0046	0.00081	mg/kg	
79-01-6	Trichloroethylene	0.0011 U	0.0046	0.0011	mg/kg	
75-69-4	Trichlorofluoromethane	0.0012 U	0.0046	0.0012	mg/kg	
75-01-4	Vinyl chloride	0.0013 U	0.0046	0.0013	mg/kg	
1330-20-7	Xylene (total)	0.0016 U	0.014	0.0016	mg/kg	
	m,p-Xylene	0.00094 U	0.0093	0.00094	mg/kg	
95-47-6	o-Xylene	0.00065 U	0.0046	0.00065	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		70-121%
2037-26-5	Toluene-D8	116%		76-132%
460-00-4	4-Bromofluorobenzene	97%		73-165%

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-12@14-16'		
Lab Sample ID:	TC6964-13	Date Sampled:	04/26/12
Matrix:	SO - Soil	Date Received:	04/27/12
Method:	TNRCC 1005 TX1005	Percent Solids:	83.2
Project:	Clinton Drive/ 8321		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	JB29799.D	1	05/03/12	NW	05/02/12	OP23241	GJB406
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	10.0 ml
Run #2		

CAS No.	Compound	Result	MQL	SDL	Units	Q
	TPH (C6-C12)	4.9 U	30	4.9	mg/kg	
	TPH (>C12-C28)	5.0 U	30	5.0	mg/kg	
	TPH (>C28-C35)	5.0 U	30	5.0	mg/kg	
	TPH (C6-C35)	4.9 U	30	4.9	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	115%		70-130%
98-08-8	aaa-Trifluorotoluene	112%		70-130%

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-13@4-6'		
Lab Sample ID:	TC6964-14	Date Sampled:	04/26/12
Matrix:	SO - Soil	Date Received:	04/27/12
Method:	SW846 8260B SW846 5030A	Percent Solids:	83.6
Project:	Clinton Drive/ 8321		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R008079.D	1	05/03/12	LT	04/27/12 17:05	n/a	VR155
Run #2							

	Initial Weight	Final Volume
Run #1	5.42 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	MQL	SDL	Units	Q
71-43-2	Benzene	0.00058 U	0.0044	0.00058	mg/kg	
108-88-3	Toluene	0.00077 U	0.0044	0.00077	mg/kg	
100-41-4	Ethylbenzene	0.00077 U	0.0044	0.00077	mg/kg	
1330-20-7	Xylene (total)	0.0015 U	0.013	0.0015	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	0.00074 U	0.0044	0.00074	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	76%		70-121%
2037-26-5	Toluene-D8	84%		76-132%
460-00-4	4-Bromofluorobenzene	81%		73-165%
17060-07-0	1,2-Dichloroethane-D4	74%		57-122%

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-13@4-6'		
Lab Sample ID:	TC6964-14	Date Sampled:	04/26/12
Matrix:	SO - Soil	Date Received:	04/27/12
Method:	TNRCC 1005 TX1005	Percent Solids:	83.6
Project:	Clinton Drive/ 8321		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LB071042.D	1	05/03/12	RM	04/30/12	OP23218	GLB1043
Run #2							

	Initial Weight	Final Volume
Run #1	10.3 g	10.0 ml
Run #2		

CAS No.	Compound	Result	MQL	SDL	Units	Q
	TPH (C6-C12)	4.8 U	29	4.8	mg/kg	
	TPH (>C12-C28)	4.8 U	29	4.8	mg/kg	
	TPH (>C28-C35)	4.8 U	29	4.8	mg/kg	
	TPH (C6-C35)	4.8 U	29	4.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	113%		70-130%
98-08-8	aaa-Trifluorotoluene	101%		70-130%

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-14@2-4'		
Lab Sample ID:	TC6964-15	Date Sampled:	04/26/12
Matrix:	SO - Soil	Date Received:	04/27/12
Method:	SW846 8260B SW846 5030A	Percent Solids:	79.5
Project:	Clinton Drive/ 8321		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R008080.D	1	05/03/12	LT	04/27/12 17:05	n/a	VR155
Run #2							

	Initial Weight	Final Volume
Run #1	5.29 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	MQL	SDL	Units	Q
71-43-2	Benzene	0.00063 U	0.0048	0.00063	mg/kg	
108-88-3	Toluene	0.00083 U	0.0048	0.00083	mg/kg	
100-41-4	Ethylbenzene	0.00083 U	0.0048	0.00083	mg/kg	
1330-20-7	Xylene (total)	0.0016 U	0.014	0.0016	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	0.00080 U	0.0048	0.00080	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	77%		70-121%
2037-26-5	Toluene-D8	88%		76-132%
460-00-4	4-Bromofluorobenzene	83%		73-165%
17060-07-0	1,2-Dichloroethane-D4	74%		57-122%

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-14@2-4'		
Lab Sample ID:	TC6964-15	**Date Sampled:**	04/26/12
Matrix:	SO - Soil	**Date Received:**	04/27/12
Method:	TNRCC 1005 TX1005	**Percent Solids:**	79.5
Project:	Clinton Drive/ 8321		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LF071043.D	1	05/03/12	RM	04/30/12	OP23218	GLF1042
Run #2							

	Initial Weight	Final Volume
Run #1	10.2 g	10.0 ml
Run #2		

CAS No.	Compound	Result	MQL	SDL	Units	Q
	TPH (C6-C12)	5.1 U	31	5.1	mg/kg	
	TPH (> C12-C28)	5.1 U	31	5.1	mg/kg	
	TPH (> C28-C35)	5.1 U	31	5.1	mg/kg	
	TPH (C6-C35)	5.1 U	31	5.1	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	109%		70-130%
98-08-8	aaa-Trifluorotoluene	87%		70-130%

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-15@8-10'		
Lab Sample ID:	TC6964-16	Date Sampled:	04/26/12
Matrix:	SO - Soil	Date Received:	04/27/12
Method:	SW846 8260B SW846 5030A	Percent Solids:	78.8
Project:	Clinton Drive/ 8321		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R008076.D	1	05/03/12	LT	04/27/12 17:05	n/a	VR155
Run #2							

	Initial Weight	Final Volume
Run #1	5.31 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	MQL	SDL	Units	Q
71-43-2	Benzene	0.00063 U	0.0048	0.00063	mg/kg	
108-88-3	Toluene	0.00083 U	0.0048	0.00083	mg/kg	
100-41-4	Ethylbenzene	0.00083 U	0.0048	0.00083	mg/kg	
1330-20-7	Xylene (total)	0.0016 U	0.014	0.0016	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	0.00080 U	0.0048	0.00080	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	66% [a]		70-121%
2037-26-5	Toluene-D8	86%		76-132%
460-00-4	4-Bromofluorobenzene	84%		73-165%
17060-07-0	1,2-Dichloroethane-D4	66%		57-122%

(a) Outside control limits due to matrix interference. Confirmed by MS/MSD.

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-15@8-10'		
Lab Sample ID:	TC6964-16	**Date Sampled:**	04/26/12
Matrix:	SO - Soil	**Date Received:**	04/27/12
Method:	TNRCC 1005 TX1005	**Percent Solids:**	78.8
Project:	Clinton Drive/ 8321		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LB071050.D	1	05/03/12	RM	04/30/12	OP23218	GLB1043
Run #2							

	Initial Weight	Final Volume
Run #1	10.2 g	10.0 ml
Run #2		

CAS No.	Compound	Result	MQL	SDL	Units	Q
	TPH (C6-C12)	5.2 U	31	5.2	mg/kg	
	TPH (>C12-C28)	5.2 U	31	5.2	mg/kg	
	TPH (>C28-C35)	5.2 U	31	5.2	mg/kg	
	TPH (C6-C35)	5.2 U	31	5.2	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	102%		70-130%
98-08-8	aaa-Trifluorotoluene	110%		70-130%

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-16@8-10'		
Lab Sample ID:	TC6964-17	Date Sampled:	04/26/12
Matrix:	SO - Soil	Date Received:	04/27/12
Method:	SW846 8260B SW846 5030A	Percent Solids:	85.1
Project:	Clinton Drive/ 8321		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y0052062.D	1	05/04/12	LT	04/27/12 17:05	n/a	VY3017
Run #2							

	Initial Weight	Final Volume
Run #1	5.12 g	5.0 ml
Run #2		

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	MQL	SDL	Units	Q
71-43-2	Benzene	0.00061 U	0.0046	0.00061	mg/kg	
108-88-3	Toluene	0.00080 U	0.0046	0.00080	mg/kg	
100-41-4	Ethylbenzene	0.00080 U	0.0046	0.00080	mg/kg	
1330-20-7	Xylene (total)	0.0016 U	0.014	0.0016	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	0.00077 U	0.0046	0.00077	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		70-121%
2037-26-5	Toluene-D8	102%		76-132%
460-00-4	4-Bromofluorobenzene	91%		73-165%
17060-07-0	1,2-Dichloroethane-D4	100%		57-122%

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-16@8-10'		
Lab Sample ID:	TC6964-17	Date Sampled:	04/26/12
Matrix:	SO - Soil	Date Received:	04/27/12
Method:	TNRCC 1005 TX1005	Percent Solids:	85.1
Project:	Clinton Drive/ 8321		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LF071051.D	1	05/03/12	RM	04/30/12	OP23218	GLF1042
Run #2							

	Initial Weight	Final Volume
Run #1	10.2 g	10.0 ml
Run #2		

CAS No.	Compound	Result	MQL	SDL	Units	Q
	TPH (C6-C12)	4.8 U	29	4.8	mg/kg	
	TPH (>C12-C28)	4.8 U	29	4.8	mg/kg	
	TPH (>C28-C35)	4.8 U	29	4.8	mg/kg	
	TPH (C6-C35)	4.8 U	29	4.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	105%		70-130%
98-08-8	aaa-Trifluorotoluene	87%		70-130%

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-17@4-6'		
Lab Sample ID:	TC6964-18	Date Sampled:	04/26/12
Matrix:	SO - Soil	Date Received:	04/27/12
Method:	SW846 8260B SW846 5030A	Percent Solids:	81.2
Project:	Clinton Drive/ 8321		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y0052063.D	1	05/04/12	LT	04/27/12 17:05	n/a	VY3017
Run #2							

	Initial Weight	Final Volume
Run #1	5.26 g	5.0 ml
Run #2		

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	MQL	SDL	Units	Q
71-43-2	Benzene	0.00062 U	0.0047	0.00062	mg/kg	
108-88-3	Toluene	0.00082 U	0.0047	0.00082	mg/kg	
100-41-4	Ethylbenzene	0.00081 U	0.0047	0.00081	mg/kg	
1330-20-7	Xylene (total)	0.0016 U	0.014	0.0016	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	0.00079 U	0.0047	0.00079	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		70-121%
2037-26-5	Toluene-D8	104%		76-132%
460-00-4	4-Bromofluorobenzene	106%		73-165%
17060-07-0	1,2-Dichloroethane-D4	96%		57-122%

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-17@4-6'		
Lab Sample ID:	TC6964-18	**Date Sampled:**	04/26/12
Matrix:	SO - Soil	**Date Received:**	04/27/12
Method:	TNRCC 1005 TX1005	**Percent Solids:**	81.2
Project:	Clinton Drive/ 8321		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LB071052.D	1	05/04/12	RM	04/30/12	OP23218	GLB1043
Run #2							

	Initial Weight	Final Volume
Run #1	10.2 g	10.0 ml
Run #2		

CAS No.	Compound	Result	MQL	SDL	Units	Q
	TPH (C6-C12)	5.0 U	30	5.0	mg/kg	
	TPH (>C12-C28)	5.0 U	30	5.0	mg/kg	
	TPH (>C28-C35)	5.0 U	30	5.0	mg/kg	
	TPH (C6-C35)	5.0 U	30	5.0	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	108%		70-130%
98-08-8	aaa-Trifluorotoluene	109%		70-130%

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-18@14-16'		
Lab Sample ID:	TC6964-19	Date Sampled:	04/26/12
Matrix:	SO - Soil	Date Received:	04/27/12
Method:	SW846 8260B SW846 5030A	Percent Solids:	79.8
Project:	Clinton Drive/ 8321		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q005661.D	1	05/05/12	LT	04/27/12 17:01	n/a	VQ226
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	MQL	SDL	Units	Q
71-43-2	Benzene	0.00066 U	0.0050	0.00066	mg/kg	
108-88-3	Toluene	0.00087 U	0.0050	0.00087	mg/kg	
100-41-4	Ethylbenzene	0.00087 U	0.0050	0.00087	mg/kg	
1330-20-7	Xylene (total)	0.0017 U	0.015	0.0017	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	0.00084 U	0.0050	0.00084	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		70-121%
2037-26-5	Toluene-D8	115%		76-132%
460-00-4	4-Bromofluorobenzene	97%		73-165%
17060-07-0	1,2-Dichloroethane-D4	83%		57-122%

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-18@14-16'		
Lab Sample ID:	TC6964-19	Date Sampled:	04/26/12
Matrix:	SO - Soil	Date Received:	04/27/12
Method:	TNRCC 1005 TX1005	Percent Solids:	79.8
Project:	Clinton Drive/ 8321		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LF071053.D	1	05/04/12	RM	04/30/12	OP23218	GLF1042
Run #2							

	Initial Weight	Final Volume
Run #1	10.6 g	10.0 ml
Run #2		

CAS No.	Compound	Result	MQL	SDL	Units	Q
	TPH (C6-C12)	4.9 U	30	4.9	mg/kg	
	TPH (> C12-C28)	4.9 U	30	4.9	mg/kg	
	TPH (> C28-C35)	4.9 U	30	4.9	mg/kg	
	TPH (C6-C35)	4.9 U	30	4.9	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	83%		70-130%
98-08-8	aaa-Trifluorotoluene	85%		70-130%

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Gulf Coast ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

CHAIN OF CUSTODY

ACCUTEST LABORATORIES

10165 Harwin Dr, Ste 150 Houston, TX 77036
TEL. 713-271-4700 FAX: 713-271-4770
www.accutest.com

FED-EX Tracking #:
Bottle Order Control #:
Accutest Quote #:
Accutest Job #: TC6964

Client / Reporting Information

Company Name: Berg-Oliver Associates, Inc.
Street Address: 14701 St. Mary's Ln, Ste 400
City: Hou State: Tx Zip: 77079
Project Contact: Tom Murphy E-mail: cathie
Phone #: 281.589.0898 Fax #: 281.584.0007
Sampler(s) Name(s): Phone #:

Project Information

Project Name: Clinton Drive
Street: Clinton Drive
City: Hou State: Tx
Project #: 8321
Client Purchase Order #: —
Project Manager: Tim Murphy
Billing Information (If different from Report to)
Company Name:
Street Address: Same
City: State: Zip:
Attention:

Requested Analyses

TPH (Tx1005) | BTEX (8260) | VOCs (8260)

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; SED - Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB - Field Blank; EB - Equipment Blank; RB - Rinse Blank; TB - Trip Blank

Accutest Sample #	Field ID / Point of Collection	Collection Date	Collection Time	Sampled By	Matrix	# of bottles	Number of preserved bottles (HCl, MeOH, ZnAcO4, HNO3, H2SO4, NONE, DI Water, MeOH, TSP, NaHSO4, ENCORE, OTHER)	TPH (Tx1005)	BTEX (8260)	VOCs (8260)	LAB USE ONLY
1	SB-1 @ 14-16'	04/25/12	915	TM	SO	1		X		X	
2	SB-2 @ 4-6'		952			1		X		X	
3	SB-3 @ 8-10'		1030			1		X		X	
4	SB-4 @ 2-4'		1054			1		X		X	
5	SB-5 @ 8-10'		1226			1		X		X	
6	SB-6 @ 2-4'		1243			1		X		X	
7	SB/TWP-4		1136		GW	6	HCl	X		X	
8	SB-7 @ 6-8'		1444		SO	1		X	X		
9	SB-8 @ 2-4'		1507					X	X		
10	SB-9 @ 14-16'		1616					X	X		
11	SB-10 @ 6-8'	04/26/12	841					X		X	
12	SB-11 @ 2-4'		923					X		X	

Turnaround Time (Business days)

- [x] Standard
- [ ] 5 Day RUSH
- [ ] 4 Day RUSH
- [ ] 3 Day RUSH
- [ ] 2 Day RUSH
- [ ] 1 Day EMERGENCY

Emergency & Rush T/A data available VIA Labtrack

Approved By (Accutest PM): / Date:

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULT1 (Level 3+4)
- [ ] REDT1 (Level 3+4)
- [ ] Commercial "C"
- [x] TRRP
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
Commercial "C" = Results + QC & Surrogate Summary

Comments / Special Instructions

- Run TCEQ TRRP Tier 1 0.5
- Acre Res. PCLs only
- Run Percent Moisture

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1 Tim Murphy	04/27/12	1	2	4-27-12 1450	2
Relinquished by Sampler: 3	Date Time: 1152	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal #	[ ] Intact [ ] Not intact	Preserved where applicable [ ] On Ice [ ] Cooler Temp.

