

**SOIL CLEANUP REPORT
for
SITE M-232-236**

**MARINE CORPS BASE
CAMP LEJEUNE, NORTH CAROLINA**

JULY 30, 2009

CATLIN PROJECT NO. 209-024



PREPARED IN COOPERATION WITH:

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SOIL CLEANUP REPORT (SCR)

A. TITLE PAGE

DATE OF REPORT: July 30, 2009

Facility ID: M-232-236 Incident Number (if known): 9593

Site Name: M-232-236

Site Location: Hayes Street at Camp Johnson, Marine Corps Base (MCB), Camp Lejeune

Nearest City/Town: Jacksonville County: Onslow

Risk Classification: Intermediate Land Use Classification: Residential

UST Owner: Commanding Officer - MCB Camp Lejeune

I&E/EMD/EQB

Address: PSC 20004

MCB Camp Lejeune, NC 28542

Phone: (910) 451-5068

UST

Operator: Same as above

Address: Same as above

Phone: Same as above

Property Owner: Same as above

Address: Same as above

Phone: Same as above

Property Occupant: Same as above

Address: Same as above

Phone: Same as above

Consultant/Contractor: CATLIN Engineers and Scientists (CATLIN)

220 Old Dairy Road, Wilmington, North Carolina

Address: 28405

Phone: (910) 452-5861

Release Information

Date Discovered: May 1990

Easting: 278921.50 (UTM, Meters) Northing: 3844756.68 (UTM, Meters)

Estimated Quantity of Release: Unknown

Cause of Release: Unknown

Source of Release (e.g. Piping/UST):

Possible leaks or overflows associated with the underground storage tank (UST).

Sizes and contents of UST system(s) from which the release occurred:

Five (5) approximately 550 gallon #2 Heating Oil USTs (One tank at each building).

I, Michael E. Mason a Professional Engineer/Licensed Geologist (**circle one**) for CATLIN Engineers and Scientists, do certify that the information contained in this report is correct and accurate to the best of my knowledge.

(Please Affix Seal and Signature)



B. EXECUTIVE SUMMARY

Buildings M-232 through M-236 are located along Hayes Street within Camp Johnson, located aboard MCB Camp Lejeune in Onslow County, North Carolina. The buildings are currently used as bachelors' quarters for military personnel.

According to the most recent Annual Monitoring Report (AMR) for the M-232-236 site from June 2009 produced by CATLIN Engineers and Scientists (CATLIN) in cooperation with Osage of Virginia (Osage), five heating oil USTs (one UST located at each of the associated Buildings M-232 through 236) were excavated and removed from the site in May 1990. Each of the USTs capacity was approximately 550-gallons and was in service from 1942 to the late 1980s. During removal activities, holes were noted in each of the USTs and petroleum odors were detected.

Since removal of the USTs several investigations have been conducted over the years to determine the extent and magnitude of contamination associated with the USTs. The most recent soil investigation was completed by Sovereign Consulting, Inc. (Sovereign) during which soil borings were installed via Direct Push Technology (DPT) in August 2007. Sovereign advanced five soil borings to approximately eight feet below land surface (BLS) in the M232-1, M233-1, M234-1 and M236-1 former tank basins. One boring was advanced in each former basin sidewall as well as the floor of the former basin in order to investigate soil contaminant concentrations. One soil sample was collected from each boring location and analyzed per Total Petroleum Hydrocarbons (TPH) Diesel Range Organics (DRO) and TPH Gasoline Range Organics (GRO). The analytical results revealed soil contaminants at concentrations above the North Carolina Department of Environment and Natural Resources (NCDENR) Action Levels in each of the former UST basins.

Based on the results from the August 2007 investigation by Sovereign, it was decided that the contaminated soil at each of the former UST basins be excavated and confirmation soil samples be collected. In addition, a shallow Type II monitoring well was proposed in the center of each of the former UST basins after excavation and backfilling to replace monitoring wells destroyed during the excavation.

Between March and July 2009, soil excavations, confirmation soil sampling and groundwater sampling was conducted at the M-232-1, M-233-1, M-234-1 and M-236-1 former UST basins. The confirmation soil samples collected during the current soil cleanup activities indicated concentrations of the C₉-C₂₂ Aromatics hydrocarbon fractions above the Soil-to-Groundwater (STGW) Maximum Soil Contaminant Concentration (MSCC), but were below the Residential MSCC. No other compounds were detected above any of the established MSCCs in the soil samples. The groundwater samples collected during the current investigation revealed the C₉-C₁₈ Aliphatics and C₉-C₂₂ Aromatics hydrocarbon fractions at concentrations above the 2L GWQSSs. No other compounds were detected above any of the established 2L GWQSSs or GCLs.

The M-232-236 site currently meets the criteria for Residential Land Use and an Intermediate Risk Classification due to the occurrence of measureable free-phase product within the past year. Since the site is currently ranked as an Intermediate Risk site, soils must meet the lower of the Residential or STGW MSCCs. However, the currently approved monitoring schedule for the next year is to conduct four quarterly gauging events of all on-site monitoring wells. If all four gauging events reveal no measureable thickness of free-phase product, then the risk ranking for the site could be reduced to "Low Risk". Upon reduction of the risk ranking to Low, the soil contamination will be re-evaluated to determine compliance with the Residential MSCCs which would be the applicable regulatory levels. As the soil confirmation samples collected during the current cleanup activities indicated no contaminants at concentrations above any of the established Residential MSCCs, if the risk ranking could be reduced to Low the site could receive "No Further Action" (NFA) with a Land Use Restriction (LUR) for groundwater.

C. INTRODUCTION

The purpose of this report is to summarize soil excavation activities at four of the five former UST basins at the subject site (M-232, M-233, M-234 and M-236). This report documents confirmation soil sampling conducted as part of the soil excavations. In addition, a monitoring well was installed to replace one destroyed during the excavation and sampled at each of the former UST basins subsequent to completion of the soil excavations. This report also summarizes these groundwater sampling results.

D. SITE HISTORY

Buildings M-232 through M-236 are located along Hayes Street within Camp Johnson, located aboard MCB Camp Lejeune in Onslow County, North Carolina. The buildings are currently used as bachelors' quarters for military personnel. A shallow drainage ditch is present between the eastern wall of Buildings M-232 through M-236 and Hayes Street. Please refer to Figure 1 for the site location and Figure 2 for the site plan.

The M-232-236 site is included in the MCB Camp Lejeune UST Management Program. As part of this program, the subject site is monitored on a periodic basis and an Annual Monitoring Report (AMR) is submitted in June of each calendar year.

According to the most recent AMR from June 2009 produced by CATLIN/Osage, five heating oil USTs (one UST located at each of the associated Buildings M-232 through 236) were excavated and removed from the site in May 1990 by UTTS Environmental. Each of the USTs capacity was approximately 550-gallons and was in service from 1942 to the late 1980s (See Table 1). During removal activities, holes were noted in each of the USTs and petroleum odors were detected. Also of note, reportedly concrete pads existed below each of the USTs at Buildings M-233 through M-236. One soil sample was collected from each of the UST basins and analyzed for Total Petroleum Hydrocarbons (TPH). Detected TPH concentrations ranged from 120 parts per million (ppm) to 6,900 ppm, all of which were above the NCDENR Action Level. Due to funding issues, the former tank basins were backfilled with a mixture of the contaminated soil and clean fill material. The UST Closure Report recommended an assessment of soil and groundwater at the subject site.

To define the extent of soil and groundwater contamination, site assessments were performed in 1991 and 1992. The 1991 site assessment included soil borings and the installation of seven shallow and intermediate monitoring well pairs. The shallow wells were installed to a depth of approximately 15 feet below land surface (BLS) and the intermediate wells were installed to a depth of approximately 30 feet BLS. Analysis of soil and groundwater indicated petroleum constituents were not present at significant concentrations in areas surrounding the former USTs, and no free-phase product was observed in the installed monitoring wells. The report recommended, however, that the UST basins be remediated to eliminate the

potential for future risk. This recommendation was made since previous sampling data indicated the presence of petroleum hydrocarbons in the tank basins.

Additional investigation activities were conducted in 1992. The investigation included the installation and sampling of three shallow monitoring wells. No constituents were detected in groundwater samples collected from the three newly installed wells. However, free-phase product was observed in one monitoring well located southwest of the former UST M236-1. Therefore, it was recommended to excavate petroleum-impacted soils in the immediate vicinity of the former USTs, conduct free-phase product removal, and monitor groundwater quality on a biannual basis. To CATLIN's knowledge, excavation of petroleum-impacted soils at each of the former UST basins did not occur.

Upon review of the available reports, five monitoring wells were reportedly installed at locations adjacent to the former UST locations sometime between April 1998 and August 1999. In addition, Law Engineering and Environmental Services, Inc. (Law) conducted a risk characterization of the site in November 1999. It appears from data review, that the wells were most likely installed as part of the risk characterization effort (this report, however, is unavailable for review). A 2000 Law report states that the risk characterization assessment indicated the site warranted classification as an Intermediate Risk based on the presence of measurable free-phase product in the monitoring well USTM232-236-MW19 located at former UST basin M235-1. Law continued conducting groundwater monitoring activities in 2000 and 2001. The monitoring program included quarterly well gauging at all site wells and semi-annual groundwater sampling at select site wells. The gauging data from these assessments identified the presence of measurable free-phase product in monitoring well USTM232-236-MW19, at thicknesses ranging from 0.12 to 0.61 feet. Free-phase product recovery was conducted, and groundwater sampling data indicated few compounds were present at concentrations above the 2L Groundwater Quality Standards (GWQSS) and none above established Gross Contamination Levels (GCLs). The AMRs concluded that concentrations of detected constituents were generally decreasing over time.

Engineering and Environment, Inc. (EEI) assumed the responsibility of groundwater monitoring at the site beginning in October 2002. Engineering and Environment, Inc. conducted a program of quarterly gauging and semi-annual groundwater sampling from October 2002 to January 2006 at the subject site. As reported in the AMRs submitted by EEI, free-phase product was detected intermittently in monitoring well USTM232-236-MW19 over this time period. Also, analytical results revealed the presence of Massachusetts Department of Environmental Protection (MADEP) constituents above the GWQSS in the wells located at the former UST basins.

Sovereign continued groundwater monitoring activities for the 2006-2008 monitoring period at the subject site. Again, quarterly gauging and semi-annual groundwater sampling was conducted. The results of these activities were summarized in AMRs submitted in July 2007 and June 2008, respectively. Measurable free-phase product was observed in monitoring well USTM232-236-MW19 during this time period. The

analytical results revealed MADEP compounds above the GWQSS during this time period from the wells located at the former UST basins.

To address the free-phase product intermittently present in USTM232-236-MW19 since 1999, MCB Camp Lejeune abandoned this monitoring well and conducted a soil excavation in the area of former UST M235-1 from April 30 through May 2, 2007. Osage removed approximately 41.24 tons of contaminated soil from the subsurface. The excavation was approximately 11 feet wide, 28 feet long, and seven feet deep. Groundwater was not encountered during excavation activities; therefore, no groundwater samples were obtained.

Osage personnel obtained confirmation soil samples from the sidewalls at the conclusion of the M235-1 area excavation. Samples were taken from the 6-7 feet depth interval and analyzed per Environmental Protection Agency (EPA) Method 8260, EPA Method 8270, and MADEP constituents. Soil samples from the M235-1 soil excavation indicated that contaminants were present above the Soil-to-Groundwater (STGW) Maximum Soil Contaminant Concentrations (MSCCs), but below the Residential and Industrial/Commercial MSCCs. The confirmation soil samples also revealed concentrations of 4-Isopropyltoluene, which does not have established MSCCs. Osage personnel mixed in one five gallon bucket of Oxygen Release Compound (ORC® powder) to the open excavation along with the clean backfill. The excavation was then backfilled to grade and then sodded in order to restore the site to its original condition. The abandoned monitoring well was later reinstalled on June 21, 2007 in its original location and renamed as monitoring well USTM232-236-MW23.

To address the historical soil contamination in the other four former UST basins at the subject site, Sovereign installed soil borings via Direct Push Technology (DPT) in August 2007. Sovereign advanced five soil borings to approximately 8 feet BLS in the M232-1, M233-1, M234-1 and M236-1 former tank basins. One boring was advanced in each former basin sidewall as well as the floor of the former basin in order to investigate soil contaminant concentrations. One soil sample was collected from each boring location and analyzed per TPH Diesel Range Organics (DRO) and TPH Gasoline Range Organics (GRO). The analytical results revealed soil contaminants at concentrations above the NCDENR Action Levels in each of the former UST basins.

In addition, a temporary piezometer was installed in each tank basin floor boring location in order to collect a groundwater sample and monitor for free-phase product. One hundredth (0.01) of a foot of free-phase product was detected using an oil water interface probe in the piezometer located in the former UST M233-1 basin. The groundwater sample results for M232-1, M234-1, and M236-1 piezometers revealed Naphthalene and the MADEP parameter C₉-C₂₂ Aromatics at concentrations above the 2L GWQSSs. The piezometers were abandoned immediately after sampling occurred in each location.

Based on the results from the August 2007 investigation by Sovereign, it was decided that the contaminated soil at each of the former UST basins be excavated

and confirmation soil samples be collected. In addition, a shallow Type II monitoring well was proposed in the center of each of the former UST basins after excavation and backfilling. The installation of the monitoring wells and the reporting of the soil and groundwater results are documented in this report.

E. RECEPTOR INFORMATION

Receptor information is summarized below:

1. Water Supply Wells

No active potable water wells are located within 1,500 feet of the project site (See Figure 1).

2. Public Water Supplies

Public water is provided to the subject site, as well as other buildings within 1,500 feet of the potential source area by water mains, which carry treated potable water. Potable water is supplied to the site and surrounding areas by the MCB Camp Lejeune water supply system. Groundwater obtained from the Castle Hayne Aquifer is the raw water source for the MCB Camp Lejeune potable water treatment facilities.

3. Surface Water

As illustrated on Figure 1, the nearest surface water bodies are the New River, located approximately 550 feet west of the site, and Northeast Creek, located approximately 900 feet east of the site.

4. Wellhead Protection Areas

Marine Corps Base, Camp Lejeune has identified wellhead protection areas on the base. Based on the most recent Wellhead Protection Plan – 2002 Update, the potential source area is not located within a proposed wellhead protection area.

5. Deep Aquifers in the Coastal Plain Physiographic Region

As identified in the Geologic Map of North Carolina (North Carolina Department of Natural Resources and Community Development, 1985), the subject site lies within the Coastal Plain physiographic province.

The potential source area is located just above an apparent unconfined surficial groundwater aquifer. While there is the potential for recharge by rainfall to the unconfined surficial aquifer at the Base, the surficial aquifer is not used for water supply aboard MCB, Camp Lejeune. Groundwater obtained from the Castle Hayne Aquifer is the raw water source for the MCB, Camp Lejeune potable water treatment facilities.

To determine deep aquifers underlying the subject site, the area was profiled in the "Visual Hydrogeologic Framework" database provided in the NCDENR Division of Water Resources website (VHF website). This is a database of well and soil boring log data from numerous locations across the North Carolina Coastal Plain.

Including the Surficial aquifer there are eleven identified aquifers (seven principal aquifers and four minor aquifers) within the North Carolina Coastal Plain physiographic region. Data from the United States Marine Corps (USMC) Camp Lejeune Test Well #12 boring, advanced in the immediate vicinity of the subject site, indicated the following:

Hydrogeologic Units	Approximate Depth (feet)
Surficial Aquifer	0-30
Castle Hayne Confining Unit	30-46
Castle Hayne Aquifer	46-324

6. Subsurface Structures

Known utilities are illustrated on Figure 2. Numerous underground and overhead utilities exist at the subject site.

7. Property Owners and Occupants

The subject site is owned and operated by the Commanding Officer – Marine Corps Base, Camp Lejeune. Refer to Table 2.

F. SITE GEOLOGY

Field observations noted during installation of monitoring well USTM232-236-MW26 which was just outside the soil excavation area at M233 and thus native material indicated an orange-brown to gray, soft clay from three to five feet BLS. From eight to ten feet BLS an orange-brown to gray, silty clay and silty fine to very fine sand was encountered. At the 13 to 15 foot depth interval a low plasticity, clay was found. Saturated soil conditions were encountered at approximately 9-10 feet BLS in this monitoring well boring, and the other three recently installed monitoring well borings. Boring logs for the soil borings are included in Appendix A.

G. SOIL REMEDIATION

M-236 UST Basin

According to Osage, on March 30, 2009 Osage and P&F personnel met on-site to begin soil excavation activities at the former M-236-1 UST basin. Soil excavation activities were conducted between March 30, 2009 and April 3, 2009. The concrete

sidewalk within the excavation area was broken into manageable pieces and taken to the MCB Camp Lejeune Landfill. Next, the excavation began and the removed soil was loaded directly onto trucks. At approximately six feet BLS the concrete anchor pad was encountered. This pad was removed, loaded and transported to the on-base landfill for disposal. Approximately four tons of concrete was disposed of at the on-base landfill. Trucks loaded with soil from the excavation were weighed at the MCB Camp Lejeune Landfill truck scales. A soil manifest was completed for each truck loaded with excavated soil. The manifest was signed by the driver and MCB Camp Lejeune personnel. Subsequently, the manifests were signed by the disposal facility upon arrival and disposal of the soil. A copy of each of the final soil manifests is included in Appendix B. During the week of excavation activities, ten trucks were loaded with the excavated soil and transported to the dedicated land application facility, Pridgen Farms, Inc. (NCDENR Permit No. SR0500106) located in Edgecombe County, North Carolina. Confirmation soil samples were collected from the four sidewalls of the excavation at a depth of approximately six feet BLS. Soil sample UST M236-S005 was collected on March 31, 2009, soil sample UST M236-S007 was collected on April 1, 2009 and soil samples UST M236-S006 and UST M236-S008 were collected on April 2, 2009. During excavation activities, existing monitoring well USTM232-236-MW18 was removed as planned because it was located within the excavation area. On April 3, 2009 the safety fencing was put back up around the excavation area as the excavation was not to be backfilled until the results from the confirmation soil samples were obtained.

The final excavation boundaries were approximately 25 feet by 15 feet by 7 feet deep (See Figure 3). A total of 162.43 tons of soil was removed from the M-236-1 excavation.

To address any residual soil contamination remaining at the sidewalls and bottom of the excavation, on April 21, 2009 Osage personnel sprayed approximately 75 pounds of ORC® powder along the sides of the excavation and then spread 25 pounds of ORC® powder on the floor of the excavation. The excavation was then backfilled with clean fill material from Morton Trucking in Jacksonville, NC. Backfilling was completed on April 22, 2009 and the site was prepared for reinstallation of the concrete sidewalk.

Photo documentation of the excavation activities is included in Appendix C.

M-234 UST Basin

According to Osage, on April 22, 2009 Osage and P&F personnel met on-site to begin soil excavation activities at the former M-234-1 UST basin. Soil excavation activities were conducted between April 22, 2009 and April 28, 2009. The concrete sidewalk within the excavation area was broken into manageable pieces and taken to the on-base landfill. Next, the excavation began and the removed soil was loaded directly onto trucks. At approximately six feet BLS the concrete anchor pad was encountered. This pad was removed, loaded and transported to the on-base landfill for disposal. Approximately four tons of concrete was disposed of at the on-base landfill. Trucks loaded with soil from the excavation were weighed at the MCB

Camp Lejeune Landfill truck scales. A soil manifest was completed for each truck loaded with excavated soil. The manifest was signed by the driver and MCB Camp Lejeune personnel. Subsequently, the manifests were signed by the disposal facility upon arrival and disposal of the soil. A copy of each of the final soil manifests is included in Appendix B. During the week of excavation activities, ten trucks were loaded with the excavated soil and transported to the dedicated land application facility, Pridgen Farms, Inc. (NCDENR Permit No. SR0500106) located in Edgecombe County, North Carolina. Confirmation soil samples were collected from the four sidewalls of the excavation at a depth of approximately six feet BLS. Soil samples USTM234-S001 and USTM234-S004 were collected on April 23, 2009 and soil samples USTM234-S002 and USTM234-S003 were collected on April 24, 2009. During excavation activities existing monitoring well USTM232-236-MW20 was removed as planned because it was located within the excavation area. On April 28, 2009 the safety fencing was put back up around the excavation area as the excavation was not to be backfilled until the results from the confirmation soil samples were obtained.

The final excavation boundaries were approximately 20 feet by 11 feet by 7 feet deep (See Figure 3). A total of 147.60 tons of soil was removed from the M-234-1 excavation.

To address any residual soil contamination remaining at the sidewalls and bottom of the excavation, on May 4, 2009 Osage personnel sprayed approximately 75 pounds of ORC® powder along the sides of the excavation and then spread 25 pounds of ORC® powder on the floor of the excavation. The excavation was then backfilled with clean fill material. Backfilling was completed on May 4, 2009 and the site was prepared for reinstallation of the concrete sidewalk.

Photo documentation of the excavation activities is included in Appendix C.

M-233 UST Basin

According to Osage, on June 4 and 5, 2009 Osage prepared the area for excavation activities. Soil excavation began on June 8, 2009 at the former M-234-1 UST basin. Soil excavation activities were conducted between June 8, 2009 and June 10, 2009. Soil removed from the excavation was properly stockpiled on-site pending disposal. The concrete sidewalk was removed and placed at the on-site staging area. The sidewalk concrete was hauled to the landfill on June 9, 2009 (1.14 tons). At approximately six feet BLS the concrete anchor pad was encountered. This pad was removed and placed at the on-site staging area until disposal at the on-base landfill. (Please note, the M-233 pad and the M-232 pad were disposed in the same load so 8.47 tons of concrete disposed of at the landfill on June 26, 2009). Confirmation soil samples were collected from the four sidewalls of the excavation at a depth of approximately six feet BLS. Soil samples M233-S001 through M233-S004 were collected on June 10, 2009. During excavation activities, existing monitoring well USTM232-236-MW21 was removed as planned because it was located within the excavation area. On June 10, 2009 the safety fencing was put back up around the excavation area as the excavation was not to be backfilled until

the results from the confirmation soil samples were obtained.

The final excavation boundaries were approximately 21 feet by 10 feet by 7 feet deep (See Figure 3). On June 24, 2009, P&F loaded four trucks with the stockpiled soils. Trucks loaded with soil from the excavation were weighed at the MCB Camp Lejeune Landfill truck scales. A soil manifest was completed for each truck loaded with excavated soil. The manifest was signed by the driver and MCB Camp Lejeune personnel. The excavated soil was transported to the dedicated land application facility, Pridgen Farms, Inc. (NCDENR Permit No. SR0500106) located in Edgecombe County, North Carolina. The manifests were signed by the disposal facility upon arrival and disposal of the soil. A copy of each of the final soil manifests is included in Appendix B. A total of 91.31 tons of soil was removed from the M-233-1 excavation.

To address any residual soil contamination remaining at the sidewalls and bottom of the excavation, on June 25, 2009 Osage personnel sprayed approximately 75 pounds of ORC® powder along the sides of the excavation and then spread 25 pounds of ORC® powder on the floor of the excavation. The excavation was backfilled with clean fill material on June 25, 2009 and the site was prepared for reinstallation of the concrete sidewalk. The concrete sidewalk was repoured on July 2, 2009. The concrete forms were removed on July 6, 2009 and sod was installed over the excavation area on July 17, 2009.

Photo documentation of the excavation activities is included in Appendix C.

M-232 UST Basin

According to Osage, soil excavation began on June 15, 2009 at the former M-232-1 UST basin. Soil excavation activities were conducted on June 16 and 17, 2009 but were then halted as a large communications box had to be disconnected and removed to continue the excavation. The excavation activities resumed on June 22, 2009 and continued until June 25, 2009. Soil removed from the excavation was properly stockpiled on-site pending disposal. The concrete sidewalk was removed and placed at the on-site staging area. At approximately six feet BLS the concrete anchor pad was encountered. This pad was removed and placed at the on-site staging area until disposal at the on-base landfill. (Please note, the M-232 pad and the M-233 pad were disposed in the same load so 8.47 tons of concrete disposed of at the landfill on June 26, 2009). Confirmation soil samples were collected from the four sidewalls of the excavation at a depth of approximately six feet BLS. Soil samples M232-S001 through M232-S004 were collected on June 25, 2009. During excavation activities existing monitoring well USTM232-236-MW22 was removed as planned because it was located within the excavation area. On June 26, 2009 the safety fencing was put back up around the excavation area as the excavation was not to be backfilled until the results from the confirmation soil samples were obtained.

The final excavation boundaries were approximately 20 feet by 15 feet by 10 feet deep (See Figure 3). On June 25, 2009, P&F loaded seven trucks with the

stockpiled soils. Trucks loaded with soil from the excavation were weighed at the MCB Camp Lejeune Landfill truck scales. A soil manifest was completed for each truck loaded with excavated soil. The manifest was signed by the driver and MCB Camp Lejeune personnel. The excavated soil was transported to the dedicated land application facility, Pridgen Farms, Inc. (NCDENR Permit No. SR0500106) located in Edgecombe County, North Carolina. The manifests were signed by the disposal facility upon arrival and disposal of the soil. A copy of each of the final soil manifests is included in Appendix B. A total of 167.92 tons of soil was removed from the M-232-1 excavation.

To address any residual soil contamination remaining at the sidewalls and bottom of the excavation, on June 29, 2009 Osage personnel sprayed approximately 75 pounds of ORC® powder along the sides of the excavation and then spread 25 pounds of ORC® powder on the floor of the excavation. The excavation was backfilled with clean fill material on June 29 and 30, 2009. Also, the communications box was reinstalled during backfilling of the excavation. The concrete sidewalk was repoured on July 2, 2009. The concrete forms were removed on July 6, 2009 and sod was installed over the excavation area on July 17, 2009.

Photo documentation of the excavation activities is included in Appendix C.

H. MONITORING WELL INSTALLATION

During the current site activities, CATLIN installed a total of four Type II monitoring wells (USTM232-236-MW24 through USTM232-236-MW27) at the subject site on July 7, 2009. Please note, monitoring well USTM232-236-MW26 located in front of Building M-233 could not be installed within the excavation area due to overhead and underground utilities, therefore this well was installed as close as possible to the excavation area. Figure 3 illustrates the new monitoring well locations.

All monitoring wells were installed by a qualified driller, licensed in the State of North Carolina. Well installation was supervised by an experienced geologist specializing in subsurface investigations. The wells were constructed in accordance with North Carolina Well Construction Standards (North Carolina Administrative Code T15:02 C). Boring logs and North Carolina well construction records are included in Appendix A.

The four Type II permanent groundwater monitoring wells were all constructed with two-inch-diameter, 0.010-inch slotted polyvinyl chloride (PVC) well screen and two-inch-diameter PVC riser. The annular space between the boring wall and the PVC well was filled with medium sand pack to roughly two feet above the screened interval, overlain by hydrated bentonite pellets, and sealed to the surface by Portland cement. All four monitoring wells were finished with a permanent, flush mount well shield and locking cap.

I. POST-REMEDIATION SOIL AND GROUNDWATER SAMPLING

Confirmation Soil Sampling

At each of the four excavations Osage personnel collected four sidewall confirmation soil samples once the limits of excavations were achieved. Each of the sidewall confirmation soil samples were collected from a depth of approximately six feet BLS. Each of the soil samples were collected from an undisturbed portion of soil and packed into the appropriate laboratory glassware.

The soil samples were labeled, placed immediately on ice in a cooler, and transported under proper Chain-of-Custody protocol to SGS Environmental Services, Inc. (SGS) in Wilmington, North Carolina. At the laboratory, soil samples were analyzed for volatile organic compounds via EPA Method 8260, semi-volatile organic compounds via EPA Method 8270, and MADEP Extractable Petroleum Hydrocarbons/Volatile Petroleum Hydrocarbons (EPH/VPH). Analytical results are included in Appendix D and are summarized as follows:

EPA Method 8260B/5035

As indicated in Table 3A and illustrated on Figure 4A, several EPA Method 8260B/5035 compounds were detected in one or more of the confirmation soil samples. However, only 4-Isopropyltoluene was detected at concentrations above the MSCCs. Please note, there are no established MSCCs for this compound. Since the 4-Isopropyltoluene does not have established MSCCs, any detection is considered reportable. This compound was detected at concentrations of 219 ug/kg, 59.9 ug/kg and 149 ug/kg in the UST 236-S005, USTM234-S001, and M233-S002 samples, respectively. The compound 4-Isopropyltoluene, with molecular formula $C_{10}H_{14}$, is an Aromatic compound whose structure is based on the Benzene ring. By definition, Aromatics are carbon compounds whose structures are based on rings of carbon. The compound 4-Isopropyltoluene contains ten carbon atoms and has a ringed structure, so detections can be compared to the MSCCs for the C_9 - C_{22} Aromatics hydrocarbon fraction. A comparison of the detected concentrations of 4-Isopropyltoluene to the MSCCs for the C_9 - C_{22} Aromatics hydrocarbon fraction reveals that the concentrations are well below the established MSCCs. All other detected EPA Method 8260B/5035 compounds were revealed at concentrations below the lowest MSCCs.

EPA Method 8270

As indicated in Table 3B and illustrated on Figure 4B, nine EPA Method 8270 compounds were detected in one or more of the confirmation soil samples. However, none of the detected EPA Method 8270 compounds were revealed at concentrations above any of the established MSCCs. Isophorone was detected at a concentration of 2,440 ug/kg in the USTM234-S004 sample. Please note, there are no established MSCCs for this compound. Since Isophorone does not have established MSCCs, any detection is considered reportable. However, it should be noted that Isophorone is not a petroleum-related compound and is a solvent used in

paints, lacquers and adhesives. All other detected EPA Method 8270 compounds were revealed at concentrations below the lowest MSCCs.

MADEP VPH/EPH

As indicated in Tables 3C and 3D and illustrated on Figure 4C; the C₉-C₂₂ Aromatics hydrocarbon fractions were detected in confirmation soil samples UST M236-S005, USTM234-S001, M233-S002 and M233-S003 at concentrations of 182.7 mg/kg, 170.5 mg/kg, 345.5 mg/kg and 132.4 mg/kg, respectively. All of these detected concentrations exceeded the STGW MSCC, but were below the Residential MSCC. All other detected MADEP compounds were revealed at concentrations below the lowest MSCCs.

Groundwater Sampling

On July 7, 2009 CATLIN personnel installed four permanent Type II monitoring wells (USTM232-236-MW24 through USTM232-236-MW27). Each monitoring well was appropriately developed after installation and allowed to equilibrate. On July 8, 2009 CATLIN personnel mobilized to the site to collect groundwater samples from the four newly installed monitoring wells. Prior to groundwater sampling, the depth to water inside each well was measured. Three volumes of water were removed from each well with a new disposable bailer. Groundwater samples were collected directly from the bailer and placed into the appropriate laboratory provided glassware. All samples collected were submitted for laboratory analysis for volatile organic compounds via EPA Method 602, semi-volatile organic compounds via EPA Method 625 and MADEP EPH/VPH.

The groundwater samples were collected in laboratory glassware, labeled, placed immediately on ice in a cooler, and shipped under proper Chain-of-Custody protocol to SGS of Wilmington, North Carolina. Analytical results for the groundwater samples are included in Appendix D and are summarized as follows:

EPA Method 602

As indicated in Table 4A and illustrated on Figure 5A; Ethylbenzene, Toluene and Total Xylenes were detected at concentrations above the laboratory Method Detection Limits (MDLs). However, none of these compounds were detected at concentrations above the 2L GWQSs or the GCLs. All other EPA Method 602 compounds analyzed were reported at concentrations below the MDLs.

EPA Method 625 + Tentatively Identified Compounds (TICs)

As indicated in Table 4B and illustrated on Figure 5B, several EPA Method 625 compounds were detected at concentrations above the laboratory MDLs. However, no compounds were detected at concentrations above any of the established 2L GWQSs or the GCLs. Diphenylamine was detected at a concentrations of 1.35 ug/L, 81.0 ug/L and 1.23 ug/L in the USTM232-236-MW25, USTM232-236-MW26, and

USTM232-236-MW27 groundwater samples, respectively. Please note, there is no established 2L GWQS or GCL for Diphenylamine; therefore, any detection is considered reportable. However, it should be noted that Diphenylamine is not a petroleum-related compound and is used in the manufacturing of dyes and stabilizing nitrocellulose explosives and celluloid. All other samples analyzed were reported at concentrations below the 2L GWQSs or below the MDLs.

All four monitoring wells sampled during the current investigation contained ten TICs. TICs are substances not on the target compound list, and not all TICs are identified and quantified using individual standards. All TIC quantifications are estimated. See the laboratory report in Appendix D for a list of the TICs associated with each groundwater sample.

MADEP VPH/EPH

As indicated in Tables 4C and 4D and illustrated on Figure 5C; the C₉-C₁₈ Aliphatics and C₉-C₂₂ Aromatics hydrocarbon fractions were detected at concentrations in excess of the 2L GWQSs in one or more samples. The C₉-C₁₈ Aliphatics hydrocarbon fractions were detected at concentrations of 110,092 ug/L and 4,210 ug/L in samples USTM232-236-MW26 and USTM232-236-MW27, respectively, both of which were above the 2L GWQS of 4,200 ug/L for this compound. All four of the groundwater samples collected contained concentrations of the C₉-C₂₂ Aromatics hydrocarbon fractions above the 2L GWQS of 210 ug/L. These concentrations were as follows: USTM232-236-MW24 = 483 ug/L, USTM232-236-MW25 = 975 ug/L, USTM232-236-MW26 = 34,236 ug/L and USTM232-236-MW27 = <2,330 ug/L. The two other MADEP VPH/EPH compounds were reported at concentrations below the 2L GWQSs or below the MDLs.

J. CONCLUSIONS AND RECOMMENDATIONS

The confirmation soil samples collected during the current soil cleanup activities indicated concentrations of the C₉-C₂₂ Aromatics hydrocarbon fractions above the STGW MSCC, but were below the Residential MSCC. No other compounds were detected above any of the established MSCCs in the soil samples. The groundwater samples collected during the current investigation revealed the C₉-C₁₈ Aliphatics and C₉-C₂₂ Aromatics hydrocarbon fractions at concentrations above the 2L GWQSs. No other compounds were detected above any of the established 2L GWQSs or GCLs.

The M-232-236 site currently meets the criteria for Residential Land Use and an Intermediate Risk Classification due to the occurrence of measureable free-phase product within the past year. Since the site is currently ranked as an Intermediate Risk site, soils must meet the lower of the Residential or STGW MSCCs. However, the currently approved monitoring schedule for the next year is to conduct four quarterly gauging events of all on-site monitoring wells. If all four gauging events reveal no measureable thickness of free-phase product, then the risk ranking for the site could be reduced to "Low Risk". Upon reduction of the risk ranking to Low, the

soil contamination will be re-evaluated to determine compliance with the Residential MSCCs which would be the applicable regulatory levels. As the soil confirmation samples collected during the current cleanup activities indicated no contaminants at concentrations above any of the established Residential MSCCs, if the risk ranking could be reduced to Low the site could receive NFA with an LUR for Groundwater.

K. LIMITATIONS

The soil and groundwater samples analyzed as part of this investigation only provide isolated data points and may not represent conditions at every location in the project area. Analyses and conclusions of this report, being based on interpolation between data points at the project area, may not be completely representative of all site conditions. Conclusions and recommendations of this investigation and report are based on the best available data in an effort to comply with current regulatory requirements.

L. REFERENCES

- CATLIN Engineers and Scientists. *Workplan/Health and Safety Plan, Well Installation and Sampling – Site M-232-236*. Marine Corps Base, Camp Lejeune, NC. May 19, 2009.
- CATLIN Engineers and Scientists and Osage of Virginia. *Final Annual Groundwater Monitoring Report 2008-2009, Buildings M-232-236*. Marine Corps Base, Camp Lejeune, NC. June 2009.
- North Carolina Department of Natural Resources and Community Development. *Geologic Map of North Carolina*. 1985.
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http://www.ehnr.state.nc.us/Data_and_Modeling/Ground_Water_Databases/rametstnew.php.

TABLES

TABLE 1

SITE HISTORY - UST SYSTEM INFORMATION

SOIL CLEANUP REPORT
SITE M-232-236

MARINE CORPS BASE
CAMP LEJEUNE, NORTH CAROLINA

UST ID Number	Product (gasoline, diesel, jet fuel, etc.)	Capacity (gallons)	Date Installed (mm/dd/yy)	Date Permanently Closed (P), or Still in Use* (C) (mm/dd/yy)	Was Release Associated With UST System? (Yes / No)
M-232-1	#2 Heating Oil	550	1942	(P) May 1990	Yes
M-233-1	#2 Heating Oil	550	1942	(P) May 1990	Yes
M-234-1	#2 Heating Oil	550	1942	(P) May 1990	Yes
M-235-1	#2 Heating Oil	550	1942	(P) May 1990	Yes
M-236-1	#2 Heating Oil	550	1942	(P) May 1990	Yes

* Still in use means not permanently closed.

TABLE 2

SITE HISTORY - UST OWNER/OPERATOR INFORMATION

**SOIL CLEANUP REPORT
SITE M-232-236**

**MARINE CORPS BASE
CAMP LEJEUNE, NORTH CAROLINA**

UST ID Numbers	Name of Owner or Operator	Dates of Ownership/Operation (mm/dd/yy) to (mm/dd/yy)	Address	Telephone Number
M-232-1 through M-236-1	Commanding General Marine Corps Base Camp Lejeune, NC	1942 to May 1990	PSC BOX 20004 Marine Corps Base Camp Lejeune, NC 28542	(910) 451-5068

TABLE 3A
SUMMARY OF CONFIRMATION SOIL SAMPLE LABORATORY RESULTS
EPA METHOD 8260B / 5035

Incident Name and No.: Site M-232-236 - Incident No. 9593

Sample ID	Contaminant of Concern →		Acetone	2-Butanone (MEK)	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Ethylbenzene	Isopropylbenzene	4-Isopropyltoluene	Methylene chloride	Naphthalene	n-Propyl benzene	Toluene	All other EPA Method 8260B / 5035 Compounds
	Date Collected	Sample Depth (ft. BLS)													
Residential MSCC (ug/kg)			1,564,000	9,385,000	626,000	626,000	626,000	1,560,000	1,564,000	NE	85,000	313,000	626,000	3,200,000	Varies
Industrial/Commercial MSCC (ug/kg)			40,880,000	245,280,000	16,350,000	16,350,000	16,350,000	40,000,000	40,880,000	NE	763,000	8,176,000	16,350,000	82,000,000	Varies
STGW MSCC (ug/kg)			2,800	17,000	4,300	3,300	3,400	4,600	1,700	NE	20	580	1,700	7,300	Varies
UST M236-S005	3/31/2009	6	<1,300	<1,300	<51.9	167	<51.9	<51.9	<51.9	219	<260	65.9	<51.9	<51.9	BQL
UST M236-S006	4/2/2009	6	<51.3	<25.7	<5.13	<5.13	<5.13	<5.13	<5.13	<5.13	<20.5	<5.13	<5.13	<5.13	BQL
UST M236-S007	4/1/2009	6	<48.4	<24.2	<4.84	<4.84	<4.84	<4.84	<4.84	<4.84	<19.4	<4.84	<4.84	<4.84	BQL
UST M236-S008	4/2/2009	6	<50.4	<25.2	<5.04	<5.04	<5.04	<5.04	<5.04	<5.04	<20.2	<5.04	<5.04	<5.04	BQL
Trip Blanks	4/2/2009	N/A	<1,250	<1,250	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<250	<50.0	<50.0	<50.0	BQL
USTM234-S001	4/23/2009	6	<1,460	<1,460	<58.2	350	<58.2	<58.2	<58.2	59.9	<291	79.7	<58.2	<58.2	BQL
USTM234-S002	4/24/2009	6	<52.8	<26.4	<5.28	<5.28	<5.28	<5.28	<5.28	<5.28	<21.1	<5.28	<5.28	<5.28	BQL
USTM234-S003	4/24/2009	6	<47.2	<23.6	<4.72	<4.72	<4.72	<4.72	<4.72	<4.72	<18.9	<4.72	<4.72	<4.72	BQL
USTM234-S004	4/23/2009	6	<52.0	<26.0	<5.20	<5.20	<5.20	<5.20	<5.20	<5.20	<20.8	<5.20	<5.20	<5.20	BQL
Trip Blanks	4/24/2009	N/A	<50.0	<25.0	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00	<5.00	BQL
M233-S001	6/10/2009	6	<6.39	<5.02	<0.884	<0.934	<1.04	<0.801	<0.822	<0.990	<1.10	0.990 J	<1.17	<0.922	BQL
M233-S002	6/10/2009	6	<117	116 J	<5.87	467	33.4 J	<4.15	33.9 J	149	<5.28	124	83.4	<4.09	BQL
M233-S003	6/10/2009	6	<7.67	<6.03	3.17 J	5.24 J	<1.24	6.28	4.22 J	<1.19	<1.32	9.18	5.87	<1.11	BQL
M233-S004	6/10/2009	6	<8.14	<6.40	<1.13	<1.19	<1.32	<1.02	<1.05	<1.26	<1.40	<1.00	<1.49	<1.18	BQL
Trip Blank	6/10/2009	N/A	10.7 J	<5.43	<0.995	<1.01	<1.12	<0.866	<0.888	<1.07	3.95 J	<0.850	<1.26	2.38 J	BQL
M232-S001	6/25/2009	6	<7.32	<5.75	<1.01	1.38 J	<1.19	<0.917	<0.941	<1.13	<1.26	2.64 J	<1.33	<1.06	BQL
M232-S002	6/25/2009	6	<8.46	<6.65	<1.17	<1.24	<1.37	<1.06	<1.09	<1.31	<1.46	<1.04	<1.54	<1.22	BQL
M232-S003	6/25/2009	6	<6.55	<5.14	<0.905	<0.957	<1.06	<0.820	<0.841	<1.01	<1.13	<0.805	<1.19	<0.944	BQL
M232-S004	6/25/2009	6	<7.68	<6.04	<1.06	<1.12	<1.24	<0.963	<0.987	<1.19	<1.32	<0.945	<1.40	<1.11	BQL

All results in micrograms per kilogram (ug/kg).

Bold results indicate concentrations above lowest MSCC.

BQL = Below Quantitation Limit (reporting limit or method detection limit)

NE = None Established

N/A = Not Applicable

ft. BLS = Feet Below Land Surface.

< = Less than reporting limit or method detection limit

MSCC = Maximum Soil Contaminant Concentration

TABLE 3B
SUMMARY OF CONFIRMATION SOIL SAMPLE LABORATORY RESULTS
EPA METHOD 8270

Incident Name and No.: Site M-232-236 - Incident No. 9593

Sample ID	Contaminant of Concern →		Acenaphthene	Anthracene	Dibenzofuran	Fluorene	Isophorone	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene	All other EPA Method 8270 Compounds
	Date Collected	Sample Depth (ft. BLS)										
Residential MSCC (ug/kg)			940,000	4,600,000	62,000	620,000	NE	63,000	313,000	469,000	469,000	Varies
Industrial/Commercial MSCC (ug/kg)			24,000,000	122,000,000	1,635,000	16,400,000	NE	1,635,000	8,176,000	12,264,000	12,264,000	Varies
STGW MSCC (ug/kg)			8,200	1,000,000	4,700	44,000	NE	1,700	580	60,000	290,000	Varies
UST M236-S005	3/31/2009	6	<416	<416	<416	449	<416	<416	<416	961	<416	BQL
UST M236-S006	4/2/2009	6	<362	<362	<362	<362	<362	<362	<362	<362	<362	BQL
UST M236-S007	4/1/2009	6	<392	<392	<392	<392	<392	<392	<392	<392	<392	BQL
UST M236-S008	4/2/2009	6	<399	<399	<399	<399	<399	<399	<399	<399	<399	BQL
USTM234-S001	4/23/2009	6	<443	<443	<443	<443	<443	<443	<443	457	<443	BQL
USTM234-S002	4/24/2009	6	<420	<420	<420	<420	<420	<420	<420	<420	<420	BQL
USTM234-S003	4/24/2009	6	<420	<420	<420	<420	<420	<420	<420	<420	<420	BQL
USTM234-S004	4/23/2009	6	<398	<398	<398	<398	2,440	<398	<398	<398	<398	BQL
M233-S001	6/10/2009	6	<69.4	<61.7	<64.0	<70.8	<66.3	<74.0	<63.5	<63.5	<61.7	BQL
M233-S002	6/10/2009	6	156 J	65.0 J	<61.1	450	<63.2	879	<60.6	814	<58.9	BQL
M233-S003	6/10/2009	6	176 J	66.9 J	167 J	468	<61.1	724	121 J	858	142 J	BQL
M233-S004	6/10/2009	6	<65.9	<58.6	<60.8	<67.2	<62.9	<70.2	<60.3	<60.3	<58.6	BQL
M232-S001	6/25/2009	6	<62.4	<55.5	<57.5	212	<59.6	<66.5	<57.1	81.6 J	<55.5	BQL
M232-S002	6/25/2009	6	<58.0	<51.6	<53.5	<59.2	<55.4	<61.8	<53.1	<53.1	<51.6	BQL
M232-S003	6/25/2009	6	<59.5	<52.9	<54.8	<60.6	<56.7	<63.3	<54.4	<54.4	<52.9	BQL
M232-S004	6/25/2009	6	<62.3	<55.4	<57.5	<63.6	<59.5	<66.4	<57.0	<57.0	<55.4	BQL

All results in micrograms per kilogram (ug/kg).
 Bold results indicate concentrations above lowest MSCC.
 BQL = Below Quantitation Limit (reporting limit or method detection limit)
 NE = None Established
 ft. BLS = Feet Below Land Surface.
 < = Less than reporting limit or method detection limit
 MSCC = Maximum Soil Contaminant Concentration

TABLE 3C
SUMMARY OF CONFIRMATION SOIL SAMPLE LABORATORY RESULTS
MADEP VPH / EPH

Incident Name and No.: Site M-232-236 - Incident No. 9593

Sample ID	Contaminant of Concern →		EPH			VPH		
	Date Collected	Sample Depth (ft. BLS)	C9-C18 Aliphatics	C19-C36 Aliphatics	C11-C22 Aromatics	C5-C8 Aliphatics	C9-C12 Aliphatics	C9-C10 Aromatics
UST M236-S005	3/31/2009	6	253	28.1	115	<10.0	31.4	67.7
UST M236-S006	4/2/2009	6	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
UST M236-S007	4/1/2009	6	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
UST M236-S008	4/2/2009	6	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Trip Blanks	4/2/2009	N/A	NA	NA	NA	<10.0	<10.0	<10.0
USTM234-S001	4/23/2009	6	290	29.8	147	<10.0	33.1	23.5
USTM234-S002	4/24/2009	6	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
USTM234-S003	4/24/2009	6	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
USTM234-S004	4/23/2009	6	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Trip Blanks	4/24/2009	N/A	NA	NA	NA	<10.0	<10.0	<10.0
M233-S001	6/10/2009	6	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
M233-S002	6/10/2009	6	559	29.9	282	<10.0	38.5	63.5
M233-S003	6/10/2009	6	158	<10.0	121	<10.0	13.4	11.4
M233-S004	6/10/2009	6	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Trip Blank	6/10/2009	N/A	NA	NA	NA	<10.0	<10.0	<10.0
M232-S001	6/25/2009	6	47.1	<10.0	10.2	<10.0	<10.0	<10.0
M232-S002	6/25/2009	6	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
M232-S003	6/25/2009	6	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
M232-S004	6/25/2009	6	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Trip Blanks	6/25/2009	N/A	NA	NA	NA	<10.0	<10.0	<10.0

All results in milligrams per kilogram (mg/kg).

VPH / EPH = Volatile Petroleum Hydrocarbon / Extractable Petroleum Hydrocarbon

N/A = Not Applicable

NA = Not Analyzed

ft. BLS = Feet Below Land Surface

< = Less than reporting limit

TABLE 3D
SUMMARY OF CONFIRMATION SOIL SAMPLE LABORATORY RESULTS
MADEP VPH / EPH AS COMPARED TO NCDENR MSCCs

Incident Name and No.: Site M-232-236 - Incident No. 9593

Sample ID	Contaminant of Concern →		MADEP VPH / EPH			
	Date Collected	Sample Depth (ft. BLS)	C5-C8 Aliphatics	C9-C18 Aliphatics	C19-C36 Aliphatics	C9-C22 Aromatics
Residential MSCC (mg/kg)			939	9,386	93,860	469
Industrial/Commercial MSCC (mg/kg)			24,528	245,280	#	12,264
STGW MSCC (mg/kg)			72	3,300	##	34
UST M236-S005	3/31/2009	6	<10.0	216.7	28.1	182.7
UST M236-S006	4/2/2009	6	<10.0	<10.0	<10.0	<20.0
UST M236-S007	4/1/2009	6	<10.0	<10.0	<10.0	<20.0
UST M236-S008	4/2/2009	6	<10.0	<10.0	<10.0	<20.0
Trip Blanks	4/2/2009	N/A	<10.0	0*	NA	<10.0*
USTM234-S001	4/23/2009	6	<10.0	299.6	29.8	170.5
USTM234-S002	4/24/2009	6	<10.0	<10.0	<10.0	<20.0
USTM234-S003	4/24/2009	6	<10.0	<10.0	<10.0	<20.0
USTM234-S004	4/23/2009	6	<10.0	<10.0	<10.0	<20.0
Trip Blanks	4/24/2009	N/A	<10.0	0*	NA	<10.0*
M233-S001	6/10/2009	6	<10.0	<10.0	<10.0	<20.0
M233-S002	6/10/2009	6	<10.0	534.0	29.9	345.5
M233-S003	6/10/2009	6	<10.0	160.0	<10.0	132.4
M233-S004	6/10/2009	6	<10.0	<10.0	<10.0	<20.0
Trip Blank	6/10/2009	N/A	<10.0	0*	NA	<10.0*
M232-S001	6/25/2009	6	<10.0	47.1	<10.0	<20.2
M232-S002	6/25/2009	6	<10.0	<10.0	<10.0	<20.0
M232-S003	6/25/2009	6	<10.0	<10.0	<10.0	<20.0
M232-S004	6/25/2009	6	<10.0	<10.0	<10.0	<20.0
Trip Blanks	6/25/2009	N/A	<10.0	0*	NA	<10.0*

All results in milligrams per kilogram (mg/kg).

MADEP = Massachusetts Department of Environmental Protection

VPH / EPH = Volatile Petroleum Hydrocarbon / Extractable Petroleum Hydrocarbon

N/A = Not Applicable

NA = Not Analyzed

ft. BLS = Feet Below Land Surface

< = Less than reporting limit

= Health based level > 100%

= Considered Immobile

MSCC = Maximum Soil Contaminant Concentration

Bold results indicate concentrations above lowest MSCC.

* = The value represents the VPH fraction, the MADEP EPH analysis was not conducted

TABLE 4A
SUMMARY OF GROUNDWATER LABORATORY RESULTS
EPA METHOD 602

Incident Name and No.: Site M-232-236 - Incident No. 9593

Well ID	Contaminant of Concern →		Ethylbenzene	Toluene	Total Xylenes	All Other EPA Method 602 Compounds
	Sample ID	Date Collected				
GCL (µg/L) 2L GWQS (µg/L)			84,500 550	257,500 1,000	87,500 530	Varies Varies
USTM232-236-MW24	USTM232-236-MW24	7/8/2009	0.604 J	<0.313	<0.886	BMDL
USTM232-236-MW25	USTM232-236-MW25	7/8/2009	11.3	<0.313	<0.886	BMDL
USTM232-236-MW26	USTM232-236-MW26	7/8/2009	<0.19	<0.313	<0.886	BMDL
USTM232-236-MW27	USTM232-236-MW27	7/8/2009	0.855 J	0.392 J	<1.111* J	BMDL
USTM232-236-MW27	USTM232-236-MW27 DUP	7/8/2009	1.04	<0.313	<1.035* J	BMDL
N/A	Trip Blank	7/8/2009	<0.19	<0.313	<0.886	BMDL

All results in micrograms per liter (µg/L).

N/A = Not Applicable

BMDL = Below Method Detection Limit

< = Less than method detection limit

GCL = Gross Contaminant Level

2L GWQS = NCAC T15A:02L Groundwater Quality Standards

J = Estimated concentration, below calibration range and above MDL

* = The value represents the sum of the reported practical quantitation limit of one fraction and the detected concentration of the other fraction.

TABLE 4B
SUMMARY OF GROUNDWATER LABORATORY RESULTS
EPA METHOD 625 + TICs

Incident Name and No.: Site M-232-236 - Incident No. 9593

Well ID	Contaminant of Concern →		Acenaphthene	Acenaphthylene	Anthracene	Diphenylamine	Fluorene	Naphthalene	Phenanthrene	All Other EPA Method 625 Compounds
	Sample ID	Date Collected								
GCL (µg/L) 2L GWQS (µg/L)			2,120 80	1,965 210	2,100 2,100	NE NE	950 280	15,500 21	410 210	Varies Varies
USTM232-236-MW24	USTM232-236-MW24	7/8/2009	1.63 J	5.77	<0.918	<0.598	2.15 J	11.4	1.84 J	BMDL
USTM232-236-MW25	USTM232-236-MW25	7/8/2009	3.91 J	5.89	<0.911	1.35 J	4.53 J	18.5	4.01 J	BMDL
USTM232-236-MW26	USTM232-236-MW26	7/8/2009	16.0 J	12.9 J	9.29 J	81.0	36.6 J	<9.39	91.3	BMDL
USTM232-236-MW27	USTM232-236-MW27	7/8/2009	2.15 J	6.10	<0.897	1.23 J	2.31 J	10.7	4.05 J	BMDL

All results in micrograms per liter (µg/L).

< = Less than method detection limit

BMDL = Below Method Detection Limit

NE = None Established

J = Estimated concentration, below calibration range and above MDL

GCL = Gross Contaminant Level

2L GWQS = NCAC T15A:02L Groundwater Quality Standards

TICs = Tentatively Identified Compounds

Bold results indicate concentrations above 2L GWQS or GCL.

TABLE 4C
SUMMARY OF GROUNDWATER LABORATORY RESULTS
MADEP VPH/EPH

Incident Name and No.: Site M-232-236 - Incident No. 9593

Well ID	Contaminant of Concern →		C5-C8 Aliphatics	C9-C12 Aliphatics	C9-C10 Aromatics	C9-C18 Aliphatics	C19-C36 Aliphatics	C11-C22 Aromatics
	Sample ID	Date Collected						
USTM232-236-MW24	USTM232-236-MW24	7/8/2009	<100	106	138	<100	<100	345
USTM232-236-MW25	USTM232-236-MW25	7/8/2009	<100	205	320	937	<100	655
USTM232-236-MW26	USTM232-236-MW26	7/8/2009	<100	328	236	110,000	11,600	34,000
USTM232-236-MW27	USTM232-236-MW27	7/8/2009	<100	<100	<100	4,210	193	2,230

All results in micrograms per liter (µg/L).

< = Less than reporting limit

TABLE 4D
SUMMARY OF GROUNDWATER LABORATORY RESULTS
MADEP VPH/EPH AS COMPARED TO 2L GWQSs

Incident Name and No.: Site M-232-236 - Incident No. 9593

Well ID	Contaminant of Concern →		C5-C8 Aliphatics	C9-C18 Aliphatics	C19-C36 Aliphatics	C9-C22 Aromatics
	Sample ID	Date Collected				
GCL (µg/L) 2L GWQS (µg/L)			NE 420	NE 4,200	NE 42,000	NE 210
USTM232-236-MW24	USTM232-236-MW24	7/8/2009	<100	<100	<100	483
USTM232-236-MW25	USTM232-236-MW25	7/8/2009	<100	822	<100	975
USTM232-236-MW26	USTM232-236-MW26	7/8/2009	<100	110,092	11,600	34,236
USTM232-236-MW27	USTM232-236-MW27	7/8/2009	<100	4,210	193	<2,330*

All results in micrograms per liter (µg/L).

NE = None Established

Bold results indicate concentrations above 2L GWQS or GCL.

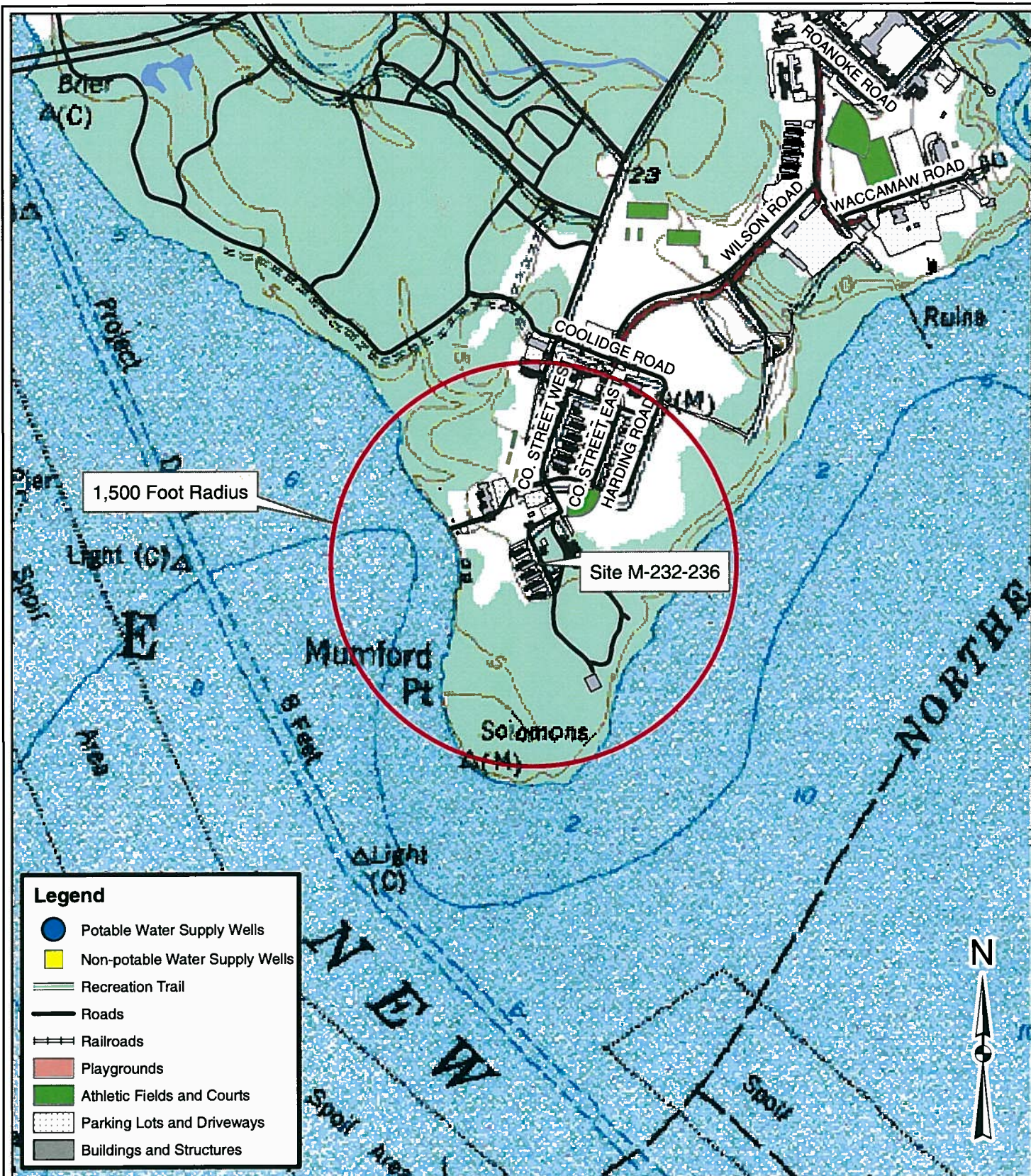
* = The value represents the sum of the reported practical quantitation limit of one fraction and the detected concentration of the other fraction.