TC6964: Chain of Custody
Page 1 of 5

CHAIN OF CUSTODY

ACCUTEST LABORATORIES

10165 Harwin Dr, Ste 150 Houston, TX 77036
TEL. 713-271-4700 FAX: 713-271-4770
www.accutest.com

FED-EX Tracking #:
Accutest Quote #:
Sample Order Control #: TC6964
Accutest Job #:

Client / Reporting Information

Company Name: Berg-Oliver Associates, Inc
Street Address: 14701 St. Marys Ln, Ste 400
City: Hou State: Tx Zip: 77079
Project Contact: Tom Murphy E-mail:
Phone #: 281.589.0898 Fax #: 281.589.0007
Sampler(s) Name(s): Phone #:

Project Information

Project Name: Clinton Drive
Street: Clinton Drive
City: Hou State: Tx
Project #: 8321
Client Purchase Order #: —
Project Manager: Tom Murphy
Billing Information (if different from Report to):
Company Name:
Street Address: Same
City: State: Zip:
Attention:

Requested Analyses: TPH (Tx 1005); BTEX (8260); VOCs (8260)

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB-Field Blank; EB-Equipment Blank; RB- Rinse Blank; TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	Collection Date	Collection Time	Sampled By	Matrix	# of bottles	HCl	MeOH	ZnAc/NaOH	HNO3	H2SO4	NONE	DI Water	MeOH	TSP	NaHSO4	ENCORE	OTHER	TPH (Tx 1005)	BTEX (8260)	VOCs (8260)	LAB USE ONLY
13	SB-12 @ 14-16'	04/26/12	1010	TM	SO	1													X		X	
14	SB-13 @ 4-6'		1034																X	X		
15	SB-14 @ 2-4'		1107																X	X		
16	SB-15 @ 8-10'		1230																X	X		
17	SB-16 @ 8-10'		1331																X	X		
18	SB-17 @ 4-6'		1433																X	X		
19	SB-18 @ 14-16'		1529																X	X		

Turnaround Time (Business days)

- [x] Standard
- [ ] 5 Day RUSH
- [ ] 4 Day RUSH
- [ ] 3 Day RUSH
- [ ] 2 Day RUSH
- [ ] 1 Day EMERGENCY

Approved By (Accutest PM): / Date:

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [x] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULT1 (Level 3+4)
- [ ] REDT1 (Level 3+4)
- [ ] Commercial "C"
- [x] TRRP
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
Commercial "C" = Results + QC & Surrogate Summary

Comments / Special Instructions

- Run T(EQ) TRRP Tier 1 0.5-A
Res PCLs only
- Run Percent Moisture

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1 TMurphy	04/27/12	1	2	4-27-12	2
Relinquished by Sampler: 3	Date Time: 1152	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal #	Intact / Not Intact	Preserved where applicable / On Ice / Cooler Temp.

TC6964: Chain of Custody
Page 2 of 5

ACCUTEST LABORATORIES

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: TC6964 Client: BERG-OLIVER ASSOCIATES Project: CLINTON DRIVE

Date / Time Received: 4/27/2012 Delivery Method: Airbill #'s:

No. Coolers: 1 Therm ID: 8095; Temp Adjustment Factor: 0;

Cooler Temps (Initial/Adjusted): #1: (2/2);

Cooler Security	Y or N		Y or N
1. Custody Seals Present:	☑ ☐	3. COC Present:	☑ ☐
2. Custody Seals Intact:	☑ ☐	4. Smpl Dates/Time OK	☑ ☐

Cooler Temperature	Y or N
1. Temp criteria achieved:	☑ ☐
2. Cooler temp verification:	
3. Cooler media:	Ice (Bag)

Quality Control Preservation	Y or N	N/A	WTB	STB
1. Trip Blank present / cooler:	☐ ☑	☐	☐	☐
2. Trip Blank listed on COC:	☐ ☑	☐		
3. Samples preserved properly:	☑ ☐			
4. VOCs headspace free:	☑ ☐	☐		

Sample Integrity - Documentation	Y or N
1. Sample labels present on bottles:	☑ ☐
2. Container labeling complete:	☑ ☐
3. Sample container label / COC agree:	☑ ☐

Sample Integrity - Condition	Y or N
1. Sample recvd within HT:	☑ ☐
2. All containers accounted for:	☑ ☐
3. Condition of sample:	Intact

Sample Integrity - Instructions	Y or N	N/A
1. Analysis requested is clear:	☑ ☐	
2. Bottles received for unspecified tests	☐ ☑	
3. Sufficient volume recvd for analysis:	☑ ☐	
4. Compositing instructions clear:	☐ ☐	☑
5. Filtering instructions clear:	☐ ☐	☑

Comments

ACCUTEST LABORATORIES

Sample Receipt Log

Job #: TC6964 **Date / Time Received:** 4/27/2012 2:55:00 PM **Initials:** BG

Client: BERG-OLIVER ASSOCIATES

Cooler #	Sample ID:	Vol	Bot #	Location	Pres	pH	Therm ID	Initial Temp	Therm CF	Corrected Temp
1	TC6964-1	4oz	1	VR	N					
1	TC6964-2	4oz	1	VR	N					
1	TC6964-3	4oz	1	VR	N		8095	2	0	2
1	TC6964-4	4oz	1	VR	N		8095	2	0	2
1	TC6964-5	4oz	1	VR	N		8095	2	0	2
1	TC6964-6	4oz	1	VR	N		8095	2	0	2
1	TC6964-7	40ml	1	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	8095	2	0	2
1	TC6964-7	40ml	2	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	8095	2	0	2
1	TC6964-7	40ml	3	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	8095	2	0	2
1	TC6964-7	40ml	4	4NN	HCL	pH < 2	8095	2	0	2
1	TC6964-7	40ml	5	4NN	HCL	pH < 2	8095	2	0	2
1	TC6964-7	40ml	6	4NN	HCL	pH < 2	8095	2	0	2
1	TC6964-8	4oz	1	VR	N		8095	2	0	2
1	TC6964-9	4oz	1	VR	N		8095	2	0	2
1	TC6964-10	4oz	1	VR	N		8095	2	0	2
1	TC6964-11	4oz	1	VR	N		8095	2	0	2
1	TC6964-12	4oz	1	VR	N		8095	2	0	2
1	TC6964-13	4oz	1	VR	N		8095	2	0	2
1	TC6964-14	4oz	1	VR	N		8095	2	0	2
1	TC6964-15	4oz	1	VR	N		8095	2	0	2
1	TC6964-16	4oz	1	VR	N		8095	2	0	2
1	TC6964-17	4oz	1	VR	N		8095	2	0	2
1	TC6964-18	4oz	1	VR	N		8095	2	0	2

ACCUTEST LABORATORIES

Sample Receipt Log

Job #: TC6964 **Date / Time Received:** 4/27/2012 2:55:00 PM **Initials:** BG

Client: BERG-OLIVER ASSOCIATES

Cooler #	Sample ID:	Vol	Bot #	Location	Pres	pH	Therm ID	Initial Temp	Therm CF	Corrected Temp
1	TC6964-19	4oz	1	VR	N		8095	2	0	2

Gulf Coast
ACCUTEST
LABORATORIES

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: TC6964
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VR153-MB	R008010.D	1	05/01/12	LT	n/a	n/a	VR153

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC6964-8

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	4.0	0.53	ug/kg	
100-41-4	Ethylbenzene	ND	4.0	0.70	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	4.0	0.67	ug/kg	
108-88-3	Toluene	ND	4.0	0.70	ug/kg	
1330-20-7	Xylene (total)	ND	12	1.4	ug/kg	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	80%	70-121%
2037-26-5	Toluene-D8	86%	76-132%
460-00-4	4-Bromofluorobenzene	78%	73-165%
17060-07-0	1,2-Dichloroethane-D4	74%	57-122%

Method Blank Summary

Job Number: TC6964
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VR154-MB	R008045.D	1	05/02/12	LT	n/a	n/a	VR154

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC6964-2, TC6964-3, TC6964-4, TC6964-5, TC6964-6

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	40	10	ug/kg	
71-43-2	Benzene	ND	4.0	0.53	ug/kg	
108-86-1	Bromobenzene	ND	4.0	0.78	ug/kg	
74-97-5	Bromochloromethane	ND	4.0	0.94	ug/kg	
75-27-4	Bromodichloromethane	ND	4.0	0.58	ug/kg	
75-25-2	Bromoform	ND	4.0	0.98	ug/kg	
104-51-8	n-Butylbenzene	ND	4.0	0.88	ug/kg	
135-98-8	sec-Butylbenzene	ND	4.0	0.71	ug/kg	
98-06-6	tert-Butylbenzene	ND	4.0	0.71	ug/kg	
108-90-7	Chlorobenzene	ND	4.0	0.48	ug/kg	
75-00-3	Chloroethane	ND	4.0	0.92	ug/kg	
67-66-3	Chloroform	ND	4.0	0.67	ug/kg	
95-49-8	o-Chlorotoluene	ND	4.0	0.65	ug/kg	
106-43-4	p-Chlorotoluene	ND	4.0	0.92	ug/kg	
75-15-0	Carbon disulfide	ND	4.0	0.70	ug/kg	
56-23-5	Carbon tetrachloride	ND	4.0	0.69	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.0	0.68	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	4.0	0.80	ug/kg	
563-58-6	1,1-Dichloropropene	ND	4.0	0.97	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.0	1.5	ug/kg	
106-93-4	1,2-Dibromoethane	ND	4.0	0.91	ug/kg	
107-06-2	1,2-Dichloroethane	ND	4.0	0.68	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.0	0.85	ug/kg	
142-28-9	1,3-Dichloropropane	ND	4.0	0.92	ug/kg	
594-20-7	2,2-Dichloropropane	ND	4.0	0.80	ug/kg	
124-48-1	Dibromochloromethane	ND	4.0	0.82	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.0	4.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	4.0	0.92	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.0	0.50	ug/kg	
541-73-1	m-Dichlorobenzene	ND	4.0	0.71	ug/kg	
95-50-1	o-Dichlorobenzene	ND	4.0	0.57	ug/kg	
106-46-7	p-Dichlorobenzene	ND	4.0	0.69	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	4.0	0.78	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.0	0.65	ug/kg	
100-41-4	Ethylbenzene	ND	4.0	0.70	ug/kg	
591-78-6	2-Hexanone	ND	40	4.2	ug/kg	

Method Blank Summary

Job Number: TC6964
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VR154-MB	R008045.D	1	05/02/12	LT	n/a	n/a	VR154

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC6964-2, TC6964-3, TC6964-4, TC6964-5, TC6964-6

CAS No.	Compound	Result	RL	MDL	Units	Q
87-68-3	Hexachlorobutadiene	ND	4.0	0.84	ug/kg	
98-82-8	Isopropylbenzene	ND	4.0	0.65	ug/kg	
99-87-6	p-Isopropyltoluene	ND	4.0	0.51	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	40	4.6	ug/kg	
74-83-9	Methyl bromide	ND	4.0	1.1	ug/kg	
74-87-3	Methyl chloride	ND	4.0	0.88	ug/kg	
74-95-3	Methylene bromide	ND	4.0	0.73	ug/kg	
75-09-2	Methylene chloride	ND	10	2.5	ug/kg	
78-93-3	Methyl ethyl ketone	ND	40	5.8	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	4.0	0.67	ug/kg	
91-20-3	Naphthalene	ND	4.0	2.0	ug/kg	
103-65-1	n-Propylbenzene	ND	4.0	0.77	ug/kg	
100-42-5	Styrene	ND	4.0	0.62	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	4.0	0.86	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	4.0	0.87	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.0	1.2	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.0	0.95	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.0	0.88	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	4.0	1.7	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.0	0.85	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	4.0	0.64	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	4.0	0.60	ug/kg	
127-18-4	Tetrachloroethylene	ND	4.0	0.93	ug/kg	
108-88-3	Toluene	ND	4.0	0.70	ug/kg	
79-01-6	Trichloroethylene	ND	4.0	0.97	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.0	1.1	ug/kg	
75-01-4	Vinyl chloride	ND	4.0	1.1	ug/kg	
1330-20-7	Xylene (total)	ND	12	1.4	ug/kg	
	m,p-Xylene	ND	8.0	0.81	ug/kg	
95-47-6	o-Xylene	ND	4.0	0.56	ug/kg	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	74%	70-121%
2037-26-5	Toluene-D8	88%	76-132%

Method Blank Summary

Job Number: TC6964
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VR154-MB	R008045.D	1	05/02/12	LT	n/a	n/a	VR154

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC6964-2, TC6964-3, TC6964-4, TC6964-5, TC6964-6

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	83%	73-165%
17060-07-0	1,2-Dichloroethane-D4	68%	57-122%

Method Blank Summary

Job Number: TC6964
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VQ223-MB	Q005603.D	1	05/02/12	LT	n/a	n/a	VQ223

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC6964-9, TC6964-10

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	4.0	0.53	ug/kg	
100-41-4	Ethylbenzene	ND	4.0	0.70	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	4.0	0.67	ug/kg	
108-88-3	Toluene	ND	4.0	0.70	ug/kg	
1330-20-7	Xylene (total)	ND	12	1.4	ug/kg	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	102%	70-121%
2037-26-5	Toluene-D8	118%	76-132%
460-00-4	4-Bromofluorobenzene	99%	73-165%
17060-07-0	1,2-Dichloroethane-D4	88%	57-122%

Method Blank Summary

Job Number: TC6964
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VQ224-MB	Q005622.D	1	05/03/12	LT	n/a	n/a	VQ224

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC6964-1, TC6964-11, TC6964-12, TC6964-13

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	40	10	ug/kg	
71-43-2	Benzene	ND	4.0	0.53	ug/kg	
108-86-1	Bromobenzene	ND	4.0	0.78	ug/kg	
74-97-5	Bromochloromethane	ND	4.0	0.94	ug/kg	
75-27-4	Bromodichloromethane	ND	4.0	0.58	ug/kg	
75-25-2	Bromoform	ND	4.0	0.98	ug/kg	
104-51-8	n-Butylbenzene	ND	4.0	0.88	ug/kg	
135-98-8	sec-Butylbenzene	ND	4.0	0.71	ug/kg	
98-06-6	tert-Butylbenzene	ND	4.0	0.71	ug/kg	
108-90-7	Chlorobenzene	ND	4.0	0.48	ug/kg	
75-00-3	Chloroethane	ND	4.0	0.92	ug/kg	
67-66-3	Chloroform	ND	4.0	0.67	ug/kg	
95-49-8	o-Chlorotoluene	ND	4.0	0.65	ug/kg	
106-43-4	p-Chlorotoluene	ND	4.0	0.92	ug/kg	
75-15-0	Carbon disulfide	ND	4.0	0.70	ug/kg	
56-23-5	Carbon tetrachloride	ND	4.0	0.69	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.0	0.68	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	4.0	0.80	ug/kg	
563-58-6	1,1-Dichloropropene	ND	4.0	0.97	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.0	1.5	ug/kg	
106-93-4	1,2-Dibromoethane	ND	4.0	0.91	ug/kg	
107-06-2	1,2-Dichloroethane	ND	4.0	0.68	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.0	0.85	ug/kg	
142-28-9	1,3-Dichloropropane	ND	4.0	0.92	ug/kg	
594-20-7	2,2-Dichloropropane	ND	4.0	0.80	ug/kg	
124-48-1	Dibromochloromethane	ND	4.0	0.82	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.0	4.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	4.0	0.92	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.0	0.50	ug/kg	
541-73-1	m-Dichlorobenzene	ND	4.0	0.71	ug/kg	
95-50-1	o-Dichlorobenzene	ND	4.0	0.57	ug/kg	
106-46-7	p-Dichlorobenzene	ND	4.0	0.69	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	4.0	0.78	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.0	0.65	ug/kg	
100-41-4	Ethylbenzene	ND	4.0	0.70	ug/kg	
591-78-6	2-Hexanone	ND	40	4.2	ug/kg	

Method Blank Summary

Job Number: TC6964
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VQ224-MB	Q005622.D	1	05/03/12	LT	n/a	n/a	VQ224

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC6964-1, TC6964-11, TC6964-12, TC6964-13

CAS No.	Compound	Result	RL	MDL	Units	Q
87-68-3	Hexachlorobutadiene	ND	4.0	0.84	ug/kg	
98-82-8	Isopropylbenzene	ND	4.0	0.65	ug/kg	
99-87-6	p-Isopropyltoluene	ND	4.0	0.51	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	40	4.6	ug/kg	
74-83-9	Methyl bromide	ND	4.0	1.1	ug/kg	
74-87-3	Methyl chloride	ND	4.0	0.88	ug/kg	
74-95-3	Methylene bromide	ND	4.0	0.73	ug/kg	
75-09-2	Methylene chloride	3.3	10	2.5	ug/kg	J
78-93-3	Methyl ethyl ketone	ND	40	5.8	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	4.0	0.67	ug/kg	
91-20-3	Naphthalene	ND	4.0	2.0	ug/kg	
103-65-1	n-Propylbenzene	ND	4.0	0.77	ug/kg	
100-42-5	Styrene	ND	4.0	0.62	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	4.0	0.86	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	4.0	0.87	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.0	1.2	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.0	0.95	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.0	0.88	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	4.0	1.7	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.0	0.85	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	4.0	0.64	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	4.0	0.60	ug/kg	
127-18-4	Tetrachloroethylene	ND	4.0	0.93	ug/kg	
108-88-3	Toluene	ND	4.0	0.70	ug/kg	
79-01-6	Trichloroethylene	ND	4.0	0.97	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.0	1.1	ug/kg	
75-01-4	Vinyl chloride	ND	4.0	1.1	ug/kg	
1330-20-7	Xylene (total)	ND	12	1.4	ug/kg	
	m,p-Xylene	ND	8.0	0.81	ug/kg	
95-47-6	o-Xylene	ND	4.0	0.56	ug/kg	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	104%	70-121%
2037-26-5	Toluene-D8	122%	76-132%

Method Blank Summary

Job Number: TC6964
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VQ224-MB	Q005622.D	1	05/03/12	LT	n/a	n/a	VQ224

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC6964-1, TC6964-11, TC6964-12, TC6964-13

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	101%	73-165%
17060-07-0	1,2-Dichloroethane-D4	92%	57-122%

Method Blank Summary

Job Number: TC6964
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VR155-MB	R008075.D	1	05/03/12	LT	n/a	n/a	VR155

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC6964-14, TC6964-15, TC6964-16

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	4.0	0.53	ug/kg	
100-41-4	Ethylbenzene	ND	4.0	0.70	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	4.0	0.67	ug/kg	
108-88-3	Toluene	ND	4.0	0.70	ug/kg	
1330-20-7	Xylene (total)	ND	12	1.4	ug/kg	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	78%	70-121%
2037-26-5	Toluene-D8	86%	76-132%
460-00-4	4-Bromofluorobenzene	83%	73-165%
17060-07-0	1,2-Dichloroethane-D4	73%	57-122%

Method Blank Summary

Job Number: TC6964
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY3017-MB	Y0052048.D	1	05/04/12	LT	n/a	n/a	VY3017

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC6964-17, TC6964-18

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	200	27	ug/kg	
100-41-4	Ethylbenzene	ND	200	35	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	200	34	ug/kg	
108-88-3	Toluene	ND	200	35	ug/kg	
1330-20-7	Xylene (total)	ND	600	68	ug/kg	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	99%	70-121%
2037-26-5	Toluene-D8	104%	76-132%
460-00-4	4-Bromofluorobenzene	108%	73-165%
17060-07-0	1,2-Dichloroethane-D4	97%	57-122%

Method Blank Summary

Job Number: TC6964
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VG461-MB	G010510.D	1	05/04/12	MH	n/a	n/a	VG461

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC6964-7

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	10	ug/l	
71-43-2	Benzene	ND	1.0	0.25	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.27	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.25	ug/l	
75-25-2	Bromoform	ND	1.0	0.35	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.30	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.34	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.32	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.44	ug/l	
67-66-3	Chloroform	ND	1.0	0.20	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.28	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.29	ug/l	
75-15-0	Carbon disulfide	ND	1.0	0.36	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.36	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.40	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.33	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.87	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.27	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.21	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.37	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.29	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.90	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.24	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.25	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.28	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.29	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.30	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
591-78-6	2-Hexanone	ND	10	2.4	ug/l	

Method Blank Summary

Job Number: TC6964
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VG461-MB	G010510.D	1	05/04/12	MH	n/a	n/a	VG461

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC6964-7

CAS No.	Compound	Result	RL	MDL	Units	Q
87-68-3	Hexachlorobutadiene	ND	1.0	0.66	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.27	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.34	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	10	1.9	ug/l	
74-83-9	Methyl bromide	ND	1.0	0.31	ug/l	
74-87-3	Methyl chloride	ND	1.0	0.27	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.30	ug/l	
75-09-2	Methylene chloride	ND	5.0	1.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	10	1.8	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.27	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.31	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.38	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.36	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.51	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	1.0	0.46	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.33	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.24	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.27	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.26	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.36	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.41	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.40	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.71	ug/l	
	m,p-Xylene	ND	2.0	0.48	ug/l	
95-47-6	o-Xylene	ND	1.0	0.23	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	94%	79-122%
17060-07-0	1,2-Dichloroethane-D4	100%	75-121%

Method Blank Summary

Job Number: TC6964
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VG461-MB	G010510.D	1	05/04/12	MH	n/a	n/a	VG461

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC6964-7

CAS No.	Surrogate Recoveries		Limits
2037-26-5	Toluene-D8	94%	87-119%
460-00-4	4-Bromofluorobenzene	92%	80-133%

Method Blank Summary

Job Number: TC6964
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VQ226-MB	Q005660.D	1	05/05/12	LT	n/a	n/a	VQ226

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC6964-19

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	4.0	0.53	ug/kg	
100-41-4	Ethylbenzene	ND	4.0	0.70	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	4.0	0.67	ug/kg	
108-88-3	Toluene	ND	4.0	0.70	ug/kg	
1330-20-7	Xylene (total)	ND	12	1.4	ug/kg	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	107%	70-121%
2037-26-5	Toluene-D8	121%	76-132%
460-00-4	4-Bromofluorobenzene	100%	73-165%
17060-07-0	1,2-Dichloroethane-D4	95%	57-122%

Blank Spike Summary

Job Number: TC6964
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VR153-BS	R008019.D	1	05/01/12	LT	n/a	n/a	VR153

The QC reported here applies to the following samples: Method: SW846 8260B

TC6964-8

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	50	49.6	99	70-114
100-41-4	Ethylbenzene	50	46.8	94	60-119
1634-04-4	Methyl Tert Butyl Ether	50	49.2	98	58-128
108-88-3	Toluene	50	46.9	94	68-115
1330-20-7	Xylene (total)	150	143	95	61-115

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	91%	70-121%
2037-26-5	Toluene-D8	91%	76-132%
460-00-4	4-Bromofluorobenzene	86%	73-165%
17060-07-0	1,2-Dichloroethane-D4	82%	57-122%

Blank Spike Summary

Job Number: TC6964
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VR154-BS	R008043.D	1	05/02/12	LT	n/a	n/a	VR154

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC6964-2, TC6964-3, TC6964-4, TC6964-5, TC6964-6

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	250	180	72	62-133
71-43-2	Benzene	50	46.3	93	70-114
108-86-1	Bromobenzene	50	47.3	95	73-112
74-97-5	Bromochloromethane	50	45.2	90	70-110
75-27-4	Bromodichloromethane	50	50.8	102	71-104
75-25-2	Bromoform	50	49.6	99	72-116
104-51-8	n-Butylbenzene	50	48.8	98	59-112
135-98-8	sec-Butylbenzene	50	50.2	100	65-112
98-06-6	tert-Butylbenzene	50	48.0	96	66-112
108-90-7	Chlorobenzene	50	48.8	98	72-113
75-00-3	Chloroethane	50	41.1	82	51-133
67-66-3	Chloroform	50	44.4	89	74-115
95-49-8	o-Chlorotoluene	50	47.5	95	70-113
106-43-4	p-Chlorotoluene	50	49.8	100	69-114
75-15-0	Carbon disulfide	50	58.9	118* [a]	44-112
56-23-5	Carbon tetrachloride	50	53.1	106	62-115
75-34-3	1,1-Dichloroethane	50	44.5	89	72-116
75-35-4	1,1-Dichloroethylene	50	46.7	93	59-122
563-58-6	1,1-Dichloropropene	50	47.6	95	61-111
96-12-8	1,2-Dibromo-3-chloropropane	50	43.1	86	61-121
106-93-4	1,2-Dibromoethane	50	44.7	89	74-114
107-06-2	1,2-Dichloroethane	50	41.9	84	73-109
78-87-5	1,2-Dichloropropane	50	45.0	90	73-111
142-28-9	1,3-Dichloropropane	50	42.6	85	72-112
594-20-7	2,2-Dichloropropane	50	49.1	98	63-118
124-48-1	Dibromochloromethane	50	48.7	97	74-115
75-71-8	Dichlorodifluoromethane	50	48.6	97	27-104
156-59-2	cis-1,2-Dichloroethylene	50	44.5	89	69-110
10061-01-5	cis-1,3-Dichloropropene	50	48.7	97	75-115
541-73-1	m-Dichlorobenzene	50	50.1	100	69-114
95-50-1	o-Dichlorobenzene	50	49.2	98	74-113
106-46-7	p-Dichlorobenzene	50	49.8	100	70-113
156-60-5	trans-1,2-Dichloroethylene	50	43.8	88	66-119
10061-02-6	trans-1,3-Dichloropropene	50	48.4	97	76-122
100-41-4	Ethylbenzene	50	47.7	95	60-119
591-78-6	2-Hexanone	250	195	78	61-131

Blank Spike Summary

Job Number: TC6964
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VR154-BS	R008043.D	1	05/02/12	LT	n/a	n/a	VR154

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC6964-2, TC6964-3, TC6964-4, TC6964-5, TC6964-6

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
87-68-3	Hexachlorobutadiene	50	53.3	107	53-123
98-82-8	Isopropylbenzene	50	56.4	113	70-114
99-87-6	p-Isopropyltoluene	50	51.7	103	65-113
108-10-1	4-Methyl-2-pentanone	250	201	80	64-128
74-83-9	Methyl bromide	50	43.2	86	64-117
74-87-3	Methyl chloride	50	45.9	92	46-139
74-95-3	Methylene bromide	50	43.8	88	76-115
75-09-2	Methylene chloride	50	46.3	93	66-113
78-93-3	Methyl ethyl ketone	250	194	78	65-129
1634-04-4	Methyl Tert Butyl Ether	50	41.0	82	58-128
91-20-3	Naphthalene	50	46.8	94	63-127
103-65-1	n-Propylbenzene	50	49.2	98	58-115
100-42-5	Styrene	50	48.3	97	75-109
630-20-6	1,1,1,2-Tetrachloroethane	50	51.8	104	73-112
71-55-6	1,1,1-Trichloroethane	50	47.8	96	65-118
79-34-5	1,1,2,2-Tetrachloroethane	50	43.5	87	65-121
79-00-5	1,1,2-Trichloroethane	50	43.8	88	73-110
87-61-6	1,2,3-Trichlorobenzene	50	50.1	100	45-142
96-18-4	1,2,3-Trichloropropane	50	42.4	85	68-103
120-82-1	1,2,4-Trichlorobenzene	50	52.4	105	54-125
95-63-6	1,2,4-Trimethylbenzene	50	47.3	95	62-113
108-67-8	1,3,5-Trimethylbenzene	50	46.7	93	62-116
127-18-4	Tetrachloroethylene	50	51.5	103	62-119
108-88-3	Toluene	50	47.4	95	68-115
79-01-6	Trichloroethylene	50	48.4	97	67-113
75-69-4	Trichlorofluoromethane	50	40.5	81	57-113
75-01-4	Vinyl chloride	50	41.6	83	50-106
1330-20-7	Xylene (total)	150	143	95	61-115
	m,p-Xylene	100	95.7	96	60-115
95-47-6	o-Xylene	50	47.3	95	63-114

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	80%	70-121%
2037-26-5	Toluene-D8	89%	76-132%

Blank Spike Summary

Job Number: TC6964
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VR154-BS	R008043.D	1	05/02/12	LT	n/a	n/a	VR154

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC6964-2, TC6964-3, TC6964-4, TC6964-5, TC6964-6

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	87%	73-165%
17060-07-0	1,2-Dichloroethane-D4	71%	57-122%

(a) Outside control limits biased high. Analyte not detected in associated samples.

Blank Spike Summary

Job Number: TC6964
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VQ223-BS	Q005601.D	1	05/02/12	LT	n/a	n/a	VQ223

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC6964-9, TC6964-10

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	50	52.4	105	70-114
100-41-4	Ethylbenzene	50	53.6	107	60-119
1634-04-4	Methyl Tert Butyl Ether	50	48.1	96	58-128
108-88-3	Toluene	50	52.8	106	68-115
1330-20-7	Xylene (total)	150	160	107	61-115

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	105%	70-121%
2037-26-5	Toluene-D8	122%	76-132%
460-00-4	4-Bromofluorobenzene	105%	73-165%
17060-07-0	1,2-Dichloroethane-D4	91%	57-122%

Blank Spike Summary

Job Number: TC6964
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VQ224-BS	Q005623.D	1	05/03/12	LT	n/a	n/a	VQ224

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC6964-1, TC6964-11, TC6964-12, TC6964-13

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	250	210	84	62-133
71-43-2	Benzene	50	49.2	98	70-114
108-86-1	Bromobenzene	50	49.3	99	73-112
74-97-5	Bromochloromethane	50	46.7	93	70-110
75-27-4	Bromodichloromethane	50	49.8	100	71-104
75-25-2	Bromoform	50	47.7	95	72-116
104-51-8	n-Butylbenzene	50	48.9	98	59-112
135-98-8	sec-Butylbenzene	50	50.6	101	65-112
98-06-6	tert-Butylbenzene	50	49.7	99	66-112
108-90-7	Chlorobenzene	50	49.7	99	72-113
75-00-3	Chloroethane	50	50.3	101	51-133
67-66-3	Chloroform	50	48.3	97	74-115
95-49-8	o-Chlorotoluene	50	49.8	100	70-113
106-43-4	p-Chlorotoluene	50	52.3	105	69-114
75-15-0	Carbon disulfide	50	51.9	104	44-112
56-23-5	Carbon tetrachloride	50	54.2	108	62-115
75-34-3	1,1-Dichloroethane	50	49.7	99	72-116
75-35-4	1,1-Dichloroethylene	50	54.8	110	59-122
563-58-6	1,1-Dichloropropene	50	49.2	98	61-111
96-12-8	1,2-Dibromo-3-chloropropane	50	42.1	84	61-121
106-93-4	1,2-Dibromoethane	50	46.1	92	74-114
107-06-2	1,2-Dichloroethane	50	47.6	95	73-109
78-87-5	1,2-Dichloropropane	50	47.2	94	73-111
142-28-9	1,3-Dichloropropane	50	46.3	93	72-112
594-20-7	2,2-Dichloropropane	50	53.9	108	63-118
124-48-1	Dibromochloromethane	50	48.2	96	74-115
75-71-8	Dichlorodifluoromethane	50	60.4	121* [a]	27-104
156-59-2	cis-1,2-Dichloroethylene	50	48.2	96	69-110
10061-01-5	cis-1,3-Dichloropropene	50	49.4	99	75-115
541-73-1	m-Dichlorobenzene	50	50.1	100	69-114
95-50-1	o-Dichlorobenzene	50	45.6	91	74-113
106-46-7	p-Dichlorobenzene	50	49.4	99	70-113
156-60-5	trans-1,2-Dichloroethylene	50	49.3	99	66-119
10061-02-6	trans-1,3-Dichloropropene	50	52.6	105	76-122
100-41-4	Ethylbenzene	50	50.4	101	60-119
591-78-6	2-Hexanone	250	216	86	61-131

Blank Spike Summary

Job Number: TC6964
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VQ224-BS	Q005623.D	1	05/03/12	LT	n/a	n/a	VQ224

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC6964-1, TC6964-11, TC6964-12, TC6964-13

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
87-68-3	Hexachlorobutadiene	50	57.1	114	53-123
98-82-8	Isopropylbenzene	50	60.7	121* [a]	70-114
99-87-6	p-Isopropyltoluene	50	48.4	97	65-113
108-10-1	4-Methyl-2-pentanone	250	225	90	64-128
74-83-9	Methyl bromide	50	49.3	99	64-117
74-87-3	Methyl chloride	50	54.4	109	46-139
74-95-3	Methylene bromide	50	46.6	93	76-115
75-09-2	Methylene chloride	50	47.0	94	66-113
78-93-3	Methyl ethyl ketone	250	224	90	65-129
1634-04-4	Methyl Tert Butyl Ether	50	45.4	91	58-128
91-20-3	Naphthalene	50	42.6	85	63-127
103-65-1	n-Propylbenzene	50	52.9	106	58-115
100-42-5	Styrene	50	49.3	99	75-109
630-20-6	1,1,1,2-Tetrachloroethane	50	48.4	97	73-112
71-55-6	1,1,1-Trichloroethane	50	52.5	105	65-118
79-34-5	1,1,2,2-Tetrachloroethane	50	45.5	91	65-121
79-00-5	1,1,2-Trichloroethane	50	46.2	92	73-110
87-61-6	1,2,3-Trichlorobenzene	50	48.2	96	45-142
96-18-4	1,2,3-Trichloropropane	50	46.1	92	68-103
120-82-1	1,2,4-Trichlorobenzene	50	47.3	95	54-125
95-63-6	1,2,4-Trimethylbenzene	50	47.4	95	62-113
108-67-8	1,3,5-Trimethylbenzene	50	49.2	98	62-116
127-18-4	Tetrachloroethylene	50	52.6	105	62-119
108-88-3	Toluene	50	49.7	99	68-115
79-01-6	Trichloroethylene	50	52.7	105	67-113
75-69-4	Trichlorofluoromethane	50	55.1	110	57-113
75-01-4	Vinyl chloride	50	49.2	98	50-106
1330-20-7	Xylene (total)	150	149	99	61-115
	m,p-Xylene	100	100	100	60-115
95-47-6	o-Xylene	50	48.9	98	63-114

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	104%	70-121%
2037-26-5	Toluene-D8	120%	76-132%

Blank Spike Summary

Job Number: TC6964
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VQ224-BS	Q005623.D	1	05/03/12	LT	n/a	n/a	VQ224

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC6964-1, TC6964-11, TC6964-12, TC6964-13

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	107%	73-165%
17060-07-0	1,2-Dichloroethane-D4	89%	57-122%

(a) Outside control limits biased high. Analyte not detected in associated samples.