GCL = Gross Contaminant Level

2L GWQS = NCAC T15A:02L Groundwater Quality Standards

< = Less than method detection limit

FIGURES

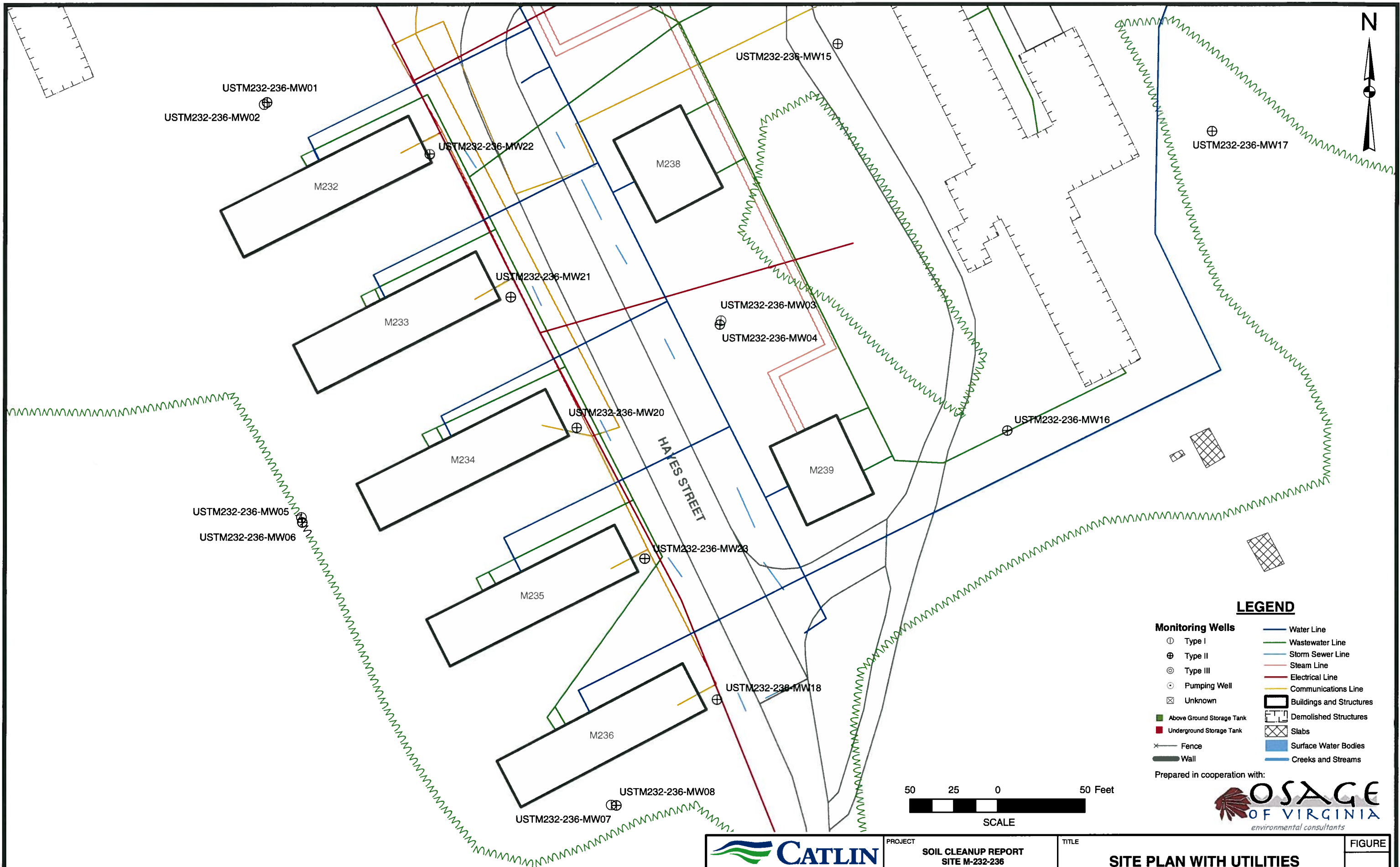


Prepared in cooperation with:



Data Sources: Data Layers provided by MCB Camp Lejeune GIS Office.

 CATLIN Engineers and Scientists P.O. Box 10279 Wilmington, NC 28404-0279 (910) 452-5861 NC Engineering License No.: C-0585	PROJECT SOIL CLEANUP REPORT SITE M-232-236 MARINE CORPS BASE CAMP LEJEUNE, NC		TITLE SITE LOCATION MAP		FIGURE 1	
	JOB NO. 209-024	DATE JULY 2009	SCALE AS SHOWN	DRAWN BY SAC	CHECKED BY MEM	



NOTES:
1. GIS Layers/Information provided by the MCB Camp Lejeune GIS Department.
2. Monitoring well locations from CATLIN Database.

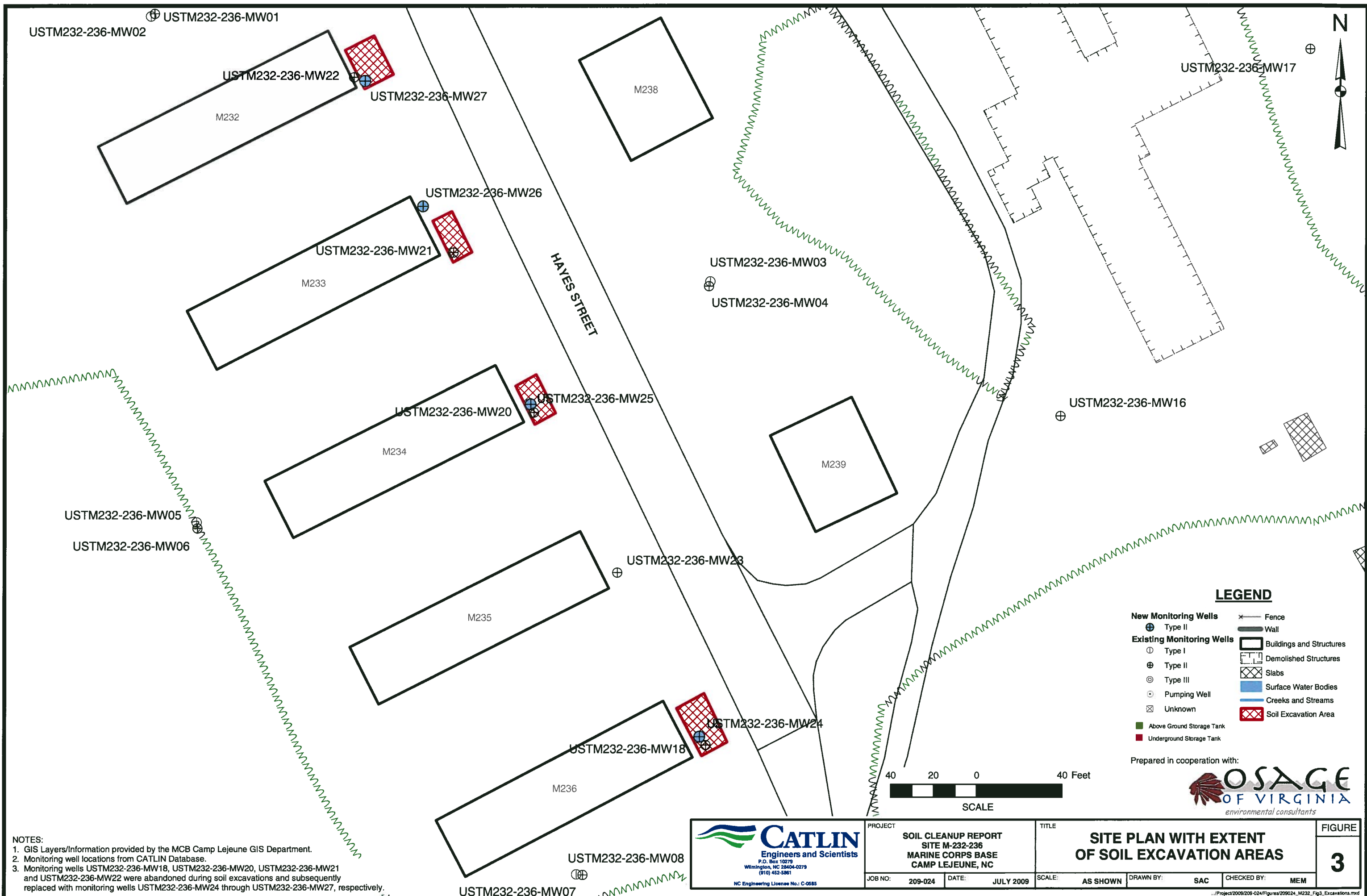
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(910) 452-5861
NC Engineering License No.: C-0585

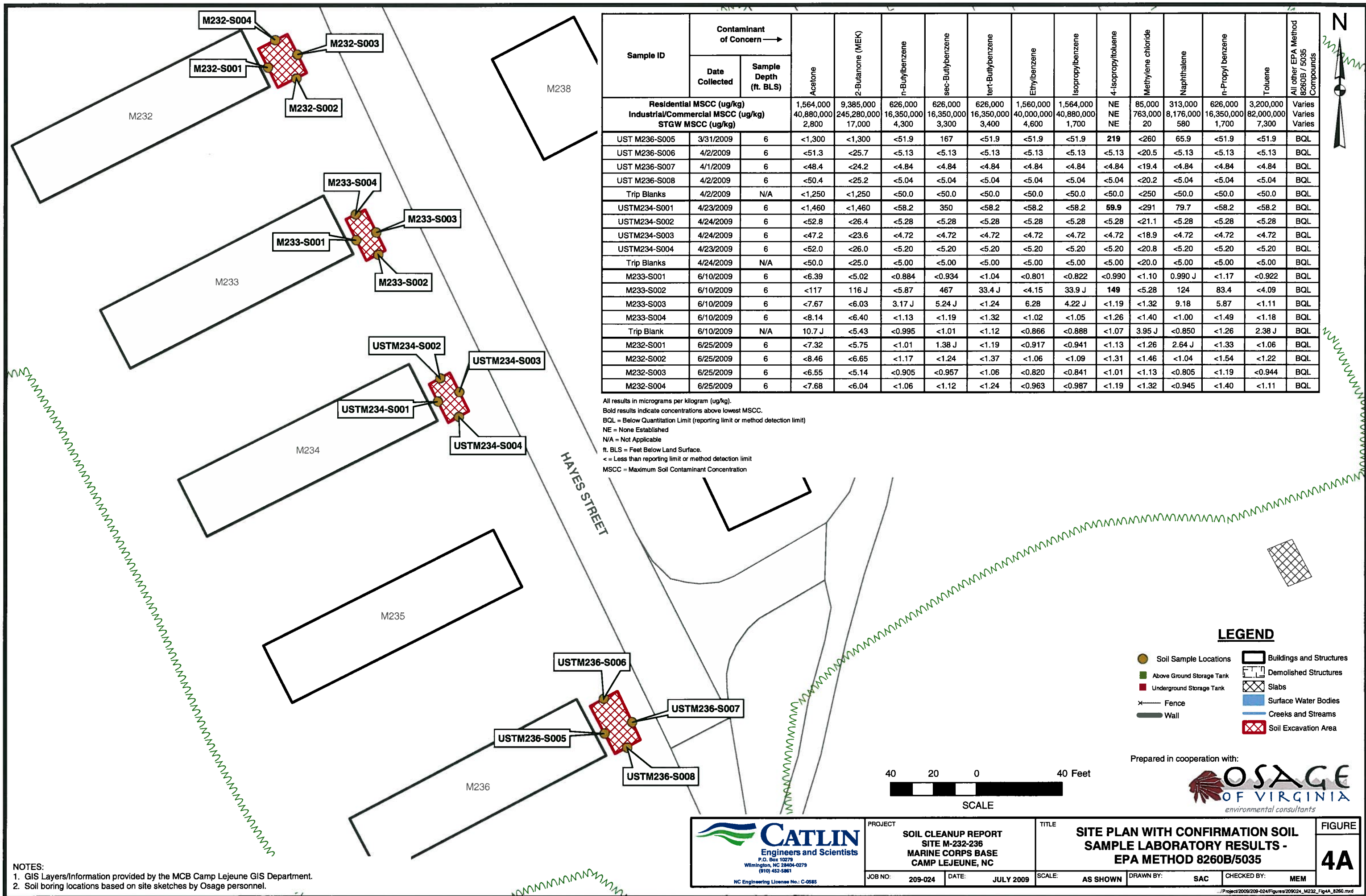
PROJECT	SOIL CLEANUP REPORT SITE M-232-236 MARINE CORPS BASE CAMP LEJEUNE, NC		
JOB NO:	209-024	DATE:	JULY 2009

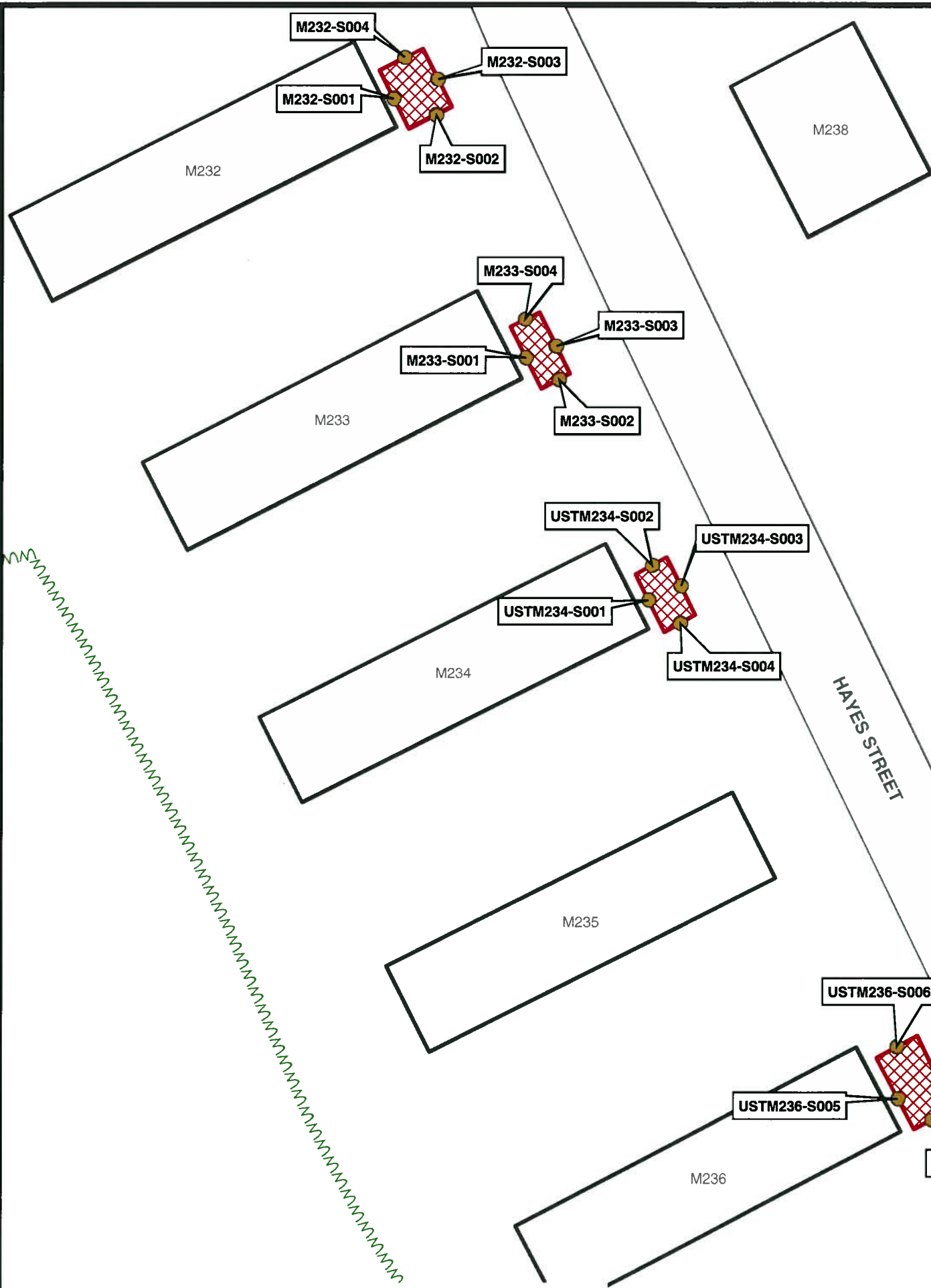
TITLE	SITE PLAN WITH UTILITIES		
SCALE:	AS SHOWN	DRAWN BY:	SAC
CHECKED BY:	MEM		

FIGURE	2
--------	---

\\Project\2009\209-024\Figures\209024_M232_Fig2_SiteMap.mxd







Sample ID	Contaminant of Concern →		Acenaphthene	Anthracene	Dibenzofuran	Fluorene	Isophorone	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene	All other EPA Method 8270 Compounds
	Date Collected	Sample Depth (ft. BLS)										
Residential MSCC (ug/kg)			940,000	4,600,000	62,000	620,000	NE	63,000	313,000	469,000	469,000	Varies
Industrial/Commercial MSCC (ug/kg)			24,000,000	122,000,000	1,635,000	16,400,000	NE	1,635,000	8,176,000	12,264,000	12,264,000	Varies
STGW MSCC (ug/kg)			8,200	1,000,000	4,700	44,000	NE	1,700	580	60,000	290,000	Varies
UST M236-S005	3/31/2009	6	<416	<416	<416	449	<416	<416	<416	961	<416	BQL
UST M236-S006	4/2/2009	6	<362	<362	<362	<362	<362	<362	<362	<362	<362	BQL
UST M236-S007	4/1/2009	6	<392	<392	<392	<392	<392	<392	<392	<392	<392	BQL
UST M236-S008	4/2/2009	6	<399	<399	<399	<399	<399	<399	<399	<399	<399	BQL
USTM234-S001	4/23/2009	6	<443	<443	<443	<443	<443	<443	<443	457	<443	BQL
USTM234-S002	4/24/2009	6	<420	<420	<420	<420	<420	<420	<420	<420	<420	BQL
USTM234-S003	4/24/2009	6	<420	<420	<420	<420	<420	<420	<420	<420	<420	BQL
USTM234-S004	4/23/2009	6	<398	<398	<398	<398	2,440	<398	<398	<398	<398	BQL
M233-S001	6/10/2009	6	<69.4	<61.7	<64.0	<70.8	<66.3	<74.0	<63.5	<63.5	<61.7	BQL
M233-S002	6/10/2009	6	156 J	65.0 J	<61.1	450	<63.2	879	<60.6	814	<58.9	BQL
M233-S003	6/10/2009	6	176 J	66.9 J	167 J	468	<61.1	724	121 J	858	142 J	BQL
M233-S004	6/10/2009	6	<65.9	<58.6	<60.8	<67.2	<62.9	<70.2	<60.3	<60.3	<58.6	BQL
M232-S001	6/25/2009	6	<62.4	<55.5	<57.5	212	<59.6	<66.5	<57.1	81.6 J	<55.5	BQL
M232-S002	6/25/2009	6	<58.0	<51.6	<53.5	<59.2	<55.4	<61.8	<53.1	<53.1	<51.6	BQL
M232-S003	6/25/2009	6	<59.5	<52.9	<54.8	<60.6	<56.7	<63.3	<54.4	<54.4	<52.9	BQL
M232-S004	6/25/2009	6	<62.3	<55.4	<57.5	<63.6	<59.5	<66.4	<57.0	<57.0	<55.4	BQL

All results in micrograms per kilogram (ug/kg).
Bold results indicate concentrations above lowest MSCC.
BQL = Below Quantitation Limit (reporting limit or method detection limit)
NE = None Established
ft. BLS = Feet Below Land Surface.
< = Less than reporting limit or method detection limit
MSCC = Maximum Soil Contaminant Concentration

LEGEND

●

 Soil Sample Locations

■

 Above Ground Storage Tank

■

 Underground Storage Tank

—

 Fence

—

 Wall

Buildings and Structures

Demolished Structures

Slabs

Surface Water Bodies

Creeks and Streams

Soil Excavation Area

Prepared in cooperation with:

OSAGE
OF VIRGINIA
environmental consultants

NOTES:
1. GIS Layers/Information provided by the MCB Camp Lejeune GIS Department.
2. Soil boring locations based on site sketches by Osage personnel.

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PROJECT

SOIL CLEANUP REPORT
SITE M-232-236
MARINE CORPS BASE
CAMP LEJEUNE, NC

TITLE

SITE PLAN WITH CONFIRMATION SOIL
SAMPLE LABORATORY RESULTS -
EPA METHOD 8270

FIGURE

4B

JOB NO:

209-024

DATE:

JULY 2009

SCALE:

AS SHOWN

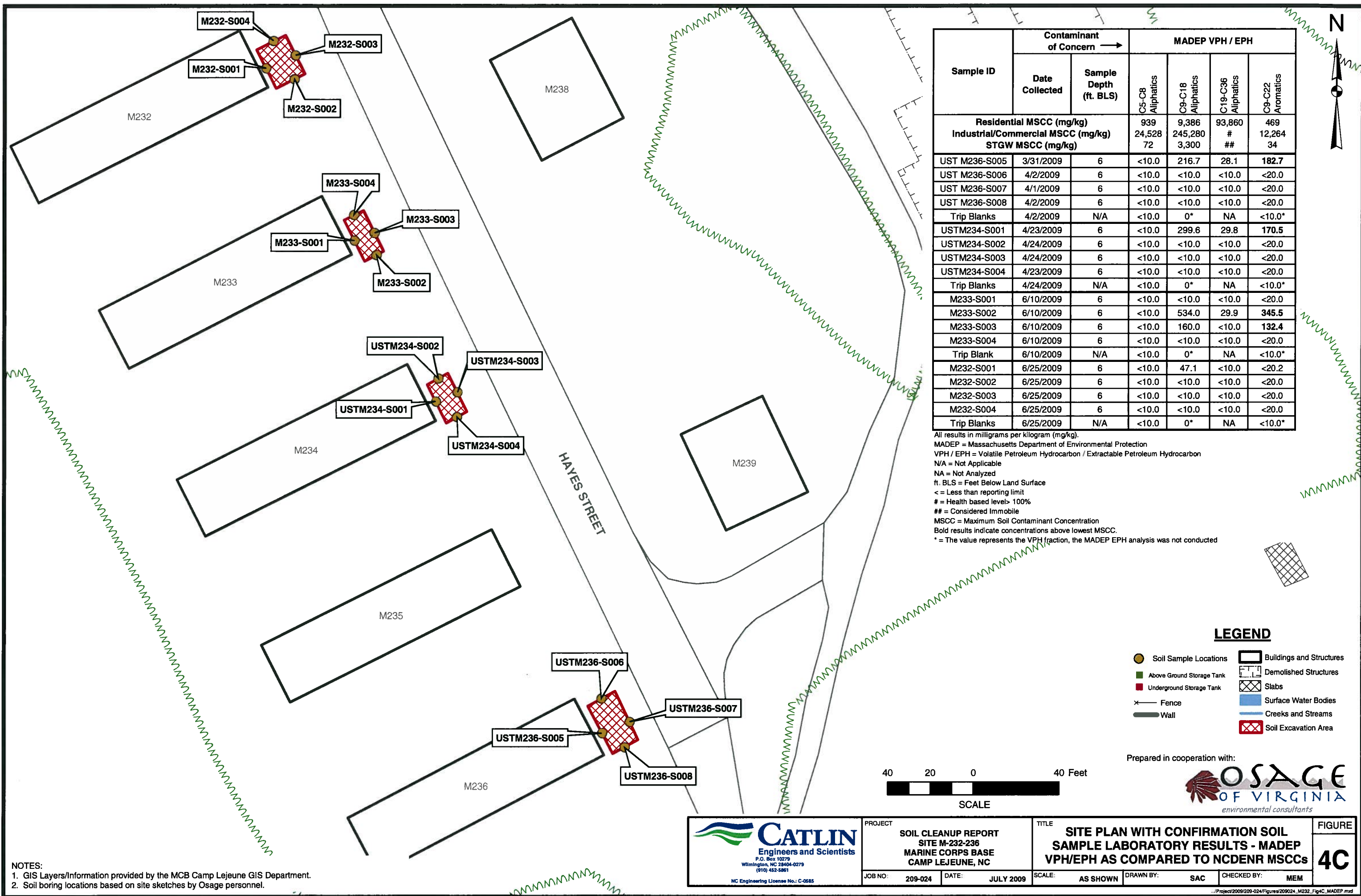
DRAWN BY:

SAC

CHECKED BY:

MEM

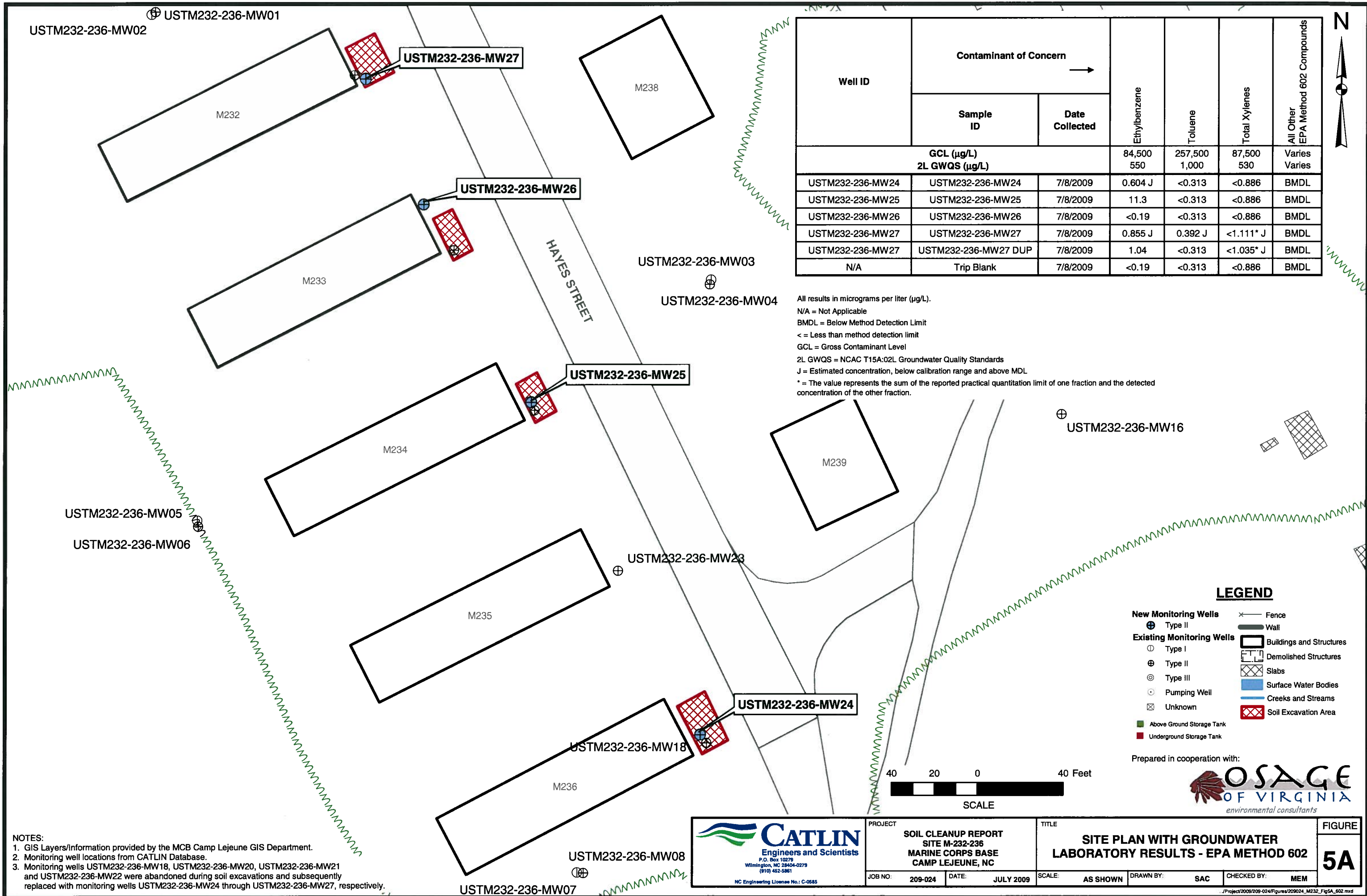
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Sample ID	Contaminant of Concern →		MADEP VPH / EPH			
	Date Collected	Sample Depth (ft. BLS)	C5-C8 Aliphatics	C9-C18 Aliphatics	C19-C36 Aliphatics	C9-C22 Aromatics
Residential MSCC (mg/kg)			939	9,386	93,860	469
Industrial/Commercial MSCC (mg/kg)			24,528	245,280	#	12,264
STGW MSCC (mg/kg)			72	3,300	##	34
UST M236-S005	3/31/2009	6	<10.0	216.7	28.1	182.7
UST M236-S006	4/2/2009	6	<10.0	<10.0	<10.0	<20.0
UST M236-S007	4/1/2009	6	<10.0	<10.0	<10.0	<20.0
UST M236-S008	4/2/2009	6	<10.0	<10.0	<10.0	<20.0
Trip Blanks	4/2/2009	N/A	<10.0	0*	NA	<10.0*
USTM234-S001	4/23/2009	6	<10.0	299.6	29.8	170.5
USTM234-S002	4/24/2009	6	<10.0	<10.0	<10.0	<20.0
USTM234-S003	4/24/2009	6	<10.0	<10.0	<10.0	<20.0
USTM234-S004	4/23/2009	6	<10.0	<10.0	<10.0	<20.0
Trip Blanks	4/24/2009	N/A	<10.0	0*	NA	<10.0*
M233-S001	6/10/2009	6	<10.0	<10.0	<10.0	<20.0
M233-S002	6/10/2009	6	<10.0	534.0	29.9	345.5
M233-S003	6/10/2009	6	<10.0	160.0	<10.0	132.4
M233-S004	6/10/2009	6	<10.0	<10.0	<10.0	<20.0
Trip Blank	6/10/2009	N/A	<10.0	0*	NA	<10.0*
M232-S001	6/25/2009	6	<10.0	47.1	<10.0	<20.2
M232-S002	6/25/2009	6	<10.0	<10.0	<10.0	<20.0
M232-S003	6/25/2009	6	<10.0	<10.0	<10.0	<20.0
M232-S004	6/25/2009	6	<10.0	<10.0	<10.0	<20.0
Trip Blanks	6/25/2009	N/A	<10.0	0*	NA	<10.0*

All results in milligrams per kilogram (mg/kg).
MADEP = Massachusetts Department of Environmental Protection
VPH / EPH = Volatile Petroleum Hydrocarbon / Extractable Petroleum Hydrocarbon
N/A = Not Applicable
NA = Not Analyzed
ft. BLS = Feet Below Land Surface
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Bold results indicate concentrations above lowest MSCC.
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NOTES:
1. GIS Layers/Information provided by the MCB Camp Lejeune GIS Department.
2. Soil boring locations based on site sketches by Osage personnel.



Well ID	Contaminant of Concern		Ethylbenzene	Toluene	Total Xylenes	All Other EPA Method 602 Compounds
	Sample ID	Date Collected				
GCL (µg/L)			84,500	257,500	87,500	Varies
2L GWQS (µg/L)			550	1,000	530	Varies
USTM232-236-MW24	USTM232-236-MW24	7/8/2009	0.604 J	<0.313	<0.886	BMDL
USTM232-236-MW25	USTM232-236-MW25	7/8/2009	11.3	<0.313	<0.886	BMDL
USTM232-236-MW26	USTM232-236-MW26	7/8/2009	<0.19	<0.313	<0.886	BMDL
USTM232-236-MW27	USTM232-236-MW27	7/8/2009	0.855 J	0.392 J	<1.111* J	BMDL
USTM232-236-MW27	USTM232-236-MW27 DUP	7/8/2009	1.04	<0.313	<1.035* J	BMDL
N/A	Trip Blank	7/8/2009	<0.19	<0.313	<0.886	BMDL

All results in micrograms per liter (µg/L).
N/A = Not Applicable
BMDL = Below Method Detection Limit
< = Less than method detection limit
GCL = Gross Contaminant Level
2L GWQS = NCAC T15A.02L Groundwater Quality Standards
J = Estimated concentration, below calibration range and above MDL
* = The value represents the sum of the reported practical quantitation limit of one fraction and the detected concentration of the other fraction.

NOTES:
1. GIS Layers/Information provided by the MCB Camp Lejeune GIS Department.
2. Monitoring well locations from CATLIN Database.
3. Monitoring wells USTM232-236-MW18, USTM232-236-MW20, USTM232-236-MW21 and USTM232-236-MW22 were abandoned during soil excavations and subsequently replaced with monitoring wells USTM232-236-MW24 through USTM232-236-MW27, respectively.

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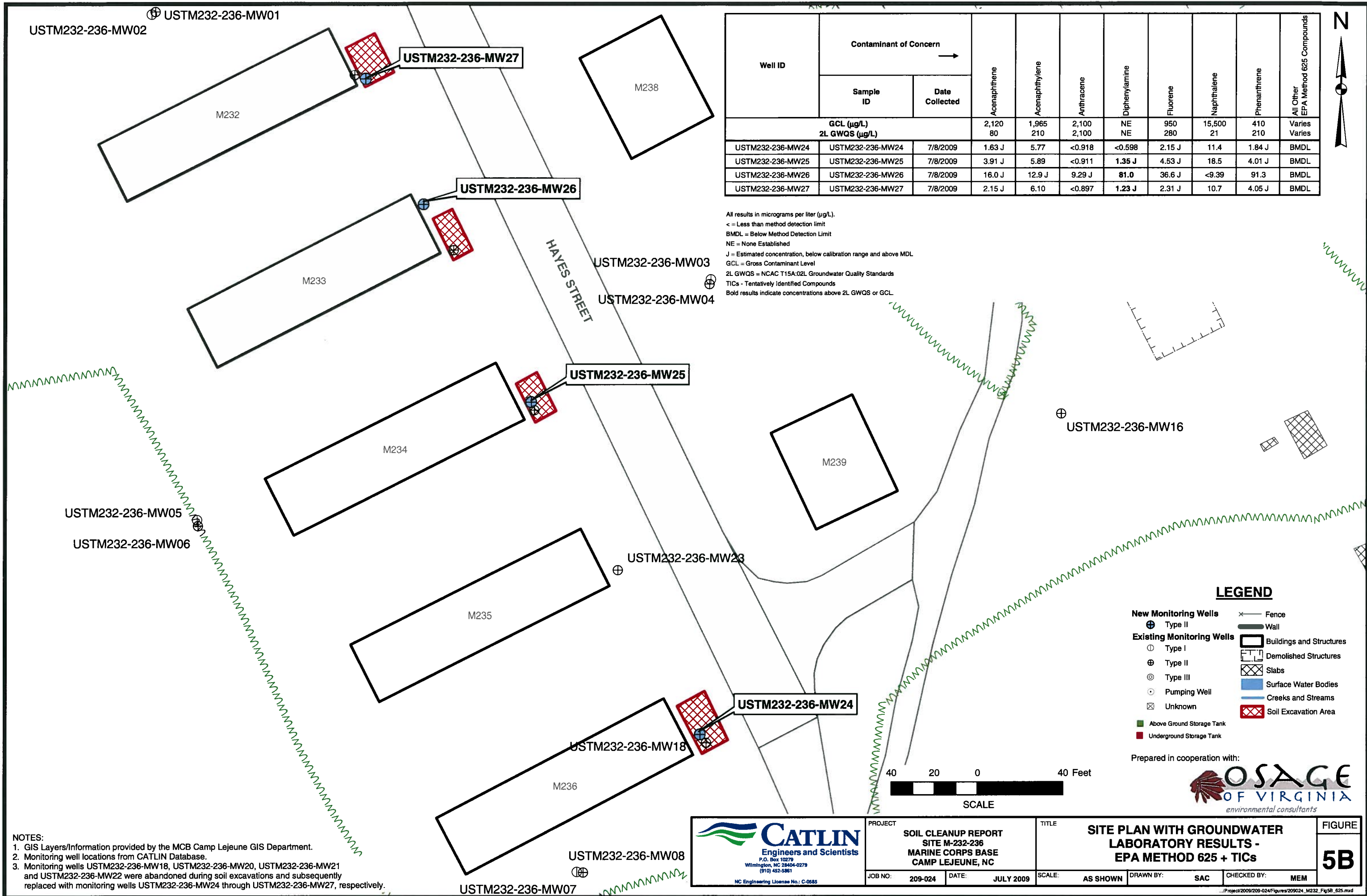
PROJECT: SOIL CLEANUP REPORT
SITE M-232-236
MARINE CORPS BASE
CAMP LEJEUNE, NC

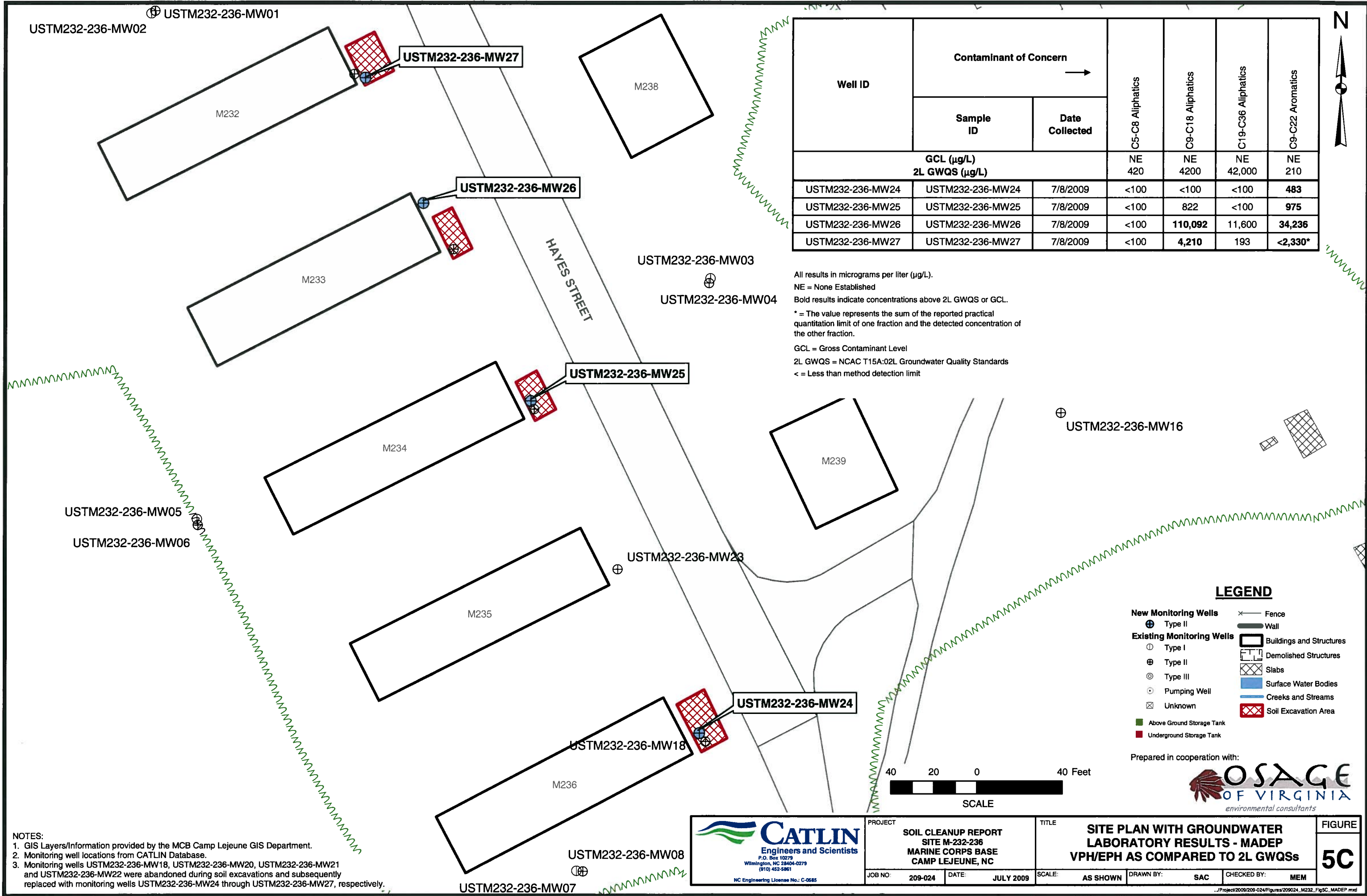
JOB NO: 209-024 DATE: JULY 2009

TITLE: SITE PLAN WITH GROUNDWATER
LABORATORY RESULTS - EPA METHOD 602

SCALE: AS SHOWN DRAWN BY: SAC CHECKED BY: MEM

FIGURE: 5A





Well ID	Contaminant of Concern		C5-C8 Aliphatics	C9-C18 Aliphatics	C19-C36 Aliphatics	C9-C22 Aromatics
	Sample ID	Date Collected				
GCL (µg/L)			NE	NE	NE	NE
2L GWQS (µg/L)			420	4200	42,000	210
USTM232-236-MW24	USTM232-236-MW24	7/8/2009	<100	<100	<100	483
USTM232-236-MW25	USTM232-236-MW25	7/8/2009	<100	822	<100	975
USTM232-236-MW26	USTM232-236-MW26	7/8/2009	<100	110,092	11,600	34,236
USTM232-236-MW27	USTM232-236-MW27	7/8/2009	<100	4,210	193	<2,330*

All results in micrograms per liter (µg/L).
NE = None Established
Bold results indicate concentrations above 2L GWQS or GCL.
* = The value represents the sum of the reported practical quantitation limit of one fraction and the detected concentration of the other fraction.
GCL = Gross Contaminant Level
2L GWQS = NCAC T15A:02L Groundwater Quality Standards
< = Less than method detection limit

NOTES:
1. GIS Layers/Information provided by the MCB Camp Lejeune GIS Department.
2. Monitoring well locations from CATLIN Database.
3. Monitoring wells USTM232-236-MW18, USTM232-236-MW20, USTM232-236-MW21 and USTM232-236-MW22 were abandoned during soil excavations and subsequently replaced with monitoring wells USTM232-236-MW24 through USTM232-236-MW27, respectively.

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PROJECT
**SOIL CLEANUP REPORT
SITE M-232-236
MARINE CORPS BASE
CAMP LEJEUNE, NC**

JOB NO: 209-024 DATE: JULY 2009

TITLE
**SITE PLAN WITH GROUNDWATER
LABORATORY RESULTS - MADEP
VPH/EPH AS COMPARED TO 2L GWQSs**

SCALE: AS SHOWN DRAWN BY: SAC CHECKED BY: MEM

FIGURE
5C

APPENDICES

APPENDIX A

BORING LOGS AND WELL CONSTRUCTION RECORDS

WELL LOG

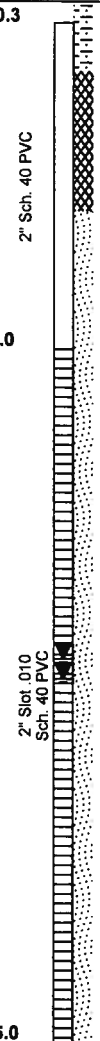


209-024
Wilmington, NC

SHEET 1 OF 1

PROJECT NO.: 209-024	STATE: NC	COUNTY: Onslow	LOCATION: Jacksonville
PROJECT NAME: Site M-232-236		LOGGED BY: Tom Stetler	WELL ID: USTM232-236
		DRILLER: John E. Wood, III	-MW24
NORTHING: 3844709.1	EASTING: 278944.7	CREW: Bobby Fowler	
SYSTEM: UTM NAD83 (m)	BORING LOCATION: Replaces MW18		T.O.C. ELEV.: 10.96
DRILL MACHINE: CME 45B ATV	METHOD: HSA	0 HOUR DTW: 9.8	TOTAL DEPTH: 15.0
START DATE: 7/7/09	FINISH DATE: 7/7/09	24 HOUR DTW: 9.2	WELL DEPTH: 15.0

DEPTH	BLOW COUNT				OVA (ppm)	LAB.	MOISS	LOG	DEPTH	SOIL AND ROCK DESCRIPTION	ELEVATION	WELL DETAIL
6in	6in	6in	6in									
									0.0	LAND SURFACE	11.3	0.0
												-0.3
												1.0
3.0									3.0		8.3	3.0
	0	1	1	2	1.2		M			(SM) - Dk. grayish-brown to orange-brown, SILTY f. to vf. SAND. Moist. No HCO. Fill material.		
									5.0		6.3	5.0
8.0									8.0		3.3	
	0	0	2	2	193.6		W			(CL) - Gray to orange-brown, mottled, low plasticity, SILTY CLAY. Few interlayered silty sands (up to .2' in thickness). Clay is moist, sands are wet. Slight HCO. Native.		
									10.0		1.3	
13.0									13.0		-1.7	
									13.5	(CL) - Same as above.	-2.2	
	2	3	4	4	8.5		Sat.			(SM) - Tan, SILTY vf. SAND. Saturated. No HCO.		
									15.0		-3.7	15.0
										Boring Terminated at Elev. -3.7 ft TOC elevation surveyed using USTM232-236-MW04 as bench mark.		15.0



Portland Cement
 Bentonite Pellets
 #2 Medium Sand

CATLIN BORING LOG 209-024 M-232-236 CAMP LEJEUNE GEL CATLIN GDI 7/23/09



Non RESIDENTIAL WELL CONSTRUCTION RECORD

North Carolina Department of Environment and Natural Resources - Division of Water Quality

WELL CONTRACTOR CERTIFICATION #: 2799

1. WELL CONTRACTOR:

John E. Wood, III

Well Contractor (Individual) Name

CATLIN Engineers and Scientists

Well Contractor Company Name

STREET ADDRESS 220 Old Dairy Road

Wilmington North Carolina 28405

City or Town State Zip Code

(910) - 452-5861

Area code - Phone number

2. WELL INFORMATION

SITE WELL ID #if applicable: USTM232-236 -MW24

STATE WELL PERMIT #if applicable: N/A

DWQ or OTHER PERMIT # (if applicable): N/A

WELL USE (Check Applicable Box): Monitoring ☒ Municipal/Public ☐

Industrial/Commercial ☐ Agricultural ☐ Recovery ☐ Injection ☐

Irrigation ☐ Other ☐ (list use):

DATE DRILLED: 07/07/2009

TIME COMPLETED:

AM ☐ PM ☐

3. WELL LOCATION:

CITY: Jacksonville

COUNTY: Onslow

Hayes St., Camp Johnson,

(Street Name, Numbers, Community, Subdivision, Lot No., Parcel, Zip Code)

TOPOGRAPHIC / LAND SETTING

Slope ☐ Valley ☐ Flat ☒ Ridge ☐ Other: _____

NORTHING: 3,844,709.1

EASTING: 278,944.7

UTM NAD83 (m)

May be in degrees, minutes, seconds, or in a decimal format

Latitude/longitude source: ☒ GPS ☐ Topo. map

(Location of well must be shown on a USGS topo map and attached to this form if not using a GPS.)

4. FACILITY - is the name of the business where the well is located.

FACILITY ID #if applicable: N/A

NAME OF FACILITY: N/A

STREET ADDRESS: Hayes St., Camp Johnson

Jacksonville NC

City or Town State Zip Code

CONTACT PERSON: Mr. Thomas Burton

STREET ADDRESS: Attn: I&E/ EMD/ EQB/ PSC Box 20004

Camp Lejeune NC 28542-0004

City or Town State Zip Code

(910)- 451-5068

Area code - Phone number

5. WELL DETAILS:

a. TOTAL DEPTH: 15

b. DOES WELL REPLACE EXISTING WELL? YES ☒ NO ☐

c. WATER LEVEL Below Top of Casing: 9.16 FT.

(Use "+" if Above Top of Casing)

d. TOP OF CASING IS -0.31 FT. Above Land Surface*

* Top of casing terminated at/or below land surface requires a variance in accordance with 15A NCAC 2C.0118

e. YIELD (gpm): N/A METHOD OF TEST: N/A

f. DISINFECTION: Type N/A Amount: N/A

g. WATER ZONES (depth):

From _____ To _____ From _____ To _____

From _____ To _____ From _____ To _____

From _____ To _____ From _____ To _____

6. CASING:

Depth	Diameter	Thickness/Weight	Material
From 0.31 To 5 ft.	2"	Sch. 40	PVC
From _____ To _____ ft.	"		
From _____ To _____ ft.	"		

7. GROUT:

Depth	Material	Method
From 0 To 1 Ft.	Portland Cement	Surface Pour
From 1 To 3 Ft.	Bent. Pellets	Surface Pour
From _____ To _____ Ft.		

8. SCREEN:

Depth	Diameter	Slot Size	Material
From 5 To 15 Ft.	2 in.	Slot .010 in.	PVC
From _____ To _____ Ft.	in.	in.	
From _____ To _____ Ft.	in.	in.	

9. SAND/GRAVEL PACK:

Depth	Size	Material
From 3 To 15 Ft.	#2 Medium	Torpedo Sand
From _____ To _____ Ft.		
From _____ To _____ Ft.		

10. DRILLING LOG

From To Formation Description

SEE ATTACHED

11. REMARKS:

I DO HEREBY CERTIFY THAT THIS WELL WAS CONSTRUCTED IN ACCORDANCE WITH 15A NCAC 2C, WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.

John Wood

SIGNATURE OF CERTIFIED WELL CONTRACTOR

7-23-09

DATE

John E. Wood, III

PRINTED NAME OF PERSON CONSTRUCTING THE WELL



Non RESIDENTIAL WELL CONSTRUCTION RECORD

North Carolina Department of Environment and Natural Resources - Division of Water Quality

WELL CONTRACTOR CERTIFICATION #: 2799

1. WELL CONTRACTOR:

John E. Wood, III

Well Contractor (Individual) Name

CATLIN Engineers and Scientists

Well Contractor Company Name

STREET ADDRESS 220 Old Dairy Road

Wilmington North Carolina 28405

City or Town State Zip Code

(910) - 452-5861

Area code - Phone number

2. WELL INFORMATION

SITE WELL ID #if applicable: USTM232-236 -MW25

STATE WELL PERMIT #if applicable: N/A

DWQ or OTHER PERMIT # (if applicable): N/A

WELL USE (Check Applicable Box): Monitoring ☒ Municipal/Public ☐

Industrial/Commercial ☐ Agricultural ☐ Recovery ☐ Injection ☐

Irrigation ☐ Other ☐ (list use):

DATE DRILLED: 07/07/2009

TIME COMPLETED: AM ☐ PM ☐

3. WELL LOCATION:

CITY: Jacksonville COUNTY: Onslow

Hayes St., Camp Johnson,

(Street Name, Numbers, Community, Subdivision, Lot No., Parcel, Zip Code)

TOPOGRAPHIC / LAND SETTING

Slope ☐ Valley ☐ Flat ☒ Ridge ☐ Other: _____

NORTHING: 3,844,755.9

EASTING: 278,920.7

UTM NAD83 (m)

May be in degrees, minutes, seconds, or in a decimal format

Latitude/longitude source: ☒ GPS ☐ Topo. map

(Location of well must be shown on a USGS topo map and attached to this form if not using a GPS.)

4. FACILITY - is the name of the business where the well is located.

FACILITY ID #if applicable: N/A

NAME OF FACILITY: N/A

STREET ADDRESS: Hayes St., Camp Johnson

Jacksonville NC

City or Town State Zip Code

CONTACT PERSON: Mr. Thomas Burton

STREET ADDRESS: Attn: I&E/ EMD/ EQB/ PSC Box 20004

Camp Lejeune NC 28542-0004

City or Town State Zip Code

(910)- 451-5068

Area code - Phone number

5. WELL DETAILS:

a. TOTAL DEPTH: 15

b. DOES WELL REPLACE EXISTING WELL? YES ☒ NO ☐

c. WATER LEVEL Below Top of Casing: 9.07 FT.

(Use "+" if Above Top of Casing)

d. TOP OF CASING IS -0.36 FT. Above Land Surface*

* Top of casing terminated at/or below land surface requires a variance in accordance with 15A NCAC 2C.0118

e. YIELD (gpm): N/A METHOD OF TEST: N/A

f. DISINFECTION: Type N/A Amount: N/A

g. WATER ZONES (depth):

From _____ To _____ From _____ To _____

From _____ To _____ From _____ To _____

From _____ To _____ From _____ To _____

6. CASING:

Depth	Diameter	Thickness/Weight	Material
From 0.36 To 5 ft.	2"	Sch. 40	PVC
From _____ To _____ ft.	"		
From _____ To _____ ft.	"		

7. GROUT:

Depth	Material	Method
From 0 To 1 Ft.	Portland Cement	Surface Pour
From 1 To 2 Ft.	Bent. Pellets	Surface Pour
From _____ To _____ Ft.		

8. SCREEN:

Depth	Diameter	Slot Size	Material
From 5 To 15 Ft.	2 in.	Slot .010 in.	PVC
From _____ To _____ Ft.	in.	in.	
From _____ To _____ Ft.	in.	in.	

9. SAND/GRAVEL PACK:

Depth	Size	Material
From 2 To 15 Ft.	#2 Medium	Torpedo Sand
From _____ To _____ Ft.		
From _____ To _____ Ft.		

10. DRILLING LOG

From To Formation Description

SEE ATTACHED

11. REMARKS:

I DO HEREBY CERTIFY THAT THIS WELL WAS CONSTRUCTED IN ACCORDANCE WITH 15A NCAC 2C, WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.

John E. Wood III

SIGNATURE OF CERTIFIED WELL CONTRACTOR

7-23-09
DATE

John E. Wood, III

PRINTED NAME OF PERSON CONSTRUCTING THE WELL



Non RESIDENTIAL WELL CONSTRUCTION RECORD

North Carolina Department of Environment and Natural Resources - Division of Water Quality

WELL CONTRACTOR CERTIFICATION #: 2799

1. WELL CONTRACTOR:

John E. Wood, III

Well Contractor (Individual) Name

CATLIN Engineers and Scientists

Well Contractor Company Name

STREET ADDRESS 220 Old Dairy Road

Wilmington North Carolina 28405

City or Town State Zip Code

(910) - 452-5861

Area code - Phone number

2. WELL INFORMATION

SITE WELL ID #if applicable: USTM232-236 -MW26

STATE WELL PERMIT #if applicable: N/A

DWQ or OTHER PERMIT # (if applicable): N/A

WELL USE (Check Applicable Box): Monitoring ☒ Municipal/Public ☐

Industrial/Commercial ☐ Agricultural ☐ Recovery ☐ Injection ☐

Irrigation ☐ Other ☐ (list use):

DATE DRILLED: 07/07/2009

TIME COMPLETED: AM ☐ PM ☐

3. WELL LOCATION:

CITY: Jacksonville COUNTY: Onslow

Hayes St., Camp Johnson,

(Street Name, Numbers, Community, Subdivision, Lot No., Parcel, Zip Code)

TOPOGRAPHIC / LAND SETTING

Slope ☐ Valley ☐ Flat ☒ Ridge ☐ Other: _____

NORTHING: 3,844,783.8

EASTING: 278,904.7

UTM NAD83 (m)

May be in degrees, minutes, seconds, or in a decimal format

Latitude/longitude source: ☒ GPS ☐ Topo. map

(Location of well must be shown on a USGS topo map and attached to this form if not using a GPS.)

4. FACILITY - is the name of the business where the well is located.

FACILITY ID #if applicable: N/A

NAME OF FACILITY: N/A

STREET ADDRESS: Hayes St., Camp Johnson

Jacksonville NC

City or Town State Zip Code

CONTACT PERSON: Mr. Thomas Burton

STREET ADDRESS: Attn: I&E/ EMD/ EQB/ PSC Box 20004

Camp Lejeune NC 28542-0004

City or Town State Zip Code

(910)- 451-5068

Area code - Phone number

5. WELL DETAILS:

a. TOTAL DEPTH: 15

b. DOES WELL REPLACE EXISTING WELL? YES ☒ NO ☐

c. WATER LEVEL Below Top of Casing: 9.56 FT.

(Use "+" if Above Top of Casing)

d. TOP OF CASING IS -0.31 FT. Above Land Surface*

* Top of casing terminated at/or below land surface requires a variance in accordance with 15A NCAC 2C.0118

e. YIELD (gpm): N/A METHOD OF TEST: N/A

f. DISINFECTION: Type N/A Amount: N/A

g. WATER ZONES (depth):

From _____ To _____ From _____ To _____

From _____ To _____ From _____ To _____

From _____ To _____ From _____ To _____

6. CASING:

Depth	Diameter	Thickness/Weight	Material
From 0.31 To 5 ft.	2"	Sch. 40	PVC
From _____ To _____ ft.	"		
From _____ To _____ ft.	"		

7. GROUT:

Depth	Material	Method
From 0 To 1 Ft.	Portland Cement	Surface Pour
From 1 To 3 Ft.	Bent. Pellets	Surface Pour
From _____ To _____ Ft.		

8. SCREEN:

Depth	Diameter	Slot Size	Material
From 5 To 15 Ft.	2 in.	Slot .010 in.	PVC
From _____ To _____ Ft.	in.	in.	
From _____ To _____ Ft.	in.	in.	

9. SAND/GRAVEL PACK:

Depth	Size	Material
From 3 To 15 Ft.	#2 Medium	Torpedo Sand
From _____ To _____ Ft.		
From _____ To _____ Ft.		

10. DRILLING LOG

From _____ To _____ Formation Description

SEE ATTACHED

11. REMARKS:

I DO HEREBY CERTIFY THAT THIS WELL WAS CONSTRUCTED IN ACCORDANCE WITH 15A NCAC 2C. WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.

John E. Wood, III

SIGNATURE OF CERTIFIED WELL CONTRACTOR

7-23-09
DATE

John E. Wood, III
PRINTED NAME OF PERSON CONSTRUCTING THE WELL

WELL LOG



209-024
Wilmington, NC

SHEET 1 OF 1

PROJECT NO.: 209-024	STATE: NC	COUNTY: Onslow	LOCATION: Jacksonville
PROJECT NAME: Site M-232-236	LOGGED BY: Tom Stetler	WELL ID: USTM232-236	
	DRILLER: John E. Wood, III	-MW27	
NORTHING: 3844802.8	EASTING: 278895.6	CREW: Bobby Fowler	
SYSTEM: UTM NAD83 (m)	BORING LOCATION: Replaces MW22	T.O.C. ELEV.: 11.43	
DRILL MACHINE: CME 45B ATV	METHOD: HSA	0 HOUR DTW: 9.1	TOTAL DEPTH: 15.0
START DATE: 7/7/09	FINISH DATE: 7/7/09	24 HOUR DTW: 9.5	WELL DEPTH: 15.0

DEPTH	BLOW COUNT				OVA (ppm)	LAB.	MOIS	LOG	DEPTH	SOIL AND ROCK DESCRIPTION	ELEVATION	WELL DETAIL
6in	6in	6in	6in									
									0.0	LAND SURFACE	11.8	0.0
												-0.4
												1.0
3.0									3.0		8.8	3.0
	0	1	1	2	1.9		M			(SM) - Brown to orange-brown, SILTY f. to vf. SAND. Fill material.		
									5.0		6.8	5.0
									8.0		3.8	
8.0	0	1	2	1	1130		W		9.0	(CL) - Orange-brown, SILTY CLAY. Medium plasticity. Moist. Strong HCO.	2.8	
									10.0	(SM) - Gray, SILTY vf. SAND. Uniform. Tr. clay. Wet. Strong HCO.	1.8	
												2" Slot .010 Sch. 40 PVC
									13.0		-1.2	
13.0	0	1	4	8	4.4		Sat.		14.0	(CL) - Brown, medium plasticity CLAY. No HCO. Very soft. Moist. Tr. orange-brown mottling.	-2.2	
									15.0	(SM) - Grayish-brown, SILTY vf. SAND. Saturated. No HCO.	-3.2	15.0
										Boring Terminated at Elev. -3.2 ft TOC elevation surveyed using USTM232-236-MW04 as bench mark.		15.0

CATLIN BORING LOG 209-024.M-232-236 CAMP LEJEUNE G.P.I. CATLIN GDT 7/23/09



Portland Cement



Bentonite Pellets



#2 Medium Sand



Non RESIDENTIAL WELL CONSTRUCTION RECORD

North Carolina Department of Environment and Natural Resources - Division of Water Quality

WELL CONTRACTOR CERTIFICATION #: 2799

1. WELL CONTRACTOR:

John E. Wood, III

Well Contractor (Individual) Name

CATLIN Engineers and Scientists

Well Contractor Company Name

STREET ADDRESS 220 Old Dairy Road

Wilmington North Carolina 28405

City or Town State Zip Code

(910) - 452-5861

Area code - Phone number

2. WELL INFORMATION

SITE WELL ID #if applicable): USTM232-236 -MW27

STATE WELL PERMIT #if applicable): N/A

DWQ or OTHER PERMIT # (if applicable): N/A

WELL USE (Check Applicable Box): Monitoring ☒ Municipal/Public ☐

Industrial/Commercial ☐ Agricultural ☐ Recovery ☐ Injection ☐

Irrigation ☐ Other ☐ (list use):

DATE DRILLED: 07/07/2009

TIME COMPLETED:

AM ☐ PM ☐

3. WELL LOCATION:

CITY: Jacksonville COUNTY: Onslow

Hayes St., Camp Johnson,

(Street Name, Numbers, Community, Subdivision, Lot No., Parcel, Zip Code)

TOPOGRAPHIC / LAND SETTING

Slope ☐ Valley ☐ Flat ☒ Ridge ☐ Other: _____

NORTHING: 3,844,802.8

EASTING: 278,895.6

UTM NAD83 (m)

May be in degrees, minutes, seconds, or in a decimal format

Latitude/longitude source: ☒ GPS ☐ Topo. map

(Location of well must be shown on a USGS topo map and attached to this form if not using a GPS.)

4. FACILITY - is the name of the business where the well is located.

FACILITY ID #if applicable) N/A

NAME OF FACILITY: N/A

STREET ADDRESS: Hayes St., Camp Johnson

Jacksonville NC

City or Town State Zip Code

CONTACT PERSON: Mr. Thomas Burton

STREET ADDRESS: Attn: I&E/ EMD/ EQB/ PSC Box 20004

Camp Lejeune NC 28542-0004

City or Town State Zip Code

(910)- 451-5068

Area code - Phone number

5. WELL DETAILS:

a. TOTAL DEPTH: 15

b. DOES WELL REPLACE EXISTING WELL? YES ☒ NO ☐

c. WATER LEVEL Below Top of Casing: 9.54 FT.

(Use "+" if Above Top of Casing)

d. TOP OF CASING IS -0.37 FT. Above Land Surface*

* Top of casing terminated at/or below land surface requires a variance in accordance with 15A NCAC 2C.0118

e. YIELD (gpm): N/A METHOD OF TEST: N/A

f. DISINFECTION: Type N/A Amount: N/A

g. WATER ZONES (depth):

From _____ To _____ From _____ To _____

From _____ To _____ From _____ To _____

From _____ To _____ From _____ To _____

6. CASING:

Depth	Diameter	Thickness/Weight	Material
From 0.37 To 5 ft.	2"	Sch. 40	PVC
From _____ To _____ ft.	"		
From _____ To _____ ft.	"		

7. GROUT:

Depth	Material	Method
From 0 To 1 Ft.	Portland Cement	Surface Pour
From 1 To 3 Ft.	Bent. Pellets	Surface Pour
From _____ To _____ Ft.		

8. SCREEN:

Depth	Diameter	Slot Size	Material
From 5 To 15 Ft.	2 in.	Slot .010 in.	PVC
From _____ To _____ Ft.	in.	in.	
From _____ To _____ Ft.	in.	in.	

9. SAND/GRAVEL PACK:

Depth	Size	Material
From 3 To 15 Ft.	#2 Medium	Torpedo Sand
From _____ To _____ Ft.		
From _____ To _____ Ft.		

10. DRILLING LOG

From To Formation Description

SEE ATTACHED

11. REMARKS:

I DO HEREBY CERTIFY THAT THIS WELL WAS CONSTRUCTED IN ACCORDANCE WITH 15A NCAC 2C, WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.

John E. Wood, III
SIGNATURE OF CERTIFIED WELL CONTRACTOR

7-23-09
DATE

John E. Wood, III
PRINTED NAME OF PERSON CONSTRUCTING THE WELL

APPENDIX B

SOIL DISPOSAL MANIFESTS

P & F Environmental

4352 N. Old Carriage Road • Rocky Mount, NC 27804
Phone: (252) 443-4083 • Fax: (252) 443-4104

NON-HAZARDOUS WASTE MANIFEST

APPROVAL # 11157

LOAD # 07478

GENERATOR

CG AC/S I+B (EMD) MCB
PFA Box 20004
Camp Johnson NC 28542

DESTINATION

Land Application Facility Permit No. SR0500106
Speights Chapel Road
Whitakers, NC 27891

PHONE: (910) 451-1482

PHONE: (252) 443-4083

WASTE DESCRIPTION:

Non-Hazardous Petroleum Contaminated Soil

WASTE ORIGINATION:

M232 Camp Johnson MCB NC
OSAG of VA (757) 274-4919

Transporter: P & F Environmental

Gross Weight (lbs.): 69600

Truck #: P-104

Tare Weight (lbs.): 31700

Truck Tag #/State: NC 2B12252

Net Weight (lbs.): 37900

Driver Name (Print): Franklin Rhoads
CDL# 2806555

Net Weight (tons): 18.98

I hereby certify that the material stated herein
was received at the waste origination site listed.

Franklin Rhoads 6/25/09
Driver Signature Date

I hereby certify that the material stated herein was
delivered without incident to the destination listed.

Franklin Rhoads 6/25/09
Driver Signature Date

Inspected and Accepted By:

E. Rhoads 6/25/09 James Bridges

NOTICE TO TRANSPORTER

TRUCKS WILL NOT BE PERMITTED TO ENTER
THE FACILITY WITHOUT THIS ENTRANCE TICKET

WHITE - Invoice

YELLOW - Generator

PINK - Trucker

GOLD - P & F Environmental

P & F Environmental

4352 N. Old Carriage Road • Rocky Mount, NC 27804
Phone: (252) 443-4083 • Fax: (252) 443-4104

NON-HAZARDOUS WASTE MANIFEST

APPROVAL # 11157

LOAD # 07479

GENERATOR

CG AC/S I & E (EMD) MCB
PSC Box 20004
Camp Lejeune NC 28542

DESTINATION

Land Application Facility Permit No. SR0500106
Speights Chapel Road
Whitakers, NC 27891

PHONE: (910) 451-1482

PHONE: (252) 443-4083

WASTE DESCRIPTION: Non-Hazardous Petroleum Contaminated Soil

WASTE ORIGINATION: M232 Camp Johnson MCB ALME

OSAGE of VA (757) 274-4949

Transporter: P & F Environmental

Gross Weight (lbs.): 76400

Truck #: P-102

Tare Weight (lbs.): 33420

Truck Tag #/State: NC ZB25821

Net Weight (lbs.): 42980

Driver Name (Print): Tim Thorne

Net Weight (tons): 21.49

CDL # NC 2147392

I hereby certify that the material stated herein
was received at the waste origination site listed.

I hereby certify that the material stated herein was
delivered without incident to the destination listed.

Tim Thorne 6/25/09
Driver Signature Date

Tim Thorne 6-25-09
Driver Signature Date

Inspected and Accepted By: [Signature] 6/25/09 James Priddy

NOTICE TO TRANSPORTER

TRUCKS WILL NOT BE PERMITTED TO ENTER
THE FACILITY WITHOUT THIS ENTRANCE TICKET

P & F Environmental

4352 N. Old Carriage Road • Rocky Mount, NC 27804
Phone: (252) 443-4083 • Fax: (252) 443-4104

NON-HAZARDOUS WASTE MANIFEST

APPROVAL # 11157

LOAD # 07480

GENERATOR

CG AC/S I+E (EMD) MCB
PSC Box 20004
Camp Lejeune NC 28542

DESTINATION

Land Application Facility Permit No. SR0500106
Speights Chapel Road
Whitakers, NC 27891

PHONE: (910) 451-1482

PHONE: (252) 443-4083

WASTE DESCRIPTION: Non-Hazardous Petroleum Contaminated Soil

WASTE ORIGATION: M232 Camp Johnson MCB NC

OSAGE of VA (757) 274-4949

Transporter: P & F Environmental

Gross Weight (lbs.): 75640

Truck #: D-106

Tare Weight (lbs.): 24500

Truck Tag #/State: NC ZB 37A6T

Net Weight (lbs.): 51140

Driver Name (Print): Bryant Priddy
CDL # 9406082

Net Weight (tons): 25.57

I hereby certify that the material stated herein
was received at the waste origination site listed.

I hereby certify that the material stated herein was
delivered without incident to the destination listed.

Bryant Priddy 6/25/09
Driver Signature Date

Bryant Priddy 6.25.09
Driver Signature Date

Inspected and Accepted By: [Signature] 6/25/09 James Priddy

NOTICE TO TRANSPORTER

TRUCKS WILL NOT BE PERMITTED TO ENTER
THE FACILITY WITHOUT THIS ENTRANCE TICKET

P & F Environmental

4352 N. Old Carriage Road • Rocky Mount, NC 27804
Phone: (252) 443-4083 • Fax: (252) 443-4104

NON-HAZARDOUS WASTE MANIFEST

APPROVAL # 11157

LOAD # 07482

GENERATOR

CG AC/S I+E (EMD) MCB
PO Box 20004
CLNC, 28542

DESTINATION

Land Application Facility Permit No. SR0500106
Speights Chapel Road
Whitakers, NC 27891

PHONE: 910 451 1482

PHONE: (252) 443-4083

WASTE DESCRIPTION:

Non-Hazardous Petroleum Contaminated Soil

WASTE ORIGINATION:

M232 Camp Johnson MCB CLNC
OSAGE OF VA 757 274 4949

Transporter: P & F Environmental

Gross Weight (lbs.): 86180

Truck #: P-102

Tare Weight (lbs.): 33420

Truck Tag #/State: NC 2B 25821

Net Weight (lbs.): 52760

Driver Name (Print): Tim Thorne
CDL # 2167392

Net Weight (tons): 26.38

I hereby certify that the material stated herein was received at the waste origination site listed.

Tim Thorne 6-25-09
Driver Signature Date

I hereby certify that the material stated herein was delivered without incident to the destination listed.

Tim Thorne 6-25-09
Driver Signature Date

Inspected and Accepted By:

Er 4/25/09 Jared Hridge

NOTICE TO TRANSPORTER

TRUCKS WILL NOT BE PERMITTED TO ENTER
THE FACILITY WITHOUT THIS ENTRANCE TICKET

WHITE - Invoice

YELLOW - Generator

PINK - Trucker

GOLD - P & F Environmental

P & F Environmental

4352 N. Old Carriage Road • Rocky Mount, NC 27804
Phone: (252) 443-4083 • Fax: (252) 443-4104

NON-HAZARDOUS WASTE MANIFEST

APPROVAL# 11157

LOAD # 07483

GENERATOR

CG AC/S I.E (EMD) MUB
PO Box 20004
CNC 28542

DESTINATION

Land Application Facility Permit No. SR0500106
Speights Chapel Road
Whitakers, NC 27891

PHONE: 910 451 1482

PHONE: (252) 443-4083

WASTE DESCRIPTION: Non-Hazardous Petroleum Contaminated Soil

WASTE ORIGINATION: M232 Camp Johnson MUB, CNC
STATE of VA 757 274 4949

Transporter: P & F Environmental

Truck #: P-106

Truck Tag #/State: NC ZB 37964

Driver Name (Print): Bryant Pridgen
CDL # 1406087

Gross Weight (lbs.): 75520

Tare Weight (lbs.): 24500

Net Weight (lbs.): 51020

Net Weight (tons): 25.51

I hereby certify that the material stated herein was received at the waste origination site listed.

Bryant Pridgen 6.25.09
Driver Signature Date

I hereby certify that the material stated herein was delivered without incident to the destination listed.

Bryant Pridgen 6.25.09
Driver Signature Date

Inspected and Accepted By: E. W. Pridgen 6/25/09 James Pridgen

NOTICE TO TRANSPORTER

TRUCKS WILL NOT BE PERMITTED TO ENTER
THE FACILITY WITHOUT THIS ENTRANCE TICKET

P & F Environmental

4352 N. Old Carriage Road • Rocky Mount, NC 27804

Phone: (252) 443-4083 • Fax: (252) 443-4104

NON-HAZARDOUS WASTE MANIFEST

APPROVAL # 11157

LOAD # 07484

GENERATOR

CG ACS I+E (EMD) MCB

PO Box 20004

CLNC 28546

DESTINATION

Land Application Facility Permit No. SR0500106

Speights Chapel Road

Whitakers, NC 27891

PHONE: 910 451 1482

PHONE: (252) 443-4083

WASTE DESCRIPTION: Non-Hazardous Petroleum Contaminated Soil

WASTE ORIGATION: m232 Camp Johnson MCB, CLNC
OSAGE of VA 757 274 4949

Transporter: P & F Environmental

Truck #: ~~P103~~ P103

Truck Tag #/State: NR 2B 16949

Driver Name (Print): Walter Parker
CON # 4538892

Gross Weight (lbs.): 86220

Tare Weight (lbs.): 33060

Net Weight (lbs.): 47160

Net Weight (tons): 23.58

I hereby certify that the material stated herein was received at the waste origination site listed.

Walt Parker 6-25-09
Driver Signature Date

I hereby certify that the material stated herein was delivered without incident to the destination listed.

Walt Parker 6-25-09
Driver Signature Date

Inspected and Accepted By: [Signature] 6/25/09 James Bridges

NOTICE TO TRANSPORTER

TRUCKS WILL NOT BE PERMITTED TO ENTER
THE FACILITY WITHOUT THIS ENTRANCE TICKET

WHITE - Invoice

YELLOW - Generator

PINK - Trucker

GOLD - P & F Environmental

P & F Environmental

4352 N. Old Carriage Road • Rocky Mount, NC 27804
Phone: (252) 443-4083 • Fax: (252) 443-4104

NON-HAZARDOUS WASTE MANIFEST

APPROVAL # 1157

LOAD # 07485

GENERATOR

CG AC/S I+E (EMO) MCB
PO Box 20004
CLNC 28542

DESTINATION

Land Application Facility Permit No. SR0500106
Speights Chapel Road
Whitakers, NC 27891

PHONE: 910 451 482

PHONE: (252) 443-4083

WASTE DESCRIPTION:

Non-Hazardous Petroleum Contaminated Soil

WASTE ORIGINATION:

m232 Camp Johnson MCB, CLNC
ORAGG OR VA - 257 274 4949

Transporter: P & F Environmental

Gross Weight (lbs.): 84520

Truck #: P104

Tare Weight (lbs.): 31700

Truck Tag #/State: NC 2B 12252

Net Weight (lbs.): 52820

Driver Name (Print): Franklin Rhodes
CDL # 2806555

Net Weight (tons): 26.41

I hereby certify that the material stated herein
was received at the waste origination site listed.

I hereby certify that the material stated herein was
delivered without incident to the destination listed.

Franklin Rhodes 6/25/09
Driver Signature Date

Franklin Rhodes 6/25/09
Driver Signature Date

Inspected and Accepted By:

[Signature] 6/25/09 James Bridges

NOTICE TO TRANSPORTER

TRUCKS WILL NOT BE PERMITTED TO ENTER
THE FACILITY WITHOUT THIS ENTRANCE TICKET

WHITE - Invoice

YELLOW - Generator

PINK - Trucker

GOLD - P & F Environmental

P & F Environmental

4352 N. Old Carriage Road • Rocky Mount, NC 27804

Phone: (252) 443-4083 • Fax: (252) 443-4104

NON-HAZARDOUS WASTE MANIFEST

APPROVAL # 11155

LOAD # 07475

GENERATOR

CG AC/ST&E (EMD) MCB
PSC Box 20004
Camp Lebone NC 28542

DESTINATION

Land Application Facility Permit No. SR0500106
Speights Chapel Road
Whitakers, NC 27891

PHONE: 910 451 1482

PHONE: (252) 443-4083

WASTE DESCRIPTION:

Non-Hazardous Petroleum Contaminated Soil

WASTE ORIGINATION:

m-233 Camp Johnson, NC 28546

STATE OF VA 757 274 4949

Transporter: P & F Environmental

Gross Weight (lbs.): 73700

Truck #: PF 106

Tare Weight (lbs.): 24500

Truck Tag #/State: NC 2B 37164

Net Weight (lbs.): 49200

Driver Name (Print): Bryant Dodge

Net Weight (tons): 24.60

I hereby certify that the material stated herein was received at the waste-origination site listed.

Bryant Dodge 6/24/09
Driver Signature Date

I hereby certify that the material stated herein was delivered without incident to the destination listed.

Bryant Dodge 6-24-09
Driver Signature Date

Inspected and Accepted By:

George L. Taylor 20090602
Bryant Dodge

NOTICE TO TRANSPORTER

TRUCKS WILL NOT BE PERMITTED TO ENTER
THE FACILITY WITHOUT THIS ENTRANCE TICKET

WHITE - Invoice

YELLOW - Generator

PINK - Trucker

GOLD - P & F Environmental

P & F Environmental

4352 N. Old Carriage Road • Rocky Mount, NC 27804
Phone: (252) 443-4083 • Fax: (252) 443-4104

NON-HAZARDOUS WASTE MANIFEST

APPROVAL # 11155

LOAD # 07476

GENERATOR

CG AC/S I+E GEMD MCB
PSC Box 20004
Camp Lejeune NC 28542

DESTINATION

Land Application Facility Permit No. SR0500106
Speights Chapel Road
Whitakers, NC 27891

PHONE: 910 451 1482

PHONE: (252) 443-4083

WASTE DESCRIPTION: Non-Hazardous Petroleum Contaminated Soil

WASTE ORIGINATION: M 233 Camp Johnson, NC 28546
OSAGE of VA 757 274 4949

Transporter: P & F Environmental

Gross Weight (lbs.): 75220

Truck #: 104

Tare Weight (lbs.): 31700

Truck Tag #/State: NC ZB 12252

Net Weight (lbs.): 45520

Driver Name (Print): Franklin Rhodes
CDL # 2806555

Net Weight (tons): 22.76

I hereby certify that the material stated herein
was received at the waste origination site listed.

Franklin Rhodes 6/24/09
Driver Signature Date

I hereby certify that the material stated herein was
delivered without incident to the destination listed.

Franklin Rhodes 6/24/09
Driver Signature Date

Inspected and Accepted By: George L. Taylor 6/24/09
James H. Taylor 20090624

NOTICE TO TRANSPORTER

TRUCKS WILL NOT BE PERMITTED TO ENTER
THE FACILITY WITHOUT THIS ENTRANCE TICKET

P & F Environmental

4352 N. Old Carriage Road • Rocky Mount, NC 27804
Phone: (252) 443-4083 • Fax: (252) 443-4104

NON-HAZARDOUS WASTE MANIFEST

APPROVAL # 11155

LOAD # 07477

GENERATOR

CG AC/S IVE (EM) MCB
POB Box 20504
Camp Lejeune, NC 28542

DESTINATION

Land Application Facility Permit No. SR0500106
Speights Chapel Road
Whitakers, NC 27891

PHONE: 910 451 1482

PHONE: (252) 443-4083

WASTE DESCRIPTION: Non-Hazardous Petroleum Contaminated Soil

WASTE ORIGINATION: M-233 Camp Johnson, NC 28456

OSAGE OF VA # 757 274 4949

Transporter: P & F Environmental

Truck #: 102

Truck Tag #/State: NC ZB 25821

Driver Name (Print): Tim Thorne
CDL #

Gross Weight (lbs.): 74260

Tare Weight (lbs.): 33420

Net Weight (lbs.): 40840

Net Weight (tons): 20.42

I hereby certify that the material stated herein
was received at the waste origination site listed.

Tim Thorne 6/24/09
Driver Signature Date

I hereby certify that the material stated herein was
delivered without incident to the destination listed.

Tim Thorne 6-24-09
Driver Signature Date

Inspected and Accepted By: George L. Taylor June 24 2009 0624

NOTICE TO TRANSPORTER

TRUCKS WILL NOT BE PERMITTED TO ENTER
THE FACILITY WITHOUT THIS ENTRANCE TICKET

WHITE - Invoice YELLOW - Generator PINK - Trucker GOLD - P & F Environmental

P & F Environmental

4352 N. Old Carriage Road • Rocky Mount, NC 27804
Phone: (252) 443-4083 • Fax: (252) 443-4104

NON-HAZARDOUS WASTE MANIFEST

APPROVAL# 11155

LOAD # 07481

GENERATOR

CG ACS I+E (EMD) MCB
PSC Box 20004
Camp Lejeune NC 28542

DESTINATION

Land Application Facility Permit No. SR0500106
Speights Chapel Road
Whitakers, NC 27891

PHONE: (910) 451-1482

PHONE: (252) 443-4083

WASTE DESCRIPTION: Non-Hazardous Petroleum Contaminated Soil

WASTE ORIGATION: M233 Camp Johnson MCB CLM

OSDGE of VA (757) 27411949

Transporter: P & F Environmental

Gross Weight (lbs.): 80120

Truck #: P.103

Tare Weight (lbs.): 33060

Truck Tag #/State: NC ZB 16949

Net Weight (lbs.): 47060

Driver Name (Print): WALTER PARKER
NC# ZB-16949

Net Weight (tons): 2353

I hereby certify that the material stated herein was received at the waste origination site listed.

Walter Parker 6/25/09
Driver Signature Date

I hereby certify that the material stated herein was delivered without incident to the destination listed.

Walter Parker 6/25/09
Driver Signature Date

Inspected and Accepted By:

E. Parker 6/25/09 James Bridges

NOTICE TO TRANSPORTER

TRUCKS WILL NOT BE PERMITTED TO ENTER
THE FACILITY WITHOUT THIS ENTRANCE TICKET

WHITE - Invoice

YELLOW - Generator

PINK - Trucker

GOLD - P & F Environmental

P & F Environmental

4352 N. Old Carriage Road • Rocky Mount, NC 27804
Phone: (252) 443-4083 • Fax: (252) 443-4104

NON-HAZARDOUS WASTE MANIFEST

APPROVAL # 11114

LOAD # 07385

GENERATOR

CG, AC/S, I+E (FMD) MCB
PO Box 20004
CLNC 28542-0004

DESTINATION

Land Application Facility Permit No. SR0500106
Speights Chapel Road
Whitakers, NC 27891

PHONE: (910) 451-1482

PHONE: (252) 443-4083

WASTE DESCRIPTION:

Non-Hazardous Petroleum Contaminated Soil

WASTE ORIGINATION:

M234 Camp Johnson MCB
ORDOS of VIRGINIA (MS7) 274-4949

Transporter: P&F Environmental

Gross Weight (lbs.): 53320

Truck #: PFF P.105

Tare Weight (lbs.): 21600

Truck Tag #/State: ZB 35517

Net Weight (lbs.): 31720

Driver Name (Print): TIM THORNE
CDL# NC2167392

Net Weight (tons): 15.86

I hereby certify that the material stated herein was received at the waste origination site listed.

Tim Thorne 4/23/09
Driver Signature Date

I hereby certify that the material stated herein was delivered without incident to the destination listed.

Tim Thorne 4-23-09
Driver Signature Date

Inspected and Accepted By:

E. [Signature] 4/23/09 James [Signature]

NOTICE TO TRANSPORTER

TRUCKS WILL NOT BE PERMITTED TO ENTER
THE FACILITY WITHOUT THIS ENTRANCE TICKET

WHITE - Invoice

YELLOW - Generator

PINK - Trucker

GOLD - P & F Environmental

P & F Environmental

4352 N. Old Carriage Road • Rocky Mount, NC 27804
Phone: (252) 443-4083 • Fax: (252) 443-4104

NON-HAZARDOUS WASTE MANIFEST

APPROVAL # 11114

LOAD # 07386

GENERATOR

CG, A/C, I & E (EMD) MOB
PO Box 20004
CLNC 28542-0004

DESTINATION

Land Application Facility Permit No. SR0500106
Speights Chapel Road
Whitakers, NC 27891

PHONE: (910) 451-1482

PHONE: (252) 443-4083

WASTE DESCRIPTION:

Non-Hazardous Petroleum Contaminated Soil

WASTE ORIGATION:

M234 Camp Johnson NCB

OSAGE of VIRGINIA (757) 274-4949

Transporter: P & F Environmental

Gross Weight (lbs.): 52760

Truck #: D101

Tare Weight (lbs.): 23560

Truck Tag #/State: ZB 12254

Net Weight (lbs.): 29200

Driver Name (Print): Franklin Rhodes
CX NC 2806555

Net Weight (tons): 14.60

I hereby certify that the material stated herein
was received at the waste origination site listed.

I hereby certify that the material stated herein was
delivered without incident to the destination listed.

Franklin Rhodes 4/23/09
Driver Signature Date

Franklin Rhodes 4/23/09
Driver Signature Date

Inspected and Accepted By:

Franklin Rhodes 4/23/09 James Bridger

NOTICE TO TRANSPORTER

TRUCKS WILL NOT BE PERMITTED TO ENTER
THE FACILITY WITHOUT THIS ENTRANCE TICKET

WHITE - Invoice

YELLOW - Generator

PINK - Trucker

GOLD - P & F Environmental

P & F Environmental

4352 N. Old Carriage Road • Rocky Mount, NC 27804

Phone: (252) 443-4083 • Fax: (252) 443-4104

NON-HAZARDOUS WASTE MANIFEST

APPROVAL# 11114

LOAD # 07387

GENERATOR

CG, AC/S, LFE (EMD) MCB
PO Box 20004
CLNC 28542-0004

DESTINATION

Land Application Facility Permit No. SR0500106
Speights Chapel Road
Whitakers, NC 27891

PHONE: (910) 451-1482

PHONE: (252) 443-4083

WASTE DESCRIPTION:

Non-Hazardous Petroleum Contaminated Soil

WASTE ORIGINATION:

M234 Camp Johnson MCB

OSAGE of VIRGINIA (757) 274-4944

Transporter:

P & F Environmental

Truck #:

P 101

Truck Tag #/State:

ZB 12254

Driver Name (Print):

Franklin Rhodes
CDL # NC 2806555

Gross Weight (lbs.):

54080

Tare Weight (lbs.):

23560

Net Weight (lbs.):

30520

Net Weight (tons):

15.26

I hereby certify that the material stated herein was received at the waste origination site listed.

Franklin Rhodes
Driver Signature

4/23/09
Date

I hereby certify that the material stated herein was delivered without incident to the destination listed.

Franklin Rhodes
Driver Signature

4/23/09
Date

Inspected and Accepted By:

[Signature] 4/23/09

[Signature]

NOTICE TO TRANSPORTER

TRUCKS WILL NOT BE PERMITTED TO ENTER
THE FACILITY WITHOUT THIS ENTRANCE TICKET

WHITE - Invoice

YELLOW - Generator

PINK - Trucker

GOLD - P & F Environmental

P & F Environmental

4352 N. Old Carriage Road • Rocky Mount, NC 27804
Phone: (252) 443-4083 • Fax: (252) 443-4104

NON-HAZARDOUS WASTE MANIFEST

APPROVAL #

11114

LOAD #

07388

GENERATOR

CG, A/S, IFE (EMD) MCB
PO Box 20004
CLNC 28542-0004

DESTINATION

Land Application Facility Permit No. SR0500106
Speights Chapel Road
Whitakers, NC 27891

PHONE: (910) 451-1482

PHONE: (252) 443-4083

WASTE DESCRIPTION:

Non-Hazardous Petroleum Contaminated Soil

WASTE ORIGINATION:

M 234 Camp Johnson MCB

OSPREY of VIRGINIA (757) 274-4949

Transporter:

P & F Environmental

Gross Weight (lbs.):

49760

Truck #:

P 105

Tare Weight (lbs.):

21600

Truck Tag #/State:

ZB 35517

Net Weight (lbs.):

28160

Driver Name (Print):

TIM THORNE

Net Weight (tons):

14.08

CDL# NC 2167392

I hereby certify that the material stated herein was received at the waste origination site listed.

Tim Thorne

Driver Signature

4/23/09

Date

I hereby certify that the material stated herein was delivered without incident to the destination listed.

Tim Thorne

Driver Signature

4-23-09

Date

Inspected and Accepted By:

Eg Alpha

4/23/09

James Ridger

NOTICE TO TRANSPORTER

TRUCKS WILL NOT BE PERMITTED TO ENTER
THE FACILITY WITHOUT THIS ENTRANCE TICKET

WHITE - Invoice

YELLOW - Generator

PINK - Trucker

GOLD - P & F Environmental

P & F Environmental

4352 N. Old Carriage Road • Rocky Mount, NC 27804
Phone: (252) 443-4083 • Fax: (252) 443-4104

NON-HAZARDOUS WASTE MANIFEST

APPROVAL# 11114

LOAD # 07389

GENERATOR

CG, AC/S I+E (END) MCB
PO Box 20004
CWC 28542-0004

DESTINATION

Land Application Facility Permit No. SR0500106
Speights Chapel Road
Whitakers, NC 27891

PHONE: (910) 451-1482

PHONE: (252) 443-4083

WASTE DESCRIPTION:

Non-Hazardous Petroleum Contaminated Soil

WASTE ORIGATION:

M234 Camp Johnson MCB

OSAGE of VIRGINIA (757) 274-4949

Transporter: P & F Environmental

Gross Weight (lbs.): 52580

Truck #: P-101

Tare Weight (lbs.): 23560

Truck Tag #/State: ZB12254

Net Weight (lbs.): 29020

Driver Name (Print): Franklin Rhodes

Net Weight (tons): 14.51

CDL # NC 2806555

I hereby certify that the material stated herein
was received at the waste origination site listed.

I hereby certify that the material stated herein was
delivered without incident to the destination listed.

Franklin Rhodes 4/24/01
Driver Signature Date

Franklin Rhodes 4/24/01
Driver Signature Date

Inspected and Accepted By:

G. M. Jones 4/24/01 Franklin Rhodes

NOTICE TO TRANSPORTER

TRUCKS WILL NOT BE PERMITTED TO ENTER
THE FACILITY WITHOUT THIS ENTRANCE TICKET

WHITE - Invoice

YELLOW - Generator

PINK - Trucker

GOLD - P & F Environmental

P & F Environmental

4352 N. Old Carriage Road • Rocky Mount, NC 27804
Phone: (252) 443-4083 • Fax: (252) 443-4104

NON-HAZARDOUS WASTE MANIFEST

APPROVAL #

11114

LOAD #

073 90

GENERATOR

CG, AC/S I + E (EMD) MCB
PO BOX 20004
CLNC 28542-0004

DESTINATION

Land Application Facility Permit No. SR0500106
Speights Chapel Road
Whitakers, NC 27891

PHONE: (910) 451-1482

PHONE: (252) 443-4083

WASTE DESCRIPTION:

Non-Hazardous Petroleum Contaminated Soil

WASTE ORIGINATION:

M234 Camp Johnson MCB

Office of Virginia (157) 274-4949

Transporter:

P & F Environmental

Gross Weight (lbs.):

51420

Truck #:

P-101

Tare Weight (lbs.):

21600

Truck Tag #/State:

35517
ZB 12254

Net Weight (lbs.):

29820

Driver Name (Print):

Tim Thorne

Net Weight (tons):

14.91

CDL # NC 2167392

I hereby certify that the material stated herein
was received at the waste origination site listed.

I hereby certify that the material stated herein was
delivered without incident to the destination listed.

Driver Signature

Tim Thorne

Date

4/24/09

Driver Signature

Tim Thorne

Date

4-24-09

Inspected and Accepted By:

E. W. [Signature]

Janet Bridger

NOTICE TO TRANSPORTER

TRUCKS WILL NOT BE PERMITTED TO ENTER
THE FACILITY WITHOUT THIS ENTRANCE TICKET

WHITE - Invoice

YELLOW - Generator

PINK - Trucker

GOLD - P & F Environmental

P & F Environmental

4352 N. Old Carriage Road • Rocky Mount, NC 27804

Phone: (252) 443-4083 • Fax: (252) 443-4104

NON-HAZARDOUS WASTE MANIFEST

APPROVAL # 11114

LOAD # 07391

GENERATOR

CG, AC/S IFE (EMD) MCB
PO Box 20004
CLNC 28542-2004

DESTINATION

Land Application Facility Permit No. SR0500106
Speights Chapel Road
Whitakers, NC 27891

PHONE: (910) 451-1482

PHONE: (252) 443-4083

WASTE DESCRIPTION:

Non-Hazardous Petroleum Contaminated Soil

WASTE ORIGINATION:

M234 Camp Johnson MCB

OSAGE of VIRGINIA (757) 274-4949

Transporter: P & F Environmental

Gross Weight (lbs.): ~~56040~~ 52400

Truck #: P105

Tare Weight (lbs.): 23560 21600

Truck Tag #/State: ZB 355517

Net Weight (lbs.): ~~32480~~ 30800

Driver Name (Print): TIM THORNE

Net Weight (tons): ~~16.24~~ 15.40

CDL# NC 2167312

I hereby certify that the material stated herein was received at the waste origination site listed.

I hereby certify that the material stated herein was delivered without incident to the destination listed.

Driver Signature

Date

Driver Signature

Date

Inspected and Accepted By:

NOTICE TO TRANSPORTER

TRUCKS WILL NOT BE PERMITTED TO ENTER
THE FACILITY WITHOUT THIS ENTRANCE TICKET

WHITE - Invoice

YELLOW - Generator

PINK - Trucker

GOLD - P & F Environmental

P & F Environmental

4352 N. Old Carriage Road • Rocky Mount, NC 27804
Phone: (252) 443-4083 • Fax: (252) 443-4104

NON-HAZARDOUS WASTE MANIFEST

APPROVAL # 11114

LOAD # 07392

GENERATOR

CG, AC/S I+E (EMD) MCB
PO Box 20004
CLNC 28542-0004

DESTINATION

Land Application Facility Permit No. SR0500106
Speights Chapel Road
Whitakers, NC 27891

PHONE: (910) 451-1482

PHONE: (252) 443-4083

WASTE DESCRIPTION: Non-Hazardous Petroleum Contaminated Soil

WASTE ORIGINATION: M234 Camp Johnson MCB

OSAGE of VIRGINIA (757) 274-4949

Transporter: P & F Environmental

Gross Weight (lbs.): 56040

Truck #: P101

Tare Weight (lbs.): 23560

Truck Tag #/State: ZB12254

Net Weight (lbs.): 32480

Driver Name (Print): Franklin Rhodes
CDL# NC 2806555

Net Weight (tons): 16.24

I hereby certify that the material stated herein
was received at the waste origination site listed.

Franklin Rhodes 4/24/09
Driver Signature Date

I hereby certify that the material stated herein was
delivered without incident to the destination listed.

Franklin Rhodes 4/24/09
Driver Signature Date

Inspected and Accepted By: [Signature] 4/24/09

Janet Ridger

NOTICE TO TRANSPORTER

TRUCKS WILL NOT BE PERMITTED TO ENTER
THE FACILITY WITHOUT THIS ENTRANCE TICKET

WHITE - Invoice

YELLOW - Generator

PINK - Trucker

GOLD - P & F Environmental

P & F Environmental

4352 N. Old Carriage Road • Rocky Mount, NC 27804
Phone: (252) 443-4083 • Fax: (252) 443-4104

NON-HAZARDOUS WASTE MANIFEST

07393

APPROVAL # 11114

LOAD # _____

GENERATOR

CG, AC+S, I+E (EMD) MCB
PO Box 20004
CLNC 28542-0004

DESTINATION

Land Application Facility Permit No. SR0500106
Speights Chapel Road
Whitakers, NC 27891

PHONE: 910 451 1482

PHONE: (252) 443-4083

WASTE DESCRIPTION: Non-Hazardous Petroleum Contaminated Soil

WASTE ORIGINATION: M234 Camp Johnson MCB
OSAGE OF VA - 757 274 4949

Transporter: P & F Environmental

Gross Weight (lbs.): 62720

Truck #: 101

Tare Weight (lbs.): 23560

Truck Tag #/State: ZB 12254 NC

Net Weight (lbs.): 39160

Driver Name (Print): Tim Thorne
CDL # NC 2167392

Net Weight (tons): 19.58

I hereby certify that the material stated herein
was received at the waste origination site listed.

Tim Thorne 4-27-09
Driver Signature Date

I hereby certify that the material stated herein was
delivered without incident to the destination listed.

Tim Thorne 4-27-09
Driver Signature Date

Inspected and Accepted By: [Signature]

[Signature]

NOTICE TO TRANSPORTER

TRUCKS WILL NOT BE PERMITTED TO ENTER
THE FACILITY WITHOUT THIS ENTRANCE TICKET

WHITE - Invoice

YELLOW - Generator

PINK - Trucker

GOLD - P & F Environmental

P & F Environmental

4352 N. Old Carriage Road • Rocky Mount, NC 27804
Phone: (252) 443-4083 • Fax: (252) 443-4104

NON-HAZARDOUS WASTE MANIFEST

APPROVAL # 11114

LOAD # 07394

GENERATOR

EG, AC/S, I+E (EMD) MEB
PB Box 20004
CLNC 28546-0004

DESTINATION

Land Application Facility Permit No. SR0500106
Speights Chapel Road
Whitakers, NC 27891

PHONE: 910 451 1482

PHONE: (252) 443-4083

WASTE DESCRIPTION:

Non-Hazardous Petroleum Contaminated Soil

WASTE ORIGINATION:

M-234 @ Camp Johnson, CLNC
OSAGE of WA - 737 274 4949

Transporter: P & F Environmental

Gross Weight (lbs.): 37880

Truck #: ~~101~~ 101

Tare Weight (lbs.): 23560

Truck Tag #/State: NC 2B 12254

Net Weight (lbs.): 14320

Driver Name (Print): Tim Thorne

Net Weight (tons): 7.16

CL # NC 2806555

I hereby certify that the material stated herein was received at the waste origination site listed.

Tim Thorne (15 min) 4-28-09
Driver Signature Date

I hereby certify that the material stated herein was delivered without incident to the destination listed.

Tim Thorne 4-28-09
Driver Signature Date

Inspected and Accepted By: George L. Taylor [Signature] 20090428
[Signature]
pret bridge

NOTICE TO TRANSPORTER

TRUCKS WILL NOT BE PERMITTED TO ENTER
THE FACILITY WITHOUT THIS ENTRANCE TICKET

WHITE - Invoice

YELLOW - Generator

PINK - Trucker

GOLD - P & F Environmental

P & F Environmental

4352 N. Old Carriage Road • Rocky Mount, NC 27804
Phone: (252) 443-4083 • Fax: (252) 443-4104

NON-HAZARDOUS WASTE MANIFEST

APPROVAL # 11094

LOAD # 07353

GENERATOR

CG A/C - S, I & E (EMD) MCB
P.O. Box 20004
CNC, 28546

DESTINATION

Land Application Facility Permit No. SR0500106
Speights Chapel Road
Whitakers, NC 27891

PHONE: 910 451 - 1482

PHONE: (252) 443-4083

WASTE DESCRIPTION:

Non-Hazardous Petroleum Contaminated Soil

WASTE ORIGINATION:

m 236 - Camp Johnson
OSAGE of WA - 757 274 4949

Transporter: P & F Environmental

Gross Weight (lbs.): 58800

Truck #: 101

Tare Weight (lbs.): 23560

Truck Tag #/State: NC 2B 12254

Net Weight (lbs.): 35240

Driver Name (Print): Tim Thorne

Net Weight (tons): 17.62

COL # NC 2167392

I hereby certify that the material stated herein
was received at the waste origination site listed.

Tim Thorne 3-30-09
Driver Signature Date

I hereby certify that the material stated herein was
delivered without incident to the destination listed.

Tim Thorne 3-30-09
Driver Signature Date

Inspected and Accepted By: George Taylor

20090330
David Hedges

NOTICE TO TRANSPORTER

TRUCKS WILL NOT BE PERMITTED TO ENTER
THE FACILITY WITHOUT THIS ENTRANCE TICKET

WHITE - Invoice

YELLOW - Generator

PINK - Trucker

GOLD - P & F Environmental

P & F Environmental

4352 N. Old Carriage Road • Rocky Mount, NC 27804
Phone: (252) 443-4083 • Fax: (252) 443-4104

NON-HAZARDOUS WASTE MANIFEST

APPROVAL # 11094

LOAD # 07354

GENERATOR EMP
CG, A/C - S, DE (GAS) MCB
PO Box 20004
CNC 28546

DESTINATION
Land Application Facility Permit No. SR0500106
Speights Chapel Road
Whitakers, NC 27891

PHONE: 910-451-1482

PHONE: (252) 443-4083

WASTE DESCRIPTION: Non-Hazardous Petroleum Contaminated Soil

WASTE ORIGINATION: m-236 Camp Johnson, CNC
OSAGE OF VA 757 274 4949

Transporter: P & F Environmental

Gross Weight (lbs.): 54780

Truck #: 101

Tare Weight (lbs.): 23560

Truck Tag #/State: NC 2B 12254

Net Weight (lbs.): 31220

Driver Name (Print): Tim Thorne

Net Weight (tons): 15.6

00L# NC 2167392

I hereby certify that the material stated herein
was received at the waste origination site listed.

Tim Thorne 3-31-09
Driver Signature Date

I hereby certify that the material stated herein was
delivered without incident to the destination listed.

Tim Thorne 3-31-09
Driver Signature Date

Inspected and Accepted By:

George L. Taylor 20090331
Janet Prichard

NOTICE TO TRANSPORTER

TRUCKS WILL NOT BE PERMITTED TO ENTER
THE FACILITY WITHOUT THIS ENTRANCE TICKET

WHITE - Invoice

YELLOW - Generator

PINK - Trucker

GOLD - P & F Environmental

P & F Environmental

4352 N. Old Carriage Road • Rocky Mount, NC 27804
Phone: (252) 443-4083 • Fax: (252) 443-4104

NON-HAZARDOUS WASTE MANIFEST

APPROVAL # 11094

LOAD # 07358

GENERATOR

CG, ACS, I & E, (Emd) MUR
RD Box 20004
CNC 28546-0004

DESTINATION

Land Application Facility Permit No. SR0500106
Speights Chapel Road
Whitakers, NC 27891

PHONE: 910 451 1482

PHONE: (252) 443-4083

WASTE DESCRIPTION:

Non-Hazardous Petroleum Contaminated Soil

WASTE ORIGINATION:

M 236 @ Camp Johnson CNC
usage of VA (157) 274 4949

Transporter: P & F Environmental

Gross Weight (lbs.): 51140

Truck #: 101

Tare Weight (lbs.): 23560

Truck Tag #/State: NC 2B 12254

Net Weight (lbs.): 27560

Driver Name (Print): Tim Thorne
CNC # 2167392

Net Weight (tons): 13.76

I hereby certify that the material stated herein
was received at the waste origination site listed.

Tim Thorne 3-31-09
Driver Signature Date

I hereby certify that the material stated herein was
delivered without incident to the destination listed.

Tim Thorne 3-31-09
Driver Signature Date

Inspected and Accepted By:

[Signature] 3/31/09 [Signature]

NOTICE TO TRANSPORTER

TRUCKS WILL NOT BE PERMITTED TO ENTER
THE FACILITY WITHOUT THIS ENTRANCE TICKET

WHITE - Invoice

YELLOW - Generator

PINK - Trucker

GOLD - P & F Environmental

P & F Environmental

4352 N. Old Carriage Road • Rocky Mount, NC 27804
Phone: (252) 443-4083 • Fax: (252) 443-4104

NON-HAZARDOUS WASTE MANIFEST

APPROVAL # 11094

LOAD # 07889

GENERATOR

CG, A/C/S, P+E, (CMB) mers
PO Box 20004
CLNC 28546-0004

DESTINATION

Land Application Facility Permit No. SR0500106
Speights Chapel Road
Whitakers, NC 27891

PHONE: 910 451-1482

PHONE: (252) 443-4083

WASTE DESCRIPTION:

Non-Hazardous Petroleum Contaminated Soil

WASTE ORIGINATION:

m-236 e Camp Johnson, CLNC
OSAGE of VA - 757 274 4949

Transporter: P & F Environmental

Gross Weight (lbs.): 51360

Truck #: 101

Tare Weight (lbs.): 23560

Truck Tag #/State: NC ZB 12254

Net Weight (lbs.): 27800

Driver Name (Print): Tim Thorne

Net Weight (tons): 13.90

I hereby certify that the material stated herein
was received at the waste origination site listed.

Tim Thorne 4-1-09
Driver Signature Date

I hereby certify that the material stated herein was
delivered without incident to the destination listed.

Tim Thorne 4-1-09
Driver Signature Date

Inspected and Accepted By:

George L. Taylor

Garret Bridge

NOTICE TO TRANSPORTER

TRUCKS WILL NOT BE PERMITTED TO ENTER
THE FACILITY WITHOUT THIS ENTRANCE TICKET

WHITE - Invoice

YELLOW - Generator

PINK - Trucker

GOLD - P & F Environmental

P & F Environmental

4352 N. Old Carriage Road • Rocky Mount, NC 27804

Phone: (252) 443-4083 • Fax: (252) 443-4104

NON-HAZARDOUS WASTE MANIFEST

APPROVAL# 11094

LOAD # 07360

GENERATOR

CG, A/CES, IEF, (EMD) MCB
PO Box 20004
CLNC 28546-0004

DESTINATION

Land Application Facility Permit No. SR0500106
Speights Chapel Road
Whitakers, NC 27891

PHONE: 910 451 1482

PHONE: (252) 443-4083

WASTE DESCRIPTION:

Non-Hazardous Petroleum Contaminated Soil

WASTE ORIGINATION:

M236 @ Camp Johnson, CLNC
OSAGE of VA 757 274 4949

Transporter: P & F Environmental

Gross Weight (lbs.): 69340

Truck #: PF 106

Tare Weight (lbs.): 24500

Truck Tag #/State: NC 2B 37964

Net Weight (lbs.): 24500

Driver Name (Print): Bryant Bridger
CDL # NC 1406087

Net Weight (tons): 44840
22.42 tons

I hereby certify that the material stated herein was received at the waste origination site listed.

I hereby certify that the material stated herein was delivered without incident to the destination listed.

Bryant Bridger 4-2-09
Driver Signature Date

Bryant Bridger 4-2-09
Driver Signature Date

Inspected and Accepted By: [Signature] 4/2/09 Janet Bridger

NOTICE TO TRANSPORTER

TRUCKS WILL NOT BE PERMITTED TO ENTER
THE FACILITY WITHOUT THIS ENTRANCE TICKET

WHITE - Invoice

YELLOW - Generator

PINK - Trucker

GOLD - P & F Environmental

P & F Environmental

4352 N. Old Carriage Road • Rocky Mount, NC 27804

Phone: (252) 443-4083 • Fax: (252) 443-4104

NON-HAZARDOUS WASTE MANIFEST

APPROVAL # 11094

LOAD # 07361

GENERATOR

CG, AC/S, P & F (EMD) MCB
PO Box 20004
CLWC 28346-0004

DESTINATION

Land Application Facility Permit No. SR0500106
Speights Chapel Road
Whitakers, NC 27891

PHONE: 910451 1482

PHONE: (252) 443-4083

WASTE DESCRIPTION:

Non-Hazardous Petroleum Contaminated Soil

WASTE ORIGINATION:

m-236 @ Camp Johnson, CLWC
OSAGE OF VA. — 757 274 4949

Transporter: P & F Environmental

Truck #: 105

Truck Tag #/State: NC ZB 35517

Driver Name (Print): Walter Parker
CDL # NC 4538892

Gross Weight (lbs.): 50200

Tare Weight (lbs.): 21600

Net Weight (lbs.): 28600

Net Weight (tons): 14.30

I hereby certify that the material stated herein
was received at the waste origination site listed.

Walter Parker 4-2-09
Driver Signature Date

I hereby certify that the material stated herein was
delivered without incident to the destination listed.

Walter Parker 4-2-09
Driver Signature Date

Inspected and Accepted By:

[Signature] 4/2/09 [Signature]
Inspected and Accepted By: Date Date

NOTICE TO TRANSPORTER

TRUCKS WILL NOT BE PERMITTED TO ENTER
THE FACILITY WITHOUT THIS ENTRANCE TICKET

WHITE - Invoice

YELLOW - Generator

PINK - Trucker

GOLD - P & F Environmental

P & F Environmental

4352 N. Old Carriage Road • Rocky Mount, NC 27804
Phone: (252) 443-4083 • Fax: (252) 443-4104

NON-HAZARDOUS WASTE MANIFEST

APPROVAL # 11094

LOAD # 07362

GENERATOR

CG, AC-S, I & F (EMD) MCB
PO Box 20004
CLNC 28346-0004

DESTINATION

Land Application Facility Permit No. SR0500106
Speights Chapel Road
Whitakers, NC 27891

PHONE: 910 451 1482

PHONE: (252) 443-4083

WASTE DESCRIPTION:

Non-Hazardous Petroleum Contaminated Soil

WASTE ORIGINATION:

M-236 @ Camp Johnson, CLNC
OSAGE of VA 757 274 4949

Transporter: P & F Environmental

Gross Weight (lbs.): 51080

Truck #: 101

Tare Weight (lbs.): 23560

Truck Tag #/State: NC 2B 12254

Net Weight (lbs.): 27520

Driver Name (Print): Tim Thorne
COL # NC 2167392

Net Weight (tons): 13.76

I hereby certify that the material stated herein
was received at the waste origination site listed.

Tim Thorne 4-2-09
Driver Signature Date

I hereby certify that the material stated herein was
delivered without incident to the destination listed.

Tim Thorne 4-2-09
Driver Signature Date

Inspected and Accepted By:

[Signature] 4/2/09 Jared Ridge

NOTICE TO TRANSPORTER

TRUCKS WILL NOT BE PERMITTED TO ENTER
THE FACILITY WITHOUT THIS ENTRANCE TICKET

WHITE - Invoice

YELLOW - Generator

PINK - Trucker

GOLD - P & F Environmental

P & F Environmental

4352 N. Old Carriage Road • Rocky Mount, NC 27804
Phone: (252) 443-4083 • Fax: (252) 443-4104

NON-HAZARDOUS WASTE MANIFEST

APPROVAL # 11094

LOAD # 01363

GENERATOR

CG, AKS, I.E (CMA) MCB
PO Box 20004
CNC 28546-0004

DESTINATION

Land Application Facility Permit No. SR0500106
Speights Chapel Road
Whitakers, NC 27891

PHONE: 910 451 1482

PHONE: (252) 443-4083

WASTE DESCRIPTION: Non-Hazardous Petroleum Contaminated Soil

WASTE ORIGINATION: m-236 @ Camp Johnson, CNC
OSAGE of VA - 757 274 4949

Transporter: P & F Environmental

Truck #: 105

Truck Tag #/State: NK 2B 35517

Driver Name (Print): Walter Parker
CDL # NC 4538892

Gross Weight (lbs.): 51300

Tare Weight (lbs.): 28440

Net Weight (lbs.): 22860

Net Weight (tons): 11.43

I hereby certify that the material stated herein
was received at the waste origination site listed.

Walter Parker 4-2-09
Driver Signature Date

I hereby certify that the material stated herein was
delivered without incident to the destination listed.

Walter Parker 4-2-09
Driver Signature Date

Inspected and Accepted By: George L Taylor 20090402
James Trudge

NOTICE TO TRANSPORTER

TRUCKS WILL NOT BE PERMITTED TO ENTER
THE FACILITY WITHOUT THIS ENTRANCE TICKET

WHITE - Invoice

YELLOW - Generator

PINK - Trucker

GOLD - P & F Environmental

P & F Environmental

4352 N. Old Carriage Road • Rocky Mount, NC 27804

Phone: (252) 443-4083 • Fax: (252) 443-4104

NON-HAZARDOUS WASTE MANIFEST

APPROVAL #

11094

LOAD #

07364

GENERATOR

CG, AC/S, I+E (EMD) MCB
PO Box 20004
CLNC 28546-0004

DESTINATION

Land Application Facility Permit No. SR0500106
Speights Chapel Road
Whitakers, NC 27891

PHONE: 910 451 1482

PHONE: (252) 443-4083

WASTE DESCRIPTION:

Non-Hazardous Petroleum Contaminated Soil

WASTE ORIGINATION:

m-236 @ Camp Johnson CLNC

Usage of VA - 757 274 4949

Transporter: P & F Environmental

Gross Weight (lbs.): 59620

Truck #: PF 106

Tare Weight (lbs.): 11940

Truck Tag #/State: NC 2B 37964

Net Weight (lbs.): 47680

Driver Name (Print):

Frank Rhodes

Net Weight (tons):

23.84

CO L # 1406087

I hereby certify that the material stated herein was received at the waste origination site listed.

I hereby certify that the material stated herein was delivered without incident to the destination listed.

Driver Signature

Date

Frank Rhodes 4-2-09

Driver Signature

Date

Frank Rhodes 4-2-09

Inspected and Accepted By:

Cory L Taylor

Frank Rhodes 20090402

NOTICE TO TRANSPORTER

TRUCKS WILL NOT BE PERMITTED TO ENTER
THE FACILITY WITHOUT THIS ENTRANCE TICKET

WHITE - Invoice

YELLOW - Generator

PINK - Trucker

GOLD - P & F Environmental

P & F Environmental

4352 N. Old Carriage Road • Rocky Mount, NC 27804
Phone: (252) 443-4083 • Fax: (252) 443-4104

NON-HAZARDOUS WASTE MANIFEST

APPROVAL # 11094

LOAD # 07365

GENERATOR

CG, ACES, F&E (EMD) MUB
PO Box 20004
CLNC 28546-0004

DESTINATION

Land Application Facility Permit No. SR0500106
Speights Chapel Road
Whitakers, NC 27891

PHONE: 910 451 1482

PHONE: (252) 443-4083

WASTE DESCRIPTION: Non-Hazardous Petroleum Contaminated Soil

WASTE ORIGINATION: m-236 @ Camp Johnson, CLNC
OSA GE of VA 757 274 4949

Transporter: P & F Environmental

Gross Weight (lbs.): 55140

Truck #: 101

Tare Weight (lbs.): 23560

Truck Tag #/State: NC 2B 12254

Net Weight (lbs.): 31580

Driver Name (Print): Tim Thorne
CDL # NC 2167392

Net Weight (tons): 15.79

I hereby certify that the material stated herein
was received at the waste origination site listed.

Tim Thorne 4-2-09
Driver Signature Date

I hereby certify that the material stated herein was
delivered without incident to the destination listed.

Tim Thorne 4-2-09
Driver Signature Date

Inspected and Accepted By:

George L. Taylor

Tim Thorne 20090402

NOTICE TO TRANSPORTER

TRUCKS WILL NOT BE PERMITTED TO ENTER
THE FACILITY WITHOUT THIS ENTRANCE TICKET

WHITE - Invoice

YELLOW - Generator

PINK - Trucker

GOLD - P & F Environmental

APPENDIX C
PHOTO DOCUMENTATION

M-232 EXCAVATION



Start of M-232 Excavation Activities



Exposing Communications Box and other Utilities within Excavation



Large Concrete Anchor Pad at Bottom of M-232 Basin



M-232 Concrete Anchor Pad after Removal from Basin



Bottom of M-232 Excavation after Concrete Pad Removal



Partial Backfilled M-232 Excavation

M-233 EXCAVATION



Start of M-233 Excavation Activities



M-233 Excavation and Removal of Concrete Anchor Pad

M-234 EXCAVATION



M-234 Excavation with Utilities



Removal of the Concrete Anchor Pad from M-234 Basin

M-236 EXCAVATION



M-236 Excavation Activities



Concrete Anchor Pad at Bottom of M-236 Basin before Removal



Application of ORC and Beginning of Backfilling at M-236

APPENDIX D

**LABORATORY REPORTS AND
CHAIN-OF-CUSTODY DOCUMENTATION**

M-232 SOIL LABORATORY RESULTS

Shaun Whitworth
Osage of Virginia
2618 A Colley Ave
Norfolk, VA 23517

Report Number: G649-143

Client Project: CTO 003

Dear Shaun Whitworth,

Enclosed are the results of the analytical services performed under the referenced project for the received samples and associated QC as applicable. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of five years in the event they are required for future reference. Any samples submitted to our laboratory will be retained for a maximum of thirty (30) days from the date of this report unless other arrangements are requested.

If there are any questions about the report or services performed during this project, please call Linda McWhirter at (910) 350-1903. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS Environmental Services for your analytical services. We look forward to working with you again on any additional analytical needs.

Sincerely,
SGS North America, Inc.



Project Manager
Linda McWhirter



Date

List of Reporting Abbreviations
And Data Qualifiers

B = Compound also detected in batch blank

BQL = Below Quantification Limit (RL or MDL)

DF = Dilution Factor

Dup = Duplicate

D = Detected, but RPD is > 40% between results in dual column method.

E = Estimated concentration, exceeds calibration range.

J = Estimated concentration, below calibration range and above MDL

LCS(D) = Laboratory Control Spike (Duplicate)

MDL = Method Detection Limit

MS(D) = Matrix Spike (Duplicate)

PQL = Practical Quantitation Limit

RL/CL = Reporting Limit / Control Limit

RPD = Relative Percent Difference

UJ = Target analytes with recoveries that are $10\% < \%R < LCL$; # of MEs are allowable and compounds are not detected in the sample.

mg/kg = milligram per kilogram, ppm, parts per million

ug/kg = micrograms per kilogram, ppb, parts per billion

mg/L = milligram per liter, ppm, parts per million

ug/L = micrograms per liter, ppb, parts per billion

% Rec = Percent Recovery

% solids = Percent Solids

Special Notes:

- 1) Metals and mercury samples are digested with a hot block; see the standard operating procedure document for details.
- 2) Uncertainty for all reported data is less than or equal to 30 percent.

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: M232-S001
Client Project ID: CTO 003
Lab Sample ID G649-143-1A
Lab Project ID: G649-143
Report Basis: Dry Weight

Analyzed By: CLP
Date Collected: 06-25-2009 08:23
Date Received: 6/25/2009
Matrix: Soil
Sample Amount: 6.36 g
%Solids: 74.2

Report Name Compound	Result UG/KG	Quantitation Limit UG/KG	MDL UG/KG	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	53.0	7.32	1	6/26/2009	
Benzene	BQL	5.30	1.13	1	6/26/2009	
Bromobenzene	BQL	5.30	1.09	1	6/26/2009	
Bromochloromethane	BQL	5.30	1.82	1	6/26/2009	
Bromodichloromethane	BQL	5.30	1.05	1	6/26/2009	
Bromoform	BQL	5.30	1.06	1	6/26/2009	
Bromomethane	BQL	5.30	1.11	1	6/26/2009	
2-Butanone	BQL	26.5	5.75	1	6/26/2009	
n-Butylbenzene	BQL	5.30	1.01	1	6/26/2009	
sec-Butylbenzene	1.38	5.30	1.07	1	6/26/2009	J
tert-Butylbenzene	BQL	5.30	1.19	1	6/26/2009	
Carbon disulfide	BQL	5.30	2.84	1	6/26/2009	
Carbon tetrachloride	BQL	5.30	1.08	1	6/26/2009	
Chlorobenzene	BQL	5.30	1.26	1	6/26/2009	
Chloroethane	BQL	5.30	1.68	1	6/26/2009	
Chloroform	BQL	5.30	1.27	1	6/26/2009	
Chloromethane	BQL	5.30	1.20	1	6/26/2009	
2-Chlorotoluene	BQL	5.30	1.07	1	6/26/2009	
4-Chlorotoluene	BQL	5.30	1.32	1	6/26/2009	
Dibromochloromethane	BQL	5.30	1.46	1	6/26/2009	
1,2-Dibromo-3-chloropropane	BQL	26.5	1.54	1	6/26/2009	
Dibromomethane	BQL	5.30	1.60	1	6/26/2009	
1,2-Dibromoethane (EDB)	BQL	5.30	1.20	1	6/26/2009	
1,2-Dichlorobenzene	BQL	5.30	1.37	1	6/26/2009	
1,3-Dichlorobenzene	BQL	5.30	1.36	1	6/26/2009	
1,4-Dichlorobenzene	BQL	5.30	1.11	1	6/26/2009	
trans-1,4-Dichloro-2-butene	BQL	26.5	1.46	1	6/26/2009	
1,1-Dichloroethane	BQL	5.30	1.12	1	6/26/2009	
1,1-Dichloroethene	BQL	5.30	1.57	1	6/26/2009	
1,2-Dichloroethane	BQL	5.30	1.40	1	6/26/2009	
cis-1,2-Dichloroethene	BQL	5.30	1.36	1	6/26/2009	
trans-1,2-dichloroethene	BQL	5.30	1.20	1	6/26/2009	
1,2-Dichloropropane	BQL	5.30	1.25	1	6/26/2009	
1,3-Dichloropropane	BQL	5.30	1.19	1	6/26/2009	
2,2-Dichloropropane	BQL	5.30	1.27	1	6/26/2009	
1,1-Dichloropropene	BQL	5.30	1.66	1	6/26/2009	
cis-1,3-Dichloropropene	BQL	5.30	0.882	1	6/26/2009	
trans-1,3-Dichloropropene	BQL	5.30	1.02	1	6/26/2009	
Dichlorodifluoromethane	BQL	5.30	1.40	1	6/26/2009	
Diisopropyl ether (DIPE)	BQL	5.30	1.20	1	6/26/2009	
Ethylbenzene	BQL	5.30	0.917	1	6/26/2009	
Hexachlorobutadiene	BQL	5.30	1.03	1	6/26/2009	
2-Hexanone	BQL	13.2	3.43	1	6/26/2009	
Iodomethane	BQL	5.30	1.14	1	6/26/2009	

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: M232-S001
Client Project ID: CTO 003
Lab Sample ID G649-143-1A
Lab Project ID: G649-143
Report Basis: Dry Weight

Analyzed By: CLP
Date Collected: 06-25-2009 08:23
Date Received: 6/25/2009
Matrix: Soil
Sample Amount: 6.36 g
%Solids: 74.2

Report Name Compound	Result UG/KG	Quantitation Limit UG/KG	MDL UG/KG	Dilution Factor	Date Analyzed	Flag
Isopropylbenzene	BQL	5.30	0.941	1	6/26/2009	
4-Isopropyltoluene	BQL	5.30	1.13	1	6/26/2009	
Methylene chloride	BQL	21.2	1.26	1	6/26/2009	
4-Methyl-2-pentanone	BQL	13.2	4.90	1	6/26/2009	
Methyl-tert-butyl ether (MTBE)	BQL	5.30	1.18	1	6/26/2009	
Naphthalene	2.64	5.30	0.900	1	6/26/2009	J
n-Propyl benzene	BQL	5.30	1.33	1	6/26/2009	
Styrene	BQL	5.30	1.17	1	6/26/2009	
1,1,1,2-Tetrachloroethane	BQL	5.30	1.08	1	6/26/2009	
1,1,2,2-Tetrachloroethane	BQL	5.30	1.20	1	6/26/2009	
Tetrachloroethene	BQL	5.30	0.970	1	6/26/2009	
Toluene	BQL	5.30	1.06	1	6/26/2009	
1,2,3-Trichlorobenzene	BQL	5.30	1.10	1	6/26/2009	
1,2,4-Trichlorobenzene	BQL	5.30	1.09	1	6/26/2009	
Trichloroethene	BQL	5.30	1.01	1	6/26/2009	
1,1,1-Trichloroethane	BQL	5.30	1.20	1	6/26/2009	
1,1,2-Trichloroethane	BQL	5.30	1.74	1	6/26/2009	
Trichlorofluoromethane	BQL	5.30	1.09	1	6/26/2009	
1,2,3-Trichloropropane	BQL	5.30	1.31	1	6/26/2009	
1,2,4-Trimethylbenzene	BQL	5.30	1.33	1	6/26/2009	
1,3,5-Trimethylbenzene	BQL	5.30	1.21	1	6/26/2009	
Vinyl chloride	BQL	5.30	1.44	1	6/26/2009	
m-,p-Xylene	BQL	10.6	2.03	1	6/26/2009	
o-Xylene	BQL	5.30	1.03	1	6/26/2009	

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	50	64.6	129
Toluene-d8	50	52.3	105
4-Bromofluorobenzene	50	52	104

Comments:

Flags:

BQL = Below Quantitation Limits.