Blank Spike Summary

Job Number: TC6964
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VR155-BS	R008073.D	1	05/03/12	LT	n/a	n/a	VR155

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC6964-14, TC6964-15, TC6964-16

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	50	50.8	102	70-114
100-41-4	Ethylbenzene	50	53.7	107	60-119
1634-04-4	Methyl Tert Butyl Ether	50	46.2	92	58-128
108-88-3	Toluene	50	53.4	107	68-115
1330-20-7	Xylene (total)	150	163	109	61-115

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	89%	70-121%
2037-26-5	Toluene-D8	106%	76-132%
460-00-4	4-Bromofluorobenzene	104%	73-165%
17060-07-0	1,2-Dichloroethane-D4	87%	57-122%

Blank Spike Summary

Job Number: TC6964
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY3017-BS	Y0052046.D	1	05/04/12	LT	n/a	n/a	VY3017

The QC reported here applies to the following samples: Method: SW846 8260B

TC6964-17, TC6964-18

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	2500	2490	100	70-114
100-41-4	Ethylbenzene	2500	2460	98	60-119
1634-04-4	Methyl Tert Butyl Ether	2500	2720	109	58-128
108-88-3	Toluene	2500	2510	100	68-115
1330-20-7	Xylene (total)	7500	7360	98	61-115

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	111%	70-121%
2037-26-5	Toluene-D8	117%	76-132%
460-00-4	4-Bromofluorobenzene	112%	73-165%
17060-07-0	1,2-Dichloroethane-D4	105%	57-122%

Blank Spike Summary

Job Number: TC6964
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VG461-BS	G010508.D	1	05/04/12	MH	n/a	n/a	VG461

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC6964-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	114	91	62-124
71-43-2	Benzene	25	23.1	92	76-118
108-86-1	Bromobenzene	25	23.6	94	72-110
74-97-5	Bromochloromethane	25	22.4	90	69-110
75-27-4	Bromodichloromethane	25	25.6	102	68-107
75-25-2	Bromoform	25	23.2	93	64-103
104-51-8	n-Butylbenzene	25	24.2	97	74-114
135-98-8	sec-Butylbenzene	25	24.7	99	76-118
98-06-6	tert-Butylbenzene	25	25.2	101	72-116
108-90-7	Chlorobenzene	25	23.3	93	74-111
75-00-3	Chloroethane	25	22.3	89	75-135
67-66-3	Chloroform	25	24.0	96	75-117
95-49-8	o-Chlorotoluene	25	23.7	95	74-113
106-43-4	p-Chlorotoluene	25	24.2	97	72-114
75-15-0	Carbon disulfide	25	24.0	96	57-126
56-23-5	Carbon tetrachloride	25	28.5	114	75-125
75-34-3	1,1-Dichloroethane	25	23.9	96	76-121
75-35-4	1,1-Dichloroethylene	25	27.6	110	71-128
563-58-6	1,1-Dichloropropene	25	26.8	107	76-122
96-12-8	1,2-Dibromo-3-chloropropane	25	24.8	99	55-121
106-93-4	1,2-Dibromoethane	25	22.7	91	69-106
107-06-2	1,2-Dichloroethane	25	25.5	102	70-111
78-87-5	1,2-Dichloropropane	25	22.8	91	71-113
142-28-9	1,3-Dichloropropane	25	22.1	88	69-106
594-20-7	2,2-Dichloropropane	25	27.2	109	68-130
124-48-1	Dibromochloromethane	25	25.0	100	69-104
75-71-8	Dichlorodifluoromethane	25	23.9	96	28-120
156-59-2	cis-1,2-Dichloroethylene	25	22.9	92	68-113
10061-01-5	cis-1,3-Dichloropropene	25	25.0	100	71-111
541-73-1	m-Dichlorobenzene	25	23.7	95	74-110
95-50-1	o-Dichlorobenzene	25	23.6	94	72-108
106-46-7	p-Dichlorobenzene	25	23.2	93	74-110
156-60-5	trans-1,2-Dichloroethylene	25	23.5	94	70-125
10061-02-6	trans-1,3-Dichloropropene	25	25.6	102	75-111
100-41-4	Ethylbenzene	25	23.7	95	75-112
591-78-6	2-Hexanone	125	102	82	60-113

Blank Spike Summary

Job Number: TC6964
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VG461-BS	G010508.D	1	05/04/12	MH	n/a	n/a	VG461

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC6964-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
87-68-3	Hexachlorobutadiene	25	26.4	106	72-123
98-82-8	Isopropylbenzene	25	27.7	111	75-123
99-87-6	p-Isopropyltoluene	25	25.7	103	76-116
108-10-1	4-Methyl-2-pentanone	125	108	86	63-115
74-83-9	Methyl bromide	25	23.9	96	59-132
74-87-3	Methyl chloride	25	22.6	90	56-150
74-95-3	Methylene bromide	25	24.8	99	68-114
75-09-2	Methylene chloride	25	22.7	91	70-113
78-93-3	Methyl ethyl ketone	125	109	87	62-117
1634-04-4	Methyl Tert Butyl Ether	25	22.3	89	65-113
91-20-3	Naphthalene	25	23.1	92	53-127
103-65-1	n-Propylbenzene	25	24.2	97	74-115
100-42-5	Styrene	25	22.6	90	76-110
630-20-6	1,1,1,2-Tetrachloroethane	25	23.7	95	72-108
71-55-6	1,1,1-Trichloroethane	25	27.5	110	76-125
79-34-5	1,1,2,2-Tetrachloroethane	25	21.0	84	67-110
79-00-5	1,1,2-Trichloroethane	25	22.7	91	69-107
87-61-6	1,2,3-Trichlorobenzene	25	24.4	98	51-128
96-18-4	1,2,3-Trichloropropane	25	21.9	88	55-116
120-82-1	1,2,4-Trichlorobenzene	25	24.8	99	63-114
95-63-6	1,2,4-Trimethylbenzene	25	23.4	94	73-111
108-67-8	1,3,5-Trimethylbenzene	25	23.7	95	74-115
127-18-4	Tetrachloroethylene	25	24.6	98	77-120
108-88-3	Toluene	25	23.2	93	77-114
79-01-6	Trichloroethylene	25	23.7	95	74-117
75-69-4	Trichlorofluoromethane	25	24.9	100	64-132
75-01-4	Vinyl chloride	25	21.7	87	64-121
1330-20-7	Xylene (total)	75	71.9	96	75-111
	m,p-Xylene	50	48.0	96	75-112
95-47-6	o-Xylene	25	23.8	95	74-110

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	93%	79-122%
17060-07-0	1,2-Dichloroethane-D4	104%	75-121%

Blank Spike Summary

Job Number: TC6964
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VG461-BS	G010508.D	1	05/04/12	MH	n/a	n/a	VG461

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC6964-7

CAS No.	Surrogate Recoveries	BSP	Limits
2037-26-5	Toluene-D8	94%	87-119%
460-00-4	4-Bromofluorobenzene	94%	80-133%

Blank Spike Summary

Job Number: TC6964
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VQ226-BS	Q005665.D	1	05/05/12	LT	n/a	n/a	VQ226

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC6964-19

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	50	48.2	96	70-114
100-41-4	Ethylbenzene	50	48.1	96	60-119
1634-04-4	Methyl Tert Butyl Ether	50	47.3	95	58-128
108-88-3	Toluene	50	48.0	96	68-115
1330-20-7	Xylene (total)	150	144	96	61-115

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	106%	70-121%
2037-26-5	Toluene-D8	122%	76-132%
460-00-4	4-Bromofluorobenzene	106%	73-165%
17060-07-0	1,2-Dichloroethane-D4	92%	57-122%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TC6964
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
TC6994-3MS	R008016.D	1	05/01/12	LT	n/a	n/a	VR153
TC6994-3MSD	R008017.D	1	05/01/12	LT	n/a	n/a	VR153
TC6994-3	R008015.D	1	05/01/12	LT	n/a	n/a	VR153

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC6964-8

CAS No.	Compound	TC6994-3 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	5.2 U		61.4	66.3	108	60.6	97	9	70-114/38
100-41-4	Ethylbenzene	5.2 U		61.4	58.4	95	53.3	85	9	60-119/40
1634-04-4	Methyl Tert Butyl Ether	2.5	J	61.4	65.6	103	63.8	98	3	58-128/33
108-88-3	Toluene	5.2 U		61.4	61.8	101	56.9	91	8	68-115/38
1330-20-7	Xylene (total)	16 U		184	176	96	162	87	8	61-115/39

CAS No.	Surrogate Recoveries	MS	MSD	TC6994-3	Limits
1868-53-7	Dibromofluoromethane	89%	84%	88%	70-121%
2037-26-5	Toluene-D8	88%	90%	86%	76-132%
460-00-4	4-Bromofluorobenzene	89%	92%	81%	73-165%
17060-07-0	1,2-Dichloroethane-D4	77%	77%	78%	57-122%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TC6964
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
TC6994-10MS	Q005605.D	1	05/02/12	LT	n/a	n/a	VQ223
TC6994-10MSD	Q005606.D	1	05/02/12	LT	n/a	n/a	VQ223
TC6994-10	Q005604.D	1	05/02/12	LT	n/a	n/a	VQ223

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC6964-9, TC6964-10

CAS No.	Compound	TC6994-10 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	5.4 U		66.1	61.3	93	63.8	99	4	70-114/38
100-41-4	Ethylbenzene	5.4 U		66.1	64.3	97	66.7	104	4	60-119/40
1634-04-4	Methyl Tert Butyl Ether	5.4 U		66.1	58.8	89	56.2	88	5	58-128/33
108-88-3	Toluene	5.4 U		66.1	64.7	98	66.8	104	3	68-115/38
1330-20-7	Xylene (total)	16 U		198	190	96	197	102	4	61-115/39

CAS No.	Surrogate Recoveries	MS	MSD	TC6994-10	Limits
1868-53-7	Dibromofluoromethane	101%	99%	95%	70-121%
2037-26-5	Toluene-D8	120%	121%	119%	76-132%
460-00-4	4-Bromofluorobenzene	112%	109%	109%	73-165%
17060-07-0	1,2-Dichloroethane-D4	85%	85%	84%	57-122%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TC6964
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
TC6844-2MS	R008048.D	1	05/02/12	LT	n/a	n/a	VR154
TC6844-2MSD	R008049.D	1	05/02/12	LT	n/a	n/a	VR154
TC6844-2	R008047.D	1	05/02/12	LT	n/a	n/a	VR154

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC6964-2, TC6964-3, TC6964-4, TC6964-5, TC6964-6

CAS No.	Compound	TC6844-2 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	41 U		280	166	59*	190	70	13	62-133/34
71-43-2	Benzene	4.1 U		56	38.7	69*	44.1	81	13	70-114/38
108-86-1	Bromobenzene	4.1 U		56	36.6	65*	42.3	78	14	73-112/36
74-97-5	Bromochloromethane	4.1 U		56	38.4	69*	44.0	81	14	70-110/34
75-27-4	Bromodichloromethane	4.1 U		56	42.5	76	48.3	89	13	71-104/35
75-25-2	Bromoform	4.1 U		56	41.6	74	48.5	90	15	72-116/34
104-51-8	n-Butylbenzene	4.1 U		56	35.8	64	40.2	74	12	59-112/40
135-98-8	sec-Butylbenzene	4.1 U		56	37.5	67	43.1	80	14	65-112/38
98-06-6	tert-Butylbenzene	4.1 U		56	37.6	67	42.6	79	12	66-112/38
108-90-7	Chlorobenzene	4.1 U		56	39.8	71*	44.5	82	11	72-113/37
75-00-3	Chloroethane	4.1 U		56	38.1	68	39.1	72	3	51-133/36
67-66-3	Chloroform	4.1 U		56	37.4	67*	41.6	77	11	74-115/35
95-49-8	o-Chlorotoluene	4.1 U		56	36.1	64*	41.5	77	14	70-113/38
106-43-4	p-Chlorotoluene	4.1 U		56	38.0	68*	43.3	80	13	69-114/37
75-15-0	Carbon disulfide	4.1 U		56	48.1	86	49.1	91	2	44-112/39
56-23-5	Carbon tetrachloride	4.1 U		56	43.0	77	47.2	87	9	62-115/38
75-34-3	1,1-Dichloroethane	4.1 U		56	37.2	66*	41.2	76	10	72-116/37
75-35-4	1,1-Dichloroethylene	4.1 U		56	39.3	70	41.2	76	5	59-122/38
563-58-6	1,1-Dichloropropene	4.1 U		56	40.6	72	43.1	80	6	61-111/38
96-12-8	1,2-Dibromo-3-chloropropane	4.1 U		56	38.3	68	45.1	83	16	61-121/40
106-93-4	1,2-Dibromoethane	4.1 U		56	37.8	67*	44.8	83	17	74-114/33
107-06-2	1,2-Dichloroethane	4.1 U		56	35.9	64*	42.1	78	16	73-109/33
78-87-5	1,2-Dichloropropane	4.1 U		56	36.7	66*	43.2	80	16	73-111/35
142-28-9	1,3-Dichloropropane	4.1 U		56	37.1	66*	43.8	81	17	72-112/33
594-20-7	2,2-Dichloropropane	4.1 U		56	38.4	69	41.2	76	7	63-118/37
124-48-1	Dibromochloromethane	4.1 U		56	39.9	71*	46.4	86	15	74-115/34
75-71-8	Dichlorodifluoromethane	4.1 U		56	44.1	79	47.0	87	6	27-104/37
156-59-2	cis-1,2-Dichloroethylene	4.1 U		56	38.3	68*	41.9	77	9	69-110/36
10061-01-5	cis-1,3-Dichloropropene	4.1 U		56	39.4	70*	45.5	84	14	75-115/36
541-73-1	m-Dichlorobenzene	4.1 U		56	37.7	67*	43.4	80	14	69-114/37
95-50-1	o-Dichlorobenzene	4.1 U		56	38.2	68*	44.5	82	15	74-113/38
106-46-7	p-Dichlorobenzene	4.1 U		56	37.6	67*	42.7	79	13	70-113/37
156-60-5	trans-1,2-Dichloroethylene	4.1 U		56	36.9	66	39.6	73	7	66-119/38
10061-02-6	trans-1,3-Dichloropropene	4.1 U		56	39.8	71*	45.5	84	13	76-122/34
100-41-4	Ethylbenzene	4.1 U		56	38.5	69	43.7	81	13	60-119/40
591-78-6	2-Hexanone	41 U		280	174	62	210	78	19	61-131/37

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TC6964
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
TC6844-2MS	R008048.D	1	05/02/12	LT	n/a	n/a	VR154
TC6844-2MSD	R008049.D	1	05/02/12	LT	n/a	n/a	VR154
TC6844-2	R008047.D	1	05/02/12	LT	n/a	n/a	VR154

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC6964-2, TC6964-3, TC6964-4, TC6964-5, TC6964-6

CAS No.	Compound	TC6844-2 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
87-68-3	Hexachlorobutadiene	4.1	U	56	38.4	69	43.7	81	13	53-123/43
98-82-8	Isopropylbenzene	4.1	U	56	43.2	77	49.7	92	14	70-114/38
99-87-6	p-Isopropyltoluene	4.1	U	56	38.7	69	44.3	82	13	65-113/40
108-10-1	4-Methyl-2-pentanone	41	U	280	183	65	217	80	17	64-128/37
74-83-9	Methyl bromide	4.1	U	56	40.4	72	42.9	79	6	64-117/36
74-87-3	Methyl chloride	4.1	U	56	41.7	74	43.5	80	4	46-139/33
74-95-3	Methylene bromide	4.1	U	56	38.5	69*	44.1	81	14	76-115/35
75-09-2	Methylene chloride	14.2		56	36.2	39*	44.0	55*	19	66-113/34
78-93-3	Methyl ethyl ketone	41	U	280	179	64*	204	75	13	65-129/36
1634-04-4	Methyl Tert Butyl Ether	4.1	U	56	35.5	63	40.7	75	14	58-128/33
91-20-3	Naphthalene	4.1	U	56	38.0	68	45.9	85	19	63-127/36
103-65-1	n-Propylbenzene	4.1	U	56	37.7	67	42.3	78	12	58-115/40
100-42-5	Styrene	4.1	U	56	38.4	69*	44.4	82	14	75-109/38
630-20-6	1,1,1,2-Tetrachloroethane	4.1	U	56	41.4	74	48.5	90	16	73-112/36
71-55-6	1,1,1-Trichloroethane	4.1	U	56	39.2	70	43.1	80	9	65-118/38
79-34-5	1,1,2,2-Tetrachloroethane	4.1	U	56	36.7	66	44.9	83	20	65-121/37
79-00-5	1,1,2-Trichloroethane	4.1	U	56	37.8	67*	44.9	83	17	73-110/34
87-61-6	1,2,3-Trichlorobenzene	4.1	U	56	38.6	69	44.2	82	14	45-142/37
96-18-4	1,2,3-Trichloropropane	4.1	U	56	36.2	65*	43.4	80	18	68-103/38
120-82-1	1,2,4-Trichlorobenzene	4.1	U	56	38.3	68	43.8	81	13	54-125/37
95-63-6	1,2,4-Trimethylbenzene	4.1	U	56	35.7	64	41.4	77	15	62-113/41
108-67-8	1,3,5-Trimethylbenzene	4.1	U	56	36.2	65	41.4	77	13	62-116/39
127-18-4	Tetrachloroethylene	4.1	U	56	40.9	73	45.4	84	10	62-119/40
108-88-3	Toluene	4.1	U	56	38.2	68	43.7	81	13	68-115/38
79-01-6	Trichloroethylene	4.1	U	56	39.7	71	45.1	83	13	67-113/39
75-69-4	Trichlorofluoromethane	4.1	U	56	37.5	67	38.6	71	3	57-113/33
75-01-4	Vinyl chloride	4.1	U	56	38.2	68	38.6	71	1	50-106/33
1330-20-7	Xylene (total)	12	U	168	116	69	131	81	12	61-115/39
	m,p-Xylene	8.1	U	112	77.5	69	86.9	80	11	60-115/40
95-47-6	o-Xylene	4.1	U	56	38.7	69	43.9	81	13	63-114/37

CAS No.	Surrogate Recoveries	MS	MSD	TC6844-2	Limits
1868-53-7	Dibromofluoromethane	83%	80%	80%	70-121%
2037-26-5	Toluene-D8	88%	88%	87%	76-132%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TC6964
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
TC6844-2MS	R008048.D	1	05/02/12	LT	n/a	n/a	VR154
TC6844-2MSD	R008049.D	1	05/02/12	LT	n/a	n/a	VR154
TC6844-2	R008047.D	1	05/02/12	LT	n/a	n/a	VR154

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC6964-2, TC6964-3, TC6964-4, TC6964-5, TC6964-6

CAS No.	Surrogate Recoveries	MS	MSD	TC6844-2	Limits
460-00-4	4-Bromofluorobenzene	84%	86%	85%	73-165%
17060-07-0	1,2-Dichloroethane-D4	72%	73%	76%	57-122%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TC6964
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
TC6964-12MS	Q005628.D	1	05/03/12	LT	n/a	n/a	VQ224
TC6964-12MSD	Q005629.D	1	05/03/12	LT	n/a	n/a	VQ224
TC6964-12	Q005627.D	1	05/03/12	LT	n/a	n/a	VQ224

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC6964-1, TC6964-11, TC6964-12, TC6964-13

CAS No.	Compound	TC6964-12 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	27.5	J	319	283	80	246	75	14	62-133/34
71-43-2	Benzene	4.8 U		63.8	59.7	94	50.2	86	17	70-114/38
108-86-1	Bromobenzene	4.8 U		63.8	59.2	93	49.1	85	19	73-112/36
74-97-5	Bromochloromethane	4.8 U		63.8	56.9	89	50.3	87	12	70-110/34
75-27-4	Bromodichloromethane	4.8 U		63.8	61.5	96	53.0	91	15	71-104/35
75-25-2	Bromoform	4.8 U		63.8	58.0	91	48.5	84	18	72-116/34
104-51-8	n-Butylbenzene	4.8 U		63.8	51.3	80	41.2	71	22	59-112/40
135-98-8	sec-Butylbenzene	4.8 U		63.8	56.6	89	44.7	77	23	65-112/38
98-06-6	tert-Butylbenzene	4.8 U		63.8	56.9	89	45.6	79	22	66-112/38
108-90-7	Chlorobenzene	4.8 U		63.8	58.8	92	49.4	85	17	72-113/37
75-00-3	Chloroethane	4.8 U		63.8	58.4	91	48.9	84	18	51-133/36
67-66-3	Chloroform	4.8 U		63.8	58.6	92	50.7	87	14	74-115/35
95-49-8	o-Chlorotoluene	4.8 U		63.8	58.3	91	47.0	81	21	70-113/38
106-43-4	p-Chlorotoluene	4.8 U		63.8	59.8	94	48.6	84	21	69-114/37
75-15-0	Carbon disulfide	4.8 U		63.8	56.4	88	46.1	79	20	44-112/39
56-23-5	Carbon tetrachloride	4.8 U		63.8	61.5	96	48.3	83	24	62-115/38
75-34-3	1,1-Dichloroethane	4.8 U		63.8	59.0	92	51.2	88	14	72-116/37
75-35-4	1,1-Dichloroethylene	4.8 U		63.8	60.0	94	50.0	86	18	59-122/38
563-58-6	1,1-Dichloropropene	4.8 U		63.8	58.5	92	51.3	88	13	61-111/38
96-12-8	1,2-Dibromo-3-chloropropane	4.8 U		63.8	51.7	81	48.2	83	7	61-121/40
106-93-4	1,2-Dibromoethane	4.8 U		63.8	58.7	92	50.7	87	15	74-114/33
107-06-2	1,2-Dichloroethane	4.8 U		63.8	58.7	92	50.4	87	15	73-109/33
78-87-5	1,2-Dichloropropane	4.8 U		63.8	56.1	88	50.6	87	10	73-111/35
142-28-9	1,3-Dichloropropane	4.8 U		63.8	58.2	91	49.6	85	16	72-112/33
594-20-7	2,2-Dichloropropane	4.8 U		63.8	58.2	91	48.9	84	17	63-118/37
124-48-1	Dibromochloromethane	4.8 U		63.8	60.7	95	51.7	89	16	74-115/34
75-71-8	Dichlorodifluoromethane	4.8 U		63.8	70.7	111*	57.0	98	21	27-104/37
156-59-2	cis-1,2-Dichloroethylene	4.8 U		63.8	57.7	90	50.2	86	14	69-110/36
10061-01-5	cis-1,3-Dichloropropene	4.8 U		63.8	60.0	94	51.6	89	15	75-115/36
541-73-1	m-Dichlorobenzene	4.8 U		63.8	55.6	87	46.0	79	19	69-114/37
95-50-1	o-Dichlorobenzene	4.8 U		63.8	51.3	80	43.0	74	18	74-113/38
106-46-7	p-Dichlorobenzene	4.8 U		63.8	55.1	86	45.9	79	18	70-113/37
156-60-5	trans-1,2-Dichloroethylene	4.8 U		63.8	56.7	89	47.8	82	17	66-119/38
10061-02-6	trans-1,3-Dichloropropene	4.8 U		63.8	64.5	101	54.7	94	16	76-122/34
100-41-4	Ethylbenzene	4.8 U		63.8	58.6	92	48.1	83	20	60-119/40
591-78-6	2-Hexanone	48 U		319	273	86	239	82	13	61-131/37

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TC6964
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
TC6964-12MS	Q005628.D	1	05/03/12	LT	n/a	n/a	VQ224
TC6964-12MSD	Q005629.D	1	05/03/12	LT	n/a	n/a	VQ224
TC6964-12	Q005627.D	1	05/03/12	LT	n/a	n/a	VQ224

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC6964-1, TC6964-11, TC6964-12, TC6964-13

CAS No.	Compound	TC6964-12 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
87-68-3	Hexachlorobutadiene	4.8 U		63.8	55.3	87	43.6	75	24	53-123/43
98-82-8	Isopropylbenzene	4.8 U		63.8	70.9	111	56.4	97	23	70-114/38
99-87-6	p-Isopropyltoluene	4.8 U		63.8	55.2	86	44.4	76	22	65-113/40
108-10-1	4-Methyl-2-pentanone	48 U		319	284	89	244	84	15	64-128/37
74-83-9	Methyl bromide	4.8 U		63.8	58.6	92	51.0	88	14	64-117/36
74-87-3	Methyl chloride	4.8 U		63.8	64.9	102	55.1	95	16	46-139/33
74-95-3	Methylene bromide	4.8 U		63.8	58.2	91	49.9	86	15	76-115/35
75-09-2	Methylene chloride	5.2	J	63.8	57.0	81	50.7	78	12	66-113/34
78-93-3	Methyl ethyl ketone	48 U		319	267	84	234	81	13	65-129/36
1634-04-4	Methyl Tert Butyl Ether	4.8 U		63.8	55.4	87	49.3	85	12	58-128/33
91-20-3	Naphthalene	4.8 U		63.8	45.7	72	38.3	66	18	63-127/36
103-65-1	n-Propylbenzene	4.8 U		63.8	60.1	94	47.7	82	23	58-115/40
100-42-5	Styrene	4.8 U		63.8	57.2	90	47.8	82	18	75-109/38
630-20-6	1,1,1,2-Tetrachloroethane	4.8 U		63.8	59.8	94	50.3	87	17	73-112/36
71-55-6	1,1,1-Trichloroethane	4.8 U		63.8	59.2	93	49.1	85	19	65-118/38
79-34-5	1,1,2,2-Tetrachloroethane	4.8 U		63.8	57.6	90	48.8	84	17	65-121/37
79-00-5	1,1,2-Trichloroethane	4.8 U		63.8	57.1	89	49.7	86	14	73-110/34
87-61-6	1,2,3-Trichlorobenzene	4.8 U		63.8	44.7	70	35.4	61	23	45-142/37
96-18-4	1,2,3-Trichloropropane	4.8 U		63.8	57.5	90	49.1	85	16	68-103/38
120-82-1	1,2,4-Trichlorobenzene	4.8 U		63.8	45.7	72	37.2	64	21	54-125/37
95-63-6	1,2,4-Trimethylbenzene	4.8 U		63.8	54.5	85	44.6	77	20	62-113/41
108-67-8	1,3,5-Trimethylbenzene	4.8 U		63.8	55.5	87	44.4	76	22	62-116/39
127-18-4	Tetrachloroethylene	4.8 U		63.8	69.6	109	56.8	98	20	62-119/40
108-88-3	Toluene	4.8 U		63.8	59.5	93	49.8	86	18	68-115/38
79-01-6	Trichloroethylene	4.8 U		63.8	62.0	97	51.3	88	19	67-113/39
75-69-4	Trichlorofluoromethane	4.8 U		63.8	59.2	93	48.7	84	19	57-113/33
75-01-4	Vinyl chloride	4.8 U		63.8	54.3	85	44.6	77	20	50-106/33
1330-20-7	Xylene (total)	14 U		192	173	90	144	83	18	61-115/39
	m,p-Xylene	9.7 U		128	115	90	95.7	82	18	60-115/40
95-47-6	o-Xylene	4.8 U		63.8	57.3	90	47.9	82	18	63-114/37

CAS No.	Surrogate Recoveries	MS	MSD	TC6964-12	Limits
1868-53-7	Dibromofluoromethane	97%	100%	95%	70-121%
2037-26-5	Toluene-D8	119%	117%	116%	76-132%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TC6964
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
TC6964-12MS	Q005628.D	1	05/03/12	LT	n/a	n/a	VQ224
TC6964-12MSD	Q005629.D	1	05/03/12	LT	n/a	n/a	VQ224
TC6964-12	Q005627.D	1	05/03/12	LT	n/a	n/a	VQ224

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC6964-1, TC6964-11, TC6964-12, TC6964-13

CAS No.	Surrogate Recoveries	MS	MSD	TC6964-12	Limits
460-00-4	4-Bromofluorobenzene	104%	103%	99%	73-165%
17060-07-0	1,2-Dichloroethane-D4	86%	86%	83%	57-122%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TC6964
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
TC6964-16MS	R008077.D	1	05/03/12	LT	n/a	n/a	VR155
TC6964-16MSD	R008078.D	1	05/03/12	LT	n/a	n/a	VR155
TC6964-16	R008076.D	1	05/03/12	LT	n/a	n/a	VR155

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC6964-14, TC6964-15, TC6964-16

CAS No.	Compound	TC6964-16 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	4.8 U		60.4	55.8	92	54.4	91	3	70-114/38
100-41-4	Ethylbenzene	4.8 U		60.4	58.0	96	55.7	93	4	60-119/40
1634-04-4	Methyl Tert Butyl Ether	4.8 U		60.4	48.0	79	48.0	80	0	58-128/33
108-88-3	Toluene	4.8 U		60.4	57.6	95	56.2	94	2	68-115/38
1330-20-7	Xylene (total)	14 U		181	172	95	169	94	2	61-115/39

CAS No.	Surrogate Recoveries	MS	MSD	TC6964-16	Limits
1868-53-7	Dibromofluoromethane	77%	79%	66%* [a]	70-121%
2037-26-5	Toluene-D8	87%	91%	86%	76-132%
460-00-4	4-Bromofluorobenzene	87%	88%	84%	73-165%
17060-07-0	1,2-Dichloroethane-D4	71%	72%	66%	57-122%

(a) Outside control limits due to matrix interference. Confirmed by MS/MSD.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TC6964
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
TC6992-1MS	Y0052050.D	1	05/04/12	LT	n/a	n/a	VY3017
TC6992-1MSD	Y0052051.D	1	05/04/12	LT	n/a	n/a	VY3017
TC6992-1	Y0052049.D	1	05/04/12	LT	n/a	n/a	VY3017

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC6964-17, TC6964-18

CAS No.	Compound	TC6992-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	94.1	J	3370	3180	92	3150	91	1	70-114/38
100-41-4	Ethylbenzene	1420		3370	4410	89	4250	84	4	60-119/40
1634-04-4	Methyl Tert Butyl Ether	270 U		3370	3730	111	3760	112	1	58-128/33
108-88-3	Toluene	270 U		3370	3160	94	3060	91	3	68-115/38
1330-20-7	Xylene (total)	1930		10100	11300	93	11100	91	2	61-115/39

CAS No.	Surrogate Recoveries	MS	MSD	TC6992-1	Limits
1868-53-7	Dibromofluoromethane	105%	101%	99%	70-121%
2037-26-5	Toluene-D8	109%	107%	108%	76-132%
460-00-4	4-Bromofluorobenzene	99%	101%	101%	73-165%
17060-07-0	1,2-Dichloroethane-D4	97%	92%	93%	57-122%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TC6964
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
TC6942-5MS	G010524.D	20	05/04/12	MH	n/a	n/a	VG461
TC6942-5MSD	G010525.D	20	05/04/12	MH	n/a	n/a	VG461
TC6942-5	G010523.D	20	05/04/12	MH	n/a	n/a	VG461

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC6964-7

CAS No.	Compound	TC6942-5 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		2500	3170	127*	3180	127*	0	62-124/21
71-43-2	Benzene	1120		500	1570	90	1500	76	5	76-118/16
108-86-1	Bromobenzene	ND		500	476	95	469	94	1	72-110/12
74-97-5	Bromochloromethane	ND		500	471	94	466	93	1	69-110/12
75-27-4	Bromodichloromethane	ND		500	484	97	444	89	9	68-107/12
75-25-2	Bromoform	ND		500	364	73	366	73	1	64-103/14
104-51-8	n-Butylbenzene	ND		500	481	96	481	96	0	74-114/12
135-98-8	sec-Butylbenzene	ND		500	501	100	488	98	3	76-118/12
98-06-6	tert-Butylbenzene	ND		500	520	104	509	102	2	72-116/14
108-90-7	Chlorobenzene	ND		500	481	96	468	94	3	74-111/11
75-00-3	Chloroethane	ND		500	449	90	443	89	1	75-135/15
67-66-3	Chloroform	ND		500	497	99	479	96	4	75-117/12
95-49-8	o-Chlorotoluene	ND		500	480	96	462	92	4	74-113/12
106-43-4	p-Chlorotoluene	ND		500	524	105	520	104	1	72-114/12
75-15-0	Carbon disulfide	ND		500	380	76	328	66	15*	57-126/13
56-23-5	Carbon tetrachloride	ND		500	541	108	495	99	9	75-125/12
75-34-3	1,1-Dichloroethane	ND		500	490	98	472	94	4	76-121/13
75-35-4	1,1-Dichloroethylene	ND		500	559	112	545	109	3	71-128/19
563-58-6	1,1-Dichloropropene	ND		500	529	106	517	103	2	76-122/12
96-12-8	1,2-Dibromo-3-chloropropane	ND		500	474	95	500	100	5	55-121/33
106-93-4	1,2-Dibromoethane	ND		500	487	97	475	95	2	69-106/13
107-06-2	1,2-Dichloroethane	8.2	J	500	533	105	510	100	4	70-111/14
78-87-5	1,2-Dichloropropane	ND		500	466	93	449	90	4	71-113/12
142-28-9	1,3-Dichloropropane	ND		500	462	92	467	93	1	69-106/12
594-20-7	2,2-Dichloropropane	ND		500	523	105	490	98	7	68-130/14
124-48-1	Dibromochloromethane	ND		500	415	83	403	81	3	69-104/12
75-71-8	Dichlorodifluoromethane	ND		500	455	91	449	90	1	28-120/21
156-59-2	cis-1,2-Dichloroethylene	ND		500	470	94	465	93	1	68-113/13
10061-01-5	cis-1,3-Dichloropropene	ND		500	461	92	426	85	8	71-111/12
541-73-1	m-Dichlorobenzene	ND		500	468	94	456	91	3	74-110/12
95-50-1	o-Dichlorobenzene	ND		500	467	93	467	93	0	72-108/12
106-46-7	p-Dichlorobenzene	ND		500	472	94	458	92	3	74-110/12
156-60-5	trans-1,2-Dichloroethylene	ND		500	479	96	456	91	5	70-125/14
10061-02-6	trans-1,3-Dichloropropene	ND		500	493	99	452	90	9	75-111/12
100-41-4	Ethylbenzene	256		500	741	97	710	91	4	75-112/12
591-78-6	2-Hexanone	ND		2500	2110	84	2200	88	4	60-113/18

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TC6964
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
TC6942-5MS	G010524.D	20	05/04/12	MH	n/a	n/a	VG461
TC6942-5MSD	G010525.D	20	05/04/12	MH	n/a	n/a	VG461
TC6942-5	G010523.D	20	05/04/12	MH	n/a	n/a	VG461

4.3.7

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The QC reported here applies to the following samples: **Method:** SW846 8260B

TC6964-7

CAS No.	Compound	TC6942-5 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
87-68-3	Hexachlorobutadiene	ND		500	494	99	522	104	6	72-123/17
98-82-8	Isopropylbenzene	25.7		500	589	113	578	110	2	75-123/12
99-87-6	p-Isopropyltoluene	7.4	J	500	520	103	512	101	2	76-116/12
108-10-1	4-Methyl-2-pentanone	ND		2500	2210	88	2310	92	4	63-115/21
74-83-9	Methyl bromide	ND		500	467	93	462	92	1	59-132/15
74-87-3	Methyl chloride	ND		500	450	90	440	88	2	56-150/17
74-95-3	Methylene bromide	ND		500	542	108	518	104	5	68-114/13
75-09-2	Methylene chloride	20.6	J	500	462	88	450	86	3	70-113/13
78-93-3	Methyl ethyl ketone	ND		2500	2320	93	2360	94	2	62-117/21
1634-04-4	Methyl Tert Butyl Ether	ND		500	458	92	465	93	2	65-113/13
91-20-3	Naphthalene	208		500	673	93	719	102	7	53-127/34
103-65-1	n-Propylbenzene	26.2		500	515	98	502	95	3	74-115/12
100-42-5	Styrene	ND		500	464	93	444	89	4	76-110/11
630-20-6	1,1,1,2-Tetrachloroethane	ND		500	492	98	450	90	9	72-108/11
71-55-6	1,1,1-Trichloroethane	ND		500	548	110	526	105	4	76-125/11
79-34-5	1,1,2,2-Tetrachloroethane	ND		500	426	85	438	88	3	67-110/20
79-00-5	1,1,2-Trichloroethane	ND		500	467	93	467	93	0	69-107/14
87-61-6	1,2,3-Trichlorobenzene	ND		500	458	92	478	96	4	51-128/31
96-18-4	1,2,3-Trichloropropane	ND		500	464	93	483	97	4	55-116/27
120-82-1	1,2,4-Trichlorobenzene	ND		500	472	94	504	101	7	63-114/21
95-63-6	1,2,4-Trimethylbenzene	291		500	776	97	749	92	4	73-111/13
108-67-8	1,3,5-Trimethylbenzene	76.9		500	553	95	539	92	3	74-115/12
127-18-4	Tetrachloroethylene	ND		500	542	108	532	106	2	77-120/13
108-88-3	Toluene	51.8		500	526	95	519	93	1	77-114/12
79-01-6	Trichloroethylene	ND		500	493	99	486	97	1	74-117/12
75-69-4	Trichlorofluoromethane	ND		500	496	99	481	96	3	64-132/18
75-01-4	Vinyl chloride	ND		500	416	83	397	79	5	64-121/19
1330-20-7	Xylene (total)	731		1500	2210	99	2130	93	4	75-111/12
	m,p-Xylene	701		1000	1690	99	1620	92	4	75-112/12
95-47-6	o-Xylene	30.4		500	528	100	508	96	4	74-110/11