Analyst: 

Reviewed By: 

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: M232-S002
Client Project ID: CTO 003
Lab Sample ID G649-143-2A
Lab Project ID: G649-143
Report Basis: Dry Weight

Analyzed By: CLP
Date Collected: 06-25-2009 08:25
Date Received: 6/25/2009
Matrix: Soil
Sample Amount: 5.57 g
%Solids: 73.3

Report Name Compound	Result UG/KG	Quantitation Limit UG/KG	MDL UG/KG	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	61.2	8.46	1	6/26/2009	
Benzene	BQL	6.12	1.31	1	6/26/2009	
Bromobenzene	BQL	6.12	1.26	1	6/26/2009	
Bromochloromethane	BQL	6.12	2.11	1	6/26/2009	
Bromodichloromethane	BQL	6.12	1.21	1	6/26/2009	
Bromoform	BQL	6.12	1.22	1	6/26/2009	
Bromomethane	BQL	6.12	1.29	1	6/26/2009	
2-Butanone	BQL	30.6	6.65	1	6/26/2009	
n-Butylbenzene	BQL	6.12	1.17	1	6/26/2009	
sec-Butylbenzene	BQL	6.12	1.24	1	6/26/2009	
tert-Butylbenzene	BQL	6.12	1.37	1	6/26/2009	
Carbon disulfide	BQL	6.12	3.28	1	6/26/2009	
Carbon tetrachloride	BQL	6.12	1.25	1	6/26/2009	
Chlorobenzene	BQL	6.12	1.46	1	6/26/2009	
Chloroethane	BQL	6.12	1.95	1	6/26/2009	
Chloroform	BQL	6.12	1.47	1	6/26/2009	
Chloromethane	BQL	6.12	1.38	1	6/26/2009	
2-Chlorotoluene	BQL	6.12	1.24	1	6/26/2009	
4-Chlorotoluene	BQL	6.12	1.53	1	6/26/2009	
Dibromochloromethane	BQL	6.12	1.69	1	6/26/2009	
1,2-Dibromo-3-chloropropane	BQL	30.6	1.78	1	6/26/2009	
Dibromomethane	BQL	6.12	1.85	1	6/26/2009	
1,2-Dibromoethane (EDB)	BQL	6.12	1.38	1	6/26/2009	
1,2-Dichlorobenzene	BQL	6.12	1.58	1	6/26/2009	
1,3-Dichlorobenzene	BQL	6.12	1.57	1	6/26/2009	
1,4-Dichlorobenzene	BQL	6.12	1.29	1	6/26/2009	
trans-1,4-Dichloro-2-butene	BQL	30.6	1.69	1	6/26/2009	
1,1-Dichloroethane	BQL	6.12	1.30	1	6/26/2009	
1,1-Dichloroethene	BQL	6.12	1.81	1	6/26/2009	
1,2-Dichloroethane	BQL	6.12	1.62	1	6/26/2009	
cis-1,2-Dichloroethene	BQL	6.12	1.57	1	6/26/2009	
trans-1,2-dichloroethene	BQL	6.12	1.38	1	6/26/2009	
1,2-Dichloropropane	BQL	6.12	1.44	1	6/26/2009	
1,3-Dichloropropane	BQL	6.12	1.37	1	6/26/2009	
2,2-Dichloropropane	BQL	6.12	1.47	1	6/26/2009	
1,1-Dichloropropene	BQL	6.12	1.92	1	6/26/2009	
cis-1,3-Dichloropropene	BQL	6.12	1.02	1	6/26/2009	
trans-1,3-Dichloropropene	BQL	6.12	1.18	1	6/26/2009	
Dichlorodifluoromethane	BQL	6.12	1.62	1	6/26/2009	
Diisopropyl ether (DIPE)	BQL	6.12	1.38	1	6/26/2009	
Ethylbenzene	BQL	6.12	1.06	1	6/26/2009	
Hexachlorobutadiene	BQL	6.12	1.19	1	6/26/2009	
2-Hexanone	BQL	15.3	3.97	1	6/26/2009	
Iodomethane	BQL	6.12	1.32	1	6/26/2009	

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: M232-S002
Client Project ID: CTO 003
Lab Sample ID G649-143-2A
Lab Project ID: G649-143
Report Basis: Dry Weight

Analyzed By: CLP
Date Collected: 06-25-2009 08:25
Date Received: 6/25/2009
Matrix: Soil
Sample Amount: 5.57 g
%Solids: 73.3

Report Name Compound	Result UG/KG	Quantitation Limit UG/KG	MDL UG/KG	Dilution Factor	Date Analyzed	Flag
Isopropylbenzene	BQL	6.12	1.09	1	6/26/2009	
4-Isopropyltoluene	BQL	6.12	1.31	1	6/26/2009	
Methylene chloride	BQL	24.5	1.46	1	6/26/2009	
4-Methyl-2-pentanone	BQL	15.3	5.67	1	6/26/2009	
Methyl-tert-butyl ether (MTBE)	BQL	6.12	1.36	1	6/26/2009	
Naphthalene	BQL	6.12	1.04	1	6/26/2009	
n-Propyl benzene	BQL	6.12	1.54	1	6/26/2009	
Styrene	BQL	6.12	1.35	1	6/26/2009	
1,1,1,2-Tetrachloroethane	BQL	6.12	1.25	1	6/26/2009	
1,1,2,2-Tetrachloroethane	BQL	6.12	1.38	1	6/26/2009	
Tetrachloroethene	BQL	6.12	1.12	1	6/26/2009	
Toluene	BQL	6.12	1.22	1	6/26/2009	
1,2,3-Trichlorobenzene	BQL	6.12	1.27	1	6/26/2009	
1,2,4-Trichlorobenzene	BQL	6.12	1.26	1	6/26/2009	
Trichloroethene	BQL	6.12	1.17	1	6/26/2009	
1,1,1-Trichloroethane	BQL	6.12	1.38	1	6/26/2009	
1,1,2-Trichloroethane	BQL	6.12	2.01	1	6/26/2009	
Trichlorofluoromethane	BQL	6.12	1.26	1	6/26/2009	
1,2,3-Trichloropropane	BQL	6.12	1.52	1	6/26/2009	
1,2,4-Trimethylbenzene	BQL	6.12	1.54	1	6/26/2009	
1,3,5-Trimethylbenzene	BQL	6.12	1.40	1	6/26/2009	
Vinyl chloride	BQL	6.12	1.66	1	6/26/2009	
m-,p-Xylene	BQL	12.2	2.35	1	6/26/2009	
o-Xylene	BQL	6.12	1.19	1	6/26/2009	

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	50	63.5	127
Toluene-d8	50	52	104
4-Bromofluorobenzene	50	49.9	100

Comments:

Flags:

BQL = Below Quantitation Limits.

Analyst: CL

Reviewed By: Th

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: M232-S003
Client Project ID: CTO 003
Lab Sample ID G649-143-3A
Lab Project ID: G649-143
Report Basis: Dry Weight

Analyzed By: CLP
Date Collected: 06-25-2009 10:11
Date Received: 6/25/2009
Matrix: Soil
Sample Amount: 6.73 g
%Solids: 78.3

Report Name Compound	Result UG/KG	Quantitation Limit UG/KG	MDL UG/KG	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	47.4	6.55	1	6/26/2009	
Benzene	BQL	4.74	1.01	1	6/26/2009	
Bromobenzene	BQL	4.74	0.976	1	6/26/2009	
Bromochloromethane	BQL	4.74	1.63	1	6/26/2009	
Bromodichloromethane	BQL	4.74	0.940	1	6/26/2009	
Bromoform	BQL	4.74	0.947	1	6/26/2009	
Bromomethane	BQL	4.74	0.995	1	6/26/2009	
2-Butanone	BQL	23.7	5.14	1	6/26/2009	
n-Butylbenzene	BQL	4.74	0.905	1	6/26/2009	
sec-Butylbenzene	BQL	4.74	0.957	1	6/26/2009	
tert-Butylbenzene	BQL	4.74	1.06	1	6/26/2009	
Carbon disulfide	BQL	4.74	2.54	1	6/26/2009	
Carbon tetrachloride	BQL	4.74	0.966	1	6/26/2009	
Chlorobenzene	BQL	4.74	1.13	1	6/26/2009	
Chloroethane	BQL	4.74	1.51	1	6/26/2009	
Chloroform	BQL	4.74	1.14	1	6/26/2009	
Chloromethane	BQL	4.74	1.07	1	6/26/2009	
2-Chlorotoluene	BQL	4.74	0.957	1	6/26/2009	
4-Chlorotoluene	BQL	4.74	1.18	1	6/26/2009	
Dibromochloromethane	BQL	4.74	1.31	1	6/26/2009	
1,2-Dibromo-3-chloropropane	BQL	23.7	1.37	1	6/26/2009	
Dibromomethane	BQL	4.74	1.43	1	6/26/2009	
1,2-Dibromoethane (EDB)	BQL	4.74	1.07	1	6/26/2009	
1,2-Dichlorobenzene	BQL	4.74	1.22	1	6/26/2009	
1,3-Dichlorobenzene	BQL	4.74	1.21	1	6/26/2009	
1,4-Dichlorobenzene	BQL	4.74	0.995	1	6/26/2009	
trans-1,4-Dichloro-2-butene	BQL	23.7	1.31	1	6/26/2009	
1,1-Dichloroethane	BQL	4.74	1.00	1	6/26/2009	
1,1-Dichloroethene	BQL	4.74	1.40	1	6/26/2009	
1,2-Dichloroethane	BQL	4.74	1.25	1	6/26/2009	
cis-1,2-Dichloroethene	BQL	4.74	1.21	1	6/26/2009	
trans-1,2-dichloroethene	BQL	4.74	1.07	1	6/26/2009	
1,2-Dichloropropane	BQL	4.74	1.12	1	6/26/2009	
1,3-Dichloropropane	BQL	4.74	1.06	1	6/26/2009	
2,2-Dichloropropane	BQL	4.74	1.14	1	6/26/2009	
1,1-Dichloropropene	BQL	4.74	1.49	1	6/26/2009	
cis-1,3-Dichloropropene	BQL	4.74	0.789	1	6/26/2009	
trans-1,3-Dichloropropene	BQL	4.74	0.912	1	6/26/2009	
Dichlorodifluoromethane	BQL	4.74	1.25	1	6/26/2009	
Diisopropyl ether (DIPE)	BQL	4.74	1.07	1	6/26/2009	
Ethylbenzene	BQL	4.74	0.820	1	6/26/2009	
Hexachlorobutadiene	BQL	4.74	0.924	1	6/26/2009	
2-Hexanone	BQL	11.8	3.07	1	6/26/2009	
Iodomethane	BQL	4.74	1.02	1	6/26/2009	

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: M232-S003
Client Project ID: CTO 003
Lab Sample ID G649-143-3A
Lab Project ID: G649-143
Report Basis: Dry Weight

Analyzed By: CLP
Date Collected: 06-25-2009 10:11
Date Received: 6/25/2009
Matrix: Soil
Sample Amount: 6.73 g
%Solids: 78.3

Report Name Compound	Result UG/KG	Quantitation Limit UG/KG	MDL UG/KG	Dilution Factor	Date Analyzed	Flag
Isopropylbenzene	BQL	4.74	0.841	1	6/26/2009	
4-Isopropyltoluene	BQL	4.74	1.01	1	6/26/2009	
Methylene chloride	BQL	18.9	1.13	1	6/26/2009	
4-Methyl-2-pentanone	BQL	11.8	4.39	1	6/26/2009	
Methyl-tert-butyl ether (MTBE)	BQL	4.74	1.05	1	6/26/2009	
Naphthalene	BQL	4.74	0.805	1	6/26/2009	
n-Propyl benzene	BQL	4.74	1.19	1	6/26/2009	
Styrene	BQL	4.74	1.04	1	6/26/2009	
1,1,1,2-Tetrachloroethane	BQL	4.74	0.966	1	6/26/2009	
1,1,2,2-Tetrachloroethane	BQL	4.74	1.07	1	6/26/2009	
Tetrachloroethene	BQL	4.74	0.868	1	6/26/2009	
Toluene	BQL	4.74	0.944	1	6/26/2009	
1,2,3-Trichlorobenzene	BQL	4.74	0.985	1	6/26/2009	
1,2,4-Trichlorobenzene	BQL	4.74	0.976	1	6/26/2009	
Trichloroethene	BQL	4.74	0.904	1	6/26/2009	
1,1,1-Trichloroethane	BQL	4.74	1.07	1	6/26/2009	
1,1,2-Trichloroethane	BQL	4.74	1.55	1	6/26/2009	
Trichlorofluoromethane	BQL	4.74	0.976	1	6/26/2009	
1,2,3-Trichloropropane	BQL	4.74	1.17	1	6/26/2009	
1,2,4-Trimethylbenzene	BQL	4.74	1.19	1	6/26/2009	
1,3,5-Trimethylbenzene	BQL	4.74	1.08	1	6/26/2009	
Vinyl chloride	BQL	4.74	1.29	1	6/26/2009	
m-,p-Xylene	BQL	9.47	1.82	1	6/26/2009	
o-Xylene	BQL	4.74	0.918	1	6/26/2009	

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	50	65.1	130
Toluene-d8	50	52.3	105
4-Bromofluorobenzene	50	50.2	100

Comments:

Flags:

BQL = Below Quantitation Limits.

Analyst: 

Reviewed By: 

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: M232-S004
Client Project ID: CTO 003
Lab Sample ID G649-143-4A
Lab Project ID: G649-143
Report Basis: Dry Weight

Analyzed By: CLP
Date Collected: 06-25-2009 10:15
Date Received: 6/25/2009
Matrix: Soil
Sample Amount: 6.11 g
%Solids: 73.5

Report Name Compound	Result UG/KG	Quantitation Limit UG/KG	MDL UG/KG	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	55.6	7.68	1	6/26/2009	
Benzene	BQL	5.56	1.19	1	6/26/2009	
Bromobenzene	BQL	5.56	1.14	1	6/26/2009	
Bromochloromethane	BQL	5.56	1.91	1	6/26/2009	
Bromodichloromethane	BQL	5.56	1.10	1	6/26/2009	
Bromoform	BQL	5.56	1.11	1	6/26/2009	
Bromomethane	BQL	5.56	1.17	1	6/26/2009	
2-Butanone	BQL	27.8	6.04	1	6/26/2009	
n-Butylbenzene	BQL	5.56	1.06	1	6/26/2009	
sec-Butylbenzene	BQL	5.56	1.12	1	6/26/2009	
tert-Butylbenzene	BQL	5.56	1.24	1	6/26/2009	
Carbon disulfide	BQL	5.56	2.98	1	6/26/2009	
Carbon tetrachloride	BQL	5.56	1.13	1	6/26/2009	
Chlorobenzene	BQL	5.56	1.32	1	6/26/2009	
Chloroethane	BQL	5.56	1.77	1	6/26/2009	
Chloroform	BQL	5.56	1.33	1	6/26/2009	
Chloromethane	BQL	5.56	1.26	1	6/26/2009	
2-Chlorotoluene	BQL	5.56	1.12	1	6/26/2009	
4-Chlorotoluene	BQL	5.56	1.39	1	6/26/2009	
Dibromochloromethane	BQL	5.56	1.53	1	6/26/2009	
1,2-Dibromo-3-chloropropane	BQL	27.8	1.61	1	6/26/2009	
Dibromomethane	BQL	5.56	1.68	1	6/26/2009	
1,2-Dibromoethane (EDB)	BQL	5.56	1.26	1	6/26/2009	
1,2-Dichlorobenzene	BQL	5.56	1.43	1	6/26/2009	
1,3-Dichlorobenzene	BQL	5.56	1.42	1	6/26/2009	
1,4-Dichlorobenzene	BQL	5.56	1.17	1	6/26/2009	
trans-1,4-Dichloro-2-butene	BQL	27.8	1.53	1	6/26/2009	
1,1-Dichloroethane	BQL	5.56	1.18	1	6/26/2009	
1,1-Dichloroethene	BQL	5.56	1.65	1	6/26/2009	
1,2-Dichloroethane	BQL	5.56	1.47	1	6/26/2009	
cis-1,2-Dichloroethene	BQL	5.56	1.42	1	6/26/2009	
trans-1,2-dichloroethene	BQL	5.56	1.26	1	6/26/2009	
1,2-Dichloropropane	BQL	5.56	1.31	1	6/26/2009	
1,3-Dichloropropane	BQL	5.56	1.24	1	6/26/2009	
2,2-Dichloropropane	BQL	5.56	1.33	1	6/26/2009	
1,1-Dichloropropene	BQL	5.56	1.75	1	6/26/2009	
cis-1,3-Dichloropropene	BQL	5.56	0.926	1	6/26/2009	
trans-1,3-Dichloropropene	BQL	5.56	1.07	1	6/26/2009	
Dichlorodifluoromethane	BQL	5.56	1.47	1	6/26/2009	
Diisopropyl ether (DIPE)	BQL	5.56	1.26	1	6/26/2009	
Ethylbenzene	BQL	5.56	0.963	1	6/26/2009	
Hexachlorobutadiene	BQL	5.56	1.08	1	6/26/2009	
2-Hexanone	BQL	13.9	3.60	1	6/26/2009	
Iodomethane	BQL	5.56	1.20	1	6/26/2009	

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: M232-S004
Client Project ID: CTO 003
Lab Sample ID G649-143-4A
Lab Project ID: G649-143
Report Basis: Dry Weight

Analyzed By: CLP
Date Collected: 06-25-2009 10:15
Date Received: 6/25/2009
Matrix: Soil
Sample Amount: 6.11 g
%Solids: 73.5

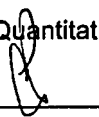
Report Name Compound	Result UG/KG	Quantitation Limit UG/KG	MDL UG/KG	Dilution Factor	Date Analyzed	Flag
Isopropylbenzene	BQL	5.56	0.987	1	6/26/2009	
4-Isopropyltoluene	BQL	5.56	1.19	1	6/26/2009	
Methylene chloride	BQL	22.2	1.32	1	6/26/2009	
4-Methyl-2-pentanone	BQL	13.9	5.15	1	6/26/2009	
Methyl-tert-butyl ether (MTBE)	BQL	5.56	1.23	1	6/26/2009	
Naphthalene	BQL	5.56	0.945	1	6/26/2009	
n-Propyl benzene	BQL	5.56	1.40	1	6/26/2009	
Styrene	BQL	5.56	1.22	1	6/26/2009	
1,1,1,2-Tetrachloroethane	BQL	5.56	1.13	1	6/26/2009	
1,1,2,2-Tetrachloroethane	BQL	5.56	1.26	1	6/26/2009	
Tetrachloroethene	BQL	5.56	1.02	1	6/26/2009	
Toluene	BQL	5.56	1.11	1	6/26/2009	
1,2,3-Trichlorobenzene	BQL	5.56	1.16	1	6/26/2009	
1,2,4-Trichlorobenzene	BQL	5.56	1.14	1	6/26/2009	
Trichloroethene	BQL	5.56	1.06	1	6/26/2009	
1,1,1-Trichloroethane	BQL	5.56	1.26	1	6/26/2009	
1,1,2-Trichloroethane	BQL	5.56	1.82	1	6/26/2009	
Trichlorofluoromethane	BQL	5.56	1.14	1	6/26/2009	
1,2,3-Trichloropropane	BQL	5.56	1.38	1	6/26/2009	
1,2,4-Trimethylbenzene	BQL	5.56	1.40	1	6/26/2009	
1,3,5-Trimethylbenzene	BQL	5.56	1.27	1	6/26/2009	
Vinyl chloride	BQL	5.56	1.51	1	6/26/2009	
m-,p-Xylene	BQL	11.1	2.13	1	6/26/2009	
o-Xylene	BQL	5.56	1.08	1	6/26/2009	

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	50	64.6	129
Toluene-d8	50	52.1	104
4-Bromofluorobenzene	50	50	100

Comments:

Flags:

BQL = Below Quantitation Limits.

Analyst: 

Reviewed By: 

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: M232-S001
Client Project ID: CTO 003
Lab Sample ID: G649-143-11
Lab Project ID: G649-143
Report Basis: Dry weight
Initial Weight: 33.03 g

Analyzed By: DCS
Date Collected: 6/25/2009 8:23
Date Received: 6/25/2009
Date Extracted: 6/25/2009
Matrix: Soil
% Solids: 74.21

Compound	Result ug/Kg	RL ug/Kg	MDL ug/Kg	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	408	62.4	1	6/26/2009	
Acenaphthylene	BQL	408	57.1	1	6/26/2009	
Anthracene	BQL	408	55.5	1	6/26/2009	
Benzo[a]anthracene	BQL	408	55.9	1	6/26/2009	
Benzo[a]pyrene	BQL	408	58.7	1	6/26/2009	
Benzo[b]fluoranthene	BQL	408	56.7	1	6/26/2009	
Benzo[g,h,i]perylene	BQL	408	71.0	1	6/26/2009	
Benzo[k]fluoranthene	BQL	408	57.9	1	6/26/2009	
Benzoic Acid	BQL	2040	504	1	6/26/2009	
Bis(2-chloroethoxy)methane	BQL	408	60.0	1	6/26/2009	
Bis(2-chloroethyl)ether	BQL	408	82.8	1	6/26/2009	
Bis(2-chloroisopropyl)ether	BQL	408	65.7	1	6/26/2009	
Bis(2-ethylhexyl)phthalate	BQL	408	62.4	1	6/26/2009	
4-bromophenyl phenyl ether	BQL	408	72.2	1	6/26/2009	
Butylbenzylphthalate	BQL	408	60.4	1	6/26/2009	
2-Chloronaphthalene	BQL	408	56.7	1	6/26/2009	
2-Chlorophenol	BQL	408	51.8	1	6/26/2009	
4-Chloro-3-methylphenol	BQL	408	59.6	1	6/26/2009	
4-Chloroaniline	BQL	2040	66.5	1	6/26/2009	
4-Chlorophenyl phenyl ether	BQL	408	60.0	1	6/26/2009	
Chrysene	BQL	408	39.2	1	6/26/2009	
Dibenzo[a,h]anthracene	BQL	408	52.2	1	6/26/2009	
Dibenzofuran	BQL	408	57.5	1	6/26/2009	
Di-n-Butylphthalate	BQL	408	59.6	1	6/26/2009	
1,2-Dichlorobenzene	BQL	408	68.9	1	6/26/2009	
1,3-Dichlorobenzene	BQL	408	66.1	1	6/26/2009	
1,4-Dichlorobenzene	BQL	408	59.2	1	6/26/2009	
3,3'-Dichlorobenzidine	BQL	816	67.3	1	6/26/2009	
2,4-Dichlorophenol	BQL	408	44.5	1	6/26/2009	
Diethylphthalate	BQL	408	54.7	1	6/26/2009	
Dimethylphthalate	BQL	408	63.2	1	6/26/2009	
2,4-Dimethylphenol	BQL	408	73.8	1	6/26/2009	
Di-n-octylphthalate	BQL	408	62.8	1	6/26/2009	
4,6-Dinitro-2-methylphenol	BQL	2040	48.5	1	6/26/2009	
2,4-Dinitrophenol	BQL	2040	53.0	1	6/26/2009	
2,4-Dinitrotoluene	BQL	408	62.0	1	6/26/2009	
2,6-Dinitrotoluene	BQL	408	67.3	1	6/26/2009	
Fluoranthene	BQL	408	65.7	1	6/26/2009	
Fluorene	212	408	63.6	1	6/26/2009	J
Hexachlorobenzene	BQL	408	88.5	1	6/26/2009	
Hexachlorobutadiene	BQL	408	74.3	1	6/26/2009	
Hexachlorocyclopentadiene	BQL	816	79.6	1	6/26/2009	
Hexachloroethane	BQL	408	63.6	1	6/26/2009	
Indeno(1,2,3-c,d)pyrene	BQL	408	48.1	1	6/26/2009	
Isophorone	BQL	408	59.6	1	6/26/2009	
2-Methylnaphthalene	BQL	408	66.5	1	6/26/2009	
2-Methylphenol	BQL	408	62.4	1	6/26/2009	

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: M232-S001
Client Project ID: CTO 003
Lab Sample ID: G649-143-11
Lab Project ID: G649-143
Report Basis: Dry weight
Initial Weight: 33.03 g

Analyzed By: DCS
Date Collected: 6/25/2009 8:23
Date Received: 6/25/2009
Date Extracted: 6/25/2009
Matrix: Soil
% Solids: 74.21

Compound	Result ug/Kg	RL ug/Kg	MDL ug/Kg	Dilution Factor	Date Analyzed	Flag
3- & 4-Methylphenol	BQL	408	53.0	1	6/26/2009	
Naphthalene	BQL	408	57.1	1	6/26/2009	
2-Nitroaniline	BQL	408	54.7	1	6/26/2009	
3-Nitroaniline	BQL	2040	60.0	1	6/26/2009	
4-Nitroaniline	BQL	2040	54.7	1	6/26/2009	
Nitrobenzene	BQL	408	54.3	1	6/26/2009	
2-Nitrophenol	BQL	408	59.6	1	6/26/2009	
4-Nitrophenol	BQL	2040	71.0	1	6/26/2009	
Diphenylamine *	BQL	408	65.7	1	6/26/2009	
Pentachlorophenol	BQL	2040	37.5	1	6/26/2009	
Phenanthrene	81.6	408	57.1	1	6/26/2009	J
Phenol	BQL	408	55.5	1	6/26/2009	
Pyrene	BQL	408	55.5	1	6/26/2009	
1,2,4-Trichlorobenzene	BQL	408	73.4	1	6/26/2009	
2,4,5-Trichlorophenol	BQL	408	60.8	1	6/26/2009	
2,4,6-Trichlorophenol	BQL	408	36.3	1	6/26/2009	
		Spike Added	Spike Result	Percent Recovered		
2-Fluorobiphenyl		10	8.4	84		
2-Fluorophenol		10	9.7	97		
Nitrobenzene-d5		10	8.1	81		
Phenol-d6		10	9.3	93		
2,4,6-Tribromophenol		10	6.9	69		
4-Terphenyl-d14		10	11.5	115		

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

J = Detected below the quantitation limit.

Reviewed By: MO

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: M232-S002
Client Project ID: CTO 003
Lab Sample ID: G649-143-2H
Lab Project ID: G649-143
Report Basis: Dry weight
Initial Weight: 35.95 g

Analyzed By: DCS
Date Collected: 6/25/2009 8:25
Date Received: 6/25/2009
Date Extracted: 6/25/2009
Matrix: Soil
% Solids: 73.33

Compound	Result ug/Kg	RL ug/Kg	MDL ug/Kg	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	379	58.0	1	6/26/2009	
Acenaphthylene	BQL	379	53.1	1	6/26/2009	
Anthracene	BQL	379	51.6	1	6/26/2009	
Benzo[a]anthracene	BQL	379	52.0	1	6/26/2009	
Benzo[a]pyrene	BQL	379	54.6	1	6/26/2009	
Benzo[b]fluoranthene	BQL	379	52.7	1	6/26/2009	
Benzo[g,h,i]perylene	BQL	379	66.0	1	6/26/2009	
Benzo[k]fluoranthene	BQL	379	53.9	1	6/26/2009	
Benzoic Acid	BQL	1900	468	1	6/26/2009	
Bis(2-chloroethoxy)methane	BQL	379	55.8	1	6/26/2009	
Bis(2-chloroethyl)ether	BQL	379	77.0	1	6/26/2009	
Bis(2-chloroisopropyl)ether	BQL	379	61.1	1	6/26/2009	
Bis(2-ethylhexyl)phthalate	BQL	379	58.0	1	6/26/2009	
4-bromophenyl phenyl ether	BQL	379	67.1	1	6/26/2009	
Butylbenzylphthalate	BQL	379	56.1	1	6/26/2009	
2-Chloronaphthalene	BQL	379	52.7	1	6/26/2009	
2-Chlorophenol	BQL	379	48.2	1	6/26/2009	
4-Chloro-3-methylphenol	BQL	379	55.4	1	6/26/2009	
4-Chloroaniline	BQL	1900	61.8	1	6/26/2009	
4-Chlorophenyl phenyl ether	BQL	379	55.8	1	6/26/2009	
Chrysene	BQL	379	36.4	1	6/26/2009	
Dibenzo[a,h]anthracene	BQL	379	48.6	1	6/26/2009	
Dibenzofuran	BQL	379	53.5	1	6/26/2009	
Di-n-Butylphthalate	BQL	379	55.4	1	6/26/2009	
1,2-Dichlorobenzene	BQL	379	64.1	1	6/26/2009	
1,3-Dichlorobenzene	BQL	379	61.5	1	6/26/2009	
1,4-Dichlorobenzene	BQL	379	55.0	1	6/26/2009	
3,3'-Dichlorobenzidine	BQL	759	62.6	1	6/26/2009	
2,4-Dichlorophenol	BQL	379	41.3	1	6/26/2009	
Diethylphthalate	BQL	379	50.8	1	6/26/2009	
Dimethylphthalate	BQL	379	58.8	1	6/26/2009	
2,4-Dimethylphenol	BQL	379	68.7	1	6/26/2009	
Di-n-octylphthalate	BQL	379	58.4	1	6/26/2009	
4,6-Dinitro-2-methylphenol	BQL	1900	45.1	1	6/26/2009	
2,4-Dinitrophenol	BQL	1900	49.3	1	6/26/2009	
2,4-Dinitrotoluene	BQL	379	57.7	1	6/26/2009	
2,6-Dinitrotoluene	BQL	379	62.6	1	6/26/2009	
Fluoranthene	BQL	379	61.1	1	6/26/2009	
Fluorene	BQL	379	59.2	1	6/26/2009	
Hexachlorobenzene	BQL	379	82.3	1	6/26/2009	
Hexachlorobutadiene	BQL	379	69.0	1	6/26/2009	
Hexachlorocyclopentadiene	BQL	759	74.0	1	6/26/2009	
Hexachloroethane	BQL	379	59.2	1	6/26/2009	
Indeno(1,2,3-c,d)pyrene	BQL	379	44.8	1	6/26/2009	
Isophorone	BQL	379	55.4	1	6/26/2009	
2-Methylnaphthalene	BQL	379	61.8	1	6/26/2009	
2-Methylphenol	BQL	379	58.0	1	6/26/2009	

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: M232-S002
Client Project ID: CTO 003
Lab Sample ID: G649-143-2H
Lab Project ID: G649-143
Report Basis: Dry weight
Initial Weight: 35.95 g

Analyzed By: DCS
Date Collected: 6/25/2009 8:25
Date Received: 6/25/2009
Date Extracted: 6/25/2009
Matrix: Soil
% Solids: 73.33

Compound	Result ug/Kg	RL ug/Kg	MDL ug/Kg	Dilution Factor	Date Analyzed	Flag
3- & 4-Methylphenol	BQL	379	49.3	1	6/26/2009	
Naphthalene	BQL	379	53.1	1	6/26/2009	
2-Nitroaniline	BQL	379	50.8	1	6/26/2009	
3-Nitroaniline	BQL	1900	55.8	1	6/26/2009	
4-Nitroaniline	BQL	1900	50.8	1	6/26/2009	
Nitrobenzene	BQL	379	50.5	1	6/26/2009	
2-Nitrophenol	BQL	379	55.4	1	6/26/2009	
4-Nitrophenol	BQL	1900	66.0	1	6/26/2009	
Diphenylamine *	BQL	379	61.1	1	6/26/2009	
Pentachlorophenol	BQL	1900	34.9	1	6/26/2009	
Phenanthrene	BQL	379	53.1	1	6/26/2009	
Phenol	BQL	379	51.6	1	6/26/2009	
Pyrene	BQL	379	51.6	1	6/26/2009	
1,2,4-Trichlorobenzene	BQL	379	68.3	1	6/26/2009	
2,4,5-Trichlorophenol	BQL	379	56.5	1	6/26/2009	
2,4,6-Trichlorophenol	BQL	379	33.8	1	6/26/2009	
		Spike Added	Spike Result	Percent Recovered		
2-Fluorobiphenyl		10	7.6	76		
2-Fluorophenol		10	9.3	93		
Nitrobenzene-d5		10	7.7	77		
Phenol-d6		10	8.9	89		
2,4,6-Tribromophenol		10	6.3	63		
4-Terphenyl-d14		10	10.3	103		

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

J = Detected below the quantitation limit.

Reviewed By: 

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: M232-S003
Client Project ID: CTO 003
Lab Sample ID: G649-143-3H
Lab Project ID: G649-143
Report Basis: Dry weight
Initial Weight: 32.86 g

Analyzed By: DCS
Date Collected: 6/25/2009 10:11
Date Received: 6/25/2009
Date Extracted: 6/25/2009
Matrix: Soil
% Solids: 78.31

Compound	Result ug/Kg	RL ug/Kg	MDL ug/Kg	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	389	59.5	1	6/26/2009	
Acenaphthylene	BQL	389	54.4	1	6/26/2009	
Anthracene	BQL	389	52.9	1	6/26/2009	
Benzo[a]anthracene	BQL	389	53.2	1	6/26/2009	
Benzo[a]pyrene	BQL	389	56.0	1	6/26/2009	
Benzo[b]fluoranthene	BQL	389	54.0	1	6/26/2009	
Benzo[g,h,i]perylene	BQL	389	67.6	1	6/26/2009	
Benzo[k]fluoranthene	BQL	389	55.2	1	6/26/2009	
Benzoic Acid	BQL	1940	480	1	6/26/2009	
Bis(2-chloroethoxy)methane	BQL	389	57.1	1	6/26/2009	
Bis(2-chloroethyl)ether	BQL	389	78.9	1	6/26/2009	
Bis(2-chloroisopropyl)ether	BQL	389	62.6	1	6/26/2009	
Bis(2-ethylhexyl)phthalate	BQL	389	59.5	1	6/26/2009	
4-bromophenyl phenyl ether	BQL	389	68.8	1	6/26/2009	
Butylbenzylphthalate	BQL	389	57.5	1	6/26/2009	
2-Chloronaphthalene	BQL	389	54.0	1	6/26/2009	
2-Chlorophenol	BQL	389	49.4	1	6/26/2009	
4-Chloro-3-methylphenol	BQL	389	56.7	1	6/26/2009	
4-Chloroaniline	BQL	1940	63.3	1	6/26/2009	
4-Chlorophenyl phenyl ether	BQL	389	57.1	1	6/26/2009	
Chrysene	BQL	389	37.3	1	6/26/2009	
Dibenzo[a,h]anthracene	BQL	389	49.7	1	6/26/2009	
Dibenzofuran	BQL	389	54.8	1	6/26/2009	
Di-n-Butylphthalate	BQL	389	56.7	1	6/26/2009	
1,2-Dichlorobenzene	BQL	389	65.7	1	6/26/2009	
1,3-Dichlorobenzene	BQL	389	63.0	1	6/26/2009	
1,4-Dichlorobenzene	BQL	389	56.3	1	6/26/2009	
3,3'-Dichlorobenzidine	BQL	777	64.1	1	6/26/2009	
2,4-Dichlorophenol	BQL	389	42.4	1	6/26/2009	
Diethylphthalate	BQL	389	52.1	1	6/26/2009	
Dimethylphthalate	BQL	389	60.2	1	6/26/2009	
2,4-Dimethylphenol	BQL	389	70.3	1	6/26/2009	
Di-n-octylphthalate	BQL	389	59.8	1	6/26/2009	
4,6-Dinitro-2-methylphenol	BQL	1940	46.2	1	6/26/2009	
2,4-Dinitrophenol	BQL	1940	50.5	1	6/26/2009	
2,4-Dinitrotoluene	BQL	389	59.1	1	6/26/2009	
2,6-Dinitrotoluene	BQL	389	64.1	1	6/26/2009	
Fluoranthene	BQL	389	62.6	1	6/26/2009	
Fluorene	BQL	389	60.6	1	6/26/2009	
Hexachlorobenzene	BQL	389	84.3	1	6/26/2009	
Hexachlorobutadiene	BQL	389	70.7	1	6/26/2009	
Hexachlorocyclopentadiene	BQL	777	75.8	1	6/26/2009	
Hexachloroethane	BQL	389	60.6	1	6/26/2009	
Indeno(1,2,3-c,d)pyrene	BQL	389	45.9	1	6/26/2009	
Isophorone	BQL	389	56.7	1	6/26/2009	
2-Methylnaphthalene	BQL	389	63.3	1	6/26/2009	
2-Methylphenol	BQL	389	59.5	1	6/26/2009	

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: M232-S003
Client Project ID: CTO 003
Lab Sample ID: G649-143-3H
Lab Project ID: G649-143
Report Basis: Dry weight
Initial Weight: 32.86 g

Analyzed By: DCS
Date Collected: 6/25/2009 10:11
Date Received: 6/25/2009
Date Extracted: 6/25/2009
Matrix: Soil
% Solids: 78.31

Compound	Result ug/Kg	RL ug/Kg	MDL ug/Kg	Dilution Factor	Date Analyzed	Flag
3- & 4-Methylphenol	BQL	389	50.5	1	6/26/2009	
Naphthalene	BQL	389	54.4	1	6/26/2009	
2-Nitroaniline	BQL	389	52.1	1	6/26/2009	
3-Nitroaniline	BQL	1940	57.1	1	6/26/2009	
4-Nitroaniline	BQL	1940	52.1	1	6/26/2009	
Nitrobenzene	BQL	389	51.7	1	6/26/2009	
2-Nitrophenol	BQL	389	56.7	1	6/26/2009	
4-Nitrophenol	BQL	1940	67.6	1	6/26/2009	
Diphenylamine *	BQL	389	62.6	1	6/26/2009	
Pentachlorophenol	BQL	1940	35.8	1	6/26/2009	
Phenanthrene	BQL	389	54.4	1	6/26/2009	
Phenol	BQL	389	52.9	1	6/26/2009	
Pyrene	BQL	389	52.9	1	6/26/2009	
1,2,4-Trichlorobenzene	BQL	389	70.0	1	6/26/2009	
2,4,5-Trichlorophenol	BQL	389	57.9	1	6/26/2009	
2,4,6-Trichlorophenol	BQL	389	34.6	1	6/26/2009	
		Spike Added	Spike Result	Percent Recovered		
2-Fluorobiphenyl		10	9.2	92		
2-Fluorophenol		10	10.1	101		
Nitrobenzene-d5		10	8.6	86		
Phenol-d6		10	9.6	96		
2,4,6-Tribromophenol		10	7.1	71		
4-Terphenyl-d14		10	12.8	127		

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

J = Detected below the quantitation limit.

Reviewed By: 

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: M232-S004
Client Project ID: CTO 003
Lab Sample ID: G649-143-4I
Lab Project ID: G649-143
Report Basis: Dry weight
Initial Weight: 33.39 g

Analyzed By: DCS
Date Collected: 6/25/2009 10:15
Date Received: 6/25/2009
Date Extracted: 6/25/2009
Matrix: Soil
% Solids: 73.5

Compound	Result ug/Kg	RL ug/Kg	MDL ug/Kg	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	407	62.3	1	6/26/2009	
Acenaphthylene	BQL	407	57.0	1	6/26/2009	
Anthracene	BQL	407	55.4	1	6/26/2009	
Benzo[a]anthracene	BQL	407	55.8	1	6/26/2009	
Benzo[a]pyrene	BQL	407	58.7	1	6/26/2009	
Benzo[b]fluoranthene	BQL	407	56.6	1	6/26/2009	
Benzo[g,h,i]perylene	BQL	407	70.9	1	6/26/2009	
Benzo[k]fluoranthene	BQL	407	57.9	1	6/26/2009	
Benzoic Acid	BQL	2040	503	1	6/26/2009	
Bis(2-chloroethoxy)methane	BQL	407	59.9	1	6/26/2009	
Bis(2-chloroethyl)ether	BQL	407	82.7	1	6/26/2009	
Bis(2-chloroisopropyl)ether	BQL	407	65.6	1	6/26/2009	
Bis(2-ethylhexyl)phthalate	BQL	407	62.3	1	6/26/2009	
4-bromophenyl phenyl ether	BQL	407	72.1	1	6/26/2009	
Butylbenzylphthalate	BQL	407	60.3	1	6/26/2009	
2-Chloronaphthalene	BQL	407	56.6	1	6/26/2009	
2-Chlorophenol	BQL	407	51.7	1	6/26/2009	
4-Chloro-3-methylphenol	BQL	407	59.5	1	6/26/2009	
4-Chloroaniline	BQL	2040	66.4	1	6/26/2009	
4-Chlorophenyl phenyl ether	BQL	407	59.9	1	6/26/2009	
Chrysene	BQL	407	39.1	1	6/26/2009	
Dibenzo[a,h]anthracene	BQL	407	52.2	1	6/26/2009	
Dibenzofuran	BQL	407	57.5	1	6/26/2009	
Di-n-Butylphthalate	BQL	407	59.5	1	6/26/2009	
1,2-Dichlorobenzene	BQL	407	68.9	1	6/26/2009	
1,3-Dichlorobenzene	BQL	407	66.0	1	6/26/2009	
1,4-Dichlorobenzene	BQL	407	59.1	1	6/26/2009	
3,3'-Dichlorobenzidine	BQL	815	67.2	1	6/26/2009	
2,4-Dichlorophenol	BQL	407	44.4	1	6/26/2009	
Diethylphthalate	BQL	407	54.6	1	6/26/2009	
Dimethylphthalate	BQL	407	63.2	1	6/26/2009	
2,4-Dimethylphenol	BQL	407	73.8	1	6/26/2009	
Di-n-octylphthalate	BQL	407	62.8	1	6/26/2009	
4,6-Dinitro-2-methylphenol	BQL	2040	48.5	1	6/26/2009	
2,4-Dinitrophenol	BQL	2040	53.0	1	6/26/2009	
2,4-Dinitrotoluene	BQL	407	61.9	1	6/26/2009	
2,6-Dinitrotoluene	BQL	407	67.2	1	6/26/2009	
Fluoranthene	BQL	407	65.6	1	6/26/2009	
Fluorene	BQL	407	63.6	1	6/26/2009	
Hexachlorobenzene	BQL	407	88.4	1	6/26/2009	
Hexachlorobutadiene	BQL	407	74.2	1	6/26/2009	
Hexachlorocyclopentadiene	BQL	815	79.5	1	6/26/2009	
Hexachloroethane	BQL	407	63.6	1	6/26/2009	
Indeno(1,2,3-c,d)pyrene	BQL	407	48.1	1	6/26/2009	
Isophorone	BQL	407	59.5	1	6/26/2009	
2-Methylnaphthalene	BQL	407	66.4	1	6/26/2009	
2-Methylphenol	BQL	407	62.3	1	6/26/2009	

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: M232-S004
Client Project ID: CTO 003
Lab Sample ID: G649-143-4I
Lab Project ID: G649-143
Report Basis: Dry weight
Initial Weight: 33.39 g

Analyzed By: DCS
Date Collected: 6/25/2009 10:15
Date Received: 6/25/2009
Date Extracted: 6/25/2009
Matrix: Soil
% Solids: 73.5

Compound	Result ug/Kg	RL ug/Kg	MDL ug/Kg	Dilution Factor	Date Analyzed	Flag
3- & 4-Methylphenol	BQL	407	53.0	1	6/26/2009	
Naphthalene	BQL	407	57.0	1	6/26/2009	
2-Nitroaniline	BQL	407	54.6	1	6/26/2009	
3-Nitroaniline	BQL	2040	59.9	1	6/26/2009	
4-Nitroaniline	BQL	2040	54.6	1	6/26/2009	
Nitrobenzene	BQL	407	54.2	1	6/26/2009	
2-Nitrophenol	BQL	407	59.5	1	6/26/2009	
4-Nitrophenol	BQL	2040	70.9	1	6/26/2009	
Diphenylamine *	BQL	407	65.6	1	6/26/2009	
Pentachlorophenol	BQL	2040	37.5	1	6/26/2009	
Phenanthrene	BQL	407	57.0	1	6/26/2009	
Phenol	BQL	407	55.4	1	6/26/2009	
Pyrene	BQL	407	55.4	1	6/26/2009	
1,2,4-Trichlorobenzene	BQL	407	73.3	1	6/26/2009	
2,4,5-Trichlorophenol	BQL	407	60.7	1	6/26/2009	
2,4,6-Trichlorophenol	BQL	407	36.3	1	6/26/2009	
		Spike Added	Spike Result	Percent Recovered		
2-Fluorobiphenyl		10	8.2	82		
2-Fluorophenol		10	8.4	84		
Nitrobenzene-d5		10	7.3	73		
Phenol-d6		10	8.3	83		
2,4,6-Tribromophenol		10	6.3	63		
4-Terphenyl-d14		10	10.7	107		

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

J = Detected below the quantitation limit.

Reviewed By: MD

EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of Virginia

Project Name: CTO 003

Sample Information	
Sample Identification	M232-S001
Sample Matrix	Soil
Date Collected	06/25/09 08:23
Date Received	06/25/09
Date Extracted	06/25/09
Date Analyzed	06/26/09 10:56 - 06/26/09 11:24
Dry Weight	74.2
Dilution Factor	1 - 1
Initial weight (g)	12.59
Final Volume (mL)	10.0

Analytical Results			
Analytes**	Result mg/Kg	Report Limit mg/Kg	Flags
C9-C18 Aliphatics	47.1	10.0	
C19-C36 Aliphatics	BQL	10.0	
C11-C22 Aromatics	10.2	10.0	

Surrogates	Percent Recovery	Flags	Limits	
			Lower	Upper
Aliphatic (tricosane)	88.5		40	140
Aromatic (ortho-terphenyl)	90.7		40	140
Fractionation 1 (2-bromonaphthalene)	117		40	140
Fractionation 2 (2-fluorobiphenyl)	118		40	140

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: G649-143-1H	Lab Info: G649-143-1H
Aliphatic: EP062609/003F0101.D	Aromatic: EP062609/004F0201.D

Reviewed By: 

EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of Virginia

Project Name: CTO 003

Sample Information	
Sample Identification	M232-S002
Sample Matrix	Soil
Date Collected	06/25/09 08:25
Date Received	06/25/09
Date Extracted	06/25/09
Date Analyzed	06/25/09 21:13 - 06/25/09 21:13
Dry Weight	73.3
Dilution Factor	1 - 1
Initial weight (g)	12.61
Final Volume (mL)	10.0

Analytical Results			
Analytes**	Result mg/Kg	Report Limit mg/Kg	Flags
C9-C18 Aliphatics	BQL	10.0	
C19-C36 Aliphatics	BQL	10.0	
C11-C22 Aromatics	BQL	10.0	

Surrogates	Percent Recovery	Flags	Limits	
			Lower	Upper
Aliphatic (tricosane)	109		40	140
Aromatic (ortho-terphenyl)	104		40	140

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: G649-143-2G	Lab Info: G649-143-2G
Aliphatic: EP062509/015F1101.D	Aromatic: EP062509/015F1101.D

Reviewed By: 

EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of Virginia

Project Name: CTO 003

Sample Information	
Sample Identification	M232-S003
Sample Matrix	Soil
Date Collected	06/25/09 10:11
Date Received	06/25/09
Date Extracted	06/25/09
Date Analyzed	06/25/09 21:42 - 06/25/09 21:42
Dry Weight	78.3
Dilution Factor	1 - 1
Initial weight (g)	12.17
Final Volume (mL)	10.0

Analytical Results			
Analytes**	Result mg/Kg	Report Limit mg/Kg	Flags
C9-C18 Aliphatics	BQL	10.0	
C19-C36 Aliphatics	BQL	10.0	
C11-C22 Aromatics	BQL	10.0	

Surrogates	Percent Recovery	Flags	Limits	
			Lower	Upper
Aliphatic (tricosane)	105		40	140
Aromatic (ortho-terphenyl)	101		40	140

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: G649-143-3G	Lab Info: G649-143-3G
Aliphatic: EP062509/016F1201.D	Aromatic: EP062509/016F1201.D

Reviewed By: 

EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of Virginia

Project Name: CTO 003

Sample Information	
Sample Identification	M232-S004
Sample Matrix	Soil
Date Collected	06/25/09 10:15
Date Received	06/25/09
Date Extracted	06/25/09
Date Analyzed	06/25/09 22:11 - 06/25/09 22:11
Dry Weight	73.5
Dilution Factor	1 - 1
Initial weight (g)	12.57
Final Volume (mL)	10.0

Analytical Results			
Analytes**	Result mg/Kg	Report Limit mg/Kg	Flags
C9-C18 Aliphatics	BQL	10.0	
C19-C36 Aliphatics	BQL	10.0	
C11-C22 Aromatics	BQL	10.0	

Surrogates	Percent Recovery	Flags	Limits	
			Lower	Upper
Aliphatic (tricosane)	104		40	140
Aromatic (ortho-terphenyl)	101		40	140

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: G649-143-4H	Lab Info: G649-143-4H
Aliphatic: EP062509/017F1301.D	Aromatic: EP062509/017F1301.D

Reviewed By: 

Attachment 3

EPH Laboratory Reporting Form

Calibration and QA/QC Information

Initial Calibration Date: 04/27/09

Calibration Ranges and Limits

Range	MDL		ML		RL	
	(02/15/08) (µg/L)	(02/11/08) (mg/Kg)	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)
C9-C18 Aliphatics	1.66	0.274	5.28	0.871	100	10
C19-C36 Aliphatics	2.79	0.201	8.87	0.639	100	10
C11-C22 Aromatics	2.64	0.110	8.40	0.350	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR	Method of Quantitation
C ₉ -C ₁₈ Aliphatics	200	33.3	11.19	Calibration Factor
	100	16.7		
	50	8.33		
	25	4.17		
	5	0.833		
C ₁₉ -C ₃₆ Aliphatics	200	33.3	5.72	Calibration Factor
	100	16.7		
	50	8.33		
	25	4.17		
	5	0.833		
C ₁₁ -C ₂₂ Aromatics	200	33.3	1.61	Calibration Factor
	50	8.3		
	100	16.67		
	25	4.17		
	5	0.833		

Calibration Check Date: 06/25/09
06/25/09Filenames: ep062509/005f0101.d
ep062509/002f0201.d

Calibration Check

Range	Levels (mg/Kg)	(µg/L)	%Difference if CF %Drift if LR	Limits
C9-C18 Aliphatics	100	16.7	13.8	≤±25%
C19-C36 Aliphatics	100	16.7	15.7	≤±25%
C11-C22 Aromatics	100	16.7	8.3	≤±25%

MDL = Method Detection Limit

ML = Minimum Limit

RL = Reportable Limit

RPD = Relative Percent Difference

%RSD = Percent Relative Standard Deviation

CCC = Correlation Coefficient of Curve

Attachment 3

EPH Laboratory Reporting Form

Calibration and QA/QC Information

Initial Calibration Date: 04/27/09

Calibration Ranges and Limits

Range	MDL		ML		RL	
	(02/15/08) (µg/L)	(02/11/08) (mg/Kg)	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)
C9-C18 Aliphatics	1.66	0.274	5.28	0.871	100	10
C19-C36 Aliphatics	2.79	0.201	8.87	0.639	100	10
C11-C22 Aromatics	2.64	0.110	8.40	0.350	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR	Method of Quantitation
C ₉ -C ₁₈ Aliphatics	200	33.3	11.19	Calibration Factor
	100	16.7		
	50	8.33		
	25	4.17		
	5	0.833		
C ₁₉ -C ₃₆ Aliphatics	200	33.3	5.72	Calibration Factor
	100	16.7		
	50	8.33		
	25	4.17		
	5	0.833		
C ₁₁ -C ₂₂ Aromatics	200	33.3	1.61	Calibration Factor
	50	8.3		
	100	16.67		
	25	4.17		
	5	0.833		

Calibration Check Date: 06/25/09
06/25/09Filenames: ep062509/018f1401.d
ep062509/019f1501.d

Calibration Check

Range	Levels (mg/Kg)	(µg/L)	%Difference if CF %Drift if LR	Limits
C9-C18 Aliphatics	100	16.7	17.1	±25%
C19-C36 Aliphatics	100	16.7	21.7	±25%
C11-C22 Aromatics	100	16.7	13.0	±25%

MDL = Method Detection Limit

ML = Minimum Limit

RL = Reportable Limit

RPD = Relative Percent Difference

%RSD = Percent Relative Standard Deviation

CCC = Correlation Coefficient of Curve

Attachment 3
EPH Laboratory Reporting Form

Calibration and QA/QC Information

Initial Calibration Date: 04/27/09

Calibration Ranges and Limits

Range	MDL		ML		RL	
	(02/15/08) (µg/L)	(02/11/08) (mg/Kg)	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)
C9-C18 Aliphatics	1.66	0.274	5.28	0.871	100	10
C19-C36 Aliphatics	2.79	0.201	8.87	0.639	100	10
C11-C22 Aromatics	2.64	0.110	8.40	0.350	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR	Method of Quantitation
C ₉ -C ₁₈ Aliphatics	200	33.3	11.19	Calibration Factor
	100	16.7		
	50	8.33		
	25	4.17		
	5	0.833		
C ₁₉ -C ₃₆ Aliphatics	200	33.3	5.72	Calibration Factor
	100	16.7		
	50	8.33		
	25	4.17		
	5	0.833		
C ₁₁ -C ₂₂ Aromatics	200	33.3	1.61	Calibration Factor
	50	8.3		
	100	16.67		
	25	4.17		
	5	0.833		

Calibration Check Date: 06/26/09 Filenames: ep062609/001f0101.d
06/26/09 ep062609/002f0201.d

Calibration Check

Range	Levels (mg/Kg)	(µg/L)	%Difference if CF %Drift if LR	Limits
C9-C18 Aliphatics	100	16.7	-18.8	±25%
C19-C36 Aliphatics	100	16.7	-5.7	±25%
C11-C22 Aromatics	100	16.7	-17.9	±25%

MDL = Method Detection Limit

ML = Minimum Limit

RL = Reportable Limit

RPD = Relative Percent Difference

%RSD = Percent Relative Standard Deviation

CCC = Correlation Coefficient of Curve

Attachment 3

EPH Laboratory Reporting Form

Calibration and QA/QC Information

Initial Calibration Date: 04/27/09

Calibration Ranges and Limits

Range	MDL		ML		RL	
	(02/15/08) (µg/L)	(02/11/08) (mg/Kg)	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)
C9-C18 Aliphatics	1.66	0.274	5.28	0.871	100	10
C19-C36 Aliphatics	2.79	0.201	8.87	0.639	100	10
C11-C22 Aromatics	2.64	0.110	8.40	0.350	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR	Method of Quantitation
C ₉ -C ₁₈ Aliphatics	200	33.3	11.19	Calibration Factor
	100	16.7		
	50	8.33		
	25	4.17		
	5	0.833		
C ₁₉ -C ₃₆ Aliphatics	200	33.3	5.72	Calibration Factor
	100	16.7		
	50	8.33		
	25	4.17		
	5	0.833		
C ₁₁ -C ₂₂ Aromatics	200	33.3	1.61	Calibration Factor
	50	8.3		
	100	16.67		
	25	4.17		
	5	0.833		

Calibration Check Date: 06/26/09Filenames: ep062609/009f0501.d06/26/09ep062609/010f0601.d

Calibration Check

Range	Levels (µg/L) (mg/Kg)	%Difference if CF %Drift if LR	Limits
C9-C18 Aliphatics	100 16.7	4.3	≤±25%
C19-C36 Aliphatics	100 16.7	8.6	≤±25%
C11-C22 Aromatics	100 16.7	4.9	≤±25%

MDL = Method Detection Limit

ML = Minimum Limit

RL = Reportable Limit

RPD = Relative Percent Difference

%RSD = Percent Relative Standard Deviation

CCC = Correlation Coefficient of Curve

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of Virginia

Project Name: CTO 003

Sample Information	
Sample Identification	M232-S001
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	06/25/09 08:23
Date Received	06/25/09
Date Extracted	06/25/09
Date Analyzed	06/26/09 03:03 - 06/26/09 03:03
Dry Weight	74.2
Dilution Factor	1 - 1

Analytical Results				
Analyte	Result mg/Kg	Report Limit mg/Kg	Flags	
C ₅ -C ₈ Aliphatics**	BQL	10.0		
C ₉ -C ₁₂ Aliphatics**	BQL	10.0		
C ₉ -C ₁₀ Aromatics**	BQL	10.0		
	Percent Recovery	Flags	Limits Lower Upper	
Surrogate % Recovery - PID	85.5		70	130
Surrogate % Recovery - FID	104		70	130

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: g649-143-1d	Lab Info: g649-143-1d
FID Info: VP062509/039F0101.D	PID Info: VP062509/039R0101.D

Reviewed By: 

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of Virginia
 Project Name: CTO 003

Sample Information	
Sample Identification	M232-S002
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	06/25/09 08:25
Date Received	06/25/09
Date Extracted	06/25/09
Date Analyzed	06/26/09 03:29 - 06/26/09 03:29
Dry Weight	73.3
Dilution Factor	1 - 1

Analytical Results				
Analyte	Result mg/Kg	Report Limit mg/Kg	Flags	
C ₅ -C ₈ Aliphatics**	BQL	10.0		
C ₉ -C ₁₂ Aliphatics**	BQL	10.0		
C ₉ -C ₁₀ Aromatics**	BQL	10.0		
	Percent Recovery	Flags	Limits Lower Upper	
Surrogate % Recovery - PID	84.9		70	130
Surrogate % Recovery - FID	102		70	130

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.
 ** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: g649-143-2d	Lab Info: g649-143-2d
FID Info: VP062509/040F0101.D	PID Info: VP062509/040R0101.D

Reviewed By: 

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of Virginia
 Project Name: CTO 003

Sample Information	
Sample Identification	M232-S003
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	06/25/09 10:11
Date Received	06/25/09
Date Extracted	06/25/09
Date Analyzed	06/26/09 03:56 - 06/26/09 03:56
Dry Weight	78.3
Dilution Factor	1 - 1

Analytical Results				
Analyte	Result mg/Kg	Report Limit mg/Kg	Flags	
C ₅ -C ₈ Aliphatics**	BQL	10.0		
C ₉ -C ₁₂ Aliphatics**	BQL	10.0		
C ₉ -C ₁₀ Aromatics**	BQL	10.0		
	Percent Recovery	Flags	Limits Lower Upper	
Surrogate % Recovery - PID	85.9		70	130
Surrogate % Recovery - FID	107		70	130

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.
 ** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: g649-143-3f	Lab Info: g649-143-3f
FID Info: VP062509/041F0101.D	PID Info: VP062509/041R0101.D

Reviewed By: WJ

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of Virginia
 Project Name: CTO 003

Sample Information	
Sample Identification	M232-S004
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	06/25/09 10:15
Date Received	06/25/09
Date Extracted	06/25/09
Date Analyzed	06/26/09 04:23 - 06/26/09 04:23
Dry Weight	73.5
Dilution Factor	1 - 1

Analytical Results				
Analyte	Result mg/Kg	Report Limit mg/Kg	Flags	
C ₅ -C ₈ Aliphatics**	BQL	10.0		
C ₉ -C ₁₂ Aliphatics**	BQL	10.0		
C ₉ -C ₁₀ Aromatics**	BQL	10.0		
	Percent Recovery	Flags	Limits Lower Upper	
Surrogate % Recovery - PID	86.3		70	130
Surrogate % Recovery - FID	108		70	130

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.
 ** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: g649-143-4f	Lab Info: g649-143-4f
FID Info: VP062509/042F0101.D	PID Info: VP062509/042R0101.D

Reviewed By: 

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of Virginia

Project Name: CTO 003

Sample Information	
Sample Identification	Trip Blank
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	06/25/09 00:00
Date Received	06/25/09
Date Extracted	06/25/09
Date Analyzed	06/26/09 02:36 - 06/26/09 02:36
Dry Weight	100
Dilution Factor	1 - 1

Analytical Results				
Analyte	Result mg/Kg	Report Limit mg/Kg	Flags	
C ₅ -C ₈ Aliphatics**	BQL	10.0		
C ₉ -C ₁₂ Aliphatics**	BQL	10.0		
C ₉ -C ₁₀ Aromatics**	BQL	10.0		
	Percent Recovery	Flags	Limits Lower Upper	
Surrogate % Recovery - PID	86.3		70	130
Surrogate % Recovery - FID	106		70	130

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: g649-143-5a	Lab Info: g649-143-5a
FID Info: VP062509/038F0101.D	PID Info: VP062509/038R0101.D

Reviewed By: 

Attachment 2

VPH Laboratory Reporting Form

Calibration and QA/QC Information

FID Initial Calibration Date: 05/08/09PID Initial Calibration Date: 05/08/09

Calibration Ranges and Limits

Range	MDL		ML		RL	
	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)
C ₅ -C ₈ Aliphatics	2.02	0.175	6.42	0.557	100	10
C ₉ -C ₁₂ Aliphatics	1.51	0.118	4.80	0.375	100	10
C ₉ -C ₁₀ Aromatics	0.902	0.132	2.87	0.420	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR	Method of Quantitation
C ₅ -C ₈ Aliphatics	10	0.8	8.80	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		
C ₉ -C ₁₂ Aliphatics	10	0.8	1.00	Linear Regression
	50	4		
	100	8		
	200	16		
	500	40		
C ₉ -C ₁₀ Aromatics	10	0.8	21.76	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		

Calibration Check Date: 06/25/09Filename: VP062509/002F0101.d

Calibration Check

Range	Levels (µg/L)	Levels (mg/Kg)	%Difference if CF %Drift if LR	Limits
C ₅ -C ₈ Aliphatics	200	16	-10.2	±25%
C ₉ -C ₁₂ Aliphatics	200	16	-8.9	±25%
C ₉ -C ₁₀ Aromatics	200	16	8.8	±25%

MDL = Method Detection Limit

ML = Minimum Limit

RL = Reportable Limit

RPD = Relative Percent Difference

%RSD = Percent Relative Standard Deviation

CCC = Correlation Coefficient of Curve

Attachment 2

VPH Laboratory Reporting Form

Calibration and QA/QC Information

FID Initial Calibration Date: 05/08/09PID Initial Calibration Date: 05/08/09

Calibration Ranges and Limits

Range	MDL		ML		RL	
	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)
C ₅ -C ₈ Aliphatics	2.02	0.175	6.42	0.557	100	10
C ₉ -C ₁₂ Aliphatics	1.51	0.118	4.80	0.375	100	10
C ₉ -C ₁₀ Aromatics	0.902	0.132	2.87	0.420	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR	Method of Quantitation
C ₅ -C ₈ Aliphatics	10	0.8	8.80	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		
C ₉ -C ₁₂ Aliphatics	10	0.8	1.00	Linear Regression
	50	4		
	100	8		
	200	16		
	500	40		
C ₉ -C ₁₀ Aromatics	10	0.8	21.76	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		

Calibration Check Date: 06/25/09Filename: VP062509/036F0101.d

Calibration Check

Range	Levels (µg/L)	Levels (mg/Kg)	%Difference if CF %Drift if LR	Limits
C ₅ -C ₈ Aliphatics	200	16	-21.0	±25%
C ₉ -C ₁₂ Aliphatics	200	16	-6.8	±25%
C ₉ -C ₁₀ Aromatics	200	16	8.6	±25%

MDL = Method Detection Limit

ML = Minimum Limit

RL = Reportable Limit

RPD = Relative Percent Difference

%RSD = Percent Relative Standard Deviation

CCC = Correlation Coefficient of Curve

Attachment 2

VPH Laboratory Reporting Form

Calibration and QA/QC Information

FID Initial Calibration Date: 05/08/09PID Initial Calibration Date: 05/08/09

Calibration Ranges and Limits

Range	MDL		ML		RL	
	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)
C ₅ -C ₈ Aliphatics	2.02	0.175	6.42	0.557	100	10
C ₉ -C ₁₂ Aliphatics	1.51	0.118	4.80	0.375	100	10
C ₉ -C ₁₀ Aromatics	0.902	0.132	2.87	0.420	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR	Method of Quantitation
C ₅ -C ₈ Aliphatics	10	0.8	8.80	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		
C ₉ -C ₁₂ Aliphatics	10	0.8	1.00	Linear Regression
	50	4		
	100	8		
	200	16		
	500	40		
C ₉ -C ₁₀ Aromatics	10	0.8	21.76	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		

Calibration Check Date: 06/25/09Filename: VP062509/044F0101.d

Calibration Check

Range	Levels (µg/L)	Levels (mg/Kg)	%Difference if CF %Drift if LR	Limits
C ₅ -C ₈ Aliphatics	200	16	-15.0	±25%
C ₉ -C ₁₂ Aliphatics	200	16	-16.6	±25%
C ₉ -C ₁₀ Aromatics	200	16	7.7	±25%

MDL = Method Detection Limit

ML = Minimum Limit

RL = Reportable Limit

RPD = Relative Percent Difference

%RSD = Percent Relative Standard Deviation

CCC = Correlation Coefficient of Curve

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M-233 SOIL LABORATORY RESULTS



Mr. Shaun Whitworth
Osage of Virginia
2618 A Colley Ave
Norfolk VA 23517

Report Number: G649-142

Client Project: CTO 003

Dear Mr. Whitworth:

Enclosed are the results of the analytical services performed under the referenced project. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of five years in the event they are required for future reference. Any samples submitted to our laboratory will be retained for a maximum of thirty (30) days from the date of this report unless other arrangements are requested.

If there are any questions about the report or the services performed during this project, please call SGS at (910) 350-1903. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS Environmental Services for your analytical services. We look forward to working with you again on any additional analytical needs which you may have.

Sincerely,
SGS Environmental Services, Inc.

A handwritten signature in black ink, appearing to read 'Linda McWhirter'.

Project Manager
Linda McWhirter

6/15/09

Date

List of Reporting Abbreviations And Data Qualifiers

B = Compound also detected in batch blank

BQL = Below Quantification Limit (RL or MDL)

DF = Dilution Factor

Dup = Duplicate

D = Detected, but RPD is > 40% between results in dual column method.

E = Estimated concentration, exceeds calibration range.

J = Estimated concentration, below calibration range and above MDL

LCS(D) = Laboratory Control Spike (Duplicate)

MDL = Method Detection Limit

MS(D) = Matrix Spike (Duplicate)

PQL = Practical Quantitation Limit

RL/CL = Reporting Limit / Control Limit

RPD = Relative Percent Difference

mg/kg = milligram per kilogram, ppm, parts per million

ug/kg = micrograms per kilogram, ppb, parts per billion

mg/L = milligram per liter, ppm, parts per million

ug/L = micrograms per liter, ppb, parts per billion

% Rec = Percent Recovery

% solids = Percent Solids

Special Notes:

- 1) Metals and mercury samples are digested with a hot block, see the standard operating procedure document for details.**
- 2) Uncertainty for all reported data is less than or equal to 30 percent.**

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: M233-S001
Client Project ID: CTO 003
Lab Sample ID G649-142-1B
Lab Project ID: G649-142
Report Basis: Dry Weight

Analyzed By: MJC
Date Collected: 06-10-2009 14:31
Date Received: 6/11/2009
Matrix: Soil
Sample Amount: 7.46 g
%Solids: 72.4

Report Name Compound	Result UG/KG	Quantitation Limit UG/KG	MDL UG/KG	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	46.3	6.39	1	6/11/2009	
Benzene	BQL	4.63	0.990	1	6/11/2009	
Bromobenzene	BQL	4.63	0.953	1	6/11/2009	
Bromochloromethane	BQL	4.63	1.59	1	6/11/2009	
Bromodichloromethane	BQL	4.63	0.918	1	6/11/2009	
Bromoform	BQL	4.63	0.925	1	6/11/2009	
Bromomethane	BQL	4.63	0.971	1	6/11/2009	
2-Butanone	BQL	23.1	5.02	1	6/11/2009	
n-Butylbenzene	BQL	4.63	0.884	1	6/11/2009	
sec-Butylbenzene	BQL	4.63	0.934	1	6/11/2009	
tert-Butylbenzene	BQL	4.63	1.04	1	6/11/2009	
Carbon disulfide	BQL	4.63	2.48	1	6/11/2009	
Carbon tetrachloride	BQL	4.63	0.944	1	6/11/2009	
Chlorobenzene	BQL	4.63	1.10	1	6/11/2009	
Chloroethane	BQL	4.63	1.47	1	6/11/2009	
Chloroform	BQL	4.63	1.11	1	6/11/2009	
Chloromethane	BQL	4.63	1.05	1	6/11/2009	
2-Chlorotoluene	BQL	4.63	0.934	1	6/11/2009	
4-Chlorotoluene	BQL	4.63	1.16	1	6/11/2009	
Dibromochloromethane	BQL	4.63	1.28	1	6/11/2009	
1,2-Dibromo-3-chloropropane	BQL	23.1	1.34	1	6/11/2009	
Dibromomethane	BQL	4.63	1.40	1	6/11/2009	
1,2-Dibromoethane (EDB)	BQL	4.63	1.05	1	6/11/2009	
1,2-Dichlorobenzene	BQL	4.63	1.19	1	6/11/2009	
1,3-Dichlorobenzene	BQL	4.63	1.18	1	6/11/2009	
1,4-Dichlorobenzene	BQL	4.63	0.971	1	6/11/2009	
trans-1,4-Dichloro-2-butene	BQL	23.1	1.28	1	6/11/2009	
1,1-Dichloroethane	BQL	4.63	0.981	1	6/11/2009	
1,1-Dichloroethene	BQL	4.63	1.37	1	6/11/2009	
1,2-Dichloroethane	BQL	4.63	1.22	1	6/11/2009	
cis-1,2-Dichloroethene	BQL	4.63	1.18	1	6/11/2009	
trans-1,2-dichloroethene	BQL	4.63	1.05	1	6/11/2009	
1,2-Dichloropropane	BQL	4.63	1.09	1	6/11/2009	
1,3-Dichloropropane	BQL	4.63	1.04	1	6/11/2009	
2,2-Dichloropropane	BQL	4.63	1.11	1	6/11/2009	
1,1-Dichloropropene	BQL	4.63	1.45	1	6/11/2009	
cis-1,3-Dichloropropene	BQL	4.63	0.771	1	6/11/2009	
trans-1,3-Dichloropropene	BQL	4.63	0.891	1	6/11/2009	
Dichlorodifluoromethane	BQL	4.63	1.22	1	6/11/2009	
Diisopropyl ether (DIPE)	BQL	4.63	1.05	1	6/11/2009	
Ethylbenzene	BQL	4.63	0.801	1	6/11/2009	
Hexachlorobutadiene	BQL	4.63	0.902	1	6/11/2009	
2-Hexanone	BQL	11.6	3.00	1	6/11/2009	
Iodomethane	BQL	4.63	0.999	1	6/11/2009	

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: M233-S001
Client Project ID: CTO 003
Lab Sample ID G649-142-1B
Lab Project ID: G649-142
Report Basis: Dry Weight

Analyzed By: MJC
Date Collected: 06-10-2009 14:31
Date Received: 6/11/2009
Matrix: Soil
Sample Amount: 7.46 g
%Solids: 72.4

Report Name Compound	Result UG/KG	Quantitation Limit UG/KG	MDL UG/KG	Dilution Factor	Date Analyzed	Flag
Isopropylbenzene	BQL	4.63	0.822	1	6/11/2009	
4-Isopropyltoluene	BQL	4.63	0.990	1	6/11/2009	
Methylene chloride	BQL	18.5	1.10	1	6/11/2009	
4-Methyl-2-pentanone	BQL	11.6	4.28	1	6/11/2009	
Methyl-tert-butyl ether (MTBE)	BQL	4.63	1.03	1	6/11/2009	
Naphthalene	0.990	4.63	0.786	1	6/11/2009	J
n-Propyl benzene	BQL	4.63	1.17	1	6/11/2009	
Styrene	BQL	4.63	1.02	1	6/11/2009	
1,1,1,2-Tetrachloroethane	BQL	4.63	0.944	1	6/11/2009	
1,1,2,2-Tetrachloroethane	BQL	4.63	1.05	1	6/11/2009	
Tetrachloroethene	BQL	4.63	0.848	1	6/11/2009	
Toluene	BQL	4.63	0.922	1	6/11/2009	
1,2,3-Trichlorobenzene	BQL	4.63	0.962	1	6/11/2009	
1,2,4-Trichlorobenzene	BQL	4.63	0.953	1	6/11/2009	
Trichloroethene	BQL	4.63	0.883	1	6/11/2009	
1,1,1-Trichloroethane	BQL	4.63	1.05	1	6/11/2009	
1,1,2-Trichloroethane	BQL	4.63	1.52	1	6/11/2009	
Trichlorofluoromethane	BQL	4.63	0.953	1	6/11/2009	
1,2,3-Trichloropropane	BQL	4.63	1.15	1	6/11/2009	
1,2,4-Trimethylbenzene	BQL	4.63	1.17	1	6/11/2009	
1,3,5-Trimethylbenzene	BQL	4.63	1.05	1	6/11/2009	
Vinyl chloride	BQL	4.63	1.26	1	6/11/2009	
m-,p-Xylene	BQL	9.25	1.78	1	6/11/2009	
o-Xylene	BQL	4.63	0.897	1	6/11/2009	

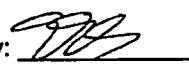
	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	50	63.6	127
Toluene-d8	50	50.1	100
4-Bromofluorobenzene	50	51.4	103

Comments:

Flags:

BQL = Below Quantitation Limits.
J = Detected below the quantitation limit.

Analyst: 

Reviewed By: 

**Results for Volatiles
by GCMS 8260B/5035**

Client Sample ID: M233-S002
Client Project ID: CTO 003
Lab Sample ID: G649-142-2E
Lab Project ID: G649-142
Report Basis: Dry Weight

Analyzed By: DVO
Date Collected: 6/10/2009 14:35
Date Received: 6/11/2009
Matrix: Soil
Sample Amount: 6.28 g
%Solids: 74.0

Compound	Result UG/KG	Quantitation Limit UG/KG	MDL UG/KG	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	1350	117	50	6/12/2009	
Benzene	BQL	53.8	3.50	50	6/12/2009	
Bromobenzene	BQL	53.8	3.01	50	6/12/2009	
Bromochloromethane	BQL	53.8	5.44	50	6/12/2009	
Bromodichloromethane	BQL	53.8	4.09	50	6/12/2009	
Bromoform	BQL	53.8	6.46	50	6/12/2009	
Bromomethane	BQL	53.8	7.16	50	6/12/2009	
2-Butanone	116	1350	29.3	50	6/12/2009	J
n-Butylbenzene	BQL	53.8	5.87	50	6/12/2009	
sec-Butylbenzene	467	53.8	4.52	50	6/12/2009	
tert-Butylbenzene	33.4	53.8	2.69	50	6/12/2009	J
Carbon disulfide	BQL	53.8	3.71	50	6/12/2009	
Carbon tetrachloride	BQL	53.8	4.68	50	6/12/2009	
Chlorobenzene	BQL	53.8	4.41	50	6/12/2009	
Chloroethane	BQL	53.8	5.71	50	6/12/2009	
Chloroform	BQL	53.8	4.25	50	6/12/2009	
Chloromethane	BQL	53.8	7.86	50	6/12/2009	
2-Chlorotoluene	BQL	53.8	5.33	50	6/12/2009	
4-Chlorotoluene	BQL	53.8	4.31	50	6/12/2009	
Dibromochloromethane	BQL	53.8	4.84	50	6/12/2009	
1,2-Dibromo-3-chloropropane	BQL	269	65.1	50	6/12/2009	
Dibromomethane	BQL	53.8	6.08	50	6/12/2009	
1,2-Dibromoethane (EDB)	BQL	53.8	6.68	50	6/12/2009	
1,2-Dichlorobenzene	BQL	53.8	6.84	50	6/12/2009	
1,3-Dichlorobenzene	BQL	53.8	4.36	50	6/12/2009	
1,4-Dichlorobenzene	BQL	53.8	4.25	50	6/12/2009	
trans-1,4-Dichloro-2-butene	BQL	269	33.9	50	6/12/2009	
1,1-Dichloroethane	BQL	53.8	3.98	50	6/12/2009	
1,1-Dichloroethene	BQL	53.8	4.79	50	6/12/2009	
1,2-Dichloroethane	BQL	53.8	4.25	50	6/12/2009	
cis-1,2-Dichloroethene	BQL	53.8	3.50	50	6/12/2009	
trans-1,2-dichloroethene	BQL	53.8	4.79	50	6/12/2009	
1,2-Dichloropropane	BQL	53.8	5.06	50	6/12/2009	
1,3-Dichloropropane	BQL	53.8	6.84	50	6/12/2009	
2,2-Dichloropropane	BQL	53.8	3.18	50	6/12/2009	
1,1-Dichloropropene	BQL	53.8	3.88	50	6/12/2009	
cis-1,3-Dichloropropene	BQL	53.8	4.09	50	6/12/2009	
trans-1,3-Dichloropropene	BQL	53.8	4.09	50	6/12/2009	
Dichlorodifluoromethane	BQL	269	5.06	50	6/12/2009	
Diisopropyl ether (DIPE)	BQL	53.8	3.93	50	6/12/2009	
Ethylbenzene	BQL	53.8	4.15	50	6/12/2009	
Hexachlorobutadiene	BQL	53.8	12.3	50	6/12/2009	
2-Hexanone	BQL	269	38.8	50	6/12/2009	
Iodomethane	BQL	53.8	2.26	50	6/12/2009	
Isopropylbenzene	33.9	53.8	3.82	50	6/12/2009	J

**Results for Volatiles
by GCMS 8260B/5035**

Client Sample ID: M233-S002
Client Project ID: CTO 003
Lab Sample ID: G649-142-2E
Lab Project ID: G649-142
Report Basis: Dry Weight

Analyzed By: DVO
Date Collected: 6/10/2009 14:35
Date Received: 6/11/2009
Matrix: Soil
Sample Amount: 6.28 g
%Solids: 74.0

Compound	Result UG/KG	Quantitation Limit UG/KG	MDL UG/KG	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	149	53.8	2.58	50	6/12/2009	
Methylene chloride	BQL	269	5.28	50	6/12/2009	
4-Methyl-2-pentanone	BQL	269	29.6	50	6/12/2009	
Methyl-tert-butyl ether (MTBE)	BQL	53.8	3.61	50	6/12/2009	
Naphthalene	124	53.8	7.16	50	6/12/2009	
n-Propyl benzene	83.4	53.8	4.31	50	6/12/2009	
Styrene	BQL	53.8	4.58	50	6/12/2009	
1,1,1,2-Tetrachloroethane	BQL	53.8	4.84	50	6/12/2009	
1,1,2,2-Tetrachloroethane	BQL	53.8	6.19	50	6/12/2009	
Tetrachloroethene	BQL	53.8	3.71	50	6/12/2009	
Toluene	BQL	53.8	4.09	50	6/12/2009	
1,2,3-Trichlorobenzene	BQL	53.8	10.2	50	6/12/2009	
1,2,4-Trichlorobenzene	BQL	53.8	6.41	50	6/12/2009	
Trichloroethene	BQL	53.8	2.91	50	6/12/2009	
1,1,1-Trichloroethane	BQL	53.8	2.91	50	6/12/2009	
1,1,2-Trichloroethane	BQL	53.8	9.80	50	6/12/2009	
Trichlorofluoromethane	BQL	53.8	5.98	50	6/12/2009	
1,2,3-Trichloropropane	BQL	53.8	6.46	50	6/12/2009	
1,2,4-Trimethylbenzene	BQL	53.8	3.50	50	6/12/2009	
1,3,5-Trimethylbenzene	BQL	53.8	3.98	50	6/12/2009	
Vinyl chloride	BQL	53.8	8.02	50	6/12/2009	
m-,p-Xylene	BQL	108	5.28	50	6/12/2009	
o-Xylene	BQL	53.8	3.50	50	6/12/2009	
		Spike Added	Spike Result	Percent Recovered		
1,2-Dichloroethane-d4		10	9.6	96		
Toluene-d8		10	10.4	104		
4-Bromofluorobenzene		10	10.4	104		

Comments:

Flags:

BQL = Below Quantitation Limits.
J = Detected below the quantitation limit.

Analyst: DVO

Reviewed By: 

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: M233-S003
Client Project ID: CTO 003
Lab Sample ID G649-142-3B
Lab Project ID: G649-142
Report Basis: Dry Weight

Analyzed By: MJC
Date Collected: 06-10-2009 14:39
Date Received: 6/11/2009
Matrix: Soil
Sample Amount: 6.28 g
%Solids: 71.6

Report Name Compound	Result UG/KG	Quantitation Limit UG/KG	MDL UG/KG	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	55.5	7.67	1	6/11/2009	
Benzene	BQL	5.55	1.19	1	6/11/2009	
Bromobenzene	BQL	5.55	1.14	1	6/11/2009	
Bromochloromethane	BQL	5.55	1.91	1	6/11/2009	
Bromodichloromethane	BQL	5.55	1.10	1	6/11/2009	
Bromoform	BQL	5.55	1.11	1	6/11/2009	
Bromomethane	BQL	5.55	1.17	1	6/11/2009	
2-Butanone	BQL	27.7	6.03	1	6/11/2009	
n-Butylbenzene	3.17	5.55	1.06	1	6/11/2009	J
sec-Butylbenzene	5.24	5.55	1.12	1	6/11/2009	J
tert-Butylbenzene	BQL	5.55	1.24	1	6/11/2009	
Carbon disulfide	BQL	5.55	2.97	1	6/11/2009	
Carbon tetrachloride	BQL	5.55	1.13	1	6/11/2009	
Chlorobenzene	BQL	5.55	1.32	1	6/11/2009	
Chloroethane	BQL	5.55	1.76	1	6/11/2009	
Chloroform	BQL	5.55	1.33	1	6/11/2009	
Chloromethane	BQL	5.55	1.25	1	6/11/2009	
2-Chlorotoluene	BQL	5.55	1.12	1	6/11/2009	
4-Chlorotoluene	BQL	5.55	1.39	1	6/11/2009	
Dibromochloromethane	BQL	5.55	1.53	1	6/11/2009	
1,2-Dibromo-3-chloropropane	BQL	27.7	1.61	1	6/11/2009	
Dibromomethane	BQL	5.55	1.68	1	6/11/2009	
1,2-Dibromoethane (EDB)	BQL	5.55	1.25	1	6/11/2009	
1,2-Dichlorobenzene	BQL	5.55	1.43	1	6/11/2009	
1,3-Dichlorobenzene	BQL	5.55	1.42	1	6/11/2009	
1,4-Dichlorobenzene	BQL	5.55	1.17	1	6/11/2009	
trans-1,4-Dichloro-2-butene	BQL	27.7	1.53	1	6/11/2009	
1,1-Dichloroethane	BQL	5.55	1.18	1	6/11/2009	
1,1-Dichloroethene	BQL	5.55	1.64	1	6/11/2009	
1,2-Dichloroethane	BQL	5.55	1.46	1	6/11/2009	
cis-1,2-Dichloroethene	BQL	5.55	1.42	1	6/11/2009	
trans-1,2-dichloroethene	BQL	5.55	1.25	1	6/11/2009	
1,2-Dichloropropane	BQL	5.55	1.31	1	6/11/2009	
1,3-Dichloropropane	BQL	5.55	1.24	1	6/11/2009	
2,2-Dichloropropane	BQL	5.55	1.33	1	6/11/2009	
1,1-Dichloropropene	BQL	5.55	1.74	1	6/11/2009	
cis-1,3-Dichloropropene	BQL	5.55	0.924	1	6/11/2009	
trans-1,3-Dichloropropene	BQL	5.55	1.07	1	6/11/2009	
Dichlorodifluoromethane	BQL	5.55	1.46	1	6/11/2009	
Diisopropyl ether (DIPE)	BQL	5.55	1.25	1	6/11/2009	
Ethylbenzene	6.28	5.55	0.961	1	6/11/2009	
Hexachlorobutadiene	BQL	5.55	1.08	1	6/11/2009	
2-Hexanone	BQL	13.9	3.60	1	6/11/2009	
Iodomethane	BQL	5.55	1.20	1	6/11/2009	

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: M233-S003
Client Project ID: CTO 003
Lab Sample ID G649-142-3B
Lab Project ID: G649-142
Report Basis: Dry Weight

Analyzed By: MJC
Date Collected: 06-10-2009 14:39
Date Received: 6/11/2009
Matrix: Soil
Sample Amount: 6.28 g
%Solids: 71.6

Report Name Compound	Result UG/KG	Quantitation Limit UG/KG	MDL UG/KG	Dilution Factor	Date Analyzed	Flag
Isopropylbenzene	4.22	5.55	0.985	1	6/11/2009	J
4-Isopropyltoluene	BQL	5.55	1.19	1	6/11/2009	
Methylene chloride	BQL	22.2	1.32	1	6/11/2009	
4-Methyl-2-pentanone	BQL	13.9	5.14	1	6/11/2009	
Methyl-tert-butyl ether (MTBE)	BQL	5.55	1.23	1	6/11/2009	
Naphthalene	9.18	5.55	0.943	1	6/11/2009	
n-Propyl benzene	5.87	5.55	1.40	1	6/11/2009	
Styrene	BQL	5.55	1.22	1	6/11/2009	
1,1,1,2-Tetrachloroethane	BQL	5.55	1.13	1	6/11/2009	
1,1,2,2-Tetrachloroethane	BQL	5.55	1.25	1	6/11/2009	
Tetrachloroethene	BQL	5.55	1.02	1	6/11/2009	
Toluene	BQL	5.55	1.11	1	6/11/2009	
1,2,3-Trichlorobenzene	BQL	5.55	1.15	1	6/11/2009	
1,2,4-Trichlorobenzene	BQL	5.55	1.14	1	6/11/2009	
Trichloroethene	BQL	5.55	1.06	1	6/11/2009	
1,1,1-Trichloroethane	BQL	5.55	1.25	1	6/11/2009	
1,1,2-Trichloroethane	BQL	5.55	1.82	1	6/11/2009	
Trichlorofluoromethane	BQL	5.55	1.14	1	6/11/2009	
1,2,3-Trichloropropane	BQL	5.55	1.38	1	6/11/2009	
1,2,4-Trimethylbenzene	BQL	5.55	1.40	1	6/11/2009	
1,3,5-Trimethylbenzene	BQL	5.55	1.26	1	6/11/2009	
Vinyl chloride	BQL	5.55	1.51	1	6/11/2009	
m-,p-Xylene	BQL	11.1	2.13	1	6/11/2009	
o-Xylene	BQL	5.55	1.08	1	6/11/2009	

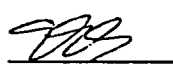
	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	50	63.7	127
Toluene-d8	50	51.4	103
4-Bromofluorobenzene	50	51.6	103

Comments:

Flags:

BQL = Below Quantitation Limits.
J = Detected below the quantitation limit.

Analyst: 

Reviewed By: 

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: M233-S004
Client Project ID: CTO 003
Lab Sample ID G649-142-4B
Lab Project ID: G649-142
Report Basis: Dry Weight

Analyzed By: MJC
Date Collected: 06-10-2009 14:44
Date Received: 6/11/2009
Matrix: Soil
Sample Amount: 5.96 g
%Solids: 71.1

Report Name Compound	Result UG/KG	Quantitation Limit UG/KG	MDL UG/KG	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	58.9	8.14	1	6/11/2009	
Benzene	BQL	5.89	1.26	1	6/11/2009	
Bromobenzene	BQL	5.89	1.21	1	6/11/2009	
Bromochloromethane	BQL	5.89	2.03	1	6/11/2009	
Bromodichloromethane	BQL	5.89	1.17	1	6/11/2009	
Bromoform	BQL	5.89	1.18	1	6/11/2009	
Bromomethane	BQL	5.89	1.24	1	6/11/2009	
2-Butanone	BQL	29.5	6.40	1	6/11/2009	
n-Butylbenzene	BQL	5.89	1.13	1	6/11/2009	
sec-Butylbenzene	BQL	5.89	1.19	1	6/11/2009	
tert-Butylbenzene	BQL	5.89	1.32	1	6/11/2009	
Carbon disulfide	BQL	5.89	3.16	1	6/11/2009	
Carbon tetrachloride	BQL	5.89	1.20	1	6/11/2009	
Chlorobenzene	BQL	5.89	1.40	1	6/11/2009	
Chloroethane	BQL	5.89	1.87	1	6/11/2009	
Chloroform	BQL	5.89	1.41	1	6/11/2009	
Chloromethane	BQL	5.89	1.33	1	6/11/2009	
2-Chlorotoluene	BQL	5.89	1.19	1	6/11/2009	
4-Chlorotoluene	BQL	5.89	1.47	1	6/11/2009	
Dibromochloromethane	BQL	5.89	1.63	1	6/11/2009	
1,2-Dibromo-3-chloropropane	BQL	29.5	1.71	1	6/11/2009	
Dibromomethane	BQL	5.89	1.78	1	6/11/2009	
1,2-Dibromoethane (EDB)	BQL	5.89	1.33	1	6/11/2009	
1,2-Dichlorobenzene	BQL	5.89	1.52	1	6/11/2009	
1,3-Dichlorobenzene	BQL	5.89	1.51	1	6/11/2009	
1,4-Dichlorobenzene	BQL	5.89	1.24	1	6/11/2009	
trans-1,4-Dichloro-2-butene	BQL	29.5	1.63	1	6/11/2009	
1,1-Dichloroethane	BQL	5.89	1.25	1	6/11/2009	
1,1-Dichloroethene	BQL	5.89	1.74	1	6/11/2009	
1,2-Dichloroethane	BQL	5.89	1.56	1	6/11/2009	
cis-1,2-Dichloroethene	BQL	5.89	1.51	1	6/11/2009	
trans-1,2-dichloroethene	BQL	5.89	1.33	1	6/11/2009	
1,2-Dichloropropane	BQL	5.89	1.39	1	6/11/2009	
1,3-Dichloropropane	BQL	5.89	1.32	1	6/11/2009	
2,2-Dichloropropane	BQL	5.89	1.41	1	6/11/2009	
1,1-Dichloropropene	BQL	5.89	1.85	1	6/11/2009	
cis-1,3-Dichloropropene	BQL	5.89	0.982	1	6/11/2009	
trans-1,3-Dichloropropene	BQL	5.89	1.14	1	6/11/2009	
Dichlorodifluoromethane	BQL	5.89	1.56	1	6/11/2009	
Diisopropyl ether (DIPE)	BQL	5.89	1.33	1	6/11/2009	
Ethylbenzene	BQL	5.89	1.02	1	6/11/2009	
Hexachlorobutadiene	BQL	5.89	1.15	1	6/11/2009	
2-Hexanone	BQL	14.7	3.82	1	6/11/2009	
Iodomethane	BQL	5.89	1.27	1	6/11/2009	

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: M233-S004
Client Project ID: CTO 003
Lab Sample ID G649-142-4B
Lab Project ID: G649-142
Report Basis: Dry Weight

Analyzed By: MJC
Date Collected: 06-10-2009 14:44
Date Received: 6/11/2009
Matrix: Soil
Sample Amount: 5.96 g
%Solids: 71.1

Report Name Compound	Result UG/KG	Quantitation Limit UG/KG	MDL UG/KG	Dilution Factor	Date Analyzed	Flag
Isopropylbenzene	BQL	5.89	1.05	1	6/11/2009	
4-Isopropyltoluene	BQL	5.89	1.26	1	6/11/2009	
Methylene chloride	BQL	23.6	1.40	1	6/11/2009	
4-Methyl-2-pentanone	BQL	14.7	5.46	1	6/11/2009	
Methyl-tert-butyl ether (MTBE)	BQL	5.89	1.31	1	6/11/2009	
Naphthalene	BQL	5.89	1.00	1	6/11/2009	
n-Propyl benzene	BQL	5.89	1.49	1	6/11/2009	
Styrene	BQL	5.89	1.30	1	6/11/2009	
1,1,1,2-Tetrachloroethane	BQL	5.89	1.20	1	6/11/2009	
1,1,2,2-Tetrachloroethane	BQL	5.89	1.33	1	6/11/2009	
Tetrachloroethene	BQL	5.89	1.08	1	6/11/2009	
Toluene	BQL	5.89	1.18	1	6/11/2009	
1,2,3-Trichlorobenzene	BQL	5.89	1.23	1	6/11/2009	
1,2,4-Trichlorobenzene	BQL	5.89	1.21	1	6/11/2009	
Trichloroethene	BQL	5.89	1.12	1	6/11/2009	
1,1,1-Trichloroethane	BQL	5.89	1.33	1	6/11/2009	
1,1,2-Trichloroethane	BQL	5.89	1.93	1	6/11/2009	
Trichlorofluoromethane	BQL	5.89	1.21	1	6/11/2009	
1,2,3-Trichloropropane	BQL	5.89	1.46	1	6/11/2009	
1,2,4-Trimethylbenzene	BQL	5.89	1.49	1	6/11/2009	
1,3,5-Trimethylbenzene	BQL	5.89	1.34	1	6/11/2009	
Vinyl chloride	BQL	5.89	1.60	1	6/11/2009	
m-,p-Xylene	BQL	11.8	2.26	1	6/11/2009	
o-Xylene	BQL	5.89	1.14	1	6/11/2009	

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	50	65.1	130
Toluene-d8	50	50.5	101
4-Bromofluorobenzene	50	50	100

Comments:

Flags:

BQL = Below Quantitation Limits.
J = Detected below the quantitation limit.

Analyst: 3/

Reviewed By: [Signature]

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: Trip Blank
Client Project ID: CTO 003
Lab Sample ID G649-142-5A
Lab Project ID: G649-142
Report Basis: 0.0

Analyzed By: MJC
Date Collected: 06-10-2009 09:00
Date Received: 6/11/2009
Matrix: Soil
Sample Amount: 5 g
%Solids: 100.0

Report Name Compound	Result UG/KG	Quantitation Limit UG/KG	MDL UG/KG	Dilution Factor	Date Analyzed	Flag
Acetone	10.7	50.0	6.91	1	6/11/2009	J
Benzene	BQL	5.00	1.07	1	6/11/2009	
Bromobenzene	BQL	5.00	1.03	1	6/11/2009	
Bromochloromethane	BQL	5.00	1.72	1	6/11/2009	
Bromodichloromethane	BQL	5.00	0.992	1	6/11/2009	
Bromoform	BQL	5.00	1.00	1	6/11/2009	
Bromomethane	BQL	5.00	1.05	1	6/11/2009	
2-Butanone	BQL	25.0	5.43	1	6/11/2009	
n-Butylbenzene	BQL	5.00	0.955	1	6/11/2009	
sec-Butylbenzene	BQL	5.00	1.01	1	6/11/2009	
tert-Butylbenzene	BQL	5.00	1.12	1	6/11/2009	
Carbon disulfide	BQL	5.00	2.68	1	6/11/2009	
Carbon tetrachloride	BQL	5.00	1.02	1	6/11/2009	
Chlorobenzene	BQL	5.00	1.19	1	6/11/2009	
Chloroethane	BQL	5.00	1.59	1	6/11/2009	
Chloroform	BQL	5.00	1.20	1	6/11/2009	
Chloromethane	BQL	5.00	1.13	1	6/11/2009	
2-Chlorotoluene	BQL	5.00	1.01	1	6/11/2009	
4-Chlorotoluene	BQL	5.00	1.25	1	6/11/2009	
Dibromochloromethane	BQL	5.00	1.38	1	6/11/2009	
1,2-Dibromo-3-chloropropane	BQL	25.0	1.45	1	6/11/2009	
Dibromomethane	BQL	5.00	1.51	1	6/11/2009	
1,2-Dibromoethane (EDB)	BQL	5.00	1.13	1	6/11/2009	
1,2-Dichlorobenzene	BQL	5.00	1.29	1	6/11/2009	
1,3-Dichlorobenzene	BQL	5.00	1.28	1	6/11/2009	
1,4-Dichlorobenzene	BQL	5.00	1.05	1	6/11/2009	
trans-1,4-Dichloro-2-butene	BQL	25.0	1.38	1	6/11/2009	
1,1-Dichloroethane	BQL	5.00	1.06	1	6/11/2009	
1,1-Dichloroethene	BQL	5.00	1.48	1	6/11/2009	
1,2-Dichloroethane	BQL	5.00	1.32	1	6/11/2009	
cis-1,2-Dichloroethene	BQL	5.00	1.28	1	6/11/2009	
trans-1,2-dichloroethene	BQL	5.00	1.13	1	6/11/2009	
1,2-Dichloropropane	BQL	5.00	1.18	1	6/11/2009	
1,3-Dichloropropane	BQL	5.00	1.12	1	6/11/2009	
2,2-Dichloropropane	BQL	5.00	1.20	1	6/11/2009	
1,1-Dichloropropene	BQL	5.00	1.57	1	6/11/2009	
cis-1,3-Dichloropropene	BQL	5.00	0.833	1	6/11/2009	
trans-1,3-Dichloropropene	BQL	5.00	0.963	1	6/11/2009	
Dichlorodifluoromethane	BQL	5.00	1.32	1	6/11/2009	
Diisopropyl ether (DIPE)	BQL	5.00	1.13	1	6/11/2009	
Ethylbenzene	BQL	5.00	0.866	1	6/11/2009	
Hexachlorobutadiene	BQL	5.00	0.975	1	6/11/2009	
2-Hexanone	BQL	12.5	3.24	1	6/11/2009	
Iodomethane	BQL	5.00	1.08	1	6/11/2009	

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: Trip Blank
Client Project ID: CTO 003
Lab Sample ID G649-142-5A
Lab Project ID: G649-142
Report Basis: 0.0

Analyzed By: MJC
Date Collected: 06-10-2009 09:00
Date Received: 6/11/2009
Matrix: Soil
Sample Amount: 5 g
%Solids: 100.0

Report Name Compound	Result UG/KG	Quantitation Limit UG/KG	MDL UG/KG	Dilution Factor	Date Analyzed	Flag
Isopropylbenzene	BQL	5.00	0.888	1	6/11/2009	
4-Isopropyltoluene	BQL	5.00	1.07	1	6/11/2009	
Methylene chloride	3.95	20.0	1.19	1	6/11/2009	J
4-Methyl-2-pentanone	BQL	12.5	4.63	1	6/11/2009	
Methyl-tert-butyl ether (MTBE)	BQL	5.00	1.11	1	6/11/2009	
Naphthalene	BQL	5.00	0.850	1	6/11/2009	
n-Propyl benzene	BQL	5.00	1.26	1	6/11/2009	
Styrene	BQL	5.00	1.10	1	6/11/2009	
1,1,1,2-Tetrachloroethane	BQL	5.00	1.02	1	6/11/2009	
1,1,2,2-Tetrachloroethane	BQL	5.00	1.13	1	6/11/2009	
Tetrachloroethene	BQL	5.00	0.916	1	6/11/2009	
Toluene	2.38	5.00	0.997	1	6/11/2009	J
1,2,3-Trichlorobenzene	BQL	5.00	1.04	1	6/11/2009	
1,2,4-Trichlorobenzene	BQL	5.00	1.03	1	6/11/2009	
Trichloroethene	BQL	5.00	0.954	1	6/11/2009	
1,1,1-Trichloroethane	BQL	5.00	1.13	1	6/11/2009	
1,1,2-Trichloroethane	BQL	5.00	1.64	1	6/11/2009	
Trichlorofluoromethane	BQL	5.00	1.03	1	6/11/2009	
1,2,3-Trichloropropane	BQL	5.00	1.24	1	6/11/2009	
1,2,4-Trimethylbenzene	BQL	5.00	1.26	1	6/11/2009	
1,3,5-Trimethylbenzene	BQL	5.00	1.14	1	6/11/2009	
Vinyl chloride	BQL	5.00	1.36	1	6/11/2009	
m-,p-Xylene	BQL	10.0	1.92	1	6/11/2009	
o-Xylene	BQL	5.00	0.969	1	6/11/2009	

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	50	65	130
Toluene-d8	50	49.7	99
4-Bromofluorobenzene	50	47.2	94

Comments:

Flags:

BQL = Below Quantitation Limits.

J = Detected below the quantitation limit.

Analyst: 3/

Reviewed By: [Signature]

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: M233-S001
Client Project ID: CTO 003
Lab Sample ID: G649-142-1G
Lab Project ID: G649-142
Report Basis: Dry weight
Initial Weight: 30.42 g

Analyzed By: DCS
Date Collected: 6/10/2009 14:31
Date Received: 6/11/2009
Date Extracted: 6/11/2009
Matrix: Soil
% Solids: 72.44

Compound	Result ug/Kg	RL ug/Kg	MDL ug/Kg	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	454	69.4	1	6/12/2009	
Acenaphthylene	BQL	454	63.5	1	6/12/2009	
Anthracene	BQL	454	61.7	1	6/12/2009	
Benzo[a]anthracene	BQL	454	62.2	1	6/12/2009	
Benzo[a]pyrene	BQL	454	65.3	1	6/12/2009	
Benzo[b]fluoranthene	BQL	454	63.1	1	6/12/2009	
Benzo[g,h,i]perylene	BQL	454	79.0	1	6/12/2009	
Benzo[k]fluoranthene	BQL	454	64.4	1	6/12/2009	
Benzoic Acid	BQL	2270	560	1	6/12/2009	
Bis(2-chloroethoxy)methane	BQL	454	66.7	1	6/12/2009	
Bis(2-chloroethyl)ether	BQL	454	92.1	1	6/12/2009	
Bis(2-chloroisopropyl)ether	BQL	454	73.1	1	6/12/2009	
Bis(2-ethylhexyl)phthalate	BQL	454	69.4	1	6/12/2009	
4-bromophenyl phenyl ether	BQL	454	80.3	1	6/12/2009	
Butylbenzylphthalate	BQL	454	67.2	1	6/12/2009	
2-Chloronaphthalene	BQL	454	63.1	1	6/12/2009	
2-Chlorophenol	BQL	454	57.6	1	6/12/2009	
4-Chloro-3-methylphenol	BQL	454	66.3	1	6/12/2009	
4-Chloroaniline	BQL	2270	74.0	1	6/12/2009	
4-Chlorophenyl phenyl ether	BQL	454	66.7	1	6/12/2009	
Chrysene	BQL	454	43.6	1	6/12/2009	
Dibenzo[a,h]anthracene	BQL	454	58.1	1	6/12/2009	
Dibenzofuran	BQL	454	64.0	1	6/12/2009	
Di-n-Butylphthalate	BQL	454	66.3	1	6/12/2009	
1,2-Dichlorobenzene	BQL	454	76.7	1	6/12/2009	
1,3-Dichlorobenzene	BQL	454	73.5	1	6/12/2009	
1,4-Dichlorobenzene	BQL	454	65.8	1	6/12/2009	
3,3'-Dichlorobenzidine	BQL	908	74.9	1	6/12/2009	
2,4-Dichlorophenol	BQL	454	49.5	1	6/12/2009	
Diethylphthalate	BQL	454	60.8	1	6/12/2009	
Dimethylphthalate	BQL	454	70.3	1	6/12/2009	
2,4-Dimethylphenol	BQL	454	82.1	1	6/12/2009	
Di-n-octylphthalate	BQL	454	69.9	1	6/12/2009	
4,6-Dinitro-2-methylphenol	BQL	2270	54.0	1	6/12/2009	
2,4-Dinitrophenol	BQL	2270	59.0	1	6/12/2009	
2,4-Dinitrotoluene	BQL	454	69.0	1	6/12/2009	
2,6-Dinitrotoluene	BQL	454	74.9	1	6/12/2009	
Fluoranthene	BQL	454	73.1	1	6/12/2009	
Fluorene	BQL	454	70.8	1	6/12/2009	
Hexachlorobenzene	BQL	454	98.5	1	6/12/2009	
Hexachlorobutadiene	BQL	454	82.6	1	6/12/2009	
Hexachlorocyclopentadiene	BQL	908	88.5	1	6/12/2009	
Hexachloroethane	BQL	454	70.8	1	6/12/2009	
Indeno(1,2,3-c,d)pyrene	BQL	454	53.5	1	6/12/2009	
Isophorone	BQL	454	66.3	1	6/12/2009	
2-Methylnaphthalene	BQL	454	74.0	1	6/12/2009	
2-Methylphenol	BQL	454	69.4	1	6/12/2009	

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: M233-S001
Client Project ID: CTO 003
Lab Sample ID: G649-142-1G
Lab Project ID: G649-142
Report Basis: Dry weight
Initial Weight: 30.42 g

Analyzed By: DCS
Date Collected: 6/10/2009 14:31
Date Received: 6/11/2009
Date Extracted: 6/11/2009
Matrix: Soil
% Solids: 72.44

Compound	Result ug/Kg	RL ug/Kg	MDL ug/Kg	Dilution Factor	Date Analyzed	Flag
3- & 4-Methylphenol	BQL	454	59.0	1	6/12/2009	
Naphthalene	BQL	454	63.5	1	6/12/2009	
2-Nitroaniline	BQL	454	60.8	1	6/12/2009	
3-Nitroaniline	BQL	2270	66.7	1	6/12/2009	
4-Nitroaniline	BQL	2270	60.8	1	6/12/2009	
Nitrobenzene	BQL	454	60.4	1	6/12/2009	
2-Nitrophenol	BQL	454	66.3	1	6/12/2009	
4-Nitrophenol	BQL	2270	79.0	1	6/12/2009	
Diphenylamine *	BQL	454	73.1	1	6/12/2009	
Pentachlorophenol	BQL	2270	41.7	1	6/12/2009	
Phenanthrene	BQL	454	63.5	1	6/12/2009	
Phenol	BQL	454	61.7	1	6/12/2009	
Pyrene	BQL	454	61.7	1	6/12/2009	
1,2,4-Trichlorobenzene	BQL	454	81.7	1	6/12/2009	
2,4,5-Trichlorophenol	BQL	454	67.6	1	6/12/2009	
2,4,6-Trichlorophenol	BQL	454	40.4	1	6/12/2009	
		Spike Added	Spike Result	Percent Recovered		
2-Fluorobiphenyl		10	8.5	85		
2-Fluorophenol		10	10	100		
Nitrobenzene-d5		10	9.5	95		
Phenol-d6		10	9.4	94		
2,4,6-Tribromophenol		10	7.2	72		
4-Terphenyl-d14		10	12.5	125		

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

J = Detected below the quantitation limit.

Reviewed By:

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: M233-S002
Client Project ID: CTO 003
Lab Sample ID: G649-142-2G
Lab Project ID: G649-142
Report Basis: Dry weight
Initial Weight: 31.22 g

Analyzed By: DCS
Date Collected: 6/10/2009 14:35
Date Received: 6/11/2009
Date Extracted: 6/11/2009
Matrix: Soil
% Solids: 73.95

Compound	Result ug/Kg	RL ug/Kg	MDL ug/Kg	Dilution Factor	Date Analyzed	Flag
Acenaphthene	156	433	66.3	1	6/12/2009	J
Acenaphthylene	BQL	433	60.6	1	6/12/2009	
Anthracene	65.0	433	58.9	1	6/12/2009	J
Benzo[a]anthracene	BQL	433	59.3	1	6/12/2009	
Benzo[a]pyrene	BQL	433	62.4	1	6/12/2009	
Benzo[b]fluoranthene	BQL	433	60.2	1	6/12/2009	
Benzo[g,h,i]perylene	BQL	433	75.4	1	6/12/2009	
Benzo[k]fluoranthene	BQL	433	61.5	1	6/12/2009	
Benzoic Acid	BQL	2170	535	1	6/12/2009	
Bis(2-chloroethoxy)methane	BQL	433	63.7	1	6/12/2009	
Bis(2-chloroethyl)ether	BQL	433	87.9	1	6/12/2009	
Bis(2-chloroisopropyl)ether	BQL	433	69.7	1	6/12/2009	
Bis(2-ethylhexyl)phthalate	BQL	433	66.3	1	6/12/2009	
4-bromophenyl phenyl ether	BQL	433	76.7	1	6/12/2009	
Butylbenzylphthalate	BQL	433	64.1	1	6/12/2009	
2-Chloronaphthalene	BQL	433	60.2	1	6/12/2009	
2-Chlorophenol	BQL	433	55.0	1	6/12/2009	
4-Chloro-3-methylphenol	BQL	433	63.2	1	6/12/2009	
4-Chloroaniline	BQL	2170	70.6	1	6/12/2009	
4-Chlorophenyl phenyl ether	BQL	433	63.7	1	6/12/2009	
Chrysene	BQL	433	41.6	1	6/12/2009	
Dibenzo[a,h]anthracene	BQL	433	55.4	1	6/12/2009	
Dibenzofuran	BQL	433	61.1	1	6/12/2009	
Di-n-Butylphthalate	BQL	433	63.2	1	6/12/2009	
1,2-Dichlorobenzene	BQL	433	73.2	1	6/12/2009	
1,3-Dichlorobenzene	BQL	433	70.2	1	6/12/2009	
1,4-Dichlorobenzene	BQL	433	62.8	1	6/12/2009	
3,3'-Dichlorobenzidine	BQL	866	71.5	1	6/12/2009	
2,4-Dichlorophenol	BQL	433	47.2	1	6/12/2009	
Diethylphthalate	BQL	433	58.0	1	6/12/2009	
Dimethylphthalate	BQL	433	67.1	1	6/12/2009	
2,4-Dimethylphenol	BQL	433	78.4	1	6/12/2009	
Di-n-octylphthalate	BQL	433	66.7	1	6/12/2009	
4,6-Dinitro-2-methylphenol	BQL	2170	51.5	1	6/12/2009	
2,4-Dinitrophenol	BQL	2170	56.3	1	6/12/2009	
2,4-Dinitrotoluene	BQL	433	65.8	1	6/12/2009	
2,6-Dinitrotoluene	BQL	433	71.5	1	6/12/2009	
Fluoranthene	BQL	433	69.7	1	6/12/2009	
Fluorene	450	433	67.6	1	6/12/2009	
Hexachlorobenzene	BQL	433	94.0	1	6/12/2009	
Hexachlorobutadiene	BQL	433	78.8	1	6/12/2009	
Hexachlorocyclopentadiene	BQL	866	84.5	1	6/12/2009	
Hexachloroethane	BQL	433	67.6	1	6/12/2009	
Indeno(1,2,3-c,d)pyrene	BQL	433	51.1	1	6/12/2009	
Isophorone	BQL	433	63.2	1	6/12/2009	
2-Methylnaphthalene	879	433	70.6	1	6/12/2009	
2-Methylphenol	BQL	433	66.3	1	6/12/2009	

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: M233-S002
Client Project ID: CTO 003
Lab Sample ID: G649-142-2G
Lab Project ID: G649-142
Report Basis: Dry weight
Initial Weight: 31.22 g

Analyzed By: DCS
Date Collected: 6/10/2009 14:35
Date Received: 6/11/2009
Date Extracted: 6/11/2009
Matrix: Soil
% Solids: 73.95

Compound	Result ug/Kg	RL ug/Kg	MDL ug/Kg	Dilution Factor	Date Analyzed	Flag
3- & 4-Methylphenol	BQL	433	56.3	1	6/12/2009	
Naphthalene	BQL	433	60.6	1	6/12/2009	
2-Nitroaniline	BQL	433	58.0	1	6/12/2009	
3-Nitroaniline	BQL	2170	63.7	1	6/12/2009	
4-Nitroaniline	BQL	2170	58.0	1	6/12/2009	
Nitrobenzene	BQL	433	57.6	1	6/12/2009	
2-Nitrophenol	BQL	433	63.2	1	6/12/2009	
4-Nitrophenol	BQL	2170	75.4	1	6/12/2009	
Diphenylamine *	BQL	433	69.7	1	6/12/2009	
Pentachlorophenol	BQL	2170	39.8	1	6/12/2009	
Phenanthrene	814	433	60.6	1	6/12/2009	
Phenol	BQL	433	58.9	1	6/12/2009	
Pyrene	BQL	433	58.9	1	6/12/2009	
1,2,4-Trichlorobenzene	BQL	433	78.0	1	6/12/2009	
2,4,5-Trichlorophenol	BQL	433	64.5	1	6/12/2009	
2,4,6-Trichlorophenol	BQL	433	38.5	1	6/12/2009	
		Spike Added	Spike Result	Percent Recovered		
2-Fluorobiphenyl		10	8.1	81		
2-Fluorophenol		10	9.7	97		
Nitrobenzene-d5		10	8.6	86		
Phenol-d6		10	9.2	92		
2,4,6-Tribromophenol		10	7.4	74		
4-Terphenyl-d14		10	12.1	121		

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

J = Detected below the quantitation limit.

Reviewed By: CO

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: M233-S003
Client Project ID: CTO 003
Lab Sample ID: G649-142-3G
Lab Project ID: G649-142
Report Basis: Dry weight
Initial Weight: 33.37 g

Analyzed By: DCS
Date Collected: 6/10/2009 14:39
Date Received: 6/11/2009
Date Extracted: 6/11/2009
Matrix: Soil
% Solids: 71.64

Compound	Result ug/Kg	RL ug/Kg	MDL ug/Kg	Dilution Factor	Date Analyzed	Flag
Acenaphthene	176	418	64.0	1	6/12/2009	J
Acenaphthylene	BQL	418	58.6	1	6/12/2009	
Anthracene	66.9	418	56.9	1	6/12/2009	J
Benzo[a]anthracene	BQL	418	57.3	1	6/12/2009	
Benzo[a]pyrene	BQL	418	60.2	1	6/12/2009	
Benzo[b]fluoranthene	BQL	418	58.1	1	6/12/2009	
Benzo[g,h,i]perylene	BQL	418	72.8	1	6/12/2009	
Benzo[k]fluoranthene	BQL	418	59.4	1	6/12/2009	
Benzoic Acid	BQL	2090	517	1	6/12/2009	
Bis(2-chloroethoxy)methane	BQL	418	61.5	1	6/12/2009	
Bis(2-chloroethyl)ether	BQL	418	84.9	1	6/12/2009	
Bis(2-chloroisopropyl)ether	BQL	418	67.3	1	6/12/2009	
Bis(2-ethylhexyl)phthalate	BQL	418	64.0	1	6/12/2009	
4-bromophenyl phenyl ether	BQL	418	74.0	1	6/12/2009	
Butylbenzylphthalate	BQL	418	61.9	1	6/12/2009	
2-Chloronaphthalene	BQL	418	58.1	1	6/12/2009	
2-Chlorophenol	BQL	418	53.1	1	6/12/2009	
4-Chloro-3-methylphenol	BQL	418	61.1	1	6/12/2009	
4-Chloroaniline	BQL	2090	68.2	1	6/12/2009	
4-Chlorophenyl phenyl ether	BQL	418	61.5	1	6/12/2009	
Chrysene	BQL	418	40.2	1	6/12/2009	
Dibenzo[a,h]anthracene	BQL	418	53.5	1	6/12/2009	
Dibenzofuran	167	418	59.0	1	6/12/2009	J
Di-n-Butylphthalate	BQL	418	61.1	1	6/12/2009	
1,2-Dichlorobenzene	BQL	418	70.7	1	6/12/2009	
1,3-Dichlorobenzene	BQL	418	67.8	1	6/12/2009	
1,4-Dichlorobenzene	BQL	418	60.7	1	6/12/2009	
3,3'-Dichlorobenzidine	BQL	837	69.0	1	6/12/2009	
2,4-Dichlorophenol	BQL	418	45.6	1	6/12/2009	
Diethylphthalate	BQL	418	56.1	1	6/12/2009	
Dimethylphthalate	BQL	418	64.8	1	6/12/2009	
2,4-Dimethylphenol	BQL	418	75.7	1	6/12/2009	
Di-n-octylphthalate	BQL	418	64.4	1	6/12/2009	
4,6-Dinitro-2-methylphenol	BQL	2090	49.8	1	6/12/2009	
2,4-Dinitrophenol	BQL	2090	54.4	1	6/12/2009	
2,4-Dinitrotoluene	BQL	418	63.6	1	6/12/2009	
2,6-Dinitrotoluene	BQL	418	69.0	1	6/12/2009	
Fluoranthene	BQL	418	67.3	1	6/12/2009	
Fluorene	468	418	65.3	1	6/12/2009	
Hexachlorobenzene	BQL	418	90.8	1	6/12/2009	
Hexachlorobutadiene	BQL	418	76.1	1	6/12/2009	
Hexachlorocyclopentadiene	BQL	837	81.6	1	6/12/2009	
Hexachloroethane	BQL	418	65.3	1	6/12/2009	
Indeno(1,2,3-c,d)pyrene	BQL	418	49.4	1	6/12/2009	
Isophorone	BQL	418	61.1	1	6/12/2009	
2-Methylnaphthalene	724	418	68.2	1	6/12/2009	
2-Methylphenol	BQL	418	64.0	1	6/12/2009	

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: M233-S003
Client Project ID: CTO 003
Lab Sample ID: G649-142-3G
Lab Project ID: G649-142
Report Basis: Dry weight
Initial Weight: 33.37 g

Analyzed By: DCS
Date Collected: 6/10/2009 14:39
Date Received: 6/11/2009
Date Extracted: 6/11/2009
Matrix: Soil
% Solids: 71.64

Compound	Result ug/Kg	RL ug/Kg	MDL ug/Kg	Dilution Factor	Date Analyzed	Flag
3- & 4-Methylphenol	BQL	418	54.4	1	6/12/2009	
Naphthalene	121	418	58.6	1	6/12/2009	J
2-Nitroaniline	BQL	418	56.1	1	6/12/2009	
3-Nitroaniline	BQL	2090	61.5	1	6/12/2009	
4-Nitroaniline	BQL	2090	56.1	1	6/12/2009	
Nitrobenzene	BQL	418	55.6	1	6/12/2009	
2-Nitrophenol	BQL	418	61.1	1	6/12/2009	
4-Nitrophenol	BQL	2090	72.8	1	6/12/2009	
Diphenylamine *	BQL	418	67.3	1	6/12/2009	
Pentachlorophenol	BQL	2090	38.5	1	6/12/2009	
Phenanthrene	858	418	58.6	1	6/12/2009	
Phenol	BQL	418	56.9	1	6/12/2009	
Pyrene	142	418	56.9	1	6/12/2009	J
1,2,4-Trichlorobenzene	BQL	418	75.3	1	6/12/2009	
2,4,5-Trichlorophenol	BQL	418	62.3	1	6/12/2009	
2,4,6-Trichlorophenol	BQL	418	37.2	1	6/12/2009	

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	7.5	75
2-Fluorophenol	10	9.4	94
Nitrobenzene-d5	10	8.8	88
Phenol-d6	10	8.9	89
2,4,6-Tribromophenol	10	6.8	68
4-Terphenyl-d14	10	11.3	113

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

J = Detected below the quantitation limit.

Reviewed By: 

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: M233-S004
Client Project ID: CTO 003
Lab Sample ID: G649-142-4G
Lab Project ID: G649-142
Report Basis: Dry weight
Initial Weight: 32.66 g

Analyzed By: DCS
Date Collected: 6/10/2009 14:44
Date Received: 6/11/2009
Date Extracted: 6/11/2009
Matrix: Soil
% Solids: 71.06

Compound	Result ug/Kg	RL ug/Kg	MDL ug/Kg	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	431	65.9	1	6/12/2009	
Acenaphthylene	BQL	431	60.3	1	6/12/2009	
Anthracene	BQL	431	58.6	1	6/12/2009	
Benzo[a]anthracene	BQL	431	59.0	1	6/12/2009	
Benzo[a]pyrene	BQL	431	62.0	1	6/12/2009	
Benzo[b]fluoranthene	BQL	431	59.9	1	6/12/2009	
Benzo[g,h,i]perylene	BQL	431	75.0	1	6/12/2009	
Benzo[k]fluoranthene	BQL	431	61.2	1	6/12/2009	
Benzoic Acid	BQL	2150	532	1	6/12/2009	
Bis(2-chloroethoxy)methane	BQL	431	63.3	1	6/12/2009	
Bis(2-chloroethyl)ether	BQL	431	87.5	1	6/12/2009	
Bis(2-chloroisopropyl)ether	BQL	431	69.4	1	6/12/2009	
Bis(2-ethylhexyl)phthalate	BQL	431	65.9	1	6/12/2009	
4-bromophenyl phenyl ether	BQL	431	76.3	1	6/12/2009	
Butylbenzylphthalate	BQL	431	63.8	1	6/12/2009	
2-Chloronaphthalene	BQL	431	59.9	1	6/12/2009	
2-Chlorophenol	BQL	431	54.7	1	6/12/2009	
4-Chloro-3-methylphenol	BQL	431	62.9	1	6/12/2009	
4-Chloroaniline	BQL	2150	70.2	1	6/12/2009	
4-Chlorophenyl phenyl ether	BQL	431	63.3	1	6/12/2009	
Chrysene	BQL	431	41.4	1	6/12/2009	
Dibenzo[a,h]anthracene	BQL	431	55.2	1	6/12/2009	
Dibenzofuran	BQL	431	60.8	1	6/12/2009	
Di-n-Butylphthalate	BQL	431	62.9	1	6/12/2009	
1,2-Dichlorobenzene	BQL	431	72.8	1	6/12/2009	
1,3-Dichlorobenzene	BQL	431	69.8	1	6/12/2009	
1,4-Dichlorobenzene	BQL	431	62.5	1	6/12/2009	
3,3'-Dichlorobenzidine	BQL	862	71.1	1	6/12/2009	
2,4-Dichlorophenol	BQL	431	47.0	1	6/12/2009	
Diethylphthalate	BQL	431	57.7	1	6/12/2009	
Dimethylphthalate	BQL	431	66.8	1	6/12/2009	
2,4-Dimethylphenol	BQL	431	78.0	1	6/12/2009	
Di-n-octylphthalate	BQL	431	66.4	1	6/12/2009	
4,6-Dinitro-2-methylphenol	BQL	2150	51.3	1	6/12/2009	
2,4-Dinitrophenol	BQL	2150	56.0	1	6/12/2009	
2,4-Dinitrotoluene	BQL	431	65.5	1	6/12/2009	
2,6-Dinitrotoluene	BQL	431	71.1	1	6/12/2009	
Fluoranthene	BQL	431	69.4	1	6/12/2009	
Fluorene	BQL	431	67.2	1	6/12/2009	
Hexachlorobenzene	BQL	431	93.5	1	6/12/2009	
Hexachlorobutadiene	BQL	431	78.4	1	6/12/2009	
Hexachlorocyclopentadiene	BQL	862	84.0	1	6/12/2009	
Hexachloroethane	BQL	431	67.2	1	6/12/2009	
Indeno(1,2,3-c,d)pyrene	BQL	431	50.8	1	6/12/2009	
Isophorone	BQL	431	62.9	1	6/12/2009	
2-Methylnaphthalene	BQL	431	70.2	1	6/12/2009	
2-Methylphenol	BQL	431	65.9	1	6/12/2009	

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: M233-S004
Client Project ID: CTO 003
Lab Sample ID: G649-142-4G
Lab Project ID: G649-142
Report Basis: Dry weight
Initial Weight: 32.66 g

Analyzed By: DCS
Date Collected: 6/10/2009 14:44
Date Received: 6/11/2009
Date Extracted: 6/11/2009
Matrix: Soil
% Solids: 71.06

Compound	Result ug/Kg	RL ug/Kg	MDL ug/Kg	Dilution Factor	Date Analyzed	Flag
3- & 4-Methylphenol	BQL	431	56.0	1	6/12/2009	
Naphthalene	BQL	431	60.3	1	6/12/2009	
2-Nitroaniline	BQL	431	57.7	1	6/12/2009	
3-Nitroaniline	BQL	2150	63.3	1	6/12/2009	
4-Nitroaniline	BQL	2150	57.7	1	6/12/2009	
Nitrobenzene	BQL	431	57.3	1	6/12/2009	
2-Nitrophenol	BQL	431	62.9	1	6/12/2009	
4-Nitrophenol	BQL	2150	75.0	1	6/12/2009	
Diphenylamine *	BQL	431	69.4	1	6/12/2009	
Pentachlorophenol	BQL	2150	39.6	1	6/12/2009	
Phenanthrene	BQL	431	60.3	1	6/12/2009	
Phenol	BQL	431	58.6	1	6/12/2009	
Pyrene	BQL	431	58.6	1	6/12/2009	
1,2,4-Trichlorobenzene	BQL	431	77.6	1	6/12/2009	
2,4,5-Trichlorophenol	BQL	431	64.2	1	6/12/2009	
2,4,6-Trichlorophenol	BQL	431	38.3	1	6/12/2009	
		Spike Added	Spike Result	Percent Recovered		
2-Fluorobiphenyl		10	6.7	67		
2-Fluorophenol		10	9.3	93		
Nitrobenzene-d5		10	8.2	82		
Phenol-d6		10	8.7	87		
2,4,6-Tribromophenol		10	6.1	60		
4-Terphenyl-d14		10	10.8	108		

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

J = Detected below the quantitation limit.