CAS No.	Surrogate Recoveries	MS	MSD	TC6942-5	Limits
1868-53-7	Dibromofluoromethane	93%	95%	94%	79-122%
17060-07-0	1,2-Dichloroethane-D4	105%	104%	103%	75-121%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TC6964
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
TC6942-5MS	G010524.D	20	05/04/12	MH	n/a	n/a	VG461
TC6942-5MSD	G010525.D	20	05/04/12	MH	n/a	n/a	VG461
TC6942-5	G010523.D	20	05/04/12	MH	n/a	n/a	VG461

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC6964-7

CAS No.	Surrogate Recoveries	MS	MSD	TC6942-5	Limits
2037-26-5	Toluene-D8	93%	94%	95%	87-119%
460-00-4	4-Bromofluorobenzene	93%	94%	94%	80-133%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TC6964
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
TC7301-1MS	Q005663.D	1	05/05/12	LT	n/a	n/a	VQ226
TC7301-1MSD	Q005664.D	1	05/05/12	LT	n/a	n/a	VQ226
TC7301-1	Q005662.D	1	05/05/12	LT	n/a	n/a	VQ226

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC6964-19

CAS No.	Compound	TC7301-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	29.7		60	50.9	35*	50.6	38*	1	70-114/38
100-41-4	Ethylbenzene	10.3		60	48.8	64	47.2	67	3	60-119/40
1634-04-4	Methyl Tert Butyl Ether	4.8	U	60	50.2	84	50.9	92	1	58-128/33
108-88-3	Toluene	124		60	52.9	-118* [a]	52.1	-130* [a]	2	68-115/38
1330-20-7	Xylene (total)	133		180	162	16*	154	13*	5	61-115/39

CAS No.	Surrogate Recoveries	MS	MSD	TC7301-1	Limits
1868-53-7	Dibromofluoromethane	64%* [b]	67%* [b]	58%* [b]	70-121%
2037-26-5	Toluene-D8	115%	115%	114%	76-132%
460-00-4	4-Bromofluorobenzene	104%	104%	99%	73-165%
17060-07-0	1,2-Dichloroethane-D4	88%	89%	85%	57-122%

(a) Outside control limits due to high level in sample relative to spike amount.
(b) Outside control limits due to matrix interference. Confirmed by MS/MSD

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5

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: TC6964
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23203-MB	LB070875.D	1	05/01/12	RM	04/30/12	OP23203	GLB1039

5.1.1

The QC reported here applies to the following samples: **Method:** TNRCC 1005

TC6964-7

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C6-C12)	ND	2.4	0.57	mg/l	
	TPH (> C12-C28)	ND	2.4	0.88	mg/l	
	TPH (> C28-C35)	ND	2.4	0.88	mg/l	
	TPH (C6-C35)	ND	2.4	0.57	mg/l	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	105%	70-130%
98-08-8	aaa-Trifluorotoluene	107%	70-130%

Method Blank Summary

Job Number: TC6964
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23218-MB	LB071026.D	1	05/03/12	RM	04/30/12	OP23218	GLB1043

5.1.2

The QC reported here applies to the following samples: **Method:** TNRCC 1005

TC6964-1, TC6964-2, TC6964-3, TC6964-4, TC6964-5, TC6964-6, TC6964-8, TC6964-9, TC6964-11, TC6964-12, TC6964-14, TC6964-15, TC6964-16, TC6964-17, TC6964-18, TC6964-19

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C6-C12)	ND	24	4.0	mg/kg	
	TPH (>C12-C28)	ND	24	4.0	mg/kg	
	TPH (>C28-C35)	ND	24	4.0	mg/kg	
	TPH (C6-C35)	ND	24	4.0	mg/kg	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	82%	70-130%
98-08-8	aaa-Trifluorotoluene	87%	70-130%

Method Blank Summary

Job Number: TC6964
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23241-MB	JB29787.D	1	05/02/12	NW	05/02/12	OP23241	GJB406

5.1.3

The QC reported here applies to the following samples: **Method:** TNRCC 1005

TC6964-10, TC6964-13

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C6-C12)	ND	24	3.9	mg/kg	
	TPH (> C12-C28)	ND	24	3.9	mg/kg	
	TPH (> C28-C35)	ND	24	3.9	mg/kg	
	TPH (C6-C35)	ND	24	3.9	mg/kg	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	104%	70-130%
98-08-8	aaa-Trifluorotoluene	94%	70-130%

Blank Spike/Blank Spike Duplicate Summary

Job Number: TC6964
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23203-BS	LB070877.D	1	05/01/12	RM	04/30/12	OP23203	GLB1039
OP23203-BSD	LB070879.D	1	05/01/12	RM	04/30/12	OP23203	GLB1039

5.2.1

5

The QC reported here applies to the following samples: **Method:** TNRCC 1005

TC6964-7

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	BSD mg/l	BSD %	RPD	Limits Rec/RPD
	TPH (C6-C12)	48.9	53.6	110	50.0	102	7	75-125/25
	TPH (> C12-C28)	48.9	47.7	98	46.6	95	2	75-125/25
	TPH (C6-C35)	97.8	101	103	96.6	99	4	75-125/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	114%	113%	70-130%
98-08-8	aaa-Trifluorotoluene	99%	105%	70-130%

Blank Spike/Blank Spike Duplicate Summary

Job Number: TC6964
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23218-BS	LB071028.D	1	05/03/12	RM	04/30/12	OP23218	GLB1043
OP23218-BSD	LB071030.D	1	05/03/12	RM	04/30/12	OP23218	GLB1043

5.2.2

5

The QC reported here applies to the following samples: **Method:** TNRCC 1005

TC6964-1, TC6964-2, TC6964-3, TC6964-4, TC6964-5, TC6964-6, TC6964-8, TC6964-9, TC6964-11, TC6964-12, TC6964-14, TC6964-15, TC6964-16, TC6964-17, TC6964-18, TC6964-19

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH (C6-C12)	242	252	104	284	116	12	75-125/25
	TPH (>C12-C28)	242	198	82	215	88	8	75-125/25
	TPH (C6-C35)	484	450	93	498	102	10	75-125/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	92%	99%	70-130%
98-08-8	aaa-Trifluorotoluene	88%	94%	70-130%

Blank Spike/Blank Spike Duplicate Summary

Job Number: TC6964
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23241-BS	JB29783.D	1	05/02/12	NW	05/02/12	OP23241	GJB406
OP23241-BSD	JB29785.D	1	05/02/12	NW	05/02/12	OP23241	GJB406

The QC reported here applies to the following samples: **Method:** TNRCC 1005

TC6964-10, TC6964-13

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH (C6-C12)	237	280	118	277	115	1	75-125/25
	TPH (> C12-C28)	237	243	103	248	103	2	75-125/25
	TPH (C6-C35)	473	523	111	525	109	0	75-125/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	110%	110%	70-130%
98-08-8	aaa-Trifluorotoluene	106%	102%	70-130%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TC6964
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23203-MS	LB070881.D	1	05/01/12	RM	04/30/12	OP23203	GLB1039
OP23203-MSD	LB070883.D	1	05/01/12	RM	04/30/12	OP23203	GLB1039
TC6918-3	LF070882.D	1	05/01/12	RM	04/30/12	OP23203	GLF1039

5.3.1 G

The QC reported here applies to the following samples: **Method:** TNRCC 1005

TC6964-7

CAS No.	Compound	TC6918-3 mg/l	Q	Spike mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH (C6-C12)	2.4	U	47.3	42.6	90	45.4	96	6	75-125/25
	TPH (> C12-C28)	2.4	U	47.3	36.3	77	41.4	88	13	75-125/25
	TPH (C6-C35)	2.4	U	94.6	78.8	83	86.8	92	10	75-125/25

CAS No.	Surrogate Recoveries	MS	MSD	TC6918-3	Limits
84-15-1	o-Terphenyl	95%	106%	97%	70-130%
98-08-8	aaa-Trifluorotoluene	99%	107%	77%	70-130%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TC6964
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23218-MS	LF071027.D	1	05/03/12	RM	04/30/12	OP23218	GLF1042
OP23218-MSD	LF071029.D	1	05/03/12	RM	04/30/12	OP23218	GLF1042
TC6964-19	LF071053.D	1	05/04/12	RM	04/30/12	OP23218	GLF1042

5.3.2

5

The QC reported here applies to the following samples: **Method:** TNRCC 1005

TC6964-1, TC6964-2, TC6964-3, TC6964-4, TC6964-5, TC6964-6, TC6964-8, TC6964-9, TC6964-11, TC6964-12, TC6964-14, TC6964-15, TC6964-16, TC6964-17, TC6964-18, TC6964-19

CAS No.	Compound	TC6964-19 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C6-C12)	30	U	302	285	94	265	88	7	75-125/25
	TPH (>C12-C28)	30	U	302	265	88	286	95	8	75-125/25
	TPH (C6-C35)	30	U	605	550	91	551	91	0	75-125/25

CAS No.	Surrogate Recoveries	MS	MSD	TC6964-19	Limits
84-15-1	o-Terphenyl	109%	115%	83%	70-130%
98-08-8	aaa-Trifluorotoluene	85%	86%	85%	70-130%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TC6964
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23241-MS	JB29791.D	1	05/02/12	NW	05/02/12	OP23241	GJB406
OP23241-MSD	JB29793.D	1	05/03/12	NW	05/02/12	OP23241	GJB406
TC7087-9	JB29789.D	1	05/02/12	NW	05/02/12	OP23241	GJB406

5.3.3

The QC reported here applies to the following samples: **Method:** TNRCC 1005

TC6964-10, TC6964-13

CAS No.	Compound	TC7087-9 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C6-C12)	ND		267	305	114	343	125	12	75-125/25
	TPH (> C12-C28)	ND		267	286	107	296	108	3	75-125/25
	TPH (C6-C35)	ND		534	591	111	639	116	8	75-125/25

CAS No.	Surrogate Recoveries	MS	MSD	TC7087-9	Limits
84-15-1	o-Terphenyl	119%	118%	114%	70-130%
98-08-8	aaa-Trifluorotoluene	99%	105%	107%	70-130%

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05/07/12

Technical Report for

Berg Oliver Associates

Clinton Drive/ 8321

8321

Accutest Job Number: TC6967

Sampling Date: 04/26/12

Report to:

Berg Oliver Associates
14701 Saint Mary's Lane Suite 400
Houston, TX 77079
tmurphy@bergoliver.com

ATTN: Tom Murphy

Total number of pages in report: 26

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Paul K Canevaro

Paul Canevaro
Laboratory Director

Client Service contact: Georgia Jones 713-271-4700

Certifications: TX (T104704220-12-7) AR (11-028-0) AZ (AZ0769) FL (E87628) KS (E-10366) LA (85695/04004) OK (211-035)

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Sample Summary

Berg Oliver Associates

Job No: TC6967

Clinton Drive/ 8321
Project No: 8321

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
TC6967-1	04/26/12	15:40	04/27/12	SO	Soil	IDW

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

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Sample Results

Report of Analysis

Accutest Laboratories

Report of Analysis

Client Sample ID:	IDW		
Lab Sample ID:	TC6967-1	Date Sampled:	04/26/12
Matrix:	SO - Soil	Date Received:	04/27/12
Method:	SW846 8260B SW846 5030A	Percent Solids:	86.4
Project:	Clinton Drive/ 8321		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y0052060.D	1	05/04/12	LT	04/27/12 17:05	n/a	VY3017
Run #2							

	Initial Weight	Final Volume
Run #1	5.09 g	5.0 ml
Run #2		

VOA 8260 List

CAS No.	Compound	Result	MQL	SDL	Units	Q
67-64-1	Acetone	0.011 U	0.045	0.011	mg/kg	
71-43-2	Benzene	0.00060 U	0.0045	0.00060	mg/kg	
108-86-1	Bromobenzene	0.00089 U	0.0045	0.00089	mg/kg	
74-97-5	Bromochloromethane	0.0011 U	0.0045	0.0011	mg/kg	
75-27-4	Bromodichloromethane	0.00066 U	0.0045	0.00066	mg/kg	
75-25-2	Bromoform	0.0011 U	0.0045	0.0011	mg/kg	
104-51-8	n-Butylbenzene	0.0010 U	0.0045	0.0010	mg/kg	
135-98-8	sec-Butylbenzene	0.00081 U	0.0045	0.00081	mg/kg	
98-06-6	tert-Butylbenzene	0.00080 U	0.0045	0.00080	mg/kg	
108-90-7	Chlorobenzene	0.00055 U	0.0045	0.00055	mg/kg	
75-00-3	Chloroethane	0.0010 U	0.0045	0.0010	mg/kg	
67-66-3	Chloroform	0.00076 U	0.0045	0.00076	mg/kg	
95-49-8	o-Chlorotoluene	0.00074 U	0.0045	0.00074	mg/kg	
106-43-4	p-Chlorotoluene	0.0010 U	0.0045	0.0010	mg/kg	
75-15-0	Carbon disulfide	0.00079 U	0.0045	0.00079	mg/kg	
56-23-5	Carbon tetrachloride	0.00079 U	0.0045	0.00079	mg/kg	
75-34-3	1,1-Dichloroethane	0.00078 U	0.0045	0.00078	mg/kg	
75-35-4	1,1-Dichloroethylene	0.00091 U	0.0045	0.00091	mg/kg	
563-58-6	1,1-Dichloropropene	0.0011 U	0.0045	0.0011	mg/kg	
96-12-8	1,2-Dibromo-3-chloropropane	0.0017 U	0.0045	0.0017	mg/kg	
106-93-4	1,2-Dibromoethane	0.0010 U	0.0045	0.0010	mg/kg	
107-06-2	1,2-Dichloroethane	0.00078 U	0.0045	0.00078	mg/kg	
78-87-5	1,2-Dichloropropane	0.00096 U	0.0045	0.00096	mg/kg	
142-28-9	1,3-Dichloropropane	0.0010 U	0.0045	0.0010	mg/kg	
594-20-7	2,2-Dichloropropane	0.00091 U	0.0045	0.00091	mg/kg	
124-48-1	Dibromochloromethane	0.00093 U	0.0045	0.00093	mg/kg	
75-71-8	Dichlorodifluoromethane	0.0045 U	0.0045	0.0045	mg/kg	
156-59-2	cis-1,2-Dichloroethylene	0.0010 U	0.0045	0.0010	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	0.00057 U	0.0045	0.00057	mg/kg	
541-73-1	m-Dichlorobenzene	0.00081 U	0.0045	0.00081	mg/kg	
95-50-1	o-Dichlorobenzene	0.00065 U	0.0045	0.00065	mg/kg	
106-46-7	p-Dichlorobenzene	0.00079 U	0.0045	0.00079	mg/kg	

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	IDW		
Lab Sample ID:	TC6967-1	Date Sampled:	04/26/12
Matrix:	SO - Soil	Date Received:	04/27/12
Method:	SW846 8260B SW846 5030A	Percent Solids:	86.4
Project:	Clinton Drive/ 8321		

VOA 8260 List

CAS No.	Compound	Result	MQL	SDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	0.00089 U	0.0045	0.00089	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	0.00073 U	0.0045	0.00073	mg/kg	
100-41-4	Ethylbenzene	0.00079 U	0.0045	0.00079	mg/kg	
591-78-6	2-Hexanone	0.0048 U	0.045	0.0048	mg/kg	
87-68-3	Hexachlorobutadiene	0.00096 U	0.0045	0.00096	mg/kg	
98-82-8	Isopropylbenzene	0.00074 U	0.0045	0.00074	mg/kg	
99-87-6	p-Isopropyltoluene	0.00058 U	0.0045	0.00058	mg/kg	
108-10-1	4-Methyl-2-pentanone	0.0052 U	0.045	0.0052	mg/kg	
74-83-9	Methyl bromide	0.0013 U	0.0045	0.0013	mg/kg	
74-87-3	Methyl chloride	0.0010 U	0.0045	0.0010	mg/kg	
74-95-3	Methylene bromide	0.00082 U	0.0045	0.00082	mg/kg	
75-09-2	Methylene chloride	0.0028 U	0.011	0.0028	mg/kg	
78-93-3	Methyl ethyl ketone	0.0066 U	0.045	0.0066	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	0.00076 U	0.0045	0.00076	mg/kg	
91-20-3	Naphthalene	0.0023 U	0.0045	0.0023	mg/kg	
103-65-1	n-Propylbenzene	0.00087 U	0.0045	0.00087	mg/kg	
100-42-5	Styrene	0.00070 U	0.0045	0.00070	mg/kg	
630-20-6	1,1,1,2-Tetrachloroethane	0.00097 U	0.0045	0.00097	mg/kg	
71-55-6	1,1,1-Trichloroethane	0.00098 U	0.0045	0.00098	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	0.0014 U	0.0045	0.0014	mg/kg	
79-00-5	1,1,2-Trichloroethane	0.0011 U	0.0045	0.0011	mg/kg	
87-61-6	1,2,3-Trichlorobenzene	0.00099 U	0.0045	0.00099	mg/kg	
96-18-4	1,2,3-Trichloropropane	0.0019 U	0.0045	0.0019	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	0.00097 U	0.0045	0.00097	mg/kg	
95-63-6	1,2,4-Trimethylbenzene	0.00073 U	0.0045	0.00073	mg/kg	
108-67-8	1,3,5-Trimethylbenzene	0.00068 U	0.0045	0.00068	mg/kg	
127-18-4	Tetrachloroethylene	0.0011 U	0.0045	0.0011	mg/kg	
108-88-3	Toluene	0.00079 U	0.0045	0.00079	mg/kg	
79-01-6	Trichloroethylene	0.0011 U	0.0045	0.0011	mg/kg	
75-69-4	Trichlorofluoromethane	0.0012 U	0.0045	0.0012	mg/kg	
75-01-4	Vinyl chloride	0.0013 U	0.0045	0.0013	mg/kg	
1330-20-7	Xylene (total)	0.0016 U	0.014	0.0016	mg/kg	
	m,p-Xylene	0.00092 U	0.0091	0.00092	mg/kg	
95-47-6	o-Xylene	0.00063 U	0.0045	0.00063	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		70-121%
2037-26-5	Toluene-D8	103%		76-132%
460-00-4	4-Bromofluorobenzene	104%		73-165%