Reviewed By: WJD

EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of Virginia

Project Name: CTO 003

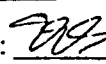
Sample Information	
Sample Identification	M233-S001
Sample Matrix	Soil
Date Collected	06/10/09 14:31
Date Received	06/11/09
Date Extracted	06/11/09
Date Analyzed	06/12/09 11:17 - 06/12/09 11:45
Dry Weight	72.4
Dilution Factor	1 - 1
Initial weight (g)	12.53
Final Volume (mL)	10.0

Analytical Results			
Analytes**	Result mg/Kg	Report Limit mg/Kg	Flags
C9-C18 Aliphatics	BQL	10.0	
C19-C36 Aliphatics	BQL	10.0	
C11-C22 Aromatics	BQL	10.0	

Surrogates	Percent Recovery	Flags	Limits	
			Lower	Upper
Aliphatic (tricosane)	98.1		40	140
Aromatic (ortho-terphenyl)	93.1		40	140
Fractionation 1 (2-bromonaphthalene)	108		40	140
Fractionation 2 (2-fluorobiphenyl)	110		40	140

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: G649-142-1H	Lab Info: G649-142-1H
Aliphatic: EP061209/008F0301.D	Aromatic: EP061209/009F0401.D

Reviewed By: 

EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of Virginia

Project Name: CTO 003

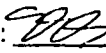
Sample Information	
Sample Identification	M233-S002
Sample Matrix	Soil
Date Collected	06/10/09 14:35
Date Received	06/11/09
Date Extracted	06/11/09
Date Analyzed	06/12/09 12:13 - 06/12/09 12:42
Dry Weight	74.0
Dilution Factor	5 - 1
Initial weight (g)	11.65
Final Volume (mL)	10.0

Analytical Results			
Analytes**	Result mg/Kg	Report Limit mg/Kg	Flags
C9-C18 Aliphatics	559	10.0	
C19-C36 Aliphatics	29.9	10.0	
C11-C22 Aromatics	282	10.0	

Surrogates	Percent Recovery	Flags	Limits	
			Lower	Upper
Aliphatic (tricosane)	105		40	140
Aromatic (ortho-terphenyl)	101		40	140
Fractionation 1 (2-bromonaphthalene)	127		40	140
Fractionation 2 (2-fluorobiphenyl)	129		40	140

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: G649-142-2H	Lab Info: G649-142-2H
Aliphatic: EP061209/010F0501.D	Aromatic: EP061209/011F0601.D

Reviewed By: 

EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of Virginia

Project Name: CTO 003

Sample Information	
Sample Identification	M233-S003
Sample Matrix	Soil
Date Collected	06/10/09 14:39
Date Received	06/11/09
Date Extracted	06/11/09
Date Analyzed	06/12/09 13:10 - 06/12/09 13:38
Dry Weight	71.6
Dilution Factor	1 - 1
Initial weight (g)	12.44
Final Volume (mL)	10.0

Analytical Results			
Analytes**	Result mg/Kg	Report Limit mg/Kg	Flags
C9-C18 Aliphatics	158	10.0	
C19-C36 Aliphatics	BQL	10.0	
C11-C22 Aromatics	121	10.0	

Surrogates	Percent Recovery	Flags	Limits	
			Lower	Upper
Aliphatic (tricosane)	97.9		40	140
Aromatic (ortho-terphenyl)	96.2		40	140
Fractionation 1 (2-bromonaphthalene)	129		40	140
Fractionation 2 (2-fluorobiphenyl)	132		40	140

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: G649-142-3H	Lab Info: G649-142-3H
Aliphatic: EP061209/012F0701.D	Aromatic: EP061209/013F0801.D

Reviewed By: 

EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of Virginia

Project Name: CTO 003

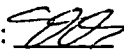
Sample Information	
Sample Identification	M233-S004
Sample Matrix	Soil
Date Collected	06/10/09 14:44
Date Received	06/11/09
Date Extracted	06/11/09
Date Analyzed	06/12/09 09:23 - 06/12/09 09:23
Dry Weight	71.1
Dilution Factor	1 - 1
Initial weight (g)	11.56
Final Volume (mL)	10.0

Analytical Results			
Analytes**	Result mg/Kg	Report Limit mg/Kg	Flags
C9-C18 Aliphatics	BQL	10.0	
C19-C36 Aliphatics	BQL	10.0	
C11-C22 Aromatics	BQL	10.0	

Surrogates	Percent Recovery	Flags	Limits	
			Lower	Upper
Aliphatic (tricosane)	99.4		40	140
Aromatic (ortho-terphenyl)	95.5		40	140

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: G649-142-4H	Lab Info: G649-142-4H
Aliphatic: EP061209/003F0301.D	Aromatic: EP061209/003F0301.D

Reviewed By: 

Attachment 3

EPH Laboratory Reporting Form

Calibration and QA/QC Information

Initial Calibration Date:

04/27/09

Calibration Ranges and Limits

Range	MDL		ML		RL	
	(02/15/08) (µg/L)	(02/11/08) (mg/Kg)	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)
C9-C18 Aliphatics	1.66	0.274	5.28	0.871	100	10
C19-C36 Aliphatics	2.79	0.201	8.87	0.639	100	10
C11-C22 Aromatics	2.64	0.110	8.40	0.350	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR ✓	Method of Quantitation
C ₉ -C ₁₈ Aliphatics	200	33.3	11.19	Calibration Factor
	100	16.7		
	50	8.33		
	25	4.17		
	5	0.833		
C ₁₉ -C ₃₆ Aliphatics	200	33.3	5.72	Calibration Factor
	100	16.7		
	50	8.33		
	25	4.17		
	5	0.833		
C ₁₁ -C ₂₂ Aromatics	200	33.3	1.61	Calibration Factor
	50	8.3		
	100	16.67		
	25	4.17		
	5	0.833		

Calibration Check Date:

06/12/09

Filenames:

ep061209/001f0101.d06/12/09ep061209/002f0201.d

Calibration Check

Range	Levels		%Difference if CF %Drift if LR ✓	Limits
	(µg/L)	(mg/Kg)		
C9-C18 Aliphatics	100	16.7	7.6	≤±25%
C19-C36 Aliphatics	100	16.7	13.9	≤±25%
C11-C22 Aromatics	100	16.7	-13.8	≤±25%

MDL = Method Detection Limit

ML = Minimum Limit

RL = Reportable Limit

RPD = Relative Percent Difference

%RSD = Percent Relative Standard Deviation

CCC = Correlation Coefficient of Curve

Attachment 3

EPH Laboratory Reporting Form

Calibration and QA/QC Information

Initial Calibration Date: 04/27/09

Calibration Ranges and Limits

Range	MDL		ML		RL	
	(02/15/08) (µg/L)	(02/11/08) (mg/Kg)	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)
C9-C18 Aliphatics	1.66	0.274	5.28	0.871	100	10
C19-C36 Aliphatics	2.79	0.201	8.87	0.639	100	10
C11-C22 Aromatics	2.64	0.110	8.40	0.350	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR ✓	Method of Quantitation
C ₉ -C ₁₈ Aliphatics	200	33.3	11.19	Calibration Factor
	100	16.7		
	50	8.33		
	25	4.17		
	5	0.833		
C ₁₉ -C ₃₆ Aliphatics	200	33.3	5.72	Calibration Factor
	100	16.7		
	50	8.33		
	25	4.17		
	5	0.833		
C ₁₁ -C ₂₂ Aromatics	200	33.3	1.61	Calibration Factor
	50	8.3		
	100	16.67		
	25	4.17		
	5	0.833		

Calibration Check Date: 06/12/09 Filenames: ep061209/020f1501.d
06/12/09 ep061209/021f1601.d

Calibration Check

Range	Levels (µg/L)	Levels (mg/Kg)	%Difference if CF %Drift if LR ✓	Limits
C9-C18 Aliphatics	100	16.7	17.0	≤±25%
C19-C36 Aliphatics	100	16.7	20.9	≤±25%
C11-C22 Aromatics	100	16.7	9.4	≤±25%

MDL = Method Detection Limit

ML = Minimum Limit

RL = Reportable Limit

RPD = Relative Percent Difference

%RSD = Percent Relative Standard Deviation

CCC = Correlation Coefficient of Curve

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of Virginia

Project Name: CTO 003

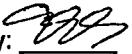
Sample Information	
Sample Identification	M233-S001
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	06/10/09 14:31
Date Received	06/11/09
Date Extracted	06/11/09
Date Analyzed	06/11/09 12:51 - 06/11/09 12:51
Dry Weight	72.4
Dilution Factor	1 - 1

Analytical Results				
Analyte	Result mg/Kg	Report Limit mg/Kg	Flags	
C ₅ -C ₈ Aliphatics**	BQL	10.0		
C ₉ -C ₁₂ Aliphatics**	BQL	10.0		
C ₉ -C ₁₀ Aromatics**	BQL	10.0		
	Percent Recovery	Flags	Limits Lower Upper	
Surrogate % Recovery - PID	91.1		70	130
Surrogate % Recovery - FID	108		70	130

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: g649-142-1e	Lab Info: g649-142-1e
FID Info: VP061109/009F0101.D	PID Info: VP061109/009R0101.D

Reviewed By: 

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of Virginia

Project Name: CTO 003

Sample Information	
Sample Identification	M233-S002
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	06/10/09 14:35
Date Received	06/11/09
Date Extracted	06/11/09
Date Analyzed	06/11/09 14:12 - 06/11/09 14:12
Dry Weight	74.0
Dilution Factor	1 - 1

Analytical Results				
Analyte	Result mg/Kg	Report Limit mg/Kg	Flags	
C ₅ -C ₈ Aliphatics**	BQL	10.0		
C ₉ -C ₁₂ Aliphatics**	38.5	10.0		
C ₉ -C ₁₀ Aromatics**	63.5	10.0		
	Percent Recovery	Flags	Limits Lower Upper	
Surrogate % Recovery - PID	102		70	130
Surrogate % Recovery - FID	115		70	130

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: g649-142-2e	Lab Info: g649-142-2e
FID Info: VP061109/012F0101.D	PID Info: VP061109/012R0101.D

Reviewed By: 

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of Virginia

Project Name: CTO 003

Sample Information	
Sample Identification	M233-S003
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	06/10/09 14:39
Date Received	06/11/09
Date Extracted	06/11/09
Date Analyzed	06/11/09 15:31 - 06/11/09 15:31
Dry Weight	71.6
Dilution Factor	1 - 1

Analytical Results				
Analyte	Result mg/Kg	Report Limit mg/Kg	Flags	
C ₅ -C ₈ Aliphatics**	BQL	10.0		
C ₉ -C ₁₂ Aliphatics**	13.4	10.0		
C ₉ -C ₁₀ Aromatics**	11.4	10.0		
	Percent Recovery	Flags	Limits Lower Upper	
Surrogate % Recovery - PID	95.8		70	130
Surrogate % Recovery - FID	111		70	130

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: g649-142-3e	Lab Info: g649-142-3e
FID Info: VP061109/015F0101.D	PID Info: VP061109/015R0101.D

Reviewed By: 

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of Virginia

Project Name: CTO 003

Sample Information	
Sample Identification	M233-S004
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	06/10/09 14:44
Date Received	06/11/09
Date Extracted	06/11/09
Date Analyzed	06/11/09 15:58 - 06/11/09 15:58
Dry Weight	71.1
Dilution Factor	1 - 1

Analytical Results				
Analyte	Result mg/Kg	Report Limit mg/Kg	Flags	
C ₅ -C ₈ Aliphatics**	BQL	10.0		
C ₉ -C ₁₂ Aliphatics**	BQL	10.0		
C ₉ -C ₁₀ Aromatics**	BQL	10.0		
	Percent Recovery	Flags	Limits Lower Upper	
Surrogate % Recovery - PID	91.2		70	130
Surrogate % Recovery - FID	106		70	130

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: g649-142-4e	Lab Info: g649-142-4e
FID Info: VP061109/016F0101.D	PID Info: VP061109/016R0101.D

Reviewed By: 

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of Virginia

Project Name: CTO 003

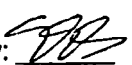
Sample Information	
Sample Identification	Trip Blank
Sample Matrix	Soil
Collection Option (for Soil)*	NA
Date Collected	06/10/09 09:00
Date Received	06/11/09
Date Extracted	06/11/09
Date Analyzed	06/11/09 11:58 - 06/11/09 11:58
Dry Weight	100
Dilution Factor	1 - 1

Analytical Results				
Analyte	Result mg/Kg	Report Limit mg/Kg	Flags	
C ₅ -C ₈ Aliphatics**	BQL	10.0		
C ₉ -C ₁₂ Aliphatics**	BQL	10.0		
C ₉ -C ₁₀ Aromatics**	BQL	10.0		
	Percent Recovery	Flags	Limits Lower Upper	
Surrogate % Recovery - PID	92.7		70	130
Surrogate % Recovery - FID	106		70	130

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: g649-142-5b	Lab Info: g649-142-5b
FID Info: VP061109/007F0101.D	PID Info: VP061109/007R0101.D

Reviewed By: 

Attachment 2

VPH Laboratory Reporting Form

Calibration and QA/QC Information

FID Initial Calibration Date:

05/08/09

PID Initial Calibration Date:

05/08/09

Calibration Ranges and Limits

Range	MDL		ML		RL	
	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)
C ₅ -C ₈ Aliphatics	2.02	0.175	6.42	0.557	100	10
C ₉ -C ₁₂ Aliphatics	1.51	0.118	4.80	0.375	100	10
C ₉ -C ₁₀ Aromatics	0.902	0.132	2.87	0.420	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR	Method of Quantitation
C ₅ -C ₈ Aliphatics	10	0.8	8.80	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		
C ₉ -C ₁₂ Aliphatics	10	0.8	1.00	Linear Regression
	50	4		
	100	8		
	200	16		
	500	40		
C ₉ -C ₁₀ Aromatics	10	0.8	21.76	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		

Calibration Check Date:

06/11/09

Filename:

VP061109/002F0101.d

Calibration Check

Range	Levels (µg/L)	Levels (mg/Kg)	%Difference if CF %Drift if LR	Limits
C ₅ -C ₈ Aliphatics	200	16	8.0	±25%
C ₉ -C ₁₂ Aliphatics	200	16	-7.2	±25%
C ₉ -C ₁₀ Aromatics	200	16	12.6	±25%

MDL = Method Detection Limit

ML = Minimum Limit

RL = Reportable Limit

RPD = Relative Percent Difference

%RSD = Percent Relative Standard Deviation

CCC = Correlation Coefficient of Curve

Attachment 2

VPH Laboratory Reporting Form

Calibration and QA/QC Information

FID Initial Calibration Date: 05/08/09PID Initial Calibration Date: 05/08/09

Calibration Ranges and Limits

Range	MDL		ML		RL	
	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)
C ₅ -C ₈ Aliphatics	2.02	0.175	6.42	0.557	100	10
C ₉ -C ₁₂ Aliphatics	1.51	0.118	4.80	0.375	100	10
C ₉ -C ₁₀ Aromatics	0.902	0.132	2.87	0.420	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR	Method of Quantitation
C ₅ -C ₈ Aliphatics	10	0.8	8.80	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		
C ₉ -C ₁₂ Aliphatics	10	0.8	1.00	Linear Regression
	50	4		
	100	8		
	200	16		
	500	40		
C ₉ -C ₁₀ Aromatics	10	0.8	21.76	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		

Calibration Check Date: 06/11/09Filename: VP061109/021F0101.d

Calibration Check

Range	Levels (µg/L)	Levels (mg/Kg)	%Difference if CF %Drift if LR	Limits
C ₅ -C ₈ Aliphatics	200	16	8.8	±25%
C ₉ -C ₁₂ Aliphatics	200	16	5.3	±25%
C ₉ -C ₁₀ Aromatics	200	16	17.4	±25%

MDL = Method Detection Limit

ML = Minimum Limit

RL = Reportable Limit

RPD = Relative Percent Difference

%RSD = Percent Relative Standard Deviation

CCC = Correlation Coefficient of Curve

SGS Environmental Services Inc. CHAIN OF CUSTODY RECORD

G 649-142

Locations Nationwide

- Alaska
- New Jersey
- North Carolina
- West Virginia
- Maryland
- New York
- Ohio

www.us.sgs.com

[illegible]

M-234 SOIL LABORATORY RESULTS



Shaun Whitworth
Osage of Virginia
2618 A Colley Ave
Norfolk, VA 23517

Report Number: G649-140

Client Project: CTO 003

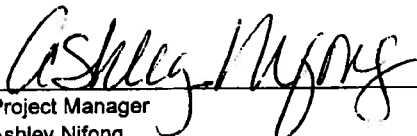
Dear Shaun Whitworth,

Enclosed are the results of the analytical services performed under the referenced project. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of five years in the event they are required for future reference. Any samples submitted to our laboratory will be retained for a maximum of thirty (30) days from the date of this report unless other arrangements are requested.

If there are any questions about the report or services performed during this project, please call Ashley Nifong at (910) 350-1903. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS Environmental Services for your analytical services. We look forward to working with you again on any additional analytical needs.

Sincerely,
SGS Environmental Services, Inc.

 4/29/09
Project Manager Date
Ashley Nifong

List of Reporting Abbreviations
And Data Qualifiers

B = Compound also detected in batch blank

BQL = Below Quantification Limit (RL or MDL)

DF = Dilution Factor

Dup = Duplicate

D = Detected, but RPD is > 40% between results in dual column method.

E = Estimated concentration, exceeds calibration range.

J = Estimated concentration, below calibration range and above MDL

LCS(D) = Laboratory Control Spike (Duplicate)

MDL = Method Detection Limit

MS(D) = Matrix Spike (Duplicate)

PQL = Practical Quantitation Limit

RL/CL = Reporting Limit / Control Limit

RPD = Relative Percent Difference

mg/kg = milligram per kilogram, ppm, parts per million

ug/kg = micrograms per kilogram, ppb, parts per billion

mg/L = milligram per liter, ppm, parts per million

ug/L = micrograms per liter, ppb, parts per billion

% Rec = Percent Recovery

% solids = Percent Solids

Special Notes:

- 1) Metals and mercury samples are digested with a hot block, see the standard operating procedure document for details.
- 2) Uncertainty for all reported data is less than or equal to 30 percent.

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of VirginiaProject Name: CTO 003

Sample Information	
Sample Identification	USTM234-S001
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	04/23/09 09:16
Date Received	04/25/09
Date Extracted	04/27/09
Date Analyzed	04/28/09 13:40 - 04/28/09 13:40
Dry Weight	69.7
Dilution Factor	1 - 1

Analytical Results				
Analyte	Result mg/Kg	Report Limit mg/Kg	Flags	
C ₅ -C ₈ Aliphatics**	BQL	10.0		
C ₉ -C ₁₂ Aliphatics**	33.1	10.0		
C ₉ -C ₁₀ Aromatics**	23.5	10.0		
	Percent Recovery	Flags	Limits Lower Upper	
Surrogate % Recovery - PID	99.1		70	130
Surrogate % Recovery - FID	108		70	130

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: g649-140-1e	Lab Info: g649-140-1e
FID Info: VP042809/013F0101.D	PID Info: VP042809/013R0101.D

Reviewed By: 

VPH (Aliphatics/Aromatics) Laboratory Reporting FormClient Name: Osage of VirginiaProject Name: CTO 003

Sample Information	
Sample Identification	USTM234-S002
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	04/24/09 10:00
Date Received	04/25/09
Date Extracted	04/27/09
Date Analyzed	04/28/09 11:28 - 04/28/09 11:28
Dry Weight	72.6
Dilution Factor	1 - 1

Analytical Results				
Analyte	Result mg/Kg	Report Limit mg/Kg	Flags	
C ₅ -C ₈ Aliphatics**	BQL	10.0		
C ₉ -C ₁₂ Aliphatics**	BQL	10.0		
C ₉ -C ₁₀ Aromatics**	BQL	10.0		
	Percent Recovery	Flags	Limits Lower Upper	
Surrogate % Recovery - PID	86.4		70	130
Surrogate % Recovery - FID	99.9		70	130

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: g649-140-2e	Lab Info: g649-140-2e
FID Info: VP042809/008F0101.D	PID Info: VP042809/008R0101.D

Reviewed By: MDA

VPH (Aliphatics/Aromatics) Laboratory Reporting FormClient Name: Osage of VirginiaProject Name: CTO 003

Sample Information	
Sample Identification	USTM234-S003
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	04/24/09 08:45
Date Received	04/25/09
Date Extracted	04/27/09
Date Analyzed	04/28/09 12:47 - 04/28/09 12:47
Dry Weight	72.6
Dilution Factor	1 - 1

Analytical Results				
Analyte	Result mg/Kg	Report Limit mg/Kg	Flags	
C ₅ -C ₈ Aliphatics**	BQL	10.0		
C ₉ -C ₁₂ Aliphatics**	BQL	10.0		
C ₉ -C ₁₀ Aromatics**	BQL	10.0		
	Percent Recovery	Flags	Limits	
			Lower	Upper
Surrogate % Recovery - PID	85.7		70	130
Surrogate % Recovery - FID	96.2		70	130

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: g649-140-3e	Lab Info: g649-140-3e
FID Info: VP042809/011F0101.D	PID Info: VP042809/011R0101.D

Reviewed By: 

VPH (Aliphatics/Aromatics) Laboratory Reporting FormClient Name: Osage of VirginiaProject Name: CTO 003

Sample Information	
Sample Identification	USTM234-S004
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	04/23/09 14:23
Date Received	04/25/09
Date Extracted	04/27/09
Date Analyzed	04/28/09 01:16 - 04/28/09 01:16
Dry Weight	73.9
Dilution Factor	1 - 1

Analytical Results				
Analyte	Result mg/Kg	Report Limit mg/Kg	Flags	
C ₅ -C ₈ Aliphatics**	BQL	10.0		
C ₉ -C ₁₂ Aliphatics**	BQL	10.0		
C ₉ -C ₁₀ Aromatics**	BQL	10.0		
	Percent Recovery	Flags	Limits Lower Upper	
Surrogate % Recovery - PID	90.0		70	130
Surrogate % Recovery - FID	99.0		70	130

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: g649-140-4d	Lab Info: g649-140-4d
FID Info: VP042709/040F0101.D	PID Info: VP042709/040R0101.D

Reviewed By: _____

VPH (Aliphatics/Aromatics) Laboratory Reporting FormClient Name: Osage of VirginiaProject Name: CTO 003

Sample Information	
Sample Identification	Trip Blank
Sample Matrix	Soil
Collection Option (for Soil)*	NA
Date Collected	04/24/09 09:00
Date Received	04/25/09
Date Extracted	04/27/09
Date Analyzed	04/28/09 11:01 - 04/28/09 11:01
Dry Weight	100
Dilution Factor	1 - 1

Analytical Results			
Analyte	Result mg/Kg	Report Limit mg/Kg	Flags
C ₅ -C ₈ Aliphatics**	BQL	10.0	
C ₉ -C ₁₂ Aliphatics**	BQL	10.0	
C ₉ -C ₁₀ Aromatics**	BQL	10.0	
	Percent Recovery	Flags	Limits Lower Upper
Surrogate % Recovery - PID	88.2		70 130
Surrogate % Recovery - FID	101		70 130

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: g649-140-5b	Lab Info: g649-140-5b
FID Info: VP042809/007F0101.D	PID Info: VP042809/007R0101.D

Reviewed By: 

Attachment 2

VPH Laboratory Reporting Form

Calibration and QA/QC Information

FID Initial Calibration Date: 04/23/09PID Initial Calibration Date: 04/23/09

Calibration Ranges and Limits

Range	MDL		ML		RL	
	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)
C ₅ -C ₈ Aliphatics	2.02	0.175	6.42	0.557	100	10
C ₉ -C ₁₂ Aliphatics	1.51	0.118	4.80	0.375	100	10
C ₉ -C ₁₀ Aromatics	0.902	0.132	2.87	0.420	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR	Method of Quantitation
C ₅ -C ₈ Aliphatics	10	0.8	12.90	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		
C ₉ -C ₁₂ Aliphatics	10	0.8	0.99	Linear Regression
	50	4		
	100	8		
	200	16		
	500	40		
C ₉ -C ₁₀ Aromatics	10	0.8	0.99	Linear Regression
	50	4		
	100	8		
	200	16		
	500	40		

Calibration Check Date: 04/27/09Filename: VP042709/037F0101.d

Calibration Check

Range	Levels (µg/L)	Levels (mg/Kg)	%Difference if CF %Drift if LR	Limits
C ₅ -C ₈ Aliphatics	200	16	10.7	±25%
C ₉ -C ₁₂ Aliphatics	200	16	-1.3	±25%
C ₉ -C ₁₀ Aromatics	200	16	-1.1	±25%

MDL = Method Detection Limit

ML = Minimum Limit

RL = Reportable Limit

RPD = Relative Percent Difference

%RSD = Percent Relative Standard Deviation

CCC = Correlation Coefficient of Curve

Attachment 2

VPH Laboratory Reporting Form

Calibration and QA/QC Information

FID Initial Calibration Date: 04/23/09PID Initial Calibration Date: 04/23/09

Calibration Ranges and Limits

Range	MDL		ML		RL	
	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)
C ₅ -C ₈ Aliphatics	2.02	0.175	6.42	0.557	100	10
C ₉ -C ₁₂ Aliphatics	1.51	0.118	4.80	0.375	100	10
C ₉ -C ₁₀ Aromatics	0.902	0.132	2.87	0.420	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR	Method of Quantitation
C ₅ -C ₈ Aliphatics	10	0.8	12.90	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		
C ₉ -C ₁₂ Aliphatics	10	0.8	0.99	Linear Regression
	50	4		
	100	8		
	200	16		
	500	40		
C ₉ -C ₁₀ Aromatics	10	0.8	0.99	Linear Regression
	50	4		
	100	8		
	200	16		
	500	40		

Calibration Check Date: 04/27/09Filename: VP042709/052F0101.d

Calibration Check

Range	Levels (µg/L)	Levels (mg/Kg)	%Difference if CF %Drift if LR	Limits
C ₅ -C ₈ Aliphatics	200	16	10.2	±25%
C ₉ -C ₁₂ Aliphatics	200	16	1.1	±25%
C ₉ -C ₁₀ Aromatics	200	16	-1.6	±25%

MDL = Method Detection Limit

ML = Minimum Limit

RL = Reportable Limit

RPD = Relative Percent Difference

%RSD = Percent Relative Standard Deviation

CCC = Correlation Coefficient of Curve

Attachment 2

VPH Laboratory Reporting Form

Calibration and QA/QC Information

FID Initial Calibration Date:

04/23/09

PID Initial Calibration Date:

04/23/09

Calibration Ranges and Limits

Range	MDL		ML		RL	
	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)
C ₅ -C ₈ Aliphatics	2.02	0.175	6.42	0.557	100	10
C ₉ -C ₁₂ Aliphatics	1.51	0.118	4.80	0.375	100	10
C ₉ -C ₁₀ Aromatics	0.902	0.132	2.87	0.420	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR	Method of Quantitation
C ₅ -C ₈ Aliphatics	10	0.8	12.90	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		
C ₉ -C ₁₂ Aliphatics	10	0.8	0.99	Linear Regression
	50	4		
	100	8		
	200	16		
	500	40		
C ₉ -C ₁₀ Aromatics	10	0.8	0.99	Linear Regression
	50	4		
	100	8		
	200	16		
	500	40		

Calibration Check Date:

04/28/09

Filename:

VP042809/002F0101.d

Calibration Check

Range	Levels (µg/L)	Levels (mg/Kg)	%Difference if CF %Drift if LR	Limits
C ₅ -C ₈ Aliphatics	200	16	17.7 /	±25%
C ₉ -C ₁₂ Aliphatics	200	16	2.6 /	±25%
C ₉ -C ₁₀ Aromatics	200	16	-0.6 /	±25%

MDL = Method Detection Limit

ML = Minimum Limit

RL = Reportable Limit

RPD = Relative Percent Difference

%RSD = Percent Relative Standard Deviation

CCC = Correlation Coefficient of Curve

Attachment 2

VPH Laboratory Reporting Form

Calibration and QA/QC Information

FID Initial Calibration Date: 04/23/09PID Initial Calibration Date: 04/23/09

Calibration Ranges and Limits

Range	MDL		ML		RL	
	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)
C ₅ -C ₈ Aliphatics	2.02	0.175	6.42	0.557	100	10
C ₉ -C ₁₂ Aliphatics	1.51	0.118	4.80	0.375	100	10
C ₉ -C ₁₀ Aromatics	0.902	0.132	2.87	0.420	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR	Method of Quantitation
C ₅ -C ₈ Aliphatics	10	0.8	12.90	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		
C ₉ -C ₁₂ Aliphatics	10	0.8	0.99	Linear Regression
	50	4		
	100	8		
	200	16		
	500	40		
C ₉ -C ₁₀ Aromatics	10	0.8	0.99	Linear Regression
	50	4		
	100	8		
	200	16		
	500	40		

Calibration Check Date: 04/28/09Filename: VP042809/014F0101.d

Calibration Check

Range	Levels (µg/L)	Levels (mg/Kg)	%Difference if CF %Drift if LR	Limits
C ₅ -C ₈ Aliphatics	200	16	13.0 ✓	±25%
C ₉ -C ₁₂ Aliphatics	200	16	-1.6 ✓	±25%
C ₉ -C ₁₀ Aromatics	200	16	-3.5 ✓	±25%

MDL = Method Detection Limit

ML = Minimum Limit

RL = Reportable Limit

RPD = Relative Percent Difference

%RSD = Percent Relative Standard Deviation

CCC = Correlation Coefficient of Curve

EPH (Aliphatics/Aromatics) Laboratory Reporting FormClient Name: Osage of VirginiaProject Name: CTO 003

Sample Information	
Sample Identification	USTM234-S001
Sample Matrix	Soil
Date Collected	04/23/09 09:16
Date Received	04/25/09
Date Extracted	04/27/09
Date Analyzed	04/28/09 08:35 - 04/28/09 09:03
Dry Weight	69.7
Dilution Factor	1 - 1
Initial weight (g)	12.50
Final Volume (mL)	10.0

Analytical Results			
Analytes**	Result mg/Kg	Report Limit mg/Kg	Flags
C9-C18 Aliphatics	290	10.0	
C19-C36 Aliphatics	29.8	10.0	
C11-C22 Aromatics	147	10.0	

Surrogates	Percent Recovery	Flags	Limits	
			Lower	Upper
Aliphatic (tricosane)	98.7		40	140
Aromatic (ortho-terphenyl)	93.9		40	140
Fractionation 1 (2-bromonaphthalene)	97.2		40	140
Fractionation 2 (2-fluorobiphenyl)	100		40	140

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: G649-140-1G	Lab Info: G649-140-1G
Aliphatic: EP042709/048F4901.D	Aromatic: EP042709/049F5001.D

Reviewed By: BL

EPH (Aliphatics/Aromatics) Laboratory Reporting FormClient Name: Osage of VirginiaProject Name: CTO 003

Sample Information	
Sample Identification	USTM234-S002
Sample Matrix	Soil
Date Collected	04/24/09 10:00
Date Received	04/25/09
Date Extracted	04/27/09
Date Analyzed	04/28/09 12:00 - 04/28/09 12:29
Dry Weight	72.6
Dilution Factor	1 - 1
Initial weight (g)	13.50
Final Volume (mL)	10.0

Analytical Results			
Analytes**	Result mg/Kg	Report Limit mg/Kg	Flags
C9-C18 Aliphatics	BQL	10.0	
C19-C36 Aliphatics	BQL	10.0	
C11-C22 Aromatics	BQL	10.0	

Surrogates	Percent Recovery	Flags	Limits	
			Lower	Upper
Aliphatic (tricosane)	96.5		40	140
Aromatic (ortho-terphenyl)	92.7		40	140
Fractionation 1 (2-bromonaphthalene)	99.4		40	140
Fractionation 2 (2-fluorobiphenyl)	102		40	140

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: G649-140-2G	Lab Info: G649-140-2G
Aliphatic: EP042809/006F0601.D	Aromatic: EP042809/007F0701.D

Reviewed By: SW

EPH (Aliphatics/Aromatics) Laboratory Reporting FormClient Name: Osage of VirginiaProject Name: CTO 003

Sample Information	
Sample Identification	USTM234-S003
Sample Matrix	Soil
Date Collected	04/24/09 08:45
Date Received	04/25/09
Date Extracted	04/27/09
Date Analyzed	04/28/09 12:57 - 04/28/09 13:26
Dry Weight	72.6
Dilution Factor	1 - 1
Initial weight (g)	12.21
Final Volume (mL)	10.0

Analytical Results			
Analytes**	Result mg/Kg	Report Limit mg/Kg	Flags
C9-C18 Aliphatics	BQL	10.0	
C19-C36 Aliphatics	BQL	10.0	
C11-C22 Aromatics	BQL	10.0	

Surrogates	Percent Recovery	Flags	Limits	
			Lower	Upper
Aliphatic (tricosane)	95.2		40	140
Aromatic (ortho-terphenyl)	51.2		40	140
Fractionation 1 (2-bromonaphthalene)	49.5		40	140
Fractionation 2 (2-fluorobiphenyl)	50.0		40	140

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: G649-140-3G	Lab Info: G649-140-3G
Aliphatic: EP042809/008F0801.D	Aromatic: EP042809/009F0901.D

Reviewed By: 6/2/09

EPH (Aliphatics/Aromatics) Laboratory Reporting FormClient Name: Osage of VirginiaProject Name: CTO 003

Sample Information	
Sample Identification	USTM234-S004
Sample Matrix	Soil
Date Collected	04/23/09 14:23
Date Received	04/25/09
Date Extracted	04/27/09
Date Analyzed	04/28/09 13:55 - 04/28/09 14:23
Dry Weight	73.9
Dilution Factor	1 - 1
Initial weight (g)	12.44
Final Volume (mL)	10.0

Analytical Results			
Analytes**	Result mg/Kg	Report Limit mg/Kg	Flags
C9-C18 Aliphatics	BQL	10.0	
C19-C36 Aliphatics	BQL	10.0	
C11-C22 Aromatics	BQL	10.0	

Surrogates	Percent Recovery	Flags	Limits	
			Lower	Upper
Aliphatic (tricosane)	95.0		40	140
Aromatic (ortho-terphenyl)	88.8		40	140
Fractionation 1 (2-bromonaphthalene)	95.4		40	140
Fractionation 2 (2-fluorobiphenyl)	97.7		40	140

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: G649-140-4G	Lab Info: G649-140-4G
Aliphatic: EP042809/010F1001.D	Aromatic: EP042809/011F1101.D

Reviewed By: QW

Attachment 3

EPH Laboratory Reporting Form

Calibration and QA/QC Information

Initial Calibration Date: 04/27/09

Calibration Ranges and Limits

Range	MDL		ML		RL	
	(02/15/08) (µg/L)	(02/11/08) (mg/Kg)	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)
C9-C18 Aliphatics	1.66	0.274	5.28	0.871	100	10
C19-C36 Aliphatics	2.79	0.201	8.87	0.639	100	10
C11-C22 Aromatics	2.64	0.110	8.40	0.350	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR	Method of Quantitation
C ₉ -C ₁₈ Aliphatics	200	33.3	11.19	Calibration Factor
	100	16.7		
	50	8.33		
	25	4.17		
	5	0.833		
C ₁₉ -C ₃₆ Aliphatics	200	33.3	5.72	Calibration Factor
	100	16.7		
	50	8.33		
	25	4.17		
	5	0.833		
C ₁₁ -C ₂₂ Aromatics	200	33.3	1.61	Calibration Factor
	50	8.3		
	100	16.67		
	25	4.17		
	5	0.833		

Calibration Check Date: 04/27/09
04/28/09Filenames: ep042709/034f3501.d
ep042709/035f3601.d

Calibration Check

Range	Levels		%Difference if CF %Drift if LR	Limits
	(µg/L)	(mg/Kg)		
C9-C18 Aliphatics	100	16.7	18.7	±25%
C19-C36 Aliphatics	100	16.7	22.3	±25%
C11-C22 Aromatics	100	16.7	9.6	±25%

MDL = Method Detection Limit
ML = Minimum Limit
RL = Reportable LimitRPD = Relative Percent Difference
%RSD = Percent Relative Standard Deviation
CCC = Correlation Coefficient of Curve

Attachment 3

EPH Laboratory Reporting Form

Calibration and QA/QC Information

Initial Calibration Date: 04/27/09

Calibration Ranges and Limits

Range	MDL		ML		RL	
	(02/15/08) (µg/L)	(02/11/08) (mg/Kg)	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)
C9-C18 Aliphatics	1.66	0.274	5.28	0.871	100	10
C19-C36 Aliphatics	2.79	0.201	8.87	0.639	100	10
C11-C22 Aromatics	2.64	0.110	8.40	0.350	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR	Method of Quantitation
C ₉ -C ₁₈ Aliphatics	200	33.3	11.19	Calibration Factor
	100	16.7		
	50	8.33		
	25	4.17		
	5	0.833		
C ₁₉ -C ₃₆ Aliphatics	200	33.3	5.72	Calibration Factor
	100	16.7		
	50	8.33		
	25	4.17		
	5	0.833		
C ₁₁ -C ₂₂ Aromatics	200	33.3	1.61	Calibration Factor
	50	8.3		
	100	16.67		
	25	4.17		
	5	0.833		

Calibration Check Date: 04/28/09
04/28/09Filenames: ep042809/002f0201.d
ep042809/003f0301.d

Calibration Check

Range	Levels (µg/L) (mg/Kg)		%Difference if CF %Drift if LR	Limits
C9-C18 Aliphatics	100	16.7	2.4	≤±25%
C19-C36 Aliphatics	100	16.7	5.3	≤±25%
C11-C22 Aromatics	100	16.7	0.9	≤±25%

MDL = Method Detection Limit
ML = Minimum Limit
RL = Reportable LimitRPD = Relative Percent Difference
%RSD = Percent Relative Standard Deviation
CCC = Correlation Coefficient of Curve

Attachment 3

EPH Laboratory Reporting Form

Calibration and QA/QC Information

Initial Calibration Date: 04/27/09

Calibration Ranges and Limits

Range	MDL		ML		RL	
	(02/15/08) (µg/L)	(02/11/08) (mg/Kg)	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)
C9-C18 Aliphatics	1.66	0.274	5.28	0.871	100	10
C19-C36 Aliphatics	2.79	0.201	8.87	0.639	100	10
C11-C22 Aromatics	2.64	0.110	8.40	0.350	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR	Method of Quantitation
C ₉ -C ₁₈ Aliphatics	200	33.3	11.19	Calibration Factor
	100	16.7		
	50	8.33		
	25	4.17		
	5	0.833		
C ₁₉ -C ₃₆ Aliphatics	200	33.3	5.72	Calibration Factor
	100	16.7		
	50	8.33		
	25	4.17		
	5	0.833		
C ₁₁ -C ₂₂ Aromatics	200	33.3	1.61	Calibration Factor
	50	8.3		
	100	16.67		
	25	4.17		
	5	0.833		

Calibration Check Date: 04/28/09
04/28/09Filenames: ep042809/002f1201.d
ep042809/003f1301.d

Calibration Check

Range	Levels (µg/L) (mg/Kg)		%Difference if CF %Drift if LR	Limits
C9-C18 Aliphatics	100	16.7	3.1	≤±25%
C19-C36 Aliphatics	100	16.7	6.1	≤±25%
C11-C22 Aromatics	100	16.7	1.6	≤±25%

MDL = Method Detection Limit
ML = Minimum Limit
RL = Reportable LimitRPD = Relative Percent Difference
%RSD = Percent Relative Standard Deviation
CCC = Correlation Coefficient of Curve

SGS Environmental Services, Inc.

Results for Volatiles
by GCMS 8260B/5035

Client Sample ID: USTM234-S001

Client Project ID: CTO 003

Lab Sample ID: G649-140-1D

Lab Project ID: G649-140

Report Basis: Dry Weight

Analyzed By: CLP

Date Collected: 4/23/2009 9:16

Date Received: 4/25/2009

Matrix: Soil

Sample Amount: 6.16 g

%Solids: 69.7

Compound	Result UG/KG	Quantitation Limit UG/KG	Dilution Factor	Date Analyzed
Acetone	BQL	1460	50	4/27/2009
Benzene	BQL	58.2	50	4/27/2009
Bromobenzene	BQL	58.2	50	4/27/2009
Bromochloromethane	BQL	58.2	50	4/27/2009
Bromodichloromethane	BQL	58.2	50	4/27/2009
Bromoform	BQL	58.2	50	4/27/2009
Bromomethane	BQL	58.2	50	4/27/2009
2-Butanone	BQL	1460	50	4/27/2009
n-Butylbenzene	BQL	58.2	50	4/27/2009
sec-Butylbenzene	350	58.2	50	4/27/2009
tert-Butylbenzene	BQL	58.2	50	4/27/2009
Carbon disulfide	BQL	58.2	50	4/27/2009
Carbon tetrachloride	BQL	58.2	50	4/27/2009
Chlorobenzene	BQL	58.2	50	4/27/2009
Chloroethane	BQL	58.2	50	4/27/2009
Chloroform	BQL	58.2	50	4/27/2009
Chloromethane	BQL	58.2	50	4/27/2009
2-Chlorotoluene	BQL	58.2	50	4/27/2009
4-Chlorotoluene	BQL	58.2	50	4/27/2009
Dibromochloromethane	BQL	58.2	50	4/27/2009
1,2-Dibromo-3-chloropropane	BQL	291	50	4/27/2009
Dibromomethane	BQL	58.2	50	4/27/2009
1,2-Dibromoethane (EDB)	BQL	58.2	50	4/27/2009
1,2-Dichlorobenzene	BQL	58.2	50	4/27/2009
1,3-Dichlorobenzene	BQL	58.2	50	4/27/2009
1,4-Dichlorobenzene	BQL	58.2	50	4/27/2009
trans-1,4-Dichloro-2-butene	BQL	291	50	4/27/2009
1,1-Dichloroethane	BQL	58.2	50	4/27/2009
1,1-Dichloroethene	BQL	58.2	50	4/27/2009
1,2-Dichloroethane	BQL	58.2	50	4/27/2009
cis-1,2-Dichloroethene	BQL	58.2	50	4/27/2009
trans-1,2-dichloroethene	BQL	58.2	50	4/27/2009
1,2-Dichloropropane	BQL	58.2	50	4/27/2009
1,3-Dichloropropane	BQL	58.2	50	4/27/2009
2,2-Dichloropropane	BQL	58.2	50	4/27/2009
1,1-Dichloropropene	BQL	58.2	50	4/27/2009
cis-1,3-Dichloropropene	BQL	58.2	50	4/27/2009
trans-1,3-Dichloropropene	BQL	58.2	50	4/27/2009
Dichlorodifluoromethane	BQL	291	50	4/27/2009
Diisopropyl ether (DIPE)	BQL	58.2	50	4/27/2009
Ethylbenzene	BQL	58.2	50	4/27/2009
Hexachlorobutadiene	BQL	58.2	50	4/27/2009
2-Hexanone	BQL	291	50	4/27/2009
Iodomethane	BQL	58.2	50	4/27/2009
Isopropylbenzene	BQL	58.2	50	4/27/2009
4-Isopropyltoluene	59.9	58.2	50	4/27/2009

SGS Environmental Services, Inc.

**Results for Volatiles
by GCMS 8260B/5035**

Client Sample ID: USTM234-S001

Client Project ID: CTO 003

Lab Sample ID: G649-140-1D

Lab Project ID: G649-140

Report Basis: Dry Weight

Analyzed By: CLP

Date Collected: 4/23/2009 9:16

Date Received: 4/25/2009

Matrix: Soil

Sample Amount: 6.16 g

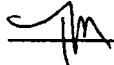
%Solids: 69.7

Compound	Result UG/KG	Quantitation Limit UG/KG	Dilution Factor	Date Analyzed
Methylene chloride	BQL	291	50	4/27/2009
4-Methyl-2-pentanone	BQL	291	50	4/27/2009
Methyl-tert-butyl ether (MTBE)	BQL	58.2	50	4/27/2009
Naphthalene	79.7	58.2	50	4/27/2009
n-Propyl benzene	BQL	58.2	50	4/27/2009
Styrene	BQL	58.2	50	4/27/2009
1,1,1,2-Tetrachloroethane	BQL	58.2	50	4/27/2009
1,1,2,2-Tetrachloroethane	BQL	58.2	50	4/27/2009
Tetrachloroethene	BQL	58.2	50	4/27/2009
Toluene	BQL	58.2	50	4/27/2009
1,2,3-Trichlorobenzene	BQL	58.2	50	4/27/2009
1,2,4-Trichlorobenzene	BQL	58.2	50	4/27/2009
Trichloroethene	BQL	58.2	50	4/27/2009
1,1,1-Trichloroethane	BQL	58.2	50	4/27/2009
1,1,2-Trichloroethane	BQL	58.2	50	4/27/2009
Trichlorofluoromethane	BQL	58.2	50	4/27/2009
1,2,3-Trichloropropane	BQL	58.2	50	4/27/2009
1,2,4-Trimethylbenzene	BQL	58.2	50	4/27/2009
1,3,5-Trimethylbenzene	BQL	58.2	50	4/27/2009
Vinyl chloride	BQL	58.2	50	4/27/2009
m-,p-Xylene	BQL	116	50	4/27/2009
o-Xylene	BQL	58.2	50	4/27/2009

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	10	9.56	96
Toluene-d8	10	10.5	105
4-Bromofluorobenzene	10	11.2	112

Comments:**Flags:**

BQL = Below Quantitation Limits.

Analyst: Reviewed By: 

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: USTM234-S002
 Client Project ID: CTO 003
 Lab Sample ID G649-140-2A
 Lab Project ID: G649-140
 Report Basis: Dry Weight

Analyzed By: MJC
 Date Collected: 04-24-2009 10:00
 Date Received: 4/25/2009
 Matrix: Soil
 Sample Amount: 6.51 g
 %Solids: 72.6

Report Name Compound	Result UG/KG	Quantitation Limit UG/KG	Dilution Factor	Date Analyzed
Acetone	BQL	52.8	1	4/27/2009
Benzene	BQL	5.28	1	4/27/2009
Bromobenzene	BQL	5.28	1	4/27/2009
Bromochloromethane	BQL	5.28	1	4/27/2009
Bromodichloromethane	BQL	5.28	1	4/27/2009
Bromoform	BQL	5.28	1	4/27/2009
Bromomethane	BQL	5.28	1	4/27/2009
2-Butanone	BQL	26.4	1	4/27/2009
n-Butylbenzene	BQL	5.28	1	4/27/2009
sec-Butylbenzene	BQL	5.28	1	4/27/2009
tert-Butylbenzene	BQL	5.28	1	4/27/2009
Carbon disulfide	BQL	5.28	1	4/27/2009
Carbon tetrachloride	BQL	5.28	1	4/27/2009
Chlorobenzene	BQL	5.28	1	4/27/2009
Chloroethane	BQL	5.28	1	4/27/2009
Chloroform	BQL	5.28	1	4/27/2009
Chloromethane	BQL	5.28	1	4/27/2009
2-Chlorotoluene	BQL	5.28	1	4/27/2009
4-Chlorotoluene	BQL	5.28	1	4/27/2009
Dibromochloromethane	BQL	5.28	1	4/27/2009
1,2-Dibromo-3-chloropropane	BQL	26.4	1	4/27/2009
Dibromomethane	BQL	5.28	1	4/27/2009
1,2-Dibromoethane (EDB)	BQL	5.28	1	4/27/2009
1,2-Dichlorobenzene	BQL	5.28	1	4/27/2009
1,3-Dichlorobenzene	BQL	5.28	1	4/27/2009
1,4-Dichlorobenzene	BQL	5.28	1	4/27/2009
trans-1,4-Dichloro-2-butene	BQL	26.4	1	4/27/2009
1,1-Dichloroethane	BQL	5.28	1	4/27/2009
1,1-Dichloroethene	BQL	5.28	1	4/27/2009
1,2-Dichloroethane	BQL	5.28	1	4/27/2009
cis-1,2-Dichloroethene	BQL	5.28	1	4/27/2009
trans-1,2-dichloroethene	BQL	5.28	1	4/27/2009
1,2-Dichloropropane	BQL	5.28	1	4/27/2009
1,3-Dichloropropane	BQL	5.28	1	4/27/2009
2,2-Dichloropropane	BQL	5.28	1	4/27/2009
1,1-Dichloropropene	BQL	5.28	1	4/27/2009
cis-1,3-Dichloropropene	BQL	5.28	1	4/27/2009
trans-1,3-Dichloropropene	BQL	5.28	1	4/27/2009
Dichlorodifluoromethane	BQL	5.28	1	4/27/2009
Diisopropyl ether (DIPE)	BQL	5.28	1	4/27/2009
Ethylbenzene	BQL	5.28	1	4/27/2009

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: USTM234-S002
 Client Project ID: CTO 003
 Lab Sample ID G649-140-2A
 Lab Project ID: G649-140
 Report Basis: Dry Weight

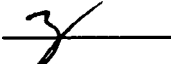
Analyzed By: MJC
 Date Collected: 04-24-2009 10:00
 Date Received: 4/25/2009
 Matrix: Soil
 Sample Amount: 6.51 g
 %Solids: 72.6

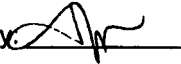
Report Name Compound	Result UG/KG	Quantitation Limit UG/KG	Dilution Factor	Date Analyzed
Hexachlorobutadiene	BQL	5.28	1	4/27/2009
2-Hexanone	BQL	13.2	1	4/27/2009
Iodomethane	BQL	5.28	1	4/27/2009
Isopropylbenzene	BQL	5.28	1	4/27/2009
4-Isopropyltoluene	BQL	5.28	1	4/27/2009
Methylene chloride	BQL	21.1	1	4/27/2009
4-Methyl-2-pentanone	BQL	13.2	1	4/27/2009
Methyl-tert-butyl ether (MTBE)	BQL	5.28	1	4/27/2009
Naphthalene	BQL	5.28	1	4/27/2009
n-Propyl benzene	BQL	5.28	1	4/27/2009
Styrene	BQL	5.28	1	4/27/2009
1,1,1,2-Tetrachloroethane	BQL	5.28	1	4/27/2009
1,1,2,2-Tetrachloroethane	BQL	5.28	1	4/27/2009
Tetrachloroethene	BQL	5.28	1	4/27/2009
Toluene	BQL	5.28	1	4/27/2009
1,2,3-Trichlorobenzene	BQL	5.28	1	4/27/2009
1,2,4-Trichlorobenzene	BQL	5.28	1	4/27/2009
Trichloroethene	BQL	5.28	1	4/27/2009
1,1,1-Trichloroethane	BQL	5.28	1	4/27/2009
1,1,2-Trichloroethane	BQL	5.28	1	4/27/2009
Trichlorofluoromethane	BQL	5.28	1	4/27/2009
1,2,3-Trichloropropane	BQL	5.28	1	4/27/2009
1,2,4-Trimethylbenzene	BQL	5.28	1	4/27/2009
1,3,5-Trimethylbenzene	BQL	5.28	1	4/27/2009
Vinyl chloride	BQL	5.28	1	4/27/2009
m-,p-Xylene	BQL	10.6	1	4/27/2009
o-Xylene	BQL	5.28	1	4/27/2009

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	50	63.5	127
Toluene-d8	50	51.2	102
4-Bromofluorobenzene	50	44.8	90

Comments:**Flags:**

BQL = Below Quantitation Limits.

Analyst: 

Reviewed By: 

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: USTM234-S003
 Client Project ID: CTO 003
 Lab Sample ID G649-140-3A
 Lab Project ID: G649-140
 Report Basis: Dry Weight

Analyzed By: MJC
 Date Collected: 04-24-2009 08:45
 Date Received: 4/25/2009
 Matrix: Soil
 Sample Amount: 7.30 g
 %Solids: 72.6

Report Name Compound	Result UG/KG	Quantitation Limit UG/KG	Dilution Factor	Date Analyzed
Acetone	BQL	47.2	1	4/27/2009
Benzene	BQL	4.72	1	4/27/2009
Bromobenzene	BQL	4.72	1	4/27/2009
Bromochloromethane	BQL	4.72	1	4/27/2009
Bromodichloromethane	BQL	4.72	1	4/27/2009
Bromoform	BQL	4.72	1	4/27/2009
Bromomethane	BQL	4.72	1	4/27/2009
2-Butanone	BQL	23.6	1	4/27/2009
n-Butylbenzene	BQL	4.72	1	4/27/2009
sec-Butylbenzene	BQL	4.72	1	4/27/2009
tert-Butylbenzene	BQL	4.72	1	4/27/2009
Carbon disulfide	BQL	4.72	1	4/27/2009
Carbon tetrachloride	BQL	4.72	1	4/27/2009
Chlorobenzene	BQL	4.72	1	4/27/2009
Chloroethane	BQL	4.72	1	4/27/2009
Chloroform	BQL	4.72	1	4/27/2009
Chloromethane	BQL	4.72	1	4/27/2009
2-Chlorotoluene	BQL	4.72	1	4/27/2009
4-Chlorotoluene	BQL	4.72	1	4/27/2009
Dibromochloromethane	BQL	4.72	1	4/27/2009
1,2-Dibromo-3-chloropropane	BQL	23.6	1	4/27/2009
Dibromomethane	BQL	4.72	1	4/27/2009
1,2-Dibromoethane (EDB)	BQL	4.72	1	4/27/2009
1,2-Dichlorobenzene	BQL	4.72	1	4/27/2009
1,3-Dichlorobenzene	BQL	4.72	1	4/27/2009
1,4-Dichlorobenzene	BQL	4.72	1	4/27/2009
trans-1,4-Dichloro-2-butene	BQL	23.6	1	4/27/2009
1,1-Dichloroethane	BQL	4.72	1	4/27/2009
1,1-Dichloroethene	BQL	4.72	1	4/27/2009
1,2-Dichloroethane	BQL	4.72	1	4/27/2009
cis-1,2-Dichloroethene	BQL	4.72	1	4/27/2009
trans-1,2-dichloroethene	BQL	4.72	1	4/27/2009
1,2-Dichloropropane	BQL	4.72	1	4/27/2009
1,3-Dichloropropane	BQL	4.72	1	4/27/2009
2,2-Dichloropropane	BQL	4.72	1	4/27/2009
1,1-Dichloropropene	BQL	4.72	1	4/27/2009
cis-1,3-Dichloropropene	BQL	4.72	1	4/27/2009
trans-1,3-Dichloropropene	BQL	4.72	1	4/27/2009
Dichlorodifluoromethane	BQL	4.72	1	4/27/2009
Diisopropyl ether (DIPE)	BQL	4.72	1	4/27/2009
Ethylbenzene	BQL	4.72	1	4/27/2009

SGS Environmental Services, Inc.

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: USTM234-S003
Client Project ID: CTO 003
Lab Sample ID G649-140-3A
Lab Project ID: G649-140
Report Basis: Dry Weight

Analyzed By: MJC
Date Collected: 04-24-2009 08:45
Date Received: 4/25/2009
Matrix: Soil
Sample Amount: 7.30 g
%Solids: 72.6

Report Name Compound	Result UG/KG	Quantitation Limit UG/KG	Dilution Factor	Date Analyzed
Hexachlorobutadiene	BQL	4.72	1	4/27/2009
2-Hexanone	BQL	11.8	1	4/27/2009
Iodomethane	BQL	4.72	1	4/27/2009
Isopropylbenzene	BQL	4.72	1	4/27/2009
4-Isopropyltoluene	BQL	4.72	1	4/27/2009
Methylene chloride	BQL	18.9	1	4/27/2009
4-Methyl-2-pentanone	BQL	11.8	1	4/27/2009
Methyl-tert-butyl ether (MTBE)	BQL	4.72	1	4/27/2009
Naphthalene	BQL	4.72	1	4/27/2009
n-Propyl benzene	BQL	4.72	1	4/27/2009
Styrene	BQL	4.72	1	4/27/2009
1,1,1,2-Tetrachloroethane	BQL	4.72	1	4/27/2009
1,1,2,2-Tetrachloroethane	BQL	4.72	1	4/27/2009
Tetrachloroethene	BQL	4.72	1	4/27/2009
Toluene	BQL	4.72	1	4/27/2009
1,2,3-Trichlorobenzene	BQL	4.72	1	4/27/2009
1,2,4-Trichlorobenzene	BQL	4.72	1	4/27/2009
Trichloroethene	BQL	4.72	1	4/27/2009
1,1,1-Trichloroethane	BQL	4.72	1	4/27/2009
1,1,2-Trichloroethane	BQL	4.72	1	4/27/2009
Trichlorofluoromethane	BQL	4.72	1	4/27/2009
1,2,3-Trichloropropane	BQL	4.72	1	4/27/2009
1,2,4-Trimethylbenzene	BQL	4.72	1	4/27/2009
1,3,5-Trimethylbenzene	BQL	4.72	1	4/27/2009
Vinyl chloride	BQL	4.72	1	4/27/2009
m-,p-Xylene	BQL	9.43	1	4/27/2009
o-Xylene	BQL	4.72	1	4/27/2009

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	50	63.2	126
Toluene-d8	50	50.8	102
4-Bromofluorobenzene	50	44.1	88

Comments:

Flags:

BQL = Below Quantitation Limits.

Analyst: 2/

Reviewed By: [Signature]

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: USTM234-S004
 Client Project ID: CTO 003
 Lab Sample ID G649-140-4A
 Lab Project ID: G649-140
 Report Basis: Dry Weight

Analyzed By: MJC
 Date Collected: 04-23-2009 14:23
 Date Received: 4/25/2009
 Matrix: Soil
 Sample Amount: 6.5 g
 %Solids: 73.9

Report Name Compound	Result UG/KG	Quantitation Limit UG/KG	Dilution Factor	Date Analyzed
Acetone	BQL	52.0	1	4/27/2009
Benzene	BQL	5.20	1	4/27/2009
Bromobenzene	BQL	5.20	1	4/27/2009
Bromochloromethane	BQL	5.20	1	4/27/2009
Bromodichloromethane	BQL	5.20	1	4/27/2009
Bromoform	BQL	5.20	1	4/27/2009
Bromomethane	BQL	5.20	1	4/27/2009
2-Butanone	BQL	26.0	1	4/27/2009
n-Butylbenzene	BQL	5.20	1	4/27/2009
sec-Butylbenzene	BQL	5.20	1	4/27/2009
tert-Butylbenzene	BQL	5.20	1	4/27/2009
Carbon disulfide	BQL	5.20	1	4/27/2009
Carbon tetrachloride	BQL	5.20	1	4/27/2009
Chlorobenzene	BQL	5.20	1	4/27/2009
Chloroethane	BQL	5.20	1	4/27/2009
Chloroform	BQL	5.20	1	4/27/2009
Chloromethane	BQL	5.20	1	4/27/2009
2-Chlorotoluene	BQL	5.20	1	4/27/2009
4-Chlorotoluene	BQL	5.20	1	4/27/2009
Dibromochloromethane	BQL	5.20	1	4/27/2009
1,2-Dibromo-3-chloropropane	BQL	26.0	1	4/27/2009
Dibromomethane	BQL	5.20	1	4/27/2009
1,2-Dibromoethane (EDB)	BQL	5.20	1	4/27/2009
1,2-Dichlorobenzene	BQL	5.20	1	4/27/2009
1,3-Dichlorobenzene	BQL	5.20	1	4/27/2009
1,4-Dichlorobenzene	BQL	5.20	1	4/27/2009
trans-1,4-Dichloro-2-butene	BQL	26.0	1	4/27/2009
1,1-Dichloroethane	BQL	5.20	1	4/27/2009
1,1-Dichloroethene	BQL	5.20	1	4/27/2009
1,2-Dichloroethane	BQL	5.20	1	4/27/2009
cis-1,2-Dichloroethene	BQL	5.20	1	4/27/2009
trans-1,2-dichloroethene	BQL	5.20	1	4/27/2009
1,2-Dichloropropane	BQL	5.20	1	4/27/2009
1,3-Dichloropropane	BQL	5.20	1	4/27/2009
2,2-Dichloropropane	BQL	5.20	1	4/27/2009
1,1-Dichloropropene	BQL	5.20	1	4/27/2009
cis-1,3-Dichloropropene	BQL	5.20	1	4/27/2009
trans-1,3-Dichloropropene	BQL	5.20	1	4/27/2009
Dichlorodifluoromethane	BQL	5.20	1	4/27/2009
Diisopropyl ether (DIPE)	BQL	5.20	1	4/27/2009
Ethylbenzene	BQL	5.20	1	4/27/2009

SGS Environmental Services, Inc.

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: USTM234-S004
Client Project ID: CTO 003
Lab Sample ID G649-140-4A
Lab Project ID: G649-140
Report Basis: Dry Weight

Analyzed By: MJC
Date Collected: 04-23-2009 14:23
Date Received: 4/25/2009
Matrix: Soil
Sample Amount: 6.5 g
%Solids: 73.9

Report Name Compound	Result UG/KG	Quantitation Limit UG/KG	Dilution Factor	Date Analyzed
Hexachlorobutadiene	BQL	5.20	1	4/27/2009
2-Hexanone	BQL	13.0	1	4/27/2009
Iodomethane	BQL	5.20	1	4/27/2009
Isopropylbenzene	BQL	5.20	1	4/27/2009
4-Isopropyltoluene	BQL	5.20	1	4/27/2009
Methylene chloride	BQL	20.8	1	4/27/2009
4-Methyl-2-pentanone	BQL	13.0	1	4/27/2009
Methyl-tert-butyl ether (MTBE)	BQL	5.20	1	4/27/2009
Naphthalene	BQL	5.20	1	4/27/2009
n-Propyl benzene	BQL	5.20	1	4/27/2009
Styrene	BQL	5.20	1	4/27/2009
1,1,1,2-Tetrachloroethane	BQL	5.20	1	4/27/2009
1,1,2,2-Tetrachloroethane	BQL	5.20	1	4/27/2009
Tetrachloroethene	BQL	5.20	1	4/27/2009
Toluene	BQL	5.20	1	4/27/2009
1,2,3-Trichlorobenzene	BQL	5.20	1	4/27/2009
1,2,4-Trichlorobenzene	BQL	5.20	1	4/27/2009
Trichloroethene	BQL	5.20	1	4/27/2009
1,1,1-Trichloroethane	BQL	5.20	1	4/27/2009
1,1,2-Trichloroethane	BQL	5.20	1	4/27/2009
Trichlorofluoromethane	BQL	5.20	1	4/27/2009
1,2,3-Trichloropropane	BQL	5.20	1	4/27/2009
1,2,4-Trimethylbenzene	BQL	5.20	1	4/27/2009
1,3,5-Trimethylbenzene	BQL	5.20	1	4/27/2009
Vinyl chloride	BQL	5.20	1	4/27/2009
m-,p-Xylene	BQL	10.4	1	4/27/2009
o-Xylene	BQL	5.20	1	4/27/2009

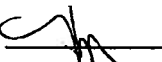
	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	50	64.1	128
Toluene-d8	50	50.8	102
4-Bromofluorobenzene	50	44.3	89

Comments:

Flags:

BQL = Below Quantitation Limits.

Analyst: 

Reviewed By: 

SGS Environmental Services, Inc.

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: Trip Blank
Client Project ID: CTO 003
Lab Sample ID G649-140-5A
Lab Project ID: G649-140
Report Basis: 0.0

Analyzed By: MJC
Date Collected: 04-24-2009 00:00
Date Received: 4/25/2009
Matrix: Soil
Sample Amount: 5 g
%Solids: 100.0

Report Name Compound	Result UG/KG	Quantitation Limit UG/KG	Dilution Factor	Date Analyzed
Acetone	BQL	50.0	1	4/27/2009
Benzene	BQL	5.00	1	4/27/2009
Bromobenzene	BQL	5.00	1	4/27/2009
Bromochloromethane	BQL	5.00	1	4/27/2009
Bromodichloromethane	BQL	5.00	1	4/27/2009
Bromoform	BQL	5.00	1	4/27/2009
Bromomethane	BQL	5.00	1	4/27/2009
2-Butanone	BQL	25.0	1	4/27/2009
n-Butylbenzene	BQL	5.00	1	4/27/2009
sec-Butylbenzene	BQL	5.00	1	4/27/2009
tert-Butylbenzene	BQL	5.00	1	4/27/2009
Carbon disulfide	BQL	5.00	1	4/27/2009
Carbon tetrachloride	BQL	5.00	1	4/27/2009
Chlorobenzene	BQL	5.00	1	4/27/2009
Chloroethane	BQL	5.00	1	4/27/2009
Chloroform	BQL	5.00	1	4/27/2009
Chloromethane	BQL	5.00	1	4/27/2009
2-Chlorotoluene	BQL	5.00	1	4/27/2009
4-Chlorotoluene	BQL	5.00	1	4/27/2009
Dibromochloromethane	BQL	5.00	1	4/27/2009
1,2-Dibromo-3-chloropropane	BQL	25.0	1	4/27/2009
Dibromomethane	BQL	5.00	1	4/27/2009
1,2-Dibromoethane (EDB)	BQL	5.00	1	4/27/2009
1,2-Dichlorobenzene	BQL	5.00	1	4/27/2009
1,3-Dichlorobenzene	BQL	5.00	1	4/27/2009
1,4-Dichlorobenzene	BQL	5.00	1	4/27/2009
trans-1,4-Dichloro-2-butene	BQL	25.0	1	4/27/2009
1,1-Dichloroethane	BQL	5.00	1	4/27/2009
1,1-Dichloroethene	BQL	5.00	1	4/27/2009
1,2-Dichloroethane	BQL	5.00	1	4/27/2009
cis-1,2-Dichloroethene	BQL	5.00	1	4/27/2009
trans-1,2-dichloroethene	BQL	5.00	1	4/27/2009
1,2-Dichloropropane	BQL	5.00	1	4/27/2009
1,3-Dichloropropane	BQL	5.00	1	4/27/2009
2,2-Dichloropropane	BQL	5.00	1	4/27/2009
1,1-Dichloropropene	BQL	5.00	1	4/27/2009
cis-1,3-Dichloropropene	BQL	5.00	1	4/27/2009
trans-1,3-Dichloropropene	BQL	5.00	1	4/27/2009
Dichlorodifluoromethane	BQL	5.00	1	4/27/2009
Diisopropyl ether (DIPE)	BQL	5.00	1	4/27/2009
Ethylbenzene	BQL	5.00	1	4/27/2009

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: Trip Blank
 Client Project ID: CTO 003
 Lab Sample ID G649-140-5A
 Lab Project ID: G649-140
 Report Basis: 0.0

Analyzed By: MJC
 Date Collected: 04-24-2009 00:00
 Date Received: 4/25/2009
 Matrix: Soil
 Sample Amount: 5 g
 %Solids: 100.0

Report Name Compound	Result UG/KG	Quantitation Limit UG/KG	Dilution Factor	Date Analyzed
Hexachlorobutadiene	BQL	5.00	1	4/27/2009
2-Hexanone	BQL	12.5	1	4/27/2009
Iodomethane	BQL	5.00	1	4/27/2009
Isopropylbenzene	BQL	5.00	1	4/27/2009
4-Isopropyltoluene	BQL	5.00	1	4/27/2009
Methylene chloride	BQL	20.0	1	4/27/2009
4-Methyl-2-pentanone	BQL	12.5	1	4/27/2009
Methyl-tert-butyl ether (MTBE)	BQL	5.00	1	4/27/2009
Naphthalene	BQL	5.00	1	4/27/2009
n-Propyl benzene	BQL	5.00	1	4/27/2009
Styrene	BQL	5.00	1	4/27/2009
1,1,1,2-Tetrachloroethane	BQL	5.00	1	4/27/2009
1,1,2,2-Tetrachloroethane	BQL	5.00	1	4/27/2009
Tetrachloroethene	BQL	5.00	1	4/27/2009
Toluene	BQL	5.00	1	4/27/2009
1,2,3-Trichlorobenzene	BQL	5.00	1	4/27/2009
1,2,4-Trichlorobenzene	BQL	5.00	1	4/27/2009
Trichloroethene	BQL	5.00	1	4/27/2009
1,1,1-Trichloroethane	BQL	5.00	1	4/27/2009
1,1,2-Trichloroethane	BQL	5.00	1	4/27/2009
Trichlorofluoromethane	BQL	5.00	1	4/27/2009
1,2,3-Trichloropropane	BQL	5.00	1	4/27/2009
1,2,4-Trimethylbenzene	BQL	5.00	1	4/27/2009
1,3,5-Trimethylbenzene	BQL	5.00	1	4/27/2009
Vinyl chloride	BQL	5.00	1	4/27/2009
m-,p-Xylene	BQL	10.0	1	4/27/2009
o-Xylene	BQL	5.00	1	4/27/2009

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	50	65.7	131
Toluene-d8	50	50.9	102
4-Bromofluorobenzene	50	45.8	92

Comments:**Flags:**

BQL = Below Quantitation Limits.

Analyst: 3

Reviewed By: CM

SGS Environmental Services, Inc.

Results for Semivolatiles by GCMS 8270

Client Sample ID: USTM234-S001
Client Project ID: CTO 003
Lab Sample ID: G649-140-1H
Lab Project ID: G649-140
Report Basis: Dry weight
Initial Weight: 32.35 g

Analyzed By: DCS
Date Collected: 4/23/2009 9:16
Date Received: 4/25/2009
Date Extracted: 4/27/2009
Matrix: Soil
% Solids: 69.73

Compound	Result ug/Kg	RL ug/Kg	Dilution Factor	Date Analyzed
Acenaphthene	BQL	443	1	4/27/2009
Acenaphthylene	BQL	443	1	4/27/2009
Anthracene	BQL	443	1	4/27/2009
Benzo[a]anthracene	BQL	443	1	4/27/2009
Benzo[a]pyrene	BQL	443	1	4/27/2009
Benzo[b]fluoranthene	BQL	443	1	4/27/2009
Benzo[g,h,i]perylene	BQL	443	1	4/27/2009
Benzo[k]fluoranthene	BQL	443	1	4/27/2009
Benzoic Acid	BQL	2220	1	4/27/2009
Bis(2-chloroethoxy)methane	BQL	443	1	4/27/2009
Bis(2-chloroethyl)ether	BQL	443	1	4/27/2009
Bis(2-chloroisopropyl)ether	BQL	443	1	4/27/2009
Bis(2-ethylhexyl)phthalate	BQL	443	1	4/27/2009
4-bromophenyl phenyl ether	BQL	443	1	4/27/2009
Butylbenzylphthalate	BQL	443	1	4/27/2009
2-Chloronaphthalene	BQL	443	1	4/27/2009
2-Chlorophenol	BQL	443	1	4/27/2009
4-Chloro-3-methylphenol	BQL	443	1	4/27/2009
4-Chloroaniline	BQL	2220	1	4/27/2009
4-Chlorophenyl phenyl ether	BQL	443	1	4/27/2009
Chrysene	BQL	443	1	4/27/2009
Dibenzo[a,h]anthracene	BQL	443	1	4/27/2009
Dibenzofuran	BQL	443	1	4/27/2009
Di-n-Butylphthalate	BQL	443	1	4/27/2009
1,2-Dichlorobenzene	BQL	443	1	4/27/2009
1,3-Dichlorobenzene	BQL	443	1	4/27/2009
1,4-Dichlorobenzene	BQL	443	1	4/27/2009
3,3'-Dichlorobenzidine	BQL	887	1	4/27/2009
2,4-Dichlorophenol	BQL	443	1	4/27/2009
Diethylphthalate	BQL	443	1	4/27/2009
Dimethylphthalate	BQL	443	1	4/27/2009
2,4-Dimethylphenol	BQL	443	1	4/27/2009
Di-n-octylphthalate	BQL	443	1	4/27/2009
4,6-Dinitro-2-methylphenol	BQL	2220	1	4/27/2009
2,4-Dinitrophenol	BQL	2220	1	4/27/2009
2,4-Dinitrotoluene	BQL	443	1	4/27/2009
2,6-Dinitrotoluene	BQL	443	1	4/27/2009
Fluoranthene	BQL	443	1	4/27/2009
Fluorene	BQL	443	1	4/27/2009
Hexachlorobenzene	BQL	443	1	4/27/2009
Hexachlorobutadiene	BQL	443	1	4/27/2009
Hexachlorocyclopentadiene	BQL	887	1	4/27/2009
Hexachloroethane	BQL	443	1	4/27/2009
Indeno(1,2,3-c,d)pyrene	BQL	443	1	4/27/2009
Isophorone	BQL	443	1	4/27/2009
2-Methylnaphthalene	BQL	443	1	4/27/2009
2-Methylphenol	BQL	443	1	4/27/2009

SGS Environmental Services, Inc.

Results for Semivolatiles by GCMS 8270

Client Sample ID: USTM234-S001
Client Project ID: CTO 003
Lab Sample ID: G649-140-1H
Lab Project ID: G649-140
Report Basis: Dry weight
Initial Weight: 32.35 g

Analyzed By: DCS
Date Collected: 4/23/2009 9:16
Date Received: 4/25/2009
Date Extracted: 4/27/2009
Matrix: Soil
% Solids: 69.73

Compound	Result ug/Kg	RL ug/Kg	Dilution Factor	Date Analyzed
3- & 4-Methylphenol	BQL	443	1	4/27/2009
Naphthalene	BQL	443	1	4/27/2009
2-Nitroaniline	BQL	443	1	4/27/2009
3-Nitroaniline	BQL	2220	1	4/27/2009
4-Nitroaniline	BQL	2220	1	4/27/2009
Nitrobenzene	BQL	443	1	4/27/2009
2-Nitrophenol	BQL	443	1	4/27/2009
4-Nitrophenol	BQL	2220	1	4/27/2009
Diphenylamine *	BQL	443	1	4/27/2009
Pentachlorophenol	BQL	2220	1	4/27/2009
Phenanthrene	457	443	1	4/27/2009
Phenol	BQL	443	1	4/27/2009
Pyrene	BQL	443	1	4/27/2009
1,2,4-Trichlorobenzene	BQL	443	1	4/27/2009
2,4,5-Trichlorophenol	BQL	443	1	4/27/2009
2,4,6-Trichlorophenol	BQL	443	1	4/27/2009

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	9	90
2-Fluorophenol	10	10.3	103
Nitrobenzene-d5	10	10.2	102
Phenol-d6	10	10.2	102
2,4,6-Tribromophenol	10	9	90
4-Terphenyl-d14	10	11.7	117

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

J = Detected below the quantitation limit.

Reviewed By: DS

SGS Environmental Services, Inc.

Results for Semivolatiles by GCMS 8270

Client Sample ID: USTM234-S002
 Client Project ID: CTO 003
 Lab Sample ID: G649-140-2H
 Lab Project ID: G649-140
 Report Basis: Dry weight
 Initial Weight: 32.78 g

Analyzed By: DCS
 Date Collected: 4/24/2009 10:00
 Date Received: 4/25/2009
 Date Extracted: 4/27/2009
 Matrix: Soil
 % Solids: 72.63

Compound	Result ug/Kg	RL ug/Kg	Dilution Factor	Date Analyzed
Acenaphthene	BQL	420	1	4/27/2009
Acenaphthylene	BQL	420	1	4/27/2009
Anthracene	BQL	420	1	4/27/2009
Benzo[a]anthracene	BQL	420	1	4/27/2009
Benzo[a]pyrene	BQL	420	1	4/27/2009
Benzo[b]fluoranthene	BQL	420	1	4/27/2009
Benzo[g,h,i]perylene	BQL	420	1	4/27/2009
Benzo[k]fluoranthene	BQL	420	1	4/27/2009
Benzoic Acid	BQL	2100	1	4/27/2009
Bis(2-chloroethoxy)methane	BQL	420	1	4/27/2009
Bis(2-chloroethyl)ether	BQL	420	1	4/27/2009
Bis(2-chloroisopropyl)ether	BQL	420	1	4/27/2009
Bis(2-ethylhexyl)phthalate	BQL	420	1	4/27/2009
4-bromophenyl phenyl ether	BQL	420	1	4/27/2009
Butylbenzylphthalate	BQL	420	1	4/27/2009
2-Chloronaphthalene	BQL	420	1	4/27/2009
2-Chlorophenol	BQL	420	1	4/27/2009
4-Chloro-3-methylphenol	BQL	420	1	4/27/2009
4-Chloroaniline	BQL	2100	1	4/27/2009
4-Chlorophenyl phenyl ether	BQL	420	1	4/27/2009
Chrysene	BQL	420	1	4/27/2009
Dibenzo[a,h]anthracene	BQL	420	1	4/27/2009
Dibenzofuran	BQL	420	1	4/27/2009
Di-n-Butylphthalate	BQL	420	1	4/27/2009
1,2-Dichlorobenzene	BQL	420	1	4/27/2009
1,3-Dichlorobenzene	BQL	420	1	4/27/2009
1,4-Dichlorobenzene	BQL	420	1	4/27/2009
3,3'-Dichlorobenzidine	BQL	840	1	4/27/2009
2,4-Dichlorophenol	BQL	420	1	4/27/2009
Diethylphthalate	BQL	420	1	4/27/2009
Dimethylphthalate	BQL	420	1	4/27/2009
2,4-Dimethylphenol	BQL	420	1	4/27/2009
Di-n-octylphthalate	BQL	420	1	4/27/2009
4,6-Dinitro-2-methylphenol	BQL	2100	1	4/27/2009
2,4-Dinitrophenol	BQL	2100	1	4/27/2009
2,4-Dinitrotoluene	BQL	420	1	4/27/2009
2,6-Dinitrotoluene	BQL	420	1	4/27/2009
Fluoranthene	BQL	420	1	4/27/2009
Fluorene	BQL	420	1	4/27/2009
Hexachlorobenzene	BQL	420	1	4/27/2009
Hexachlorobutadiene	BQL	420	1	4/27/2009
Hexachlorocyclopentadiene	BQL	840	1	4/27/2009
Hexachloroethane	BQL	420	1	4/27/2009
Indeno(1,2,3-c,d)pyrene	BQL	420	1	4/27/2009
Isophorone	BQL	420	1	4/27/2009
2-Methylnaphthalene	BQL	420	1	4/27/2009
2-Methylphenol	BQL	420	1	4/27/2009

SGS Environmental Services, Inc.

Results for Semivolatiles by GCMS 8270

Client Sample ID: USTM234-S002
Client Project ID: CTO 003
Lab Sample ID: G649-140-2H
Lab Project ID: G649-140
Report Basis: Dry weight
Initial Weight: 32.78 g

Analyzed By: DCS
Date Collected: 4/24/2009 10:00
Date Received: 4/25/2009
Date Extracted: 4/27/2009
Matrix: Soil
% Solids: 72.63

Compound	Result ug/Kg	RL ug/Kg	Dilution Factor	Date Analyzed
3- & 4-Methylphenol	BQL	420	1	4/27/2009
Naphthalene	BQL	420	1	4/27/2009
2-Nitroaniline	BQL	420	1	4/27/2009
3-Nitroaniline	BQL	2100	1	4/27/2009
4-Nitroaniline	BQL	2100	1	4/27/2009
Nitrobenzene	BQL	420	1	4/27/2009
2-Nitrophenol	BQL	420	1	4/27/2009
4-Nitrophenol	BQL	2100	1	4/27/2009
Diphenylamine *	BQL	420	1	4/27/2009
Pentachlorophenol	BQL	2100	1	4/27/2009
Phenanthrene	BQL	420	1	4/27/2009
Phenol	BQL	420	1	4/27/2009
Pyrene	BQL	420	1	4/27/2009
1,2,4-Trichlorobenzene	BQL	420	1	4/27/2009
2,4,5-Trichlorophenol	BQL	420	1	4/27/2009
2,4,6-Trichlorophenol	BQL	420	1	4/27/2009

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	9.6	96
2-Fluorophenol	10	10.1	101
Nitrobenzene-d5	10	10.4	104
Phenol-d6	10	9.9	99
2,4,6-Tribromophenol	10	8.4	84
4-Terphenyl-d14	10	11.6	116

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.
J = Detected below the quantitation limit.

Reviewed By: DS

SGS Environmental Services, Inc.

Results for Semivolatiles
by GCMS 8270

Client Sample ID: USTM234-S003
Client Project ID: CTO 003
Lab Sample ID: G649-140-3H
Lab Project ID: G649-140
Report Basis: Dry weight
Initial Weight: 32.81 g

Analyzed By: DCS
Date Collected: 4/24/2009 8:45
Date Received: 4/25/2009
Date Extracted: 4/27/2009
Matrix: Soil
% Solids: 72.62

Compound	Result ug/Kg	RL ug/Kg	Dilution Factor	Date Analyzed
Acenaphthene	BQL	420	1	4/27/2009
Acenaphthylene	BQL	420	1	4/27/2009
Anthracene	BQL	420	1	4/27/2009
Benzo[a]anthracene	BQL	420	1	4/27/2009
Benzo[a]pyrene	BQL	420	1	4/27/2009
Benzo[b]fluoranthene	BQL	420	1	4/27/2009
Benzo[g,h,i]perylene	BQL	420	1	4/27/2009
Benzo[k]fluoranthene	BQL	420	1	4/27/2009
Benzoic Acid	BQL	2100	1	4/27/2009
Bis(2-chloroethoxy)methane	BQL	420	1	4/27/2009
Bis(2-chloroethyl)ether	BQL	420	1	4/27/2009
Bis(2-chloroisopropyl)ether	BQL	420	1	4/27/2009
Bis(2-ethylhexyl)phthalate	BQL	420	1	4/27/2009
4-bromophenyl phenyl ether	BQL	420	1	4/27/2009
Butylbenzylphthalate	BQL	420	1	4/27/2009
2-Chloronaphthalene	BQL	420	1	4/27/2009
2-Chlorophenol	BQL	420	1	4/27/2009
4-Chloro-3-methylphenol	BQL	420	1	4/27/2009
4-Chloroaniline	BQL	2100	1	4/27/2009
4-Chlorophenyl phenyl ether	BQL	420	1	4/27/2009
Chrysene	BQL	420	1	4/27/2009
Dibenzo[a,h]anthracene	BQL	420	1	4/27/2009
Dibenzofuran	BQL	420	1	4/27/2009
Di-n-Butylphthalate	BQL	420	1	4/27/2009
1,2-Dichlorobenzene	BQL	420	1	4/27/2009
1,3-Dichlorobenzene	BQL	420	1	4/27/2009
1,4-Dichlorobenzene	BQL	420	1	4/27/2009
3,3'-Dichlorobenzidine	BQL	839	1	4/27/2009
2,4-Dichlorophenol	BQL	420	1	4/27/2009
Diethylphthalate	BQL	420	1	4/27/2009
Dimethylphthalate	BQL	420	1	4/27/2009
2,4-Dimethylphenol	BQL	420	1	4/27/2009
Di-n-octylphthalate	BQL	420	1	4/27/2009
4,6-Dinitro-2-methylphenol	BQL	2100	1	4/27/2009
2,4-Dinitrophenol	BQL	2100	1	4/27/2009
2,4-Dinitrotoluene	BQL	420	1	4/27/2009
2,6-Dinitrotoluene	BQL	420	1	4/27/2009
Fluoranthene	BQL	420	1	4/27/2009
Fluorene	BQL	420	1	4/27/2009
Hexachlorobenzene	BQL	420	1	4/27/2009
Hexachlorobutadiene	BQL	420	1	4/27/2009
Hexachlorocyclopentadiene	BQL	839	1	4/27/2009
Hexachloroethane	BQL	420	1	4/27/2009
Indeno(1,2,3-c,d)pyrene	BQL	420	1	4/27/2009
Isophorone	BQL	420	1	4/27/2009
2-Methylnaphthalene	BQL	420	1	4/27/2009
2-Methylphenol	BQL	420	1	4/27/2009

SGS Environmental Services, Inc.

Results for Semivolatiles by GCMS 8270

Client Sample ID: USTM234-S003
Client Project ID: CTO 003
Lab Sample ID: G649-140-3H
Lab Project ID: G649-140
Report Basis: Dry weight
Initial Weight: 32.81 g

Analyzed By: DCS
Date Collected: 4/24/2009 8:45
Date Received: 4/25/2009
Date Extracted: 4/27/2009
Matrix: Soil
% Solids: 72.62

Compound	Result ug/Kg	RL ug/Kg	Dilution Factor	Date Analyzed
3- & 4-Methylphenol	BQL	420	1	4/27/2009
Naphthalene	BQL	420	1	4/27/2009
2-Nitroaniline	BQL	420	1	4/27/2009
3-Nitroaniline	BQL	2100	1	4/27/2009
4-Nitroaniline	BQL	2100	1	4/27/2009
Nitrobenzene	BQL	420	1	4/27/2009
2-Nitrophenol	BQL	420	1	4/27/2009
4-Nitrophenol	BQL	2100	1	4/27/2009
Diphenylamine *	BQL	420	1	4/27/2009
Pentachlorophenol	BQL	2100	1	4/27/2009
Phenanthrene	BQL	420	1	4/27/2009
Phenol	BQL	420	1	4/27/2009
Pyrene	BQL	420	1	4/27/2009
1,2,4-Trichlorobenzene	BQL	420	1	4/27/2009
2,4,5-Trichlorophenol	BQL	420	1	4/27/2009
2,4,6-Trichlorophenol	BQL	420	1	4/27/2009

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	10.6	106
2-Fluorophenol	10	10.9	109
Nitrobenzene-d5	10	11.2	112
Phenol-d6	10	10.7	107
2,4,6-Tribromophenol	10	8.9	89
4-Terphenyl-d14	10	13.1	131

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

J = Detected below the quantitation limit.

Reviewed By: DS

SGS Environmental Services, Inc.

Results for Semivolatiles
by GCMS 8270

Client Sample ID: USTM234-S004
Client Project ID: CTO 003
Lab Sample ID: G649-140-4H
Lab Project ID: G649-140
Report Basis: Dry weight
Initial Weight: 34.01 g

Analyzed By: DCS
Date Collected: 4/23/2009 14:23
Date Received: 4/25/2009
Date Extracted: 4/27/2009
Matrix: Soil
% Solids: 73.93

Compound	Result ug/Kg	RL ug/Kg	Dilution Factor	Date Analyzed
Acenaphthene	BQL	398	1	4/27/2009
Acenaphthylene	BQL	398	1	4/27/2009
Anthracene	BQL	398	1	4/27/2009
Benzo[a]anthracene	BQL	398	1	4/27/2009
Benzo[a]pyrene	BQL	398	1	4/27/2009
Benzo[b]fluoranthene	BQL	398	1	4/27/2009
Benzo[g,h,i]perylene	BQL	398	1	4/27/2009
Benzo[k]fluoranthene	BQL	398	1	4/27/2009
Benzoic Acid	BQL	1990	1	4/27/2009
Bis(2-chloroethoxy)methane	BQL	398	1	4/27/2009
Bis(2-chloroethyl)ether	BQL	398	1	4/27/2009
Bis(2-chloroisopropyl)ether	BQL	398	1	4/27/2009
Bis(2-ethylhexyl)phthalate	BQL	398	1	4/27/2009
4-bromophenyl phenyl ether	BQL	398	1	4/27/2009
Butylbenzylphthalate	BQL	398	1	4/27/2009
2-Chloronaphthalene	BQL	398	1	4/27/2009
2-Chlorophenol	BQL	398	1	4/27/2009
4-Chloro-3-methylphenol	BQL	398	1	4/27/2009
4-Chloroaniline	BQL	1990	1	4/27/2009
4-Chlorophenyl phenyl ether	BQL	398	1	4/27/2009
Chrysene	BQL	398	1	4/27/2009
Dibenzo[a,h]anthracene	BQL	398	1	4/27/2009
Dibenzofuran	BQL	398	1	4/27/2009
Di-n-Butylphthalate	BQL	398	1	4/27/2009
1,2-Dichlorobenzene	BQL	398	1	4/27/2009
1,3-Dichlorobenzene	BQL	398	1	4/27/2009
1,4-Dichlorobenzene	BQL	398	1	4/27/2009
3,3'-Dichlorobenzidine	BQL	795	1	4/27/2009
2,4-Dichlorophenol	BQL	398	1	4/27/2009
Diethylphthalate	BQL	398	1	4/27/2009
Dimethylphthalate	BQL	398	1	4/27/2009
2,4-Dimethylphenol	BQL	398	1	4/27/2009
Di-n-octylphthalate	BQL	398	1	4/27/2009
4,6-Dinitro-2-methylphenol	BQL	1990	1	4/27/2009
2,4-Dinitrophenol	BQL	1990	1	4/27/2009
2,4-Dinitrotoluene	BQL	398	1	4/27/2009
2,6-Dinitrotoluene	BQL	398	1	4/27/2009
Fluoranthene	BQL	398	1	4/27/2009
Fluorene	BQL	398	1	4/27/2009
Hexachlorobenzene	BQL	398	1	4/27/2009
Hexachlorobutadiene	BQL	398	1	4/27/2009
Hexachlorocyclopentadiene	BQL	795	1	4/27/2009
Hexachloroethane	BQL	398	1	4/27/2009
Indeno(1,2,3-c,d)pyrene	BQL	398	1	4/27/2009
Isophorone	2440	398	1	4/27/2009
2-Methylnaphthalene	BQL	398	1	4/27/2009
2-Methylphenol	BQL	398	1	4/27/2009

SGS Environmental Services, Inc.

Results for Semivolatiles by GCMS 8270

Client Sample ID: USTM234-S004
Client Project ID: CTO 003
Lab Sample ID: G649-140-4H
Lab Project ID: G649-140
Report Basis: Dry weight
Initial Weight: 34.01 g

Analyzed By: DCS
Date Collected: 4/23/2009 14:23
Date Received: 4/25/2009
Date Extracted: 4/27/2009
Matrix: Soil
% Solids: 73.93

Compound	Result ug/Kg	RL ug/Kg	Dilution Factor	Date Analyzed
3- & 4-Methylphenol	BQL	398	1	4/27/2009
Naphthalene	BQL	398	1	4/27/2009
2-Nitroaniline	BQL	398	1	4/27/2009
3-Nitroaniline	BQL	1990	1	4/27/2009
4-Nitroaniline	BQL	1990	1	4/27/2009
Nitrobenzene	BQL	398	1	4/27/2009
2-Nitrophenol	BQL	398	1	4/27/2009
4-Nitrophenol	BQL	1990	1	4/27/2009
Diphenylamine *	BQL	398	1	4/27/2009
Pentachlorophenol	BQL	1990	1	4/27/2009
Phenanthrene	BQL	398	1	4/27/2009
Phenol	BQL	398	1	4/27/2009
Pyrene	BQL	398	1	4/27/2009
1,2,4-Trichlorobenzene	BQL	398	1	4/27/2009
2,4,5-Trichlorophenol	BQL	398	1	4/27/2009
2,4,6-Trichlorophenol	BQL	398	1	4/27/2009

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	10.7	107
2-Fluorophenol	10	10.7	107
Nitrobenzene-d5	10	11.2	112
Phenol-d6	10	10.6	106
2,4,6-Tribromophenol	10	9.1	91
4-Terphenyl-d14	10	13	130

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

J = Detected below the quantitation limit.

Reviewed By: DS

6649-140 • West

[illegible]

M-236 SOIL LABORATORY RESULTS



Mr. Shaun Whitworth
Osage of Virginia
2618 A Colley Ave
Norfolk VA 23517

Report Number: G649-137

Client Project: CTO 003

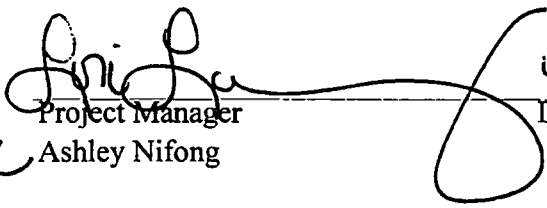
Dear Mr. Whitworth:

Enclosed are the results of the analytical services performed under the referenced project. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of five years in the event they are required for future reference. Any samples submitted to our laboratory will be retained for a maximum of thirty (30) days from the date of this report unless other arrangements are requested.

If there are any questions about the report or the services performed during this project, please call SGS at (910) 350-1903. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS Environmental Services for your analytical services. We look forward to working with you again on any additional analytical needs which you may have.

Sincerely,
SGS Environmental Services, Inc.


Project Manager
for Ashley Nifong

4/6/09
Date

List of Reporting Abbreviations And Data Qualifiers

B = Compound also detected in batch blank

BQL = Below Quantification Limit (RL or MDL)

DF = Dilution Factor

Dup = Duplicate

D = Detected, but RPD is > 40% between results in dual column method.

E = Estimated concentration, exceeds calibration range.

J = Estimated concentration, below calibration range and above MDL

LCS(D) = Laboratory Control Spike (Duplicate)

MDL = Method Detection Limit

MS(D) = Matrix Spike (Duplicate)

PQL = Practical Quantitation Limit

RL/CL = Reporting Limit / Control Limit

RPD = Relative Percent Difference

mg/kg = milligram per kilogram, ppm, parts per million

ug/kg = micrograms per kilogram, ppb, parts per billion

mg/L = milligram per liter, ppm, parts per million

ug/L = micrograms per liter, ppb, parts per billion

% Rec = Percent Recovery

% solids = Percent Solids

Special Notes:

- 1) Metals and mercury samples are digested with a hot block, see the standard operating procedure document for details.
- 2) Uncertainty for all reported data is less than or equal to 30 percent.

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of Virginia

Project Name: CTO 003

Sample Information	
Sample Identification	UST M236-S005
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	03/31/09 10:15
Date Received	04/03/09
Date Extracted	04/03/09
Date Analyzed	04/03/09 15:15 - 04/03/09 15:15
Dry Weight	76.4
Dilution Factor	1 - 1

Analytical Results			
Analyte	Result mg/Kg	Report Limit mg/Kg	Flags
C ₅ -C ₈ Aliphatics**	BQL	10.0	
C ₉ -C ₁₂ Aliphatics**	31.4	10.0	
C ₉ -C ₁₀ Aromatics**	67.7	10.0	
	Percent Recovery	Flags	Limits Lower Upper
Surrogate % Recovery - PID	98.8		70 130
Surrogate % Recovery - FID	111		70 130

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: g649-137-1e	Lab Info: g649-137-1e
FID Info: VP040309/016F0101.D	PID Info: VP040309/016R0101.D

Reviewed By: MFT

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of Virginia

Project Name: CTO 003

Sample Information	
Sample Identification	UST M236-S006
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	04/02/09 11:30
Date Received	04/03/09
Date Extracted	04/03/09
Date Analyzed	04/03/09 13:26 - 04/03/09 13:26
Dry Weight	76.8
Dilution Factor	1 - 1

Analytical Results				
Analyte	Result mg/Kg	Report Limit mg/Kg	Flags	
C ₅ -C ₈ Aliphatics**	BQL	10.0		
C ₉ -C ₁₂ Aliphatics**	BQL	10.0		
C ₉ -C ₁₀ Aromatics**	BQL	10.0		
	Percent Recovery	Flags	Limits Lower Upper	
Surrogate % Recovery - PID	91.1		70	130
Surrogate % Recovery - FID	95.1		70	130

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: g649-137-2e	Lab Info: g649-137-2e
FID Info: VP040309/012F0101.D	PID Info: VP040309/012R0101.D

Reviewed By: MC

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of Virginia

Project Name: CTO 003

Sample Information	
Sample Identification	UST M236-S007
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	04/01/09 15:08
Date Received	04/03/09
Date Extracted	04/03/09
Date Analyzed	04/03/09 14:21 - 04/03/09 14:21
Dry Weight	78.7
Dilution Factor	1 - 1

Analytical Results			
Analyte	Result mg/Kg	Report Limit mg/Kg	Flags
C ₅ -C ₈ Aliphatics**	BQL	10.0	
C ₉ -C ₁₂ Aliphatics**	BQL	10.0	
C ₉ -C ₁₀ Aromatics**	BQL	10.0	
	Percent Recovery	Flags	Limits Lower Upper
Surrogate % Recovery - PID	92.1		70 130
Surrogate % Recovery - FID	96.5		70 130

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: g649-137-3e	Lab Info: g649-137-3e
FID Info: VP040309/014F0101.D	PID Info: VP040309/014R0101.D

Reviewed By: 

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of Virginia

Project Name: CTO 003

Sample Information	
Sample Identification	UST M236-S008
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	04/02/09 11:45
Date Received	04/03/09
Date Extracted	04/03/09
Date Analyzed	04/03/09 14:48 - 04/03/09 14:48
Dry Weight	76.8
Dilution Factor	1 - 1

Analytical Results				
Analyte	Result mg/Kg	Report Limit mg/Kg	Flags	
C ₅ -C ₈ Aliphatics**	BQL	10.0		
C ₉ -C ₁₂ Aliphatics**	BQL	10.0		
C ₉ -C ₁₀ Aromatics**	BQL	10.0		
	Percent Recovery	Flags	Limits Lower Upper	
Surrogate % Recovery - PID	89.8		70	130
Surrogate % Recovery - FID	95.2		70	130

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: g649-137-4e	Lab Info: g649-137-4e
FID Info: VP040309/015F0101.D	PID Info: VP040309/015R0101.D

Reviewed By: 

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of Virginia

Project Name: CTO 003

Sample Information	
Sample Identification	Trip Blanks
Sample Matrix	Soil
Collection Option (for Soil)*	NA
Date Collected	04/02/09 00:00
Date Received	04/03/09
Date Extracted	04/03/09
Date Analyzed	04/03/09 12:59 - 04/03/09 12:59
Dry Weight	100
Dilution Factor	1 - 1

Analytical Results				
Analyte	Result mg/Kg	Report Limit mg/Kg	Flags	
C ₅ -C ₈ Aliphatics**	BQL	10.0		
C ₉ -C ₁₂ Aliphatics**	BQL	10.0		
C ₉ -C ₁₀ Aromatics**	BQL	10.0		
		Percent Recovery	Flags	Limits Lower Upper
Surrogate % Recovery - PID		90.3		70 130
Surrogate % Recovery - FID		93.7		70 130

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: g649-137-5a	Lab Info: g649-137-5a
FID Info: VP040309/011F0101.D	PID Info: VP040309/011R0101.D

Reviewed By: CRS

Attachment 2

VPH Laboratory Reporting Form

Calibration and QA/QC Information

FID Initial Calibration Date: 03/28/09PID Initial Calibration Date: 03/28/09

Calibration Ranges and Limits

Range	MDL		ML		RL	
	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)
C ₅ -C ₈ Aliphatics	2.02	0.175	6.42	0.557	100	10
C ₉ -C ₁₂ Aliphatics	1.51	0.118	4.80	0.375	100	10
C ₉ -C ₁₀ Aromatics	0.902	0.132	2.87	0.420	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR	Method of Quantitation
C ₅ -C ₈ Aliphatics	10	0.8	7.11	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		
C ₉ -C ₁₂ Aliphatics	10	0.8	0.99	Linear Regression
	50	4		
	100	8		
	200	16		
	500	40		
C ₉ -C ₁₀ Aromatics	10	0.8	11.28	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		

Calibration Check Date: 04/03/09Filename: VP040309/002F0101.d

Calibration Check

Range	Levels (µg/L)	Levels (mg/Kg)	%Difference if CF %Drift if LR	Limits
C ₅ -C ₈ Aliphatics	200	16	-16.4 /	±25%
C ₉ -C ₁₂ Aliphatics	200	16	-9.7 /	±25%
C ₉ -C ₁₀ Aromatics	200	16	0.2 /	±25%

MDL = Method Detection Limit

ML = Minimum Limit

RL = Reportable Limit

RPD = Relative Percent Difference

%RSD = Percent Relative Standard Deviation

CCC = Correlation Coefficient of Curve

Attachment 2

VPH Laboratory Reporting Form

Calibration and QA/QC Information

FID Initial Calibration Date:

03/28/09

PID Initial Calibration Date:

03/28/09

Calibration Ranges and Limits

Range	MDL		ML		RL	
	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)
C ₅ -C ₈ Aliphatics	2.02	0.175	6.42	0.557	100	10
C ₉ -C ₁₂ Aliphatics	1.51	0.118	4.80	0.375	100	10
C ₉ -C ₁₀ Aromatics	0.902	0.132	2.87	0.420	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR	Method of Quantitation
C ₅ -C ₈ Aliphatics	10	0.8	7.11	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		
C ₉ -C ₁₂ Aliphatics	10	0.8	0.99	Linear Regression
	50	4		
	100	8		
	200	16		
	500	40		
C ₉ -C ₁₀ Aromatics	10	0.8	11.28	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		

Calibration Check Date:

04/03/09

Filename:

VP040309/023F0101.d

Calibration Check

Range	Levels (µg/L)	Levels (mg/Kg)	%Difference if CF %Drift if LR	Limits
C ₅ -C ₈ Aliphatics	200	16	-16.6 /	±25%
C ₉ -C ₁₂ Aliphatics	200	16	-6.4 /	±25%
C ₉ -C ₁₀ Aromatics	200	16	1.4 /	±25%

MDL = Method Detection Limit

ML = Minimum Limit

RL = Reportable Limit

RPD = Relative Percent Difference

%RSD = Percent Relative Standard Deviation

CCC = Correlation Coefficient of Curve

EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of Virginia

Project Name: CTO 003

Sample Information	
Sample Identification	UST M236-S005
Sample Matrix	Soil
Date Collected	03/31/09 10:15
Date Received	04/03/09
Date Extracted	04/03/09
Date Analyzed	04/06/09 15:01 - 04/06/09 15:30
Dry Weight	76.4
Dilution Factor	1 - 1
Initial weight (g)	12.07
Final Volume (mL)	10.0

Analytical Results			
Analytes**	Result mg/Kg	Report Limit mg/Kg	Flags
C9-C18 Aliphatics	253	10.0	
C19-C36 Aliphatics	28.1	10.0	
C11-C22 Aromatics	115	10.0	

Surrogates	Percent Recovery	Flags	Limits	
			Lower	Upper
Aliphatic (tricosane)	104		40	140
Aromatic (ortho-terphenyl)	72.4		40	140
Fractionation 1 (2-bromonaphthalene)	66.9		40	140
Fractionation 2 (2-fluorobiphenyl)	65.3		40	140

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: G649-137-1H	Lab Info: G649-137-1H
Aliphatic: EP040609/015F1401.D	Aromatic: EP040609/016F1501.D

Reviewed By: 272

EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of Virginia

Project Name: CTO 003

Sample Information	
Sample Identification	UST M236-S006
Sample Matrix	Soil
Date Collected	04/02/09 11:30
Date Received	04/03/09
Date Extracted	04/03/09
Date Analyzed	04/06/09 09:47 - 04/06/09 09:47
Dry Weight	76.8
Dilution Factor	1 - 1
Initial weight (g)	14.06
Final Volume (mL)	10.0

Analytical Results			
Analytes**	Result mg/Kg	Report Limit mg/Kg	Flags
C9-C18 Aliphatics	BQL	10.0	
C19-C36 Aliphatics	BQL	10.0	
C11-C22 Aromatics	BQL	10.0	

Surrogates	Percent Recovery	Flags	Limits	
			Lower	Upper
Aliphatic (tricosane)	99.7		40	140
Aromatic (ortho-terphenyl)	94.9		40	140

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: G649-137-2H	Lab Info: G649-137-2H
Aliphatic: EP040609/004F0301.D	Aromatic: EP040609/004F0301.D

Reviewed By: 

EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of Virginia

Project Name: CTO 003

Sample Information	
Sample Identification	UST M236-S007
Sample Matrix	Soil
Date Collected	04/01/09 15:08
Date Received	04/03/09
Date Extracted	04/03/09
Date Analyzed	04/06/09 10:15 - 04/06/09 10:15
Dry Weight	78.7
Dilution Factor	1 - 1
Initial weight (g)	12.20
Final Volume (mL)	10.0

Analytical Results			
Analytes**	Result mg/Kg	Report Limit mg/Kg	Flags
C9-C18 Aliphatics	BQL	10.0	
C19-C36 Aliphatics	BQL	10.0	
C11-C22 Aromatics	BQL	10.0	

Surrogates	Percent Recovery	Flags	Limits	
			Lower	Upper
Aliphatic (tricosane)	105		40	140
Aromatic (ortho-terphenyl)	104		40	140

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: G649-137-3H	Lab Info: G649-137-3H
Aliphatic: EP040609/005F0401.D	Aromatic: EP040609/005F0401.D

Reviewed By: 

EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of Virginia

Project Name: CTO 003

Sample Information	
Sample Identification	UST M236-S008
Sample Matrix	Soil
Date Collected	04/02/09 11:45
Date Received	04/03/09
Date Extracted	04/03/09
Date Analyzed	04/06/09 10:44 - 04/06/09 10:44
Dry Weight	76.8
Dilution Factor	1 - 1
Initial weight (g)	11.84
Final Volume (mL)	10.0

Analytical Results			
Analytes**	Result mg/Kg	Report Limit mg/Kg	Flags
C9-C18 Aliphatics	BQL	10.0	
C19-C36 Aliphatics	BQL	10.0	
C11-C22 Aromatics	BQL	10.0	

Surrogates	Percent Recovery	Flags	Limits	
			Lower	Upper
Aliphatic (tricosane)	92.0		40	140
Aromatic (ortho-terphenyl)	90.7		40	140

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: G649-137-4H	Lab Info: G649-137-4H
Aliphatic: EP040609/006F0501.D	Aromatic: EP040609/006F0501.D

Reviewed By: 

Attachment 3

EPH Laboratory Reporting Form

Calibration and QA/QC Information

Initial Calibration Date: 02/24/09

Calibration Ranges and Limits

Range	MDL		ML		RL	
	(02/15/08) (µg/L)	(02/11/08) (mg/Kg)	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)
C9-C18 Aliphatics	1.66	0.274	5.28	0.871	100	10
C19-C36 Aliphatics	2.79	0.201	8.87	0.639	100	10
C11-C22 Aromatics	2.64	0.110	8.40	0.350	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR ✓	Method of Quantitation
C ₉ -C ₁₈ Aliphatics	200	33.3	6.70	Calibration Factor
	100	16.7		
	50	8.33		
	25	4.17		
	5	0.833		
C ₁₉ -C ₃₆ Aliphatics	200	33.3	4.67	Calibration Factor
	100	16.7		
	50	8.33		
	25	4.17		
	5	0.833		
C ₁₁ -C ₂₂ Aromatics	200	33.3	2.55	Calibration Factor
	100	16.7		
	50	8.33		
	25	4.17		
	5	0.833		

Calibration Check Date: 04/06/09
04/06/09Filenames: ep040609/002f0101.d
ep040609/003f0201.d

Calibration Check

Range	Levels (µg/L)	Levels (mg/Kg)	%Difference if CF %Drift if LR ✓	Limits
C9-C18 Aliphatics	100	16.7	1.5	±25%
C19-C36 Aliphatics	100	16.7	-2.0	±25%
C11-C22 Aromatics	100	16.7	1.7	±25%

MDL = Method Detection Limit

ML = Minimum Limit

RL = Reportable Limit

RPD = Relative Percent Difference

%RSD = Percent Relative Standard Deviation

CCC = Correlation Coefficient of Curve

Attachment 3

EPH Laboratory Reporting Form

Calibration and QA/QC Information

Initial Calibration Date: 02/24/09

Calibration Ranges and Limits

Range	MDL		ML		RL	
	(02/15/08) (µg/L)	(02/11/08) (mg/Kg)	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)
C9-C18 Aliphatics	1.66	0.274	5.28	0.871	100	10
C19-C36 Aliphatics	2.79	0.201	8.87	0.639	100	10
C11-C22 Aromatics	2.64	0.110	8.40	0.350	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR ✓	Method of Quantitation
C ₉ -C ₁₈ Aliphatics	200	33.3	6.70	Calibration Factor
	100	16.7		
	50	8.33		
	25	4.17		
	5	0.833		
C ₁₉ -C ₃₆ Aliphatics	200	33.3	4.67	Calibration Factor
	100	16.7		
	50	8.33		
	25	4.17		
	5	0.833		
C ₁₁ -C ₂₂ Aromatics	200	33.3	2.55	Calibration Factor
	100	16.7		
	50	8.33		
	25	4.17		
	5	0.833		

Calibration Check Date: 04/06/09 Filenames: ep040609/100f0101.d
04/06/09 ep040609/002f1701.d

Calibration Check

Range	Levels		%Difference if CF %Drift if LR ✓	Limits
	(µg/L)	(mg/Kg)		
C9-C18 Aliphatics	100	16.7	10.0	≤±25%
C19-C36 Aliphatics	100	16.7	11.8	≤±25%
C11-C22 Aromatics	100	16.7	7.6	≤±25%

MDL = Method Detection Limit

ML = Minimum Limit

RL = Reportable Limit

RPD = Relative Percent Difference

%RSD = Percent Relative Standard Deviation

CCC = Correlation Coefficient of Curve

**Results for Volatiles
by GCMS 8260B/5035**

Client Sample ID: UST M236-S005
Client Project ID: CTO 003
Lab Sample ID: G649-137-1D
Lab Project ID: G649-137
Report Basis: Dry Weight

Analyzed By: DVG
Date Collected: 3/31/2009 10:15
Date Received: 4/3/2009
Matrix: Soil
Sample Amount: 6.3 g
%Solids: 76.4

Compound	Result UG/KG	Quantitation Limit UG/KG	Dilution Factor	Date Analyzed
Acetone	BQL	1300	50	4/3/2009
Benzene	BQL	51.9	50	4/3/2009
Bromobenzene	BQL	51.9	50	4/3/2009
Bromochloromethane	BQL	51.9	50	4/3/2009
Bromodichloromethane	BQL	51.9	50	4/3/2009
Bromoform	BQL	51.9	50	4/3/2009
Bromomethane	BQL	51.9	50	4/3/2009
2-Butanone	BQL	1300	50	4/3/2009
n-Butylbenzene	BQL	51.9	50	4/3/2009
sec-Butylbenzene	167	51.9	50	4/3/2009
tert-Butylbenzene	BQL	51.9	50	4/3/2009
Carbon disulfide	BQL	51.9	50	4/3/2009
Carbon tetrachloride	BQL	51.9	50	4/3/2009
Chlorobenzene	BQL	51.9	50	4/3/2009
Chloroethane	BQL	51.9	50	4/3/2009
Chloroform	BQL	51.9	50	4/3/2009
Chloromethane	BQL	51.9	50	4/3/2009
2-Chlorotoluene	BQL	51.9	50	4/3/2009
4-Chlorotoluene	BQL	51.9	50	4/3/2009
Dibromochloromethane	BQL	51.9	50	4/3/2009
1,2-Dibromo-3-chloropropane	BQL	260	50	4/3/2009
Dibromomethane	BQL	51.9	50	4/3/2009
1,2-Dibromoethane (EDB)	BQL	51.9	50	4/3/2009
1,2-Dichlorobenzene	BQL	51.9	50	4/3/2009
1,3-Dichlorobenzene	BQL	51.9	50	4/3/2009
1,4-Dichlorobenzene	BQL	51.9	50	4/3/2009
trans-1,4-Dichloro-2-butene	BQL	260	50	4/3/2009
1,1-Dichloroethane	BQL	51.9	50	4/3/2009
1,1-Dichloroethene	BQL	51.9	50	4/3/2009
1,2-Dichloroethane	BQL	51.9	50	4/3/2009
cis-1,2-Dichloroethene	BQL	51.9	50	4/3/2009
trans-1,2-dichloroethene	BQL	51.9	50	4/3/2009
1,2-Dichloropropane	BQL	51.9	50	4/3/2009
1,3-Dichloropropane	BQL	51.9	50	4/3/2009
2,2-Dichloropropane	BQL	51.9	50	4/3/2009
1,1-Dichloropropene	BQL	51.9	50	4/3/2009
cis-1,3-Dichloropropene	BQL	51.9	50	4/3/2009
trans-1,3-Dichloropropene	BQL	51.9	50	4/3/2009
Dichlorodifluoromethane	BQL	260	50	4/3/2009
Diisopropyl ether (DIPE)	BQL	51.9	50	4/3/2009
Ethylbenzene	BQL	51.9	50	4/3/2009
Hexachlorobutadiene	BQL	51.9	50	4/3/2009
2-Hexanone	BQL	260	50	4/3/2009
Iodomethane	BQL	51.9	50	4/3/2009
Isopropylbenzene	BQL	51.9	50	4/3/2009

**Results for Volatiles
by GCMS 8260B/5035**

Client Sample ID: UST M236-S005
Client Project ID: CTO 003
Lab Sample ID: G649-137-1D
Lab Project ID: G649-137
Report Basis: Dry Weight

Analyzed By: DVG
Date Collected: 3/31/2009 10:15
Date Received: 4/3/2009
Matrix: Soil
Sample Amount: 6.3 g
%Solids: 76.4

Compound	Result UG/KG	Quantitation Limit UG/KG	Dilution Factor	Date Analyzed
4-Isopropyltoluene	219	51.9	50	4/3/2009
Methylene chloride	BQL	260	50	4/3/2009
4-Methyl-2-pentanone	BQL	260	50	4/3/2009
Methyl-tert-butyl ether (MTBE)	BQL	51.9	50	4/3/2009
Naphthalene	65.9	51.9	50	4/3/2009
n-Propyl benzene	BQL	51.9	50	4/3/2009
Styrene	BQL	51.9	50	4/3/2009
1,1,1,2-Tetrachloroethane	BQL	51.9	50	4/3/2009
1,1,2,2-Tetrachloroethane	BQL	51.9	50	4/3/2009
Tetrachloroethene	BQL	51.9	50	4/3/2009
Toluene	BQL	51.9	50	4/3/2009
1,2,3-Trichlorobenzene	BQL	51.9	50	4/3/2009
1,2,4-Trichlorobenzene	BQL	51.9	50	4/3/2009
Trichloroethene	BQL	51.9	50	4/3/2009
1,1,1-Trichloroethane	BQL	51.9	50	4/3/2009
1,1,2-Trichloroethane	BQL	51.9	50	4/3/2009
Trichlorofluoromethane	BQL	51.9	50	4/3/2009
1,2,3-Trichloropropane	BQL	51.9	50	4/3/2009
1,2,4-Trimethylbenzene	BQL	51.9	50	4/3/2009
1,3,5-Trimethylbenzene	BQL	51.9	50	4/3/2009
Vinyl chloride	BQL	51.9	50	4/3/2009
m-,p-Xylene	BQL	104	50	4/3/2009
o-Xylene	BQL	51.9	50	4/3/2009

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	10	8.28	83
Toluene-d8	10	10.3	103
4-Bromofluorobenzene	10	9.07	91

Comments:

Flags:

BQL = Below Quantitation Limits.

Analyst: 3/

Reviewed By: DVG

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: UST M236-S006
Client Project ID: CTO 003
Lab Sample ID G649-137-2A
Lab Project ID: G649-137
Report Basis: Dry Weight

Analyzed By: MJC
Date Collected: 04-02-2009 11:30
Date Received: 4/3/2009
Matrix: Soil
Sample Amount: 6.34 g
%Solids: 76.8

Report Name Compound	Result UG/KG	Quantitation Limit UG/KG	Dilution Factor	Date Analyzed
Acetone	BQL	51.3	1	4/3/2009
Benzene	BQL	5.13	1	4/3/2009
Bromobenzene	BQL	5.13	1	4/3/2009
Bromochloromethane	BQL	5.13	1	4/3/2009
Bromodichloromethane	BQL	5.13	1	4/3/2009
Bromoform	BQL	5.13	1	4/3/2009
Bromomethane	BQL	5.13	1	4/3/2009
2-Butanone	BQL	25.7	1	4/3/2009
n-Butylbenzene	BQL	5.13	1	4/3/2009
sec-Butylbenzene	BQL	5.13	1	4/3/2009
tert-Butylbenzene	BQL	5.13	1	4/3/2009
Carbon disulfide	BQL	5.13	1	4/3/2009
Carbon tetrachloride	BQL	5.13	1	4/3/2009
Chlorobenzene	BQL	5.13	1	4/3/2009
Chloroethane	BQL	5.13	1	4/3/2009
Chloroform	BQL	5.13	1	4/3/2009
Chloromethane	BQL	5.13	1	4/3/2009
2-Chlorotoluene	BQL	5.13	1	4/3/2009
4-Chlorotoluene	BQL	5.13	1	4/3/2009
Dibromochloromethane	BQL	5.13	1	4/3/2009
1,2-Dibromo-3-chloropropane	BQL	25.7	1	4/3/2009
Dibromomethane	BQL	5.13	1	4/3/2009
1,2-Dibromoethane (EDB)	BQL	5.13	1	4/3/2009
1,2-Dichlorobenzene	BQL	5.13	1	4/3/2009
1,3-Dichlorobenzene	BQL	5.13	1	4/3/2009
1,4-Dichlorobenzene	BQL	5.13	1	4/3/2009
trans-1,4-Dichloro-2-butene	BQL	25.7	1	4/3/2009
1,1-Dichloroethane	BQL	5.13	1	4/3/2009
1,1-Dichloroethene	BQL	5.13	1	4/3/2009
1,2-Dichloroethane	BQL	5.13	1	4/3/2009
cis-1,2-Dichloroethene	BQL	5.13	1	4/3/2009
trans-1,2-dichloroethene	BQL	5.13	1	4/3/2009
1,2-Dichloropropane	BQL	5.13	1	4/3/2009
1,3-Dichloropropane	BQL	5.13	1	4/3/2009
2,2-Dichloropropane	BQL	5.13	1	4/3/2009
1,1-Dichloropropene	BQL	5.13	1	4/3/2009
cis-1,3-Dichloropropene	BQL	5.13	1	4/3/2009
trans-1,3-Dichloropropene	BQL	5.13	1	4/3/2009
Dichlorodifluoromethane	BQL	5.13	1	4/3/2009
Diisopropyl ether (DIPE)	BQL	5.13	1	4/3/2009
Ethylbenzene	BQL	5.13	1	4/3/2009
Hexachlorobutadiene	BQL	5.13	1	4/3/2009
2-Hexanone	BQL	12.8	1	4/3/2009
Iodomethane	BQL	5.13	1	4/3/2009

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: UST M236-S006
Client Project ID: CTO 003
Lab Sample ID G649-137-2A
Lab Project ID: G649-137
Report Basis: Dry Weight

Analyzed By: MJC
Date Collected: 04-02-2009 11:30
Date Received: 4/3/2009
Matrix: Soil
Sample Amount: 6.34 g
%Solids: 76.8

Report Name Compound	Result UG/KG	Quantitation Limit UG/KG	Dilution Factor	Date Analyzed
Isopropylbenzene	BQL	5.13	1	4/3/2009
4-Isopropyltoluene	BQL	5.13	1	4/3/2009
Methylene chloride	BQL	20.5	1	4/3/2009
4-Methyl-2-pentanone	BQL	12.8	1	4/3/2009
Methyl-tert-butyl ether (MTBE)	BQL	5.13	1	4/3/2009
Naphthalene	BQL	5.13	1	4/3/2009
n-Propyl benzene	BQL	5.13	1	4/3/2009
Styrene	BQL	5.13	1	4/3/2009
1,1,1,2-Tetrachloroethane	BQL	5.13	1	4/3/2009
1,1,2,2-Tetrachloroethane	BQL	5.13	1	4/3/2009
Tetrachloroethene	BQL	5.13	1	4/3/2009
Toluene	BQL	5.13	1	4/3/2009
1,2,3-Trichlorobenzene	BQL	5.13	1	4/3/2009
1,2,4-Trichlorobenzene	BQL	5.13	1	4/3/2009
Trichloroethene	BQL	5.13	1	4/3/2009
1,1,1-Trichloroethane	BQL	5.13	1	4/3/2009
1,1,2-Trichloroethane	BQL	5.13	1	4/3/2009
Trichlorofluoromethane	BQL	5.13	1	4/3/2009
1,2,3-Trichloropropane	BQL	5.13	1	4/3/2009
1,2,4-Trimethylbenzene	BQL	5.13	1	4/3/2009
1,3,5-Trimethylbenzene	BQL	5.13	1	4/3/2009
Vinyl chloride	BQL	5.13	1	4/3/2009
m-,p-Xylene	BQL	10.3	1	4/3/2009
o-Xylene	BQL	5.13	1	4/3/2009

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	50	62.6	125
Toluene-d8	50	52	104
4-Bromofluorobenzene	50	48.3	97

Comments:

Flags:

BQL = Below Quantitation Limits.
J = Detected below the quantitation limit.