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	IDW		
Lab Sample ID:	TC6967-1	Date Sampled:	04/26/12
Matrix:	SO - Soil	Date Received:	04/27/12
Method:	SW846 8260B SW846 5030A	Percent Solids:	86.4
Project:	Clinton Drive/ 8321		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	94%		57-122%

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	IDW		
Lab Sample ID:	TC6967-1	**Date Sampled:**	04/26/12
Matrix:	SO - Soil	**Date Received:**	04/27/12
Method:	TNRCC 1005 TX1005	**Percent Solids:**	86.4
Project:	Clinton Drive/ 8321		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	JB29781.D	1	05/02/12	NW	04/30/12	OP23219	GJB406
Run #2							

	Initial Weight	Final Volume
Run #1	10.3 g	10.0 ml
Run #2		

CAS No.	Compound	Result	MQL	SDL	Units	Q
	TPH (C6-C12)	4.7 U	28	4.7	mg/kg	
	TPH (> C12-C28)	4.7 U	28	4.7	mg/kg	
	TPH (> C28-C35)	4.7 U	28	4.7	mg/kg	
	TPH (C6-C35)	4.7 U	28	4.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	114%		70-130%
98-08-8	aaa-Trifluorotoluene	115%		70-130%

U = Not detected SDL - Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

CHAIN OF CUSTODY

PAGE 1 OF 1

ACCUTEST LABORATORIES

10165 Harwin Dr, Ste 150 Houston, TX 77036
TEL. 713-271-4700 FAX: 713-271-4770
www.accutest.com

FED-EX Tracking #:
Accutest Quote #:
Sample Order Control #: TC6967
Accutest Job #:

Client / Reporting Information

Company Name: Berg-Oliver Associates, Inc
Street Address: 14701 St. Marys Ln, Ste 400
City: Hou State: Tx Zip: 77079
Project Contact: Tom Murphy E-mail: on file
Phone #: 281.589.0898 Fax #: 281.589.0007
Sampler(s) Name(s): Dhlung GR Phone #:

Project Information

Project Name: Clinton Drive
Street: Clinton Drive
City: Hou State: Tx
Project #: 8321
Client Purchase Order #: —
Project Manager: Tom Murphy

Billing Information (if different from Report to)

Company Name:
Street Address: Same
City: State: Zip:
Attention:

Requested Analyses

TPH (TX1005)
VOCs (8260)

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB-Equipment Blank
RB- Rinse Blank
TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	Collection Date	Collection Time	Sampled By	Matrix	# of bottles	HCl	NaOH	ZnAcOH	HNO3	H2SO4	NONE	DI Water	MEOH	TSP	NaHSO4	ENCORE	OTHER	TPH (TX1005)	VOCs (8260)	LAB USE ONLY
1.	IDW	04/26/12	1540	TM	SO	1													X	X	

Turnaround Time (Business days)

- [x] Standard
- [ ] 5 Day RUSH
- [ ] 4 Day RUSH
- [ ] 3 Day RUSH
- [ ] 2 Day RUSH
- [ ] 1 Day EMERGENCY

Approved By (Accutest PM): / Date:

Emergency & Rush TAT data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULT1 (Level 3+4)
- [ ] REDT1 (Level 3+4)
- [ ] Commercial "C"
- [x] TRRP
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
Commercial "C" = Results + QC & Surrogate Summary

Comments / Special Instructions

- Run TEQ TRRP Tier 1
0.5-Acre Res PCLC only

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1 Dhlung	04/27/12	1	2	4-27-12 1455	2
Relinquished by Sampler: 3	Date Time: 1152	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal #	☐ Intact ☐ Not Intact	Preserved where applicable ☐ On Ice ☐ Cooler Temp.

TC6967: Chain of Custody
Page 1 of 3

ACCUTEST LABORATORIES

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: TC6967 Client: BERG OLIVER ASSOCIATES Project: CLINTON DRIVE

Date / Time Received: 4/27/2012 Delivery Method: Airbill #'s:

No. Coolers: 1 Therm ID: 8095; Temp Adjustment Factor: 0;

Cooler Temps (Initial/Adjusted): #1: (2/2);

Cooler Security	Y	or N		Y	or N
1. Custody Seals Present:	☑	☐	3. COC Present:	☑	☐
2. Custody Seals Intact:	☑	☐	4. Smpl Dates/Time OK	☑	☐

Cooler Temperature	Y	or N
1. Temp criteria achieved:	☑	☐
2. Cooler temp verification:		
3. Cooler media:	Ice (Bag)	

Quality Control Preservation	Y	or N	N/A	WTB	STB
1. Trip Blank present / cooler:	☐	☐	☑	☐	☐
2. Trip Blank listed on COC:	☐	☐	☑		
3. Samples preserved properly:	☑	☐			
4. VOCs headspace free:	☐	☐	☑		

Sample Integrity - Documentation	Y	or N
1. Sample labels present on bottles:	☑	☐
2. Container labeling complete:	☑	☐
3. Sample container label / COC agree:	☑	☐

Sample Integrity - Condition	Y	or N
1. Sample recvd within HT:	☑	☐
2. All containers accounted for:	☑	☐
3. Condition of sample:	Intact	

Sample Integrity - Instructions	Y	or N	N/A
1. Analysis requested is clear:	☑	☐	
2. Bottles received for unspecified tests	☐	☑	
3. Sufficient volume recvd for analysis:	☑	☐	
4. Compositing instructions clear:	☐	☐	☑
5. Filtering instructions clear:	☐	☐	☑

Comments

Accutest Laboratories
V.713.271.4700

10165 Harwin Drive
F: 713.271.4770

Houston, TX 77036
www.accutest.com

TC6967: Chain of Custody
Page 2 of 3

ACCUTEST LABORATORIES

Sample Receipt Log

Job #: TC6967 **Date / Time Received:** 4/27/2012 2:55:00 PM **Initials:** BG

Client: BERG OLIVER ASSOCIATES

Cooler #	Sample ID:	Vol	Bot #	Location	Pres	pH	Therm ID	Initial Temp	Therm CF	Corrected Temp
1	TC6967-1	4oz	1	VR	N/P	Note #2 - Preservative check not applicable.	8095	2	0	2

TC6967: Chain of Custody
Page 3 of 3

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4

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: TC6967
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY3017-MB	Y0052048.D	1	05/04/12	LT	n/a	n/a	VY3017

The QC reported here applies to the following samples: Method: SW846 8260B

TC6967-1

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	2000	500	ug/kg	
71-43-2	Benzene	ND	200	27	ug/kg	
108-86-1	Bromobenzene	ND	200	39	ug/kg	
74-97-5	Bromochloromethane	ND	200	47	ug/kg	
75-27-4	Bromodichloromethane	ND	200	29	ug/kg	
75-25-2	Bromoform	ND	200	49	ug/kg	
104-51-8	n-Butylbenzene	ND	200	44	ug/kg	
135-98-8	sec-Butylbenzene	ND	200	36	ug/kg	
98-06-6	tert-Butylbenzene	ND	200	35	ug/kg	
108-90-7	Chlorobenzene	ND	200	24	ug/kg	
75-00-3	Chloroethane	ND	200	46	ug/kg	
67-66-3	Chloroform	ND	200	33	ug/kg	
95-49-8	o-Chlorotoluene	ND	200	33	ug/kg	
106-43-4	p-Chlorotoluene	ND	200	46	ug/kg	
75-15-0	Carbon disulfide	ND	200	35	ug/kg	
56-23-5	Carbon tetrachloride	ND	200	35	ug/kg	
75-34-3	1,1-Dichloroethane	ND	200	34	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	200	40	ug/kg	
563-58-6	1,1-Dichloropropene	ND	200	48	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	200	76	ug/kg	
106-93-4	1,2-Dibromoethane	ND	200	46	ug/kg	
107-06-2	1,2-Dichloroethane	ND	200	34	ug/kg	
78-87-5	1,2-Dichloropropane	ND	200	42	ug/kg	
142-28-9	1,3-Dichloropropane	ND	200	46	ug/kg	
594-20-7	2,2-Dichloropropane	ND	200	40	ug/kg	
124-48-1	Dibromochloromethane	ND	200	41	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	200	200	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	200	46	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	200	25	ug/kg	
541-73-1	m-Dichlorobenzene	ND	200	36	ug/kg	
95-50-1	o-Dichlorobenzene	ND	200	29	ug/kg	
106-46-7	p-Dichlorobenzene	ND	200	35	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	200	39	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	200	32	ug/kg	
100-41-4	Ethylbenzene	ND	200	35	ug/kg	
591-78-6	2-Hexanone	ND	2000	210	ug/kg	

Method Blank Summary

Job Number: TC6967
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY3017-MB	Y0052048.D	1	05/04/12	LT	n/a	n/a	VY3017

4.1.1

4

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC6967-1

CAS No.	Compound	Result	RL	MDL	Units	Q
87-68-3	Hexachlorobutadiene	ND	200	42	ug/kg	
98-82-8	Isopropylbenzene	ND	200	33	ug/kg	
99-87-6	p-Isopropyltoluene	ND	200	25	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	2000	230	ug/kg	
74-83-9	Methyl bromide	ND	200	57	ug/kg	
74-87-3	Methyl chloride	ND	200	44	ug/kg	
74-95-3	Methylene bromide	ND	200	36	ug/kg	
75-09-2	Methylene chloride	ND	500	130	ug/kg	
78-93-3	Methyl ethyl ketone	ND	2000	290	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	200	34	ug/kg	
91-20-3	Naphthalene	ND	200	100	ug/kg	
103-65-1	n-Propylbenzene	ND	200	38	ug/kg	
100-42-5	Styrene	ND	200	31	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	200	43	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	200	43	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	200	60	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	200	47	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	200	44	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	200	83	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	200	42	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	200	32	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	200	30	ug/kg	
127-18-4	Tetrachloroethylene	ND	200	46	ug/kg	
108-88-3	Toluene	ND	200	35	ug/kg	
79-01-6	Trichloroethylene	ND	200	48	ug/kg	
75-69-4	Trichlorofluoromethane	ND	200	54	ug/kg	
75-01-4	Vinyl chloride	ND	200	55	ug/kg	
1330-20-7	Xylene (total)	ND	600	68	ug/kg	
	m,p-Xylene	ND	400	40	ug/kg	
95-47-6	o-Xylene	ND	200	28	ug/kg	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	99%	70-121%
2037-26-5	Toluene-D8	104%	76-132%

Method Blank Summary

Job Number: TC6967
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY3017-MB	Y0052048.D	1	05/04/12	LT	n/a	n/a	VY3017

The QC reported here applies to the following samples: Method: SW846 8260B

TC6967-1

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	108%	73-165%
17060-07-0	1,2-Dichloroethane-D4	97%	57-122%

Blank Spike Summary

Job Number: TC6967
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY3017-BS	Y0052046.D	1	05/04/12	LT	n/a	n/a	VY3017

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC6967-1

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	12500	11300	90	62-133
71-43-2	Benzene	2500	2490	100	70-114
108-86-1	Bromobenzene	2500	2460	98	73-112
74-97-5	Bromochloromethane	2500	2510	100	70-110
75-27-4	Bromodichloromethane	2500	2450	98	71-104
75-25-2	Bromoform	2500	2490	100	72-116
104-51-8	n-Butylbenzene	2500	2300	92	59-112
135-98-8	sec-Butylbenzene	2500	2530	101	65-112
98-06-6	tert-Butylbenzene	2500	2540	102	66-112
108-90-7	Chlorobenzene	2500	2500	100	72-113
75-00-3	Chloroethane	2500	2080	83	51-133
67-66-3	Chloroform	2500	2450	98	74-115
95-49-8	o-Chlorotoluene	2500	2450	98	70-113
106-43-4	p-Chlorotoluene	2500	2420	97	69-114
75-15-0	Carbon disulfide	2500	2230	89	44-112
56-23-5	Carbon tetrachloride	2500	2400	96	62-115
75-34-3	1,1-Dichloroethane	2500	2610	104	72-116
75-35-4	1,1-Dichloroethylene	2500	2380	95	59-122
563-58-6	1,1-Dichloropropene	2500	2480	99	61-111
96-12-8	1,2-Dibromo-3-chloropropane	2500	1950	78	61-121
106-93-4	1,2-Dibromoethane	2500	2510	100	74-114
107-06-2	1,2-Dichloroethane	2500	2400	96	73-109
78-87-5	1,2-Dichloropropane	2500	2520	101	73-111
142-28-9	1,3-Dichloropropane	2500	2520	101	72-112
594-20-7	2,2-Dichloropropane	2500	2320	93	63-118
124-48-1	Dibromochloromethane	2500	2550	102	74-115
75-71-8	Dichlorodifluoromethane	2500	2520	101	27-104
156-59-2	cis-1,2-Dichloroethylene	2500	2570	103	69-110
10061-01-5	cis-1,3-Dichloropropene	2500	2500	100	75-115
541-73-1	m-Dichlorobenzene	2500	2440	98	69-114
95-50-1	o-Dichlorobenzene	2500	2430	97	74-113
106-46-7	p-Dichlorobenzene	2500	2450	98	70-113
156-60-5	trans-1,2-Dichloroethylene	2500	2670	107	66-119
10061-02-6	trans-1,3-Dichloropropene	2500	2680	107	76-122
100-41-4	Ethylbenzene	2500	2460	98	60-119
591-78-6	2-Hexanone	12500	12100	97	61-131

Blank Spike Summary

Job Number: TC6967
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY3017-BS	Y0052046.D	1	05/04/12	LT	n/a	n/a	VY3017

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC6967-1

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
87-68-3	Hexachlorobutadiene	2500	2230	89	53-123
98-82-8	Isopropylbenzene	2500	2880	115* [a]	70-114
99-87-6	p-Isopropyltoluene	2500	2560	102	65-113
108-10-1	4-Methyl-2-pentanone	12500	12200	98	64-128
74-83-9	Methyl bromide	2500	2430	97	64-117
74-87-3	Methyl chloride	2500	2270	91	46-139
74-95-3	Methylene bromide	2500	2440	98	76-115
75-09-2	Methylene chloride	2500	2310	92	66-113
78-93-3	Methyl ethyl ketone	12500	14000	112	65-129
1634-04-4	Methyl Tert Butyl Ether	2500	2720	109	58-128
91-20-3	Naphthalene	2500	1880	75	63-127
103-65-1	n-Propylbenzene	2500	2480	99	58-115
100-42-5	Styrene	2500	2440	98	75-109
630-20-6	1,1,1,2-Tetrachloroethane	2500	2540	102	73-112
71-55-6	1,1,1-Trichloroethane	2500	2350	94	65-118
79-34-5	1,1,2,2-Tetrachloroethane	2500	2440	98	65-121
79-00-5	1,1,2-Trichloroethane	2500	2540	102	73-110
87-61-6	1,2,3-Trichlorobenzene	2500	2110	84	45-142
96-18-4	1,2,3-Trichloropropane	2500	2390	96	68-103
120-82-1	1,2,4-Trichlorobenzene	2500	2170	87	54-125
95-63-6	1,2,4-Trimethylbenzene	2500	2320	93	62-113
108-67-8	1,3,5-Trimethylbenzene	2500	2410	96	62-116
127-18-4	Tetrachloroethylene	2500	2510	100	62-119
108-88-3	Toluene	2500	2510	100	68-115
79-01-6	Trichloroethylene	2500	2560	102	67-113
75-69-4	Trichlorofluoromethane	2500	2110	84	57-113
75-01-4	Vinyl chloride	2500	2210	88	50-106
1330-20-7	Xylene (total)	7500	7360	98	61-115
	m,p-Xylene	5000	4890	98	60-115
95-47-6	o-Xylene	2500	2460	98	63-114

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	111%	70-121%
2037-26-5	Toluene-D8	117%	76-132%

Blank Spike Summary

Job Number: TC6967
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY3017-BS	Y0052046.D	1	05/04/12	LT	n/a	n/a	VY3017

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC6967-1

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	112%	73-165%
17060-07-0	1,2-Dichloroethane-D4	105%	57-122%

(a) Outside control limits biased high. Analyte not detected in associated samples.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TC6967
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
TC6992-1MS	Y0052050.D	1	05/04/12	LT	n/a	n/a	VY3017
TC6992-1MSD	Y0052051.D	1	05/04/12	LT	n/a	n/a	VY3017
TC6992-1	Y0052049.D	1	05/04/12	LT	n/a	n/a	VY3017

4.3.1

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC6967-1

CAS No.	Compound	TC6992-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	2700 U		16900	15900	94	15900	94	0	62-133/34
71-43-2	Benzene	94.1	J	3370	3180	92	3150	91	1	70-114/38
108-86-1	Bromobenzene	270 U		3370	3080	91	3060	91	1	73-112/36
74-97-5	Bromochloromethane	270 U		3370	3370	100	3420	101	1	70-110/34
75-27-4	Bromodichloromethane	270 U		3370	3210	95	3150	93	2	71-104/35
75-25-2	Bromoform	270 U		3370	3240	96	3230	96	0	72-116/34
104-51-8	n-Butylbenzene	552		3370	3500	87	3290	81	6	59-112/40
135-98-8	sec-Butylbenzene	88.9	J	3370	3240	93	3120	90	4	65-112/38
98-06-6	tert-Butylbenzene	270 U		3370	3290	98	3130	93	5	66-112/38
108-90-7	Chlorobenzene	270 U		3370	3190	95	3120	93	2	72-113/37
75-00-3	Chloroethane	270 U		3370	2700	80	2770	82	3	51-133/36
67-66-3	Chloroform	45.8	J	3370	3270	96	3280	96	0	74-115/35
95-49-8	o-Chlorotoluene	270 U		3370	3440	102	3300	98	4	70-113/38
106-43-4	p-Chlorotoluene	270 U		3370	3150	93	3140	93	0	69-114/37
75-15-0	Carbon disulfide	270 U		3370	3020	90	2910	86	4	44-112/39
56-23-5	Carbon tetrachloride	270 U		3370	3080	91	2910	86	6	62-115/38
75-34-3	1,1-Dichloroethane	270 U		3370	3440	102	3390	101	1	72-116/37
75-35-4	1,1-Dichloroethylene	270 U		3370	3040	90	2970	88	2	59-122/38
563-58-6	1,1-Dichloropropene	270 U		3370	3200	95	3060	91	4	61-111/38
96-12-8	1,2-Dibromo-3-chloropropane	270 U		3370	3170	94	3070	91	3	61-121/40
106-93-4	1,2-Dibromoethane	270 U		3370	3220	96	3290	98	2	74-114/33
107-06-2	1,2-Dichloroethane	270 U		3370	3070	91	3090	92	1	73-109/33
78-87-5	1,2-Dichloropropane	270 U		3370	3180	94	3180	94	0	73-111/35
142-28-9	1,3-Dichloropropane	270 U		3370	3110	92	3120	93	0	72-112/33
594-20-7	2,2-Dichloropropane	270 U		3370	3420	101	3310	98	3	63-118/37
124-48-1	Dibromochloromethane	270 U		3370	3230	96	3180	94	2	74-115/34
75-71-8	Dichlorodifluoromethane	270 U		3370	3150	93	2900	86	8	27-104/37
156-59-2	cis-1,2-Dichloroethylene	270 U		3370	3410	101	3420	101	0	69-110/36
10061-01-5	cis-1,3-Dichloropropene	270 U		3370	3000	89	3040	90	1	75-115/36
541-73-1	m-Dichlorobenzene	270 U		3370	3170	94	3130	93	1	69-114/37
95-50-1	o-Dichlorobenzene	270 U		3370	3130	93	3060	91	2	74-113/38
106-46-7	p-Dichlorobenzene	270 U		3370	3130	93	3040	90	3	70-113/37
156-60-5	trans-1,2-Dichloroethylene	270 U		3370	3610	107	3520	104	3	66-119/38
10061-02-6	trans-1,3-Dichloropropene	270 U		3370	3390	101	3400	101	0	76-122/34
100-41-4	Ethylbenzene	1420		3370	4410	89	4250	84	4	60-119/40
591-78-6	2-Hexanone	2700 U		16900	15000	89	14900	88	1	61-131/37

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TC6967
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
TC6992-1MS	Y0052050.D	1	05/04/12	LT	n/a	n/a	VY3017
TC6992-1MSD	Y0052051.D	1	05/04/12	LT	n/a	n/a	VY3017
TC6992-1	Y0052049.D	1	05/04/12	LT	n/a	n/a	VY3017

4.3.1

4

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC6967-1

CAS No.	Compound	TC6992-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
87-68-3	Hexachlorobutadiene	270 U		3370	3150	93	2820	84	11	53-123/43
98-82-8	Isopropylbenzene	245	J	3370	3900	108	3800	105	3	70-114/38
99-87-6	p-Isopropyltoluene	117	J	3370	3380	97	3240	93	4	65-113/40
108-10-1	4-Methyl-2-pentanone	2700 U		16900	16700	99	16500	98	1	64-128/37
74-83-9	Methyl bromide	270 U		3370	2940	87	3050	90	4	64-117/36
74-87-3	Methyl chloride	270 U		3370	2840	84	2820	84	1	46-139/33
74-95-3	Methylene bromide	270 U		3370	3150	93	3170	94	1	76-115/35
75-09-2	Methylene chloride	670 U		3370	3040	90	2890	86	5	66-113/34
78-93-3	Methyl ethyl ketone	2700 U		16900	18100	107	18300	109	1	65-129/36
1634-04-4	Methyl Tert Butyl Ether	270 U		3370	3730	111	3760	112	1	58-128/33
91-20-3	Naphthalene	543		3370	3510	88	3120	76	12	63-127/36
103-65-1	n-Propylbenzene	830		3370	3900	91	3760	87	4	58-115/40
100-42-5	Styrene	270 U		3370	3150	93	3110	92	1	75-109/38
630-20-6	1,1,1,2-Tetrachloroethane	270 U		3370	3320	98	3280	97	1	73-112/36
71-55-6	1,1,1-Trichloroethane	270 U		3370	3130	93	3050	90	3	65-118/38
79-34-5	1,1,2,2-Tetrachloroethane	270 U		3370	3290	98	3230	96	2	65-121/37
79-00-5	1,1,2-Trichloroethane	270 U		3370	3260	97	3600	107	10	73-110/34
87-61-6	1,2,3-Trichlorobenzene	270 U		3370	2550	76	2770	82	8	45-142/37
96-18-4	1,2,3-Trichloropropane	270 U		3370	3370	100	3390	101	1	68-103/38
120-82-1	1,2,4-Trichlorobenzene	270 U		3370	3120	93	2640	78	17	54-125/37
95-63-6	1,2,4-Trimethylbenzene	3070		3370	6000	87	5820	82	3	62-113/41
108-67-8	1,3,5-Trimethylbenzene	949		3370	3960	89	3850	86	3	62-116/39
127-18-4	Tetrachloroethylene	270 U		3370	3160	94	3060	91	3	62-119/40
108-88-3	Toluene	270 U		3370	3160	94	3060	91	3	68-115/38
79-01-6	Trichloroethylene	270 U		3370	3220	96	3100	92	4	67-113/39
75-69-4	Trichlorofluoromethane	270 U		3370	2660	79	2490	74	7	57-113/33
75-01-4	Vinyl chloride	270 U		3370	2670	79	2630	78	2	50-106/33
1330-20-7	Xylene (total)	1930		10100	11300	93	11100	91	2	61-115/39
	m,p-Xylene	1680		6740	7880	92	7680	89	3	60-115/40
95-47-6	o-Xylene	253	J	3370	3460	95	3380	93	2	63-114/37

CAS No.	Surrogate Recoveries	MS	MSD	TC6992-1	Limits
1868-53-7	Dibromofluoromethane	105%	101%	99%	70-121%
2037-26-5	Toluene-D8	109%	107%	108%	76-132%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TC6967
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
TC6992-1MS	Y0052050.D	1	05/04/12	LT	n/a	n/a	VY3017
TC6992-1MSD	Y0052051.D	1	05/04/12	LT	n/a	n/a	VY3017
TC6992-1	Y0052049.D	1	05/04/12	LT	n/a	n/a	VY3017

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC6967-1

CAS No.	Surrogate Recoveries	MS	MSD	TC6992-1	Limits
460-00-4	4-Bromofluorobenzene	99%	101%	101%	73-165%
17060-07-0	1,2-Dichloroethane-D4	97%	92%	93%	57-122%

Gulf Coast ACCUTEST LABORATORIES

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: TC6967
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23219-MB	JB29745.D	1	05/02/12	NW	04/30/12	OP23219	GJB406

5.1.1

The QC reported here applies to the following samples: Method: TNRCC 1005

TC6967-1

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C6-C12)	ND	24	4.0	mg/kg	
	TPH (>C12-C28)	ND	24	4.0	mg/kg	
	TPH (>C28-C35)	ND	24	4.0	mg/kg	
	TPH (C6-C35)	ND	24	4.0	mg/kg	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	102%	70-130%
98-08-8	aaa-Trifluorotoluene	99%	70-130%

Blank Spike/Blank Spike Duplicate Summary

Job Number: TC6967
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23219-BS	JB29741.D	1	05/02/12	NW	04/30/12	OP23219	GJB406
OP23219-BSD	JB29743.D	1	05/02/12	NW	04/30/12	OP23219	GJB406

5.2.1

5

The QC reported here applies to the following samples: **Method:** TNRCC 1005

TC6967-1

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH (C6-C12)	245	256	105	253	104	1	75-125/25
	TPH (> C12-C28)	245	237	97	233	96	2	75-125/25
	TPH (C6-C35)	490	493	101	486	100	1	75-125/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	108%	107%	70-130%
98-08-8	aaa-Trifluorotoluene	103%	98%	70-130%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TC6967
Account: BOATXHO Berg Oliver Associates
Project: Clinton Drive/ 8321

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP23219-MS	JB29747.D	1	05/02/12	NW	04/30/12	OP23219	GJB406
OP23219-MSD	JB29749.D	1	05/02/12	NW	04/30/12	OP23219	GJB406
TC6938-7	JF29750.D	1	05/02/12	NW	04/30/12	OP23219	GJF406

The QC reported here applies to the following samples: **Method:** TNRCC 1005

TC6967-1

CAS No.	Compound	TC6938-7 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C6-C12)	ND		297	339	114	366	122	8	75-125/25
	TPH (>C12-C28)	ND		297	326	110	347	115	6	75-125/25
	TPH (C6-C35)	ND		594	665	112	713	118	7	75-125/25

CAS No.	Surrogate Recoveries	MS	MSD	TC6938-7	Limits
84-15-1	o-Terphenyl	126%	129%	141%*	70-130%
98-08-8	aaa-Trifluorotoluene	121%	122%	117%	70-130%

APPENDIX C

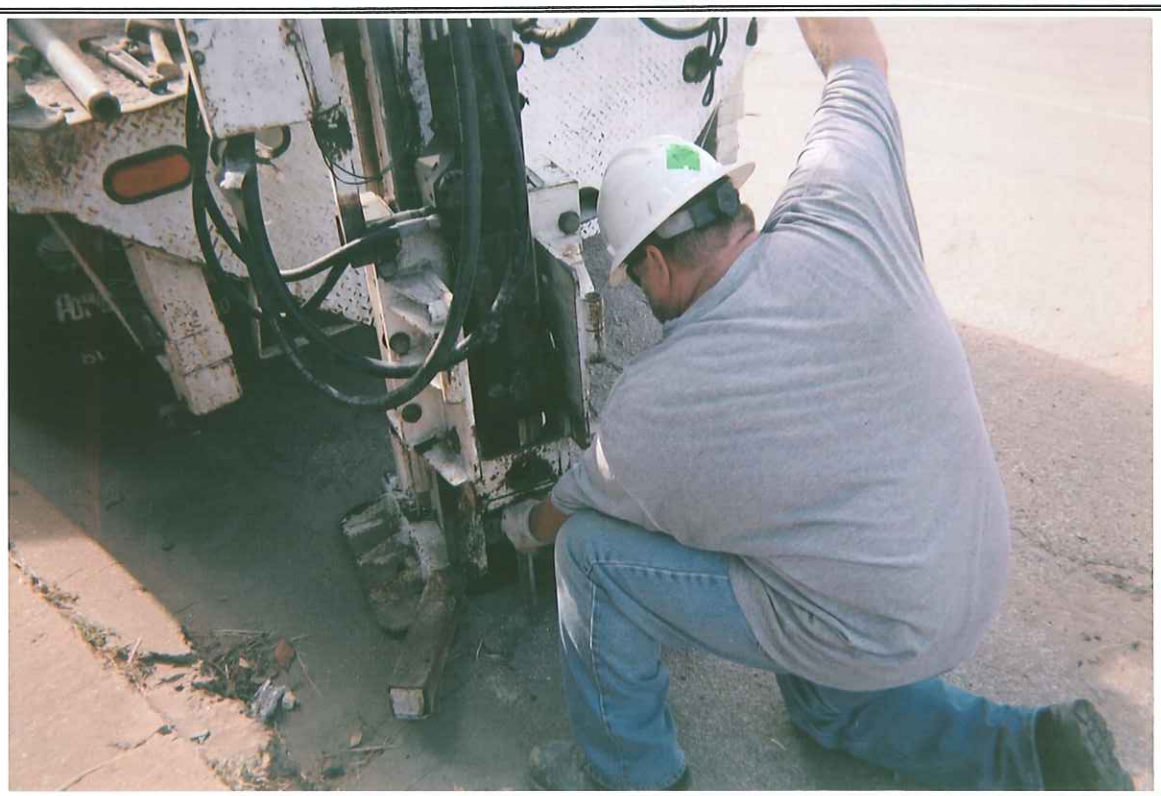
Photographs

View of Clinton Drive facing east just east of Hirsch Road.

View of push drilling activity at soil boring SB-1 at JL Proler Iron & Steel (4401 Clinton Drive).

Another view of push drilling activity at soil boring SB-1 at JL Proler Iron & Steel (4401 Clinton Drive).

View of push drilling activity at soil boring SB-2 at JL Proler Iron & Steel (4401 Clinton Drive).



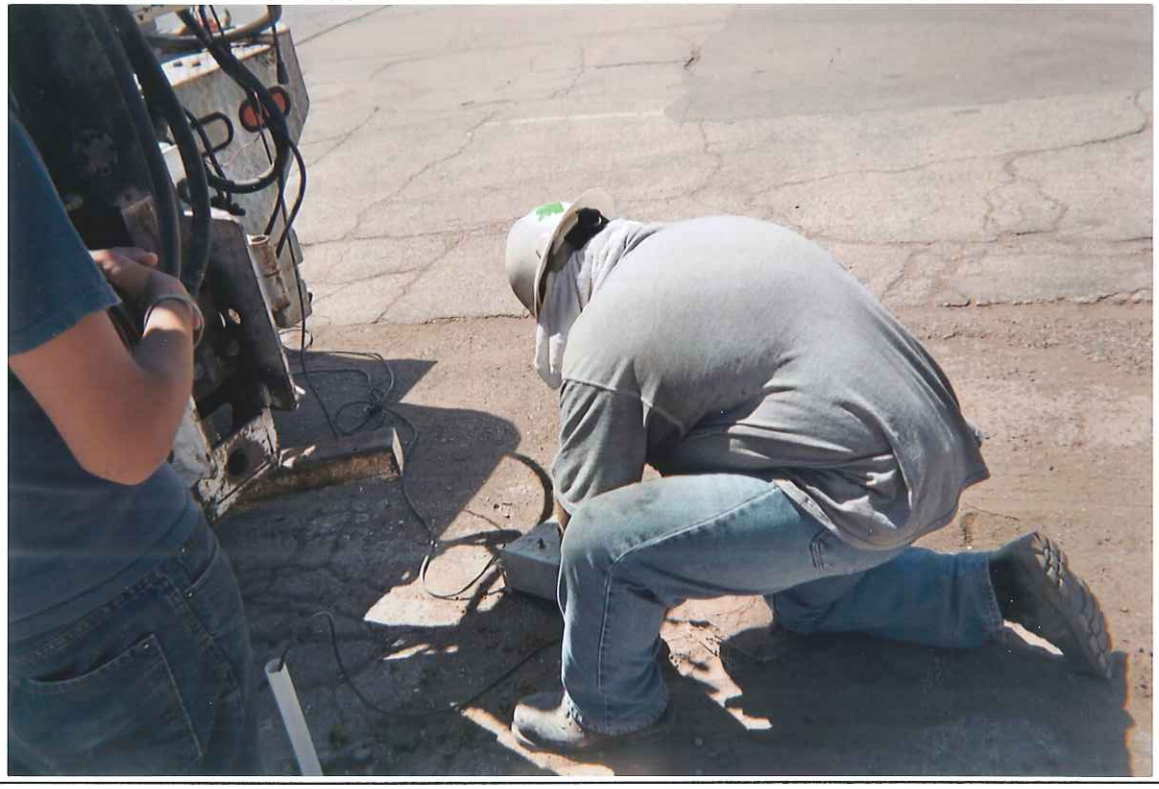
Close-up view of push drilling activity at soil boring SB-2 at JL Proler Iron & Steel (4401 Clinton Drive).

View of push drilling activity at soil boring SB-3 at JL Proler Iron & Steel (4401 Clinton Drive).

View of push drilling activity at soil boring SB-4 at the old Comet Rice facility (4601 Clinton Drive).

Close-up view of push drilling activity at soil boring SB-4 at the old Comet Rice facility (4601 Clinton Drive).

View of some of the soil cores from SB-4.



View of setting up to collect water samples from SB-4.

View of push drilling activity at soil boring SB-5 (4601 Clinton Drive).

View of the central eastern portion of the project area near Japhet Street with construction activity already occurring.

View of push drilling activity at soil boring SB-7 fronting the former Burbank Drum & Barrel facility (4815 Clinton Drive).

View of push drilling activity at soil boring SB-8 (4815 Clinton Drive).

View of push drilling activity at soil boring SB-9 (4815 Clinton Drive).

Close-up view of push drilling activity at soil boring SB-9 (4815 Clinton Drive).

View of push drilling at SB-10 fronting Clay & Hahn (5100 Clinton Drive) that fronted Lone Star Heat Treating (5212 Clinton Drive).

View of push drilling activity at soil boring SB-12 fronting the current MSC/former Earle M. Jorgensen Co. (5311 Clinton Drive).

View of the push drilling activity at soil boring SB-13 at Stop-N-Joy/Valero
(999 Lockwood Drive at Clinton).

View of the push drilling at soil boring SB-14 at Stripes No. 1006/Chevron (990 Lockwood Dr. at Clinton).

View of the push drilling at soil boring SB-15 at Stripes No. 1006/Chevron
(990 Lockwood Drive at Clinton).

View of push drilling activity at soil boring SB-16 at 5515 Clinton Drive.

View of push drilling activity at soil boring SB-17 fronting the former AFCO No. 010501 fleet fueling facility (6002 Clinton Drive).