Analyst: 3

Reviewed By: MJC

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: UST M236-S007
Client Project ID: CTO 003
Lab Sample ID G649-137-3A
Lab Project ID: G649-137
Report Basis: Dry Weight

Analyzed By: MJC
Date Collected: 04-01-2009 15:08
Date Received: 4/3/2009
Matrix: Soil
Sample Amount: 6.55 g
%Solids: 78.7

Report Name Compound	Result UG/KG	Quantitation Limit UG/KG	Dilution Factor	Date Analyzed
Acetone	BQL	48.4	1	4/3/2009
Benzene	BQL	4.84	1	4/3/2009
Bromobenzene	BQL	4.84	1	4/3/2009
Bromochloromethane	BQL	4.84	1	4/3/2009
Bromodichloromethane	BQL	4.84	1	4/3/2009
Bromoform	BQL	4.84	1	4/3/2009
Bromomethane	BQL	4.84	1	4/3/2009
2-Butanone	BQL	24.2	1	4/3/2009
n-Butylbenzene	BQL	4.84	1	4/3/2009
sec-Butylbenzene	BQL	4.84	1	4/3/2009
tert-Butylbenzene	BQL	4.84	1	4/3/2009
Carbon disulfide	BQL	4.84	1	4/3/2009
Carbon tetrachloride	BQL	4.84	1	4/3/2009
Chlorobenzene	BQL	4.84	1	4/3/2009
Chloroethane	BQL	4.84	1	4/3/2009
Chloroform	BQL	4.84	1	4/3/2009
Chloromethane	BQL	4.84	1	4/3/2009
2-Chlorotoluene	BQL	4.84	1	4/3/2009
4-Chlorotoluene	BQL	4.84	1	4/3/2009
Dibromochloromethane	BQL	4.84	1	4/3/2009
1,2-Dibromo-3-chloropropane	BQL	24.2	1	4/3/2009
Dibromomethane	BQL	4.84	1	4/3/2009
1,2-Dibromoethane (EDB)	BQL	4.84	1	4/3/2009
1,2-Dichlorobenzene	BQL	4.84	1	4/3/2009
1,3-Dichlorobenzene	BQL	4.84	1	4/3/2009
1,4-Dichlorobenzene	BQL	4.84	1	4/3/2009
trans-1,4-Dichloro-2-butene	BQL	24.2	1	4/3/2009
1,1-Dichloroethane	BQL	4.84	1	4/3/2009
1,1-Dichloroethene	BQL	4.84	1	4/3/2009
1,2-Dichloroethane	BQL	4.84	1	4/3/2009
cis-1,2-Dichloroethene	BQL	4.84	1	4/3/2009
trans-1,2-dichloroethene	BQL	4.84	1	4/3/2009
1,2-Dichloropropane	BQL	4.84	1	4/3/2009
1,3-Dichloropropane	BQL	4.84	1	4/3/2009
2,2-Dichloropropane	BQL	4.84	1	4/3/2009
1,1-Dichloropropene	BQL	4.84	1	4/3/2009
cis-1,3-Dichloropropene	BQL	4.84	1	4/3/2009
trans-1,3-Dichloropropene	BQL	4.84	1	4/3/2009
Dichlorodifluoromethane	BQL	4.84	1	4/3/2009
Diisopropyl ether (DIPE)	BQL	4.84	1	4/3/2009
Ethylbenzene	BQL	4.84	1	4/3/2009
Hexachlorobutadiene	BQL	4.84	1	4/3/2009
2-Hexanone	BQL	12.1	1	4/3/2009
Iodomethane	BQL	4.84	1	4/3/2009

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: UST M236-S007
Client Project ID: CTO 003
Lab Sample ID G649-137-3A
Lab Project ID: G649-137
Report Basis: Dry Weight

Analyzed By: MJC
Date Collected: 04-01-2009 15:08
Date Received: 4/3/2009
Matrix: Soil
Sample Amount: 6.55 g
%Solids: 78.7

Report Name Compound	Result UG/KG	Quantitation Limit UG/KG	Dilution Factor	Date Analyzed
Isopropylbenzene	BQL	4.84	1	4/3/2009
4-Isopropyltoluene	BQL	4.84	1	4/3/2009
Methylene chloride	BQL	19.4	1	4/3/2009
4-Methyl-2-pentanone	BQL	12.1	1	4/3/2009
Methyl-tert-butyl ether (MTBE)	BQL	4.84	1	4/3/2009
Naphthalene	BQL	4.84	1	4/3/2009
n-Propyl benzene	BQL	4.84	1	4/3/2009
Styrene	BQL	4.84	1	4/3/2009
1,1,1,2-Tetrachloroethane	BQL	4.84	1	4/3/2009
1,1,2,2-Tetrachloroethane	BQL	4.84	1	4/3/2009
Tetrachloroethene	BQL	4.84	1	4/3/2009
Toluene	BQL	4.84	1	4/3/2009
1,2,3-Trichlorobenzene	BQL	4.84	1	4/3/2009
1,2,4-Trichlorobenzene	BQL	4.84	1	4/3/2009
Trichloroethene	BQL	4.84	1	4/3/2009
1,1,1-Trichloroethane	BQL	4.84	1	4/3/2009
1,1,2-Trichloroethane	BQL	4.84	1	4/3/2009
Trichlorofluoromethane	BQL	4.84	1	4/3/2009
1,2,3-Trichloropropane	BQL	4.84	1	4/3/2009
1,2,4-Trimethylbenzene	BQL	4.84	1	4/3/2009
1,3,5-Trimethylbenzene	BQL	4.84	1	4/3/2009
Vinyl chloride	BQL	4.84	1	4/3/2009
m-,p-Xylene	BQL	9.68	1	4/3/2009
o-Xylene	BQL	4.84	1	4/3/2009

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	50	62.2	124
Toluene-d8	50	52	104
4-Bromofluorobenzene	50	49.2	98

Comments:

Flags:

BQL = Below Quantitation Limits.
J = Detected below the quantitation limit.

Analyst: 3

Reviewed By: CMA

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: UST M236-S008
Client Project ID: CTO 003
Lab Sample ID G649-137-4A
Lab Project ID: G649-137
Report Basis: Dry Weight

Analyzed By: MJC
Date Collected: 04-02-2009 11:45
Date Received: 4/3/2009
Matrix: Soil
Sample Amount: 6.46 g
%Solids: 76.8

Report Name Compound	Result UG/KG	Quantitation Limit UG/KG	Dilution Factor	Date Analyzed
Acetone	BQL	50.4	1	4/3/2009
Benzene	BQL	5.04	1	4/3/2009
Bromobenzene	BQL	5.04	1	4/3/2009
Bromochloromethane	BQL	5.04	1	4/3/2009
Bromodichloromethane	BQL	5.04	1	4/3/2009
Bromoform	BQL	5.04	1	4/3/2009
Bromomethane	BQL	5.04	1	4/3/2009
2-Butanone	BQL	25.2	1	4/3/2009
n-Butylbenzene	BQL	5.04	1	4/3/2009
sec-Butylbenzene	BQL	5.04	1	4/3/2009
tert-Butylbenzene	BQL	5.04	1	4/3/2009
Carbon disulfide	BQL	5.04	1	4/3/2009
Carbon tetrachloride	BQL	5.04	1	4/3/2009
Chlorobenzene	BQL	5.04	1	4/3/2009
Chloroethane	BQL	5.04	1	4/3/2009
Chloroform	BQL	5.04	1	4/3/2009
Chloromethane	BQL	5.04	1	4/3/2009
2-Chlorotoluene	BQL	5.04	1	4/3/2009
4-Chlorotoluene	BQL	5.04	1	4/3/2009
Dibromochloromethane	BQL	5.04	1	4/3/2009
1,2-Dibromo-3-chloropropane	BQL	25.2	1	4/3/2009
Dibromomethane	BQL	5.04	1	4/3/2009
1,2-Dibromoethane (EDB)	BQL	5.04	1	4/3/2009
1,2-Dichlorobenzene	BQL	5.04	1	4/3/2009
1,3-Dichlorobenzene	BQL	5.04	1	4/3/2009
1,4-Dichlorobenzene	BQL	5.04	1	4/3/2009
trans-1,4-Dichloro-2-butene	BQL	25.2	1	4/3/2009
1,1-Dichloroethane	BQL	5.04	1	4/3/2009
1,1-Dichloroethene	BQL	5.04	1	4/3/2009
1,2-Dichloroethane	BQL	5.04	1	4/3/2009
cis-1,2-Dichloroethene	BQL	5.04	1	4/3/2009
trans-1,2-dichloroethene	BQL	5.04	1	4/3/2009
1,2-Dichloropropane	BQL	5.04	1	4/3/2009
1,3-Dichloropropane	BQL	5.04	1	4/3/2009
2,2-Dichloropropane	BQL	5.04	1	4/3/2009
1,1-Dichloropropene	BQL	5.04	1	4/3/2009
cis-1,3-Dichloropropene	BQL	5.04	1	4/3/2009
trans-1,3-Dichloropropene	BQL	5.04	1	4/3/2009
Dichlorodifluoromethane	BQL	5.04	1	4/3/2009
Diisopropyl ether (DIPE)	BQL	5.04	1	4/3/2009
Ethylbenzene	BQL	5.04	1	4/3/2009
Hexachlorobutadiene	BQL	5.04	1	4/3/2009
2-Hexanone	BQL	12.6	1	4/3/2009
Iodomethane	BQL	5.04	1	4/3/2009

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: UST M236-S008
Client Project ID: CTO 003
Lab Sample ID G649-137-4A
Lab Project ID: G649-137
Report Basis: Dry Weight

Analyzed By: MJC
Date Collected: 04-02-2009 11:45
Date Received: 4/3/2009
Matrix: Soil
Sample Amount: 6.46 g
%Solids: 76.8

Report Name Compound	Result UG/KG	Quantitation Limit UG/KG	Dilution Factor	Date Analyzed
Isopropylbenzene	BQL	5.04	1	4/3/2009
4-Isopropyltoluene	BQL	5.04	1	4/3/2009
Methylene chloride	BQL	20.2	1	4/3/2009
4-Methyl-2-pentanone	BQL	12.6	1	4/3/2009
Methyl-tert-butyl ether (MTBE)	BQL	5.04	1	4/3/2009
Naphthalene	BQL	5.04	1	4/3/2009
n-Propyl benzene	BQL	5.04	1	4/3/2009
Styrene	BQL	5.04	1	4/3/2009
1,1,1,2-Tetrachloroethane	BQL	5.04	1	4/3/2009
1,1,2,2-Tetrachloroethane	BQL	5.04	1	4/3/2009
Tetrachloroethene	BQL	5.04	1	4/3/2009
Toluene	BQL	5.04	1	4/3/2009
1,2,3-Trichlorobenzene	BQL	5.04	1	4/3/2009
1,2,4-Trichlorobenzene	BQL	5.04	1	4/3/2009
Trichloroethene	BQL	5.04	1	4/3/2009
1,1,1-Trichloroethane	BQL	5.04	1	4/3/2009
1,1,2-Trichloroethane	BQL	5.04	1	4/3/2009
Trichlorofluoromethane	BQL	5.04	1	4/3/2009
1,2,3-Trichloropropane	BQL	5.04	1	4/3/2009
1,2,4-Trimethylbenzene	BQL	5.04	1	4/3/2009
1,3,5-Trimethylbenzene	BQL	5.04	1	4/3/2009
Vinyl chloride	BQL	5.04	1	4/3/2009
m-,p-Xylene	BQL	10.1	1	4/3/2009
o-Xylene	BQL	5.04	1	4/3/2009

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	50	59.6	119
Toluene-d8	50	52.4	105
4-Bromofluorobenzene	50	49.4	99

Comments:

Flags:

BQL = Below Quantitation Limits.
J = Detected below the quantitation limit.

Analyst:

Reviewed By:

**Results for Volatiles
by GCMS 8260B/5035**

Client Sample ID: Trip Blanks
Client Project ID: CTO 003
Lab Sample ID: G649-137-5A
Lab Project ID: G649-137
Report Basis: Dry Weight

Analyzed By: MJC
Date Collected: 4/2/2009 0:00
Date Received: 4/3/2009
Matrix: Soil
Sample Amount: 5 g
%Solids: 100.0

Compound	Result UG/KG	Quantitation Limit UG/KG	Dilution Factor	Date Analyzed
Acetone	BQL	1250	50	4/4/2009
Benzene	BQL	50.0	50	4/4/2009
Bromobenzene	BQL	50.0	50	4/4/2009
Bromochloromethane	BQL	50.0	50	4/4/2009
Bromodichloromethane	BQL	50.0	50	4/4/2009
Bromoform	BQL	50.0	50	4/4/2009
Bromomethane	BQL	50.0	50	4/4/2009
2-Butanone	BQL	1250	50	4/4/2009
n-Butylbenzene	BQL	50.0	50	4/4/2009
sec-Butylbenzene	BQL	50.0	50	4/4/2009
tert-Butylbenzene	BQL	50.0	50	4/4/2009
Carbon disulfide	BQL	50.0	50	4/4/2009
Carbon tetrachloride	BQL	50.0	50	4/4/2009
Chlorobenzene	BQL	50.0	50	4/4/2009
Chloroethane	BQL	50.0	50	4/4/2009
Chloroform	BQL	50.0	50	4/4/2009
Chloromethane	BQL	50.0	50	4/4/2009
2-Chlorotoluene	BQL	50.0	50	4/4/2009
4-Chlorotoluene	BQL	50.0	50	4/4/2009
Dibromochloromethane	BQL	50.0	50	4/4/2009
1,2-Dibromo-3-chloropropane	BQL	250	50	4/4/2009
Dibromomethane	BQL	50.0	50	4/4/2009
1,2-Dibromoethane (EDB)	BQL	50.0	50	4/4/2009
1,2-Dichlorobenzene	BQL	50.0	50	4/4/2009
1,3-Dichlorobenzene	BQL	50.0	50	4/4/2009
1,4-Dichlorobenzene	BQL	50.0	50	4/4/2009
trans-1,4-Dichloro-2-butene	BQL	250	50	4/4/2009
1,1-Dichloroethane	BQL	50.0	50	4/4/2009
1,1-Dichloroethene	BQL	50.0	50	4/4/2009
1,2-Dichloroethane	BQL	50.0	50	4/4/2009
cis-1,2-Dichloroethene	BQL	50.0	50	4/4/2009
trans-1,2-dichloroethene	BQL	50.0	50	4/4/2009
1,2-Dichloropropane	BQL	50.0	50	4/4/2009
1,3-Dichloropropane	BQL	50.0	50	4/4/2009
2,2-Dichloropropane	BQL	50.0	50	4/4/2009
1,1-Dichloropropene	BQL	50.0	50	4/4/2009
cis-1,3-Dichloropropene	BQL	50.0	50	4/4/2009
trans-1,3-Dichloropropene	BQL	50.0	50	4/4/2009
Dichlorodifluoromethane	BQL	250	50	4/4/2009
Diisopropyl ether (DIPE)	BQL	50.0	50	4/4/2009
Ethylbenzene	BQL	50.0	50	4/4/2009
Hexachlorobutadiene	BQL	50.0	50	4/4/2009
2-Hexanone	BQL	250	50	4/4/2009
Iodomethane	BQL	50.0	50	4/4/2009
Isopropylbenzene	BQL	50.0	50	4/4/2009

**Results for Volatiles
by GCMS 8260B/5035**

Client Sample ID: Trip Blanks
Client Project ID: CTO 003
Lab Sample ID: G649-137-5A
Lab Project ID: G649-137
Report Basis: Dry Weight

Analyzed By: MJC
Date Collected: 4/2/2009 0:00
Date Received: 4/3/2009
Matrix: Soil
Sample Amount: 5 g
%Solids: 100.0

Compound	Result UG/KG	Quantitation Limit UG/KG	Dilution Factor	Date Analyzed
4-Isopropyltoluene	BQL	50.0	50	4/4/2009
Methylene chloride	BQL	250	50	4/4/2009
4-Methyl-2-pentanone	BQL	250	50	4/4/2009
Methyl-tert-butyl ether (MTBE)	BQL	50.0	50	4/4/2009
Naphthalene	BQL	50.0	50	4/4/2009
n-Propyl benzene	BQL	50.0	50	4/4/2009
Styrene	BQL	50.0	50	4/4/2009
1,1,1,2-Tetrachloroethane	BQL	50.0	50	4/4/2009
1,1,2,2-Tetrachloroethane	BQL	50.0	50	4/4/2009
Tetrachloroethene	BQL	50.0	50	4/4/2009
Toluene	BQL	50.0	50	4/4/2009
1,2,3-Trichlorobenzene	BQL	50.0	50	4/4/2009
1,2,4-Trichlorobenzene	BQL	50.0	50	4/4/2009
Trichloroethene	BQL	50.0	50	4/4/2009
1,1,1-Trichloroethane	BQL	50.0	50	4/4/2009
1,1,2-Trichloroethane	BQL	50.0	50	4/4/2009
Trichlorofluoromethane	BQL	50.0	50	4/4/2009
1,2,3-Trichloropropane	BQL	50.0	50	4/4/2009
1,2,4-Trimethylbenzene	BQL	50.0	50	4/4/2009
1,3,5-Trimethylbenzene	BQL	50.0	50	4/4/2009
Vinyl chloride	BQL	50.0	50	4/4/2009
m-,p-Xylene	BQL	100	50	4/4/2009
o-Xylene	BQL	50.0	50	4/4/2009

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	10	10.2	102
Toluene-d8	10	10.2	102
4-Bromofluorobenzene	10	10.2	102

Comments:

Flags:

BQL = Below Quantitation Limits.

Analyst: 3

Reviewed By: MJC

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: UST M236-S005
Client Project ID: CTO 003
Lab Sample ID: G649-137-1G
Lab Project ID: G649-137
Report Basis: Dry weight
Initial Weight: 31.44 g

Analyzed By: DCS
Date Collected: 3/31/2009 10:15
Date Received: 4/3/2009
Date Extracted: 4/3/2009
Matrix: Soil
% Solids: 76.44

Compound	Result ug/Kg	RL ug/Kg	Dilution Factor	Date Analyzed
Acenaphthene	BQL	416	1	4/6/2009
Acenaphthylene	BQL	416	1	4/6/2009
Anthracene	BQL	416	1	4/6/2009
Benzo[a]anthracene	BQL	416	1	4/6/2009
Benzo[a]pyrene	BQL	416	1	4/6/2009
Benzo[b]fluoranthene	BQL	416	1	4/6/2009
Benzo[g,h,i]perylene	BQL	416	1	4/6/2009
Benzo[k]fluoranthene	BQL	416	1	4/6/2009
Benzoic Acid	BQL	2080	1	4/6/2009
Bis(2-chloroethoxy)methane	BQL	416	1	4/6/2009
Bis(2-chloroethyl)ether	BQL	416	1	4/6/2009
Bis(2-chloroisopropyl)ether	BQL	416	1	4/6/2009
Bis(2-ethylhexyl)phthalate	BQL	416	1	4/6/2009
4-bromophenyl phenyl ether	BQL	416	1	4/6/2009
Butylbenzylphthalate	BQL	416	1	4/6/2009
2-Chloronaphthalene	BQL	416	1	4/6/2009
2-Chlorophenol	BQL	416	1	4/6/2009
4-Chloro-3-methylphenol	BQL	416	1	4/6/2009
4-Chloroaniline	BQL	2080	1	4/6/2009
4-Chlorophenyl phenyl ether	BQL	416	1	4/6/2009
Chrysene	BQL	416	1	4/6/2009
Dibenzo[a,h]anthracene	BQL	416	1	4/6/2009
Dibenzofuran	BQL	416	1	4/6/2009
Di-n-Butylphthalate	BQL	416	1	4/6/2009
1,2-Dichlorobenzene	BQL	416	1	4/6/2009
1,3-Dichlorobenzene	BQL	416	1	4/6/2009
1,4-Dichlorobenzene	BQL	416	1	4/6/2009
3,3'-Dichlorobenzidine	BQL	832	1	4/6/2009
2,4-Dichlorophenol	BQL	416	1	4/6/2009
Diethylphthalate	BQL	416	1	4/6/2009
Dimethylphthalate	BQL	416	1	4/6/2009
2,4-Dimethylphenol	BQL	416	1	4/6/2009
Di-n-octylphthalate	BQL	416	1	4/6/2009
4,6-Dinitro-2-methylphenol	BQL	2080	1	4/6/2009
2,4-Dinitrophenol	BQL	2080	1	4/6/2009
2,4-Dinitrotoluene	BQL	416	1	4/6/2009
2,6-Dinitrotoluene	BQL	416	1	4/6/2009
Fluoranthene	BQL	416	1	4/6/2009
Fluorene	449	416	1	4/6/2009
Hexachlorobenzene	BQL	416	1	4/6/2009
Hexachlorobutadiene	BQL	416	1	4/6/2009
Hexachlorocyclopentadiene	BQL	832	1	4/6/2009
Hexachloroethane	BQL	416	1	4/6/2009
Indeno(1,2,3-c,d)pyrene	BQL	416	1	4/6/2009
Isophorone	BQL	416	1	4/6/2009
2-Methylnaphthalene	BQL	416	1	4/6/2009
2-Methylphenol	BQL	416	1	4/6/2009

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: UST M236-S005
Client Project ID: CTO 003
Lab Sample ID: G649-137-1G
Lab Project ID: G649-137
Report Basis: Dry weight
Initial Weight: 31.44 g

Analyzed By: DCS
Date Collected: 3/31/2009 10:15
Date Received: 4/3/2009
Date Extracted: 4/3/2009
Matrix: Soil
% Solids: 76.44

Compound	Result ug/Kg	RL ug/Kg	Dilution Factor	Date Analyzed
3- & 4-Methylphenol	BQL	416	1	4/6/2009
Naphthalene	BQL	416	1	4/6/2009
2-Nitroaniline	BQL	416	1	4/6/2009
3-Nitroaniline	BQL	2080	1	4/6/2009
4-Nitroaniline	BQL	2080	1	4/6/2009
Nitrobenzene	BQL	416	1	4/6/2009
2-Nitrophenol	BQL	416	1	4/6/2009
4-Nitrophenol	BQL	2080	1	4/6/2009
Diphenylamine *	BQL	416	1	4/6/2009
Pentachlorophenol	BQL	2080	1	4/6/2009
Phenanthrene	961	416	1	4/6/2009
Phenol	BQL	416	1	4/6/2009
Pyrene	BQL	416	1	4/6/2009
1,2,4-Trichlorobenzene	BQL	416	1	4/6/2009
2,4,5-Trichlorophenol	BQL	416	1	4/6/2009
2,4,6-Trichlorophenol	BQL	416	1	4/6/2009

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	8.6	86
2-Fluorophenol	10	8.7	87
Nitrobenzene-d5	10	8.7	87
Phenol-d6	10	9	90
2,4,6-Tribromophenol	10	8.3	83
4-Terphenyl-d14	10	8.9	89

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

J = Detected below the quantitation limit.

Reviewed By: 

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: UST M236-S006
Client Project ID: CTO 003
Lab Sample ID: G649-137-2G
Lab Project ID: G649-137
Report Basis: Dry weight
Initial Weight: 35.92 g

Analyzed By: DCS
Date Collected: 4/2/2009 11:30
Date Received: 4/3/2009
Date Extracted: 4/3/2009
Matrix: Soil
% Solids: 76.81

Compound	Result ug/Kg	RL ug/Kg	Dilution Factor	Date Analyzed
Acenaphthene	BQL	362	1	4/6/2009
Acenaphthylene	BQL	362	1	4/6/2009
Anthracene	BQL	362	1	4/6/2009
Benzo[a]anthracene	BQL	362	1	4/6/2009
Benzo[a]pyrene	BQL	362	1	4/6/2009
Benzo[b]fluoranthene	BQL	362	1	4/6/2009
Benzo[g,h,i]perylene	BQL	362	1	4/6/2009
Benzo[k]fluoranthene	BQL	362	1	4/6/2009
Benzoic Acid	BQL	1810	1	4/6/2009
Bis(2-chloroethoxy)methane	BQL	362	1	4/6/2009
Bis(2-chloroethyl)ether	BQL	362	1	4/6/2009
Bis(2-chloroisopropyl)ether	BQL	362	1	4/6/2009
Bis(2-ethylhexyl)phthalate	BQL	362	1	4/6/2009
4-bromophenyl phenyl ether	BQL	362	1	4/6/2009
Butylbenzylphthalate	BQL	362	1	4/6/2009
2-Chloronaphthalene	BQL	362	1	4/6/2009
2-Chlorophenol	BQL	362	1	4/6/2009
4-Chloro-3-methylphenol	BQL	362	1	4/6/2009
4-Chloroaniline	BQL	1810	1	4/6/2009
4-Chlorophenyl phenyl ether	BQL	362	1	4/6/2009
Chrysene	BQL	362	1	4/6/2009
Dibenzo[a,h]anthracene	BQL	362	1	4/6/2009
Dibenzofuran	BQL	362	1	4/6/2009
Di-n-Butylphthalate	BQL	362	1	4/6/2009
1,2-Dichlorobenzene	BQL	362	1	4/6/2009
1,3-Dichlorobenzene	BQL	362	1	4/6/2009
1,4-Dichlorobenzene	BQL	362	1	4/6/2009
3,3'-Dichlorobenzidine	BQL	725	1	4/6/2009
2,4-Dichlorophenol	BQL	362	1	4/6/2009
Diethylphthalate	BQL	362	1	4/6/2009
Dimethylphthalate	BQL	362	1	4/6/2009
2,4-Dimethylphenol	BQL	362	1	4/6/2009
Di-n-octylphthalate	BQL	362	1	4/6/2009
4,6-Dinitro-2-methylphenol	BQL	1810	1	4/6/2009
2,4-Dinitrophenol	BQL	1810	1	4/6/2009
2,4-Dinitrotoluene	BQL	362	1	4/6/2009
2,6-Dinitrotoluene	BQL	362	1	4/6/2009
Fluoranthene	BQL	362	1	4/6/2009
Fluorene	BQL	362	1	4/6/2009
Hexachlorobenzene	BQL	362	1	4/6/2009
Hexachlorobutadiene	BQL	362	1	4/6/2009
Hexachlorocyclopentadiene	BQL	725	1	4/6/2009
Hexachloroethane	BQL	362	1	4/6/2009
Indeno(1,2,3-c,d)pyrene	BQL	362	1	4/6/2009
Isophorone	BQL	362	1	4/6/2009
2-Methylnaphthalene	BQL	362	1	4/6/2009
2-Methylphenol	BQL	362	1	4/6/2009

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: UST M236-S006
 Client Project ID: CTO 003
 Lab Sample ID: G649-137-2G
 Lab Project ID: G649-137
 Report Basis: Dry weight
 Initial Weight: 35.92 g

Analyzed By: DCS
 Date Collected: 4/2/2009 11:30
 Date Received: 4/3/2009
 Date Extracted: 4/3/2009
 Matrix: Soil
 % Solids: 76.81

Compound	Result ug/Kg	RL ug/Kg	Dilution Factor	Date Analyzed
3- & 4-Methylphenol	BQL	362	1	4/6/2009
Naphthalene	BQL	362	1	4/6/2009
2-Nitroaniline	BQL	362	1	4/6/2009
3-Nitroaniline	BQL	1810	1	4/6/2009
4-Nitroaniline	BQL	1810	1	4/6/2009
Nitrobenzene	BQL	362	1	4/6/2009
2-Nitrophenol	BQL	362	1	4/6/2009
4-Nitrophenol	BQL	1810	1	4/6/2009
Diphenylamine *	BQL	362	1	4/6/2009
Pentachlorophenol	BQL	1810	1	4/6/2009
Phenanthrene	BQL	362	1	4/6/2009
Phenol	BQL	362	1	4/6/2009
Pyrene	BQL	362	1	4/6/2009
1,2,4-Trichlorobenzene	BQL	362	1	4/6/2009
2,4,5-Trichlorophenol	BQL	362	1	4/6/2009
2,4,6-Trichlorophenol	BQL	362	1	4/6/2009

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	8.5	85
2-Fluorophenol	10	9.1	91
Nitrobenzene-d5	10	9	90
Phenol-d6	10	9.3	93
2,4,6-Tribromophenol	10	8.4	84
4-Terphenyl-d14	10	9.8	98

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

J = Detected below the quantitation limit.

Reviewed By: 

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: UST M236-S007
Client Project ID: CTO 003
Lab Sample ID: G649-137-3G
Lab Project ID: G649-137
Report Basis: Dry weight
Initial Weight: 32.4 g

Analyzed By: DCS
Date Collected: 4/1/2009 15:08
Date Received: 4/3/2009
Date Extracted: 4/3/2009
Matrix: Soil
% Solids: 78.72

Compound	Result ug/Kg	RL ug/Kg	Dilution Factor	Date Analyzed
Acenaphthene	BQL	392	1	4/6/2009
Acenaphthylene	BQL	392	1	4/6/2009
Anthracene	BQL	392	1	4/6/2009
Benzo[a]anthracene	BQL	392	1	4/6/2009
Benzo[a]pyrene	BQL	392	1	4/6/2009
Benzo[b]fluoranthene	BQL	392	1	4/6/2009
Benzo[g,h,i]perylene	BQL	392	1	4/6/2009
Benzo[k]fluoranthene	BQL	392	1	4/6/2009
Benzoic Acid	BQL	1960	1	4/6/2009
Bis(2-chloroethoxy)methane	BQL	392	1	4/6/2009
Bis(2-chloroethyl)ether	BQL	392	1	4/6/2009
Bis(2-chloroisopropyl)ether	BQL	392	1	4/6/2009
Bis(2-ethylhexyl)phthalate	BQL	392	1	4/6/2009
4-bromophenyl phenyl ether	BQL	392	1	4/6/2009
Butylbenzylphthalate	BQL	392	1	4/6/2009
2-Chloronaphthalene	BQL	392	1	4/6/2009
2-Chlorophenol	BQL	392	1	4/6/2009
4-Chloro-3-methylphenol	BQL	392	1	4/6/2009
4-Chloroaniline	BQL	1960	1	4/6/2009
4-Chlorophenyl phenyl ether	BQL	392	1	4/6/2009
Chrysene	BQL	392	1	4/6/2009
Dibenzo[a,h]anthracene	BQL	392	1	4/6/2009
Dibenzofuran	BQL	392	1	4/6/2009
Di-n-Butylphthalate	BQL	392	1	4/6/2009
1,2-Dichlorobenzene	BQL	392	1	4/6/2009
1,3-Dichlorobenzene	BQL	392	1	4/6/2009
1,4-Dichlorobenzene	BQL	392	1	4/6/2009
3,3'-Dichlorobenzidine	BQL	784	1	4/6/2009
2,4-Dichlorophenol	BQL	392	1	4/6/2009
Diethylphthalate	BQL	392	1	4/6/2009
Dimethylphthalate	BQL	392	1	4/6/2009
2,4-Dimethylphenol	BQL	392	1	4/6/2009
Di-n-octylphthalate	BQL	392	1	4/6/2009
4,6-Dinitro-2-methylphenol	BQL	1960	1	4/6/2009
2,4-Dinitrophenol	BQL	1960	1	4/6/2009
2,4-Dinitrotoluene	BQL	392	1	4/6/2009
2,6-Dinitrotoluene	BQL	392	1	4/6/2009
Fluoranthene	BQL	392	1	4/6/2009
Fluorene	BQL	392	1	4/6/2009
Hexachlorobenzene	BQL	392	1	4/6/2009
Hexachlorobutadiene	BQL	392	1	4/6/2009
Hexachlorocyclopentadiene	BQL	784	1	4/6/2009
Hexachloroethane	BQL	392	1	4/6/2009
Indeno(1,2,3-c,d)pyrene	BQL	392	1	4/6/2009
Isophorone	BQL	392	1	4/6/2009
2-Methylnaphthalene	BQL	392	1	4/6/2009
2-Methylphenol	BQL	392	1	4/6/2009

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: UST M236-S007
Client Project ID: CTO 003
Lab Sample ID: G649-137-3G
Lab Project ID: G649-137
Report Basis: Dry weight
Initial Weight: 32.4 g

Analyzed By: DCS
Date Collected: 4/1/2009 15:08
Date Received: 4/3/2009
Date Extracted: 4/3/2009
Matrix: Soil
% Solids: 78.72

Compound	Result ug/Kg	RL ug/Kg	Dilution Factor	Date Analyzed
3- & 4-Methylphenol	BQL	392	1	4/6/2009
Naphthalene	BQL	392	1	4/6/2009
2-Nitroaniline	BQL	392	1	4/6/2009
3-Nitroaniline	BQL	1960	1	4/6/2009
4-Nitroaniline	BQL	1960	1	4/6/2009
Nitrobenzene	BQL	392	1	4/6/2009
2-Nitrophenol	BQL	392	1	4/6/2009
4-Nitrophenol	BQL	1960	1	4/6/2009
Diphenylamine *	BQL	392	1	4/6/2009
Pentachlorophenol	BQL	1960	1	4/6/2009
Phenanthrene	BQL	392	1	4/6/2009
Phenol	BQL	392	1	4/6/2009
Pyrene	BQL	392	1	4/6/2009
1,2,4-Trichlorobenzene	BQL	392	1	4/6/2009
2,4,5-Trichlorophenol	BQL	392	1	4/6/2009
2,4,6-Trichlorophenol	BQL	392	1	4/6/2009

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	8.8	88
2-Fluorophenol	10	8.9	89
Nitrobenzene-d5	10	9	90
Phenol-d6	10	8.9	89
2,4,6-Tribromophenol	10	8.3	83
4-Terphenyl-d14	10	9.6	96

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

J = Detected below the quantitation limit.

Reviewed By: 

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: UST M236-S008
Client Project ID: CTO 003
Lab Sample ID: G649-137-4G
Lab Project ID: G649-137
Report Basis: Dry weight
Initial Weight: 32.61 g

Analyzed By: DCS
Date Collected: 4/2/2009 11:45
Date Received: 4/3/2009
Date Extracted: 4/3/2009
Matrix: Soil
% Solids: 76.78

Compound	Result ug/Kg	RL ug/Kg	Dilution Factor	Date Analyzed
Acenaphthene	BQL	399	1	4/6/2009
Acenaphthylene	BQL	399	1	4/6/2009
Anthracene	BQL	399	1	4/6/2009
Benzo[a]anthracene	BQL	399	1	4/6/2009
Benzo[a]pyrene	BQL	399	1	4/6/2009
Benzo[b]fluoranthene	BQL	399	1	4/6/2009
Benzo[g,h,i]perylene	BQL	399	1	4/6/2009
Benzo[k]fluoranthene	BQL	399	1	4/6/2009
Benzoic Acid	BQL	2000	1	4/6/2009
Bis(2-chloroethoxy)methane	BQL	399	1	4/6/2009
Bis(2-chloroethyl)ether	BQL	399	1	4/6/2009
Bis(2-chloroisopropyl)ether	BQL	399	1	4/6/2009
Bis(2-ethylhexyl)phthalate	BQL	399	1	4/6/2009
4-bromophenyl phenyl ether	BQL	399	1	4/6/2009
Butylbenzylphthalate	BQL	399	1	4/6/2009
2-Chloronaphthalene	BQL	399	1	4/6/2009
2-Chlorophenol	BQL	399	1	4/6/2009
4-Chloro-3-methylphenol	BQL	399	1	4/6/2009
4-Chloroaniline	BQL	2000	1	4/6/2009
4-Chlorophenyl phenyl ether	BQL	399	1	4/6/2009
Chrysene	BQL	399	1	4/6/2009
Dibenzo[a,h]anthracene	BQL	399	1	4/6/2009
Dibenzofuran	BQL	399	1	4/6/2009
Di-n-Butylphthalate	BQL	399	1	4/6/2009
1,2-Dichlorobenzene	BQL	399	1	4/6/2009
1,3-Dichlorobenzene	BQL	399	1	4/6/2009
1,4-Dichlorobenzene	BQL	399	1	4/6/2009
3,3'-Dichlorobenzidine	BQL	799	1	4/6/2009
2,4-Dichlorophenol	BQL	399	1	4/6/2009
Diethylphthalate	BQL	399	1	4/6/2009
Dimethylphthalate	BQL	399	1	4/6/2009
2,4-Dimethylphenol	BQL	399	1	4/6/2009
Di-n-octylphthalate	BQL	399	1	4/6/2009
4,6-Dinitro-2-methylphenol	BQL	2000	1	4/6/2009
2,4-Dinitrophenol	BQL	2000	1	4/6/2009
2,4-Dinitrotoluene	BQL	399	1	4/6/2009
2,6-Dinitrotoluene	BQL	399	1	4/6/2009
Fluoranthene	BQL	399	1	4/6/2009
Fluorene	BQL	399	1	4/6/2009
Hexachlorobenzene	BQL	399	1	4/6/2009
Hexachlorobutadiene	BQL	399	1	4/6/2009
Hexachlorocyclopentadiene	BQL	799	1	4/6/2009
Hexachloroethane	BQL	399	1	4/6/2009
Indeno(1,2,3-c,d)pyrene	BQL	399	1	4/6/2009
Isophorone	BQL	399	1	4/6/2009
2-Methylnaphthalene	BQL	399	1	4/6/2009
2-Methylphenol	BQL	399	1	4/6/2009

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: UST M236-S008
 Client Project ID: CTO 003
 Lab Sample ID: G649-137-4G
 Lab Project ID: G649-137
 Report Basis: Dry weight
 Initial Weight: 32.61 g

Analyzed By: DCS
 Date Collected: 4/2/2009 11:45
 Date Received: 4/3/2009
 Date Extracted: 4/3/2009
 Matrix: Soil
 % Solids: 76.78

Compound	Result ug/Kg	RL ug/Kg	Dilution Factor	Date Analyzed
3- & 4-Methylphenol	BQL	399	1	4/6/2009
Naphthalene	BQL	399	1	4/6/2009
2-Nitroaniline	BQL	399	1	4/6/2009
3-Nitroaniline	BQL	2000	1	4/6/2009
4-Nitroaniline	BQL	2000	1	4/6/2009
Nitrobenzene	BQL	399	1	4/6/2009
2-Nitrophenol	BQL	399	1	4/6/2009
4-Nitrophenol	BQL	2000	1	4/6/2009
Diphenylamine *	BQL	399	1	4/6/2009
Pentachlorophenol	BQL	2000	1	4/6/2009
Phenanthrene	BQL	399	1	4/6/2009
Phenol	BQL	399	1	4/6/2009
Pyrene	BQL	399	1	4/6/2009
1,2,4-Trichlorobenzene	BQL	399	1	4/6/2009
2,4,5-Trichlorophenol	BQL	399	1	4/6/2009
2,4,6-Trichlorophenol	BQL	399	1	4/6/2009

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	8.5	85
2-Fluorophenol	10	8.5	85
Nitrobenzene-d5	10	8.8	88
Phenol-d6	10	8.8	88
2,4,6-Tribromophenol	10	8.3	83
4-Terphenyl-d14	10	9.5	95

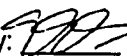
Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

J = Detected below the quantitation limit.

Reviewed By: 



SGS Environmental Services Inc.
CHAIN OF CUSTODY RECORD

Locations Nationwide
• Alaska • Maryland
• New Jersey • New York
• North Carolina • Ohio
• West Virginia

www.us.sgs.com

1 CLIENT: OSAGE of Virginia					SGS Reference #: 6649-137					page 1 of 1												
CONTACT: Theresa Ellerman PHONE NO: 757 274 4949					# CONTAINERS					Preservatives Used Analysis Required ③ Madcap VPH Madcap EPH S260 S270												
PROJECT: CTO 003 SITE/PWSID#: m 236																						
REPORTS TO: Theresa Ellerman EMAIL: Tellerman@osageva.com Shawn Whitworth Swhitworth@osageva.com																						
INVOICE TO: mika Cree QUOTE #: CTO 003 P.O. #: CTO 003																						
LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX/MATRIX CODE										REMARKS/LOC ID								
✓	UST m236-5005	3/31/09	1015	S	6				X	X	X	X										
✓	UST m236-5006	4/2/09	1130	S	6				X	X	X	X										
✓	UST m236-5007	4/1/09	1508	S	6				X	X	X	X										
✓	UST m236-5008	4/2/09	1145	S	6				X	X	X	X										
	Trip blanks			-	2				X		X											
Times added Final signed & sealed 4/3/09 [Signature]																						
5 Collected/Relinquished By: (1) Paul J. Hill					Date	Time	Received By:	4					DOD Project? YES NO					Special Deliverable Requirements: EDD				
Relinquished By: (2)					Date	Time	Received By:	Cooler ID					Requested Turnaround Time and-or Special Instructions: 24 hr turnaround Email results to: Tellerman@osageva.com Swhitworth@osageva.com									
Relinquished By: (3)					Date	Time	Received By:	Samples Received Cold? YES NO					Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT									
Relinquished By: (4)					Date	Time	Received For Laboratory By:	Temperature °C: 2.40C														

GROUNDWATER LABORATORY RESULTS



Shane Chasteen
Richard Catlin & Associates
P.O. Box 10279
Wilmington, NC 28404-0279

Report Number: G128-2409

Client Project: Site M-232-236

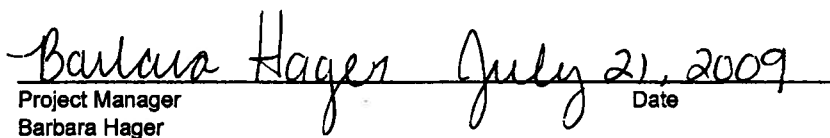
Dear Shane Chasteen,

Enclosed are the results of the analytical services performed under the referenced project for the received samples and associated QC as applicable. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of five years in the event they are required for future reference. Any samples submitted to our laboratory will be retained for a maximum of thirty (30) days from the date of this report unless other arrangements are requested.

If there are any questions about the report or services performed during this project, please call Barbara Hager at (910) 350-1903. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS North America, Inc. for your analytical services. We look forward to working with you again on any additional analytical needs.

Sincerely,
SGS North America, Inc.

A handwritten signature in cursive script that reads 'Barbara Hager July 21, 2009'. The signature is written over a horizontal line.

Project Manager
Barbara Hager

Date

SGS North America, Inc.
List of Reporting Abbreviations
And Data Qualifiers

B = Compound also detected in batch blank

BQL = Below Quantification Limit (RL or MDL)

DF = Dilution Factor

Dup = Duplicate

D = Detected, but RPD is > 40% between results in dual column method.

E = Estimated concentration, exceeds calibration range.

J = Estimated concentration, below calibration range and above MDL

LCS(D) = Laboratory Control Spike (Duplicate)

MDL = Method Detection Limit

MS(D) = Matrix Spike (Duplicate)

PQL = Practical Quantitation Limit

RL/CL = Reporting Limit / Control Limit

RPD = Relative Percent Difference

UJ = Target analytes with recoveries that are $10\% < \%R < LCL$; # of MEs are allowable and compounds are not detected in the sample.

mg/kg = milligram per kilogram, ppm, parts per million

ug/kg = micrograms per kilogram, ppb, parts per billion

mg/L = milligram per liter, ppm, parts per million

ug/L = micrograms per liter, ppb, parts per billion

% Rec = Percent Recovery

% solids = Percent Solids

Special Notes:

- 1) Metals and mercury samples are digested with a hot block; see the standard operating procedure document for details.
- 2) Uncertainty for all reported data is less than or equal to 30 percent.

MI34.021808.4

SGS North America, Inc.

Results for Volatiles

by GC 602

Client Sample ID: USTM232-236-MW24

Analyzed By: DVO

Client Project ID: Site M-232-236

Date Collected: 7/8/2009 10:15

Lab Sample ID: G128-2409-1A

Date Received: 7/9/2009

Lab Project ID: G128-2409

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.177	1	7/14/2009	
Diisopropyl ether (DIPE)	BQL	1.00	0.253	1	7/14/2009	
Ethylbenzene	0.604	1.00	0.19	1	7/14/2009	J
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.306	1	7/14/2009	
Toluene	BQL	1.00	0.313	1	7/14/2009	
m/p-Xylene	BQL	2.00	0.481	1	7/14/2009	
o-Xylene	BQL	2.00	0.405	1	7/14/2009	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	41.0	102

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

Reviewed By: 

Results for Volatiles

by GC 602

Client Sample ID: USTM232-236-MW25

Analyzed By: DVO

Client Project ID: Site M-232-236

Date Collected: 7/8/2009 10:45

Lab Sample ID: G128-2409-2A

Date Received: 7/9/2009

Lab Project ID: G128-2409

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.177	1	7/14/2009	
Diisopropyl ether (DIPE)	BQL	1.00	0.253	1	7/14/2009	
Ethylbenzene	11.3	1.00	0.19	1	7/14/2009	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.306	1	7/14/2009	
Toluene	BQL	1.00	0.313	1	7/14/2009	
m/p-Xylene	BQL	2.00	0.481	1	7/14/2009	
o-Xylene	BQL	2.00	0.405	1	7/14/2009	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	40.8	102

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

Reviewed By: 

GC-VOA_WA

SGS North America, Inc.

Results for Volatiles

by GC 602

Client Sample ID: USTM232-236-MW26

Analyzed By: DVO

Client Project ID: Site M-232-236

Date Collected: 7/8/2009 11:15

Lab Sample ID: G128-2409-3A

Date Received: 7/9/2009

Lab Project ID: G128-2409

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.177	1	7/15/2009	
Diisopropyl ether (DIPE)	BQL	1.00	0.253	1	7/15/2009	
Ethylbenzene	BQL	1.00	0.19	1	7/15/2009	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.306	1	7/15/2009	
Toluene	BQL	1.00	0.313	1	7/15/2009	
m/p-Xylene	BQL	2.00	0.481	1	7/15/2009	
o-Xylene	BQL	2.00	0.405	1	7/15/2009	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	38.9	97.3

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

SGS North America, Inc.

Results for Volatiles

by GC 602

Client Sample ID: USTM232-236-MW27

Analyzed By: DVO

Client Project ID: Site M-232-236

Date Collected: 7/8/2009 12:15

Lab Sample ID: G128-2409-4A

Date Received: 7/9/2009

Lab Project ID: G128-2409

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.177	1	7/15/2009	
Diisopropyl ether (DIPE)	BQL	1.00	0.253	1	7/15/2009	
Ethylbenzene	0.855	1.00	0.19	1	7/15/2009	J
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.306	1	7/15/2009	
Toluene	0.392	1.00	0.313	1	7/15/2009	J
m/p-Xylene	0.706	2.00	0.481	1	7/15/2009	J
o-Xylene	BQL	2.00	0.405	1	7/15/2009	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	38.4	96.1

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

Reviewed By: 
GC-VOA_WA
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SGS North America, Inc.

Results for Volatiles

by GC 602

Client Sample ID: USTM232-236-MW27 DUP

Analyzed By: DVO

Client Project ID: Site M-232-236

Date Collected: 7/8/2009 12:15

Lab Sample ID: G128-2409-5A

Date Received: 7/9/2009

Lab Project ID: G128-2409

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.177	1	7/15/2009	
Diisopropyl ether (DIPE)	BQL	1.00	0.253	1	7/15/2009	
Ethylbenzene	1.04	1.00	0.19	1	7/15/2009	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.306	1	7/15/2009	
Toluene	BQL	1.00	0.313	1	7/15/2009	
m/p-Xylene	0.630	2.00	0.481	1	7/15/2009	J
o-Xylene	BQL	2.00	0.405	1	7/15/2009	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	38.7	96.7

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

Reviewed By: 
GC-VOA_WA
Page 7 of 39

Results for Volatiles

by GC 602

Client Sample ID: Trip Blank
 Client Project ID: Site M-232-236
 Lab Sample ID: G128-2409-6A
 Lab Project ID: G128-2409

Analyzed By: DVO
 Date Collected: 7/8/2009 0:00
 Date Received: 7/9/2009
 Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.177	1	7/14/2009	
Diisopropyl ether (DIPE)	BQL	1.00	0.253	1	7/14/2009	
Ethylbenzene	BQL	1.00	0.19	1	7/14/2009	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.306	1	7/14/2009	
Toluene	BQL	1.00	0.313	1	7/14/2009	
m/p-Xylene	BQL	2.00	0.481	1	7/14/2009	
o-Xylene	BQL	2.00	0.405	1	7/14/2009	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	41.1	103

Comments:

All values corrected for dilution.
 BQL = Below quantitation limit.

SGS North America, Inc.

Results for Semivolatiles
by GCMS 625

Client Sample ID: USTM232-236-MW24
Client Project ID: Site M-232-236
Lab Sample ID: G128-2409-1K
Lab Project ID: G128-2409

Analyzed By: EAW
Date Collected: 7/8/2009 10:15
Date Received: 7/9/2009
Date Extracted: 7/10/2009
Matrix: Water

Initial/Final Amt: 953 mL / 5.0 mL

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	1.63	5.25	0.782	1	7/11/2009	J
Acenaphthylene	5.77	5.25	0.782	1	7/11/2009	
Anthracene	BQL	5.25	0.918	1	7/11/2009	
Benzo[a]anthracene	BQL	5.25	0.714	1	7/11/2009	
Benzo[a]pyrene	BQL	5.25	0.666	1	7/11/2009	
Benzo[b]fluoranthene	BQL	5.25	0.750	1	7/11/2009	
Benzo[g,h,i]perylene	BQL	5.25	0.645	1	7/11/2009	
Benzo[k]fluoranthene	BQL	5.25	0.577	1	7/11/2009	
Bis(2-chloroethoxy)methane	BQL	5.25	1.08	1	7/11/2009	
Bis(2-chloroethyl)ether	BQL	5.25	1.09	1	7/11/2009	
Bis(2-chloroisopropyl)ether	BQL	5.25	1.02	1	7/11/2009	
Bis(2-ethylhexyl)phthalate	BQL	5.25	0.430	1	7/11/2009	
4-bromophenyl phenyl ether	BQL	5.25	0.818	1	7/11/2009	
Butylbenzylphthalate	BQL	5.25	0.467	1	7/11/2009	
2-Chloronaphthalene	BQL	5.25	0.908	1	7/11/2009	
2-Chlorophenol	BQL	5.25	1.23	1	7/11/2009	
4-Chloro-3-methylphenol	BQL	5.25	0.834	1	7/11/2009	
4-Chlorophenyl phenyl ether	BQL	5.25	3.42	1	7/11/2009	
Chrysene	BQL	5.25	0.582	1	7/11/2009	
Dibenzo[a,h]anthracene	BQL	5.25	0.462	1	7/11/2009	
Di-n-Butylphthalate	BQL	5.25	0.866	1	7/11/2009	
3,3'-Dichlorobenzidine	BQL	10.5	1.28	1	7/11/2009	
2,4-Dichlorophenol	BQL	5.25	1.18	1	7/11/2009	
Diethylphthalate	BQL	5.25	0.776	1	7/11/2009	
Dimethylphthalate	BQL	5.25	0.582	1	7/11/2009	
2,4-Dimethylphenol	BQL	5.25	1.70	1	7/11/2009	
Di-n-octylphthalate	BQL	5.25	0.609	1	7/11/2009	
4,6-Dinitro-2-methylphenol	BQL	26.2	0.577	1	7/11/2009	
2,4-Dinitrophenol	BQL	26.2	0.672	1	7/11/2009	
2,4-Dinitrotoluene	BQL	5.25	0.561	1	7/11/2009	
2,6-Dinitrotoluene	BQL	5.25	0.682	1	7/11/2009	
Diphenylamine *	BQL	5.25	0.598	1	7/11/2009	
Fluoranthene	BQL	5.25	0.740	1	7/11/2009	
Fluorene	2.15	5.25	0.761	1	7/11/2009	J
Hexachlorobenzene	BQL	5.25	0.530	1	7/11/2009	
Hexachlorobutadiene	BQL	5.25	0.797	1	7/11/2009	
Hexachlorocyclopentadiene	BQL	10.5	10.5	1	7/11/2009	
Hexachloroethane	BQL	5.25	0.782	1	7/11/2009	
Indeno(1,2,3-c,d)pyrene	BQL	5.25	2.40	1	7/11/2009	
Isophorone	BQL	5.25	0.929	1	7/11/2009	
Naphthalene	11.4	5.25	0.955	1	7/11/2009	
Nitrobenzene	BQL	5.25	1.10	1	7/11/2009	
2-Nitrophenol	BQL	5.25	1.29	1	7/11/2009	
4-Nitrophenol	BQL	26.2	1.13	1	7/11/2009	
N-Nitrosodi-n-propylamine	BQL	5.25	1.57	1	7/11/2009	
Pentachlorophenol	BQL	26.2	1.48	1	7/11/2009	
Phenanthrene	1.84	5.25	0.467	1	7/11/2009	J

Results for Semivolatiles
by GCMS 625

Client Sample ID: USTM232-236-MW24
Client Project ID: Site M-232-236
Lab Sample ID: G128-2409-1K
Lab Project ID: G128-2409

Analyzed By: EAW
Date Collected: 7/8/2009 10:15
Date Received: 7/9/2009
Date Extracted: 7/10/2009
Matrix: Water

Initial/Final Amt: 953 mL / 5.0 mL

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Phenol	BQL	5.25	1.11	1	7/11/2009	
Pyrene	BQL	5.25	2.17	1	7/11/2009	
1,2,4-Trichlorobenzene	BQL	5.25	0.756	1	7/11/2009	
2,4,6-Trichlorophenol	BQL	5.25	0.971	1	7/11/2009	
		Spike Added	Spike Result	Percent Recovered		
2-Fluorobiphenyl		10	7.6	76		
2-Fluorophenol		10	8.8	88		
Nitrobenzene-d5		10	8.1	81		
Phenol-d6		10	7.9	79		
2,4,6-Tribromophenol		10	6.1	61		
4-Terphenyl-d14		10	9.9	99		

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

J = Detected below the quantitation limit.

Reviewed By: 

Results of Library Search for Semivolatile Compounds
by GCMS

Client Sample ID: USTM232-236-MW24
Client Project ID: Site M-232-236
Lab Sample ID: G128-2409-1K
Lab Project ID: G128-2409
Sample Wt/Vol: 953 ML
Dilution: 1

Analyzed By: DES
Date Collected: 7/8/2009 10:15
Date Received: 7/9/2009
Date Extracted: 7/10/2009
Date Analyzed: 7/11/2009
Matrix: Water

No.	Compound	Retention Time	CAS#	Match Probability	Result ug/L
1	Unknown	6.90			66.6
2	Naphthalene, 2,3-dimethyl-	6.55	581-40-8	98	21.1
3	Aromatic, Unknown	4.06			11.6
4	Benzene, 2-ethenyl-1,3-dimethyl-	4.85	2039-90-9	92	11.5
5	Unknown	4.32			10.1
6	Unknown	8.46			8.49
7	Naphthalene, 2,6-dimethyl-	6.48	581-42-0	98	7.97
8	Naphthalene, 1,4-dimethyl-	6.68	571-58-4	98	6.64
9	Naphthalene, 1,2,3,4-tetrahydro-	4.94	119-64-2	96	6.36
10	Benzene, 1,2,3,4-tetramethyl-	4.60	488-23-3	91	4.15

Comment:

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak area of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak area is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 

SGS North America, Inc.

Results for Semivolatiles
by GCMS 625

Client Sample ID: USTM232-236-MW25
Client Project ID: Site M-232-236
Lab Sample ID: G128-2409-2K
Lab Project ID: G128-2409

Analyzed By: EAW
Date Collected: 7/8/2009 10:45
Date Received: 7/9/2009
Date Extracted: 7/10/2009
Matrix: Water

Initial/Final Amt: 960 mL / 5.0 mL

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	3.91	5.21	0.776	1	7/11/2009	J
Acenaphthylene	5.89	5.21	0.776	1	7/11/2009	
Anthracene	BQL	5.21	0.911	1	7/11/2009	
Benzo[a]anthracene	BQL	5.21	0.708	1	7/11/2009	
Benzo[a]pyrene	BQL	5.21	0.661	1	7/11/2009	
Benzo[b]fluoranthene	BQL	5.21	0.745	1	7/11/2009	
Benzo[g,h,i]perylene	BQL	5.21	0.641	1	7/11/2009	
Benzo[k]fluoranthene	BQL	5.21	0.573	1	7/11/2009	
Bis(2-chloroethoxy)methane	BQL	5.21	1.07	1	7/11/2009	
Bis(2-chloroethyl)ether	BQL	5.21	1.08	1	7/11/2009	
Bis(2-chloroisopropyl)ether	BQL	5.21	1.02	1	7/11/2009	
Bis(2-ethylhexyl)phthalate	BQL	5.21	0.427	1	7/11/2009	
4-bromophenyl phenyl ether	BQL	5.21	0.812	1	7/11/2009	
Butylbenzylphthalate	BQL	5.21	0.464	1	7/11/2009	
2-Chloronaphthalene	BQL	5.21	0.901	1	7/11/2009	
2-Chlorophenol	BQL	5.21	1.22	1	7/11/2009	
4-Chloro-3-methylphenol	BQL	5.21	0.828	1	7/11/2009	
4-Chlorophenyl phenyl ether	BQL	5.21	3.39	1	7/11/2009	
Chrysene	BQL	5.21	0.578	1	7/11/2009	
Dibenzo[a,h]anthracene	BQL	5.21	0.458	1	7/11/2009	
Di-n-Butylphthalate	BQL	5.21	0.859	1	7/11/2009	
3,3'-Dichlorobenzidine	BQL	10.4	1.27	1	7/11/2009	
2,4-Dichlorophenol	BQL	5.21	1.17	1	7/11/2009	
Diethylphthalate	BQL	5.21	0.771	1	7/11/2009	
Dimethylphthalate	BQL	5.21	0.578	1	7/11/2009	
2,4-Dimethylphenol	BQL	5.21	1.69	1	7/11/2009	
Di-n-octylphthalate	BQL	5.21	0.604	1	7/11/2009	
4,6-Dinitro-2-methylphenol	BQL	26.0	0.573	1	7/11/2009	
2,4-Dinitrophenol	BQL	26.0	0.667	1	7/11/2009	
2,4-Dinitrotoluene	BQL	5.21	0.557	1	7/11/2009	
2,6-Dinitrotoluene	BQL	5.21	0.677	1	7/11/2009	
Diphenylamine *	1.35	5.21	0.594	1	7/11/2009	J
Fluoranthene	BQL	5.21	0.734	1	7/11/2009	
Fluorene	4.53	5.21	0.755	1	7/11/2009	J
Hexachlorobenzene	BQL	5.21	0.526	1	7/11/2009	
Hexachlorobutadiene	BQL	5.21	0.792	1	7/11/2009	
Hexachlorocyclopentadiene	BQL	10.4	10.4	1	7/11/2009	
Hexachloroethane	BQL	5.21	0.776	1	7/11/2009	
Indeno(1,2,3-c,d)pyrene	BQL	5.21	2.38	1	7/11/2009	
Isophorone	BQL	5.21	0.922	1	7/11/2009	
Naphthalene	18.5	5.21	0.948	1	7/11/2009	
Nitrobenzene	BQL	5.21	1.09	1	7/11/2009	
2-Nitrophenol	BQL	5.21	1.28	1	7/11/2009	
4-Nitrophenol	BQL	26.0	1.13	1	7/11/2009	
N-Nitrosodi-n-propylamine	BQL	5.21	1.56	1	7/11/2009	
Pentachlorophenol	BQL	26.0	1.47	1	7/11/2009	
Phenanthrene	4.01	5.21	0.464	1	7/11/2009	J

SGS North America, Inc.

Results for Semivolatiles
by GCMS 625

Client Sample ID: USTM232-236-MW25
Client Project ID: Site M-232-236
Lab Sample ID: G128-2409-2K
Lab Project ID: G128-2409

Analyzed By: EAW
Date Collected: 7/8/2009 10:45
Date Received: 7/9/2009
Date Extracted: 7/10/2009
Matrix: Water

Initial/Final Amt: 960 mL / 5.0 mL

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Phenol	BQL	5.21	1.10	1	7/11/2009	
Pyrene	BQL	5.21	2.15	1	7/11/2009	
1,2,4-Trichlorobenzene	BQL	5.21	0.750	1	7/11/2009	
2,4,6-Trichlorophenol	BQL	5.21	0.964	1	7/11/2009	
		Spike Added	Spike Result	Percent Recovered		
2-Fluorobiphenyl		10	6.4	64		
2-Fluorophenol		10	8	80		
Nitrobenzene-d5		10	7.6	76		
Phenol-d6		10	7.5	75		
2,4,6-Tribromophenol		10	6.4	64		
4-Terphenyl-d14		10	9.2	92		

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

J = Detected below the quantitation limit.

Reviewed By: 

Results of Library Search for Semivolatile Compounds
by GCMS

Client Sample ID: USTM232-236-MW25
Client Project ID: Site M-232-236
Lab Sample ID: G128-2409-2K
Lab Project ID: G128-2409
Sample Wt/Vol: 960 ML
Dilution: 1

Analyzed By: DES
Date Collected: 7/8/2009 10:45
Date Received: 7/9/2009
Date Extracted: 7/10/2009
Date Analyzed: 7/11/2009
Matrix: Water

No.	Compound	Retention Time	CAS#	Match Probability	Result ug/L
1	Naphthalene, 2,6-dimethyl-	6.49	581-42-0	97	40.4
2	Naphthalene, 2,3-dimethyl-	6.56	581-40-8	98	35.7
3	Aromatic, Unknown	4.06			32.2
4	Aromatic, Unknown	4.85			28.6
5	Alkane, Unknown	7.90			19.6
6	Naphthalene, 1,4-dimethyl-	6.68	571-58-4	98	15.2
7	Naphthalene, 1,2,3,4-tetrahydro-	4.94	119-64-2	97	14.3
8	Benzene, 1,3-diethyl-	4.11	141-93-5	96	11.6
9	Unknown	4.32			9.74
10	Alkane, Unknown	6.60			7.57

Comment:

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak area of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak area is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 

SGS North America, Inc.

Results for Semivolatiles
by GCMS 625

Client Sample ID: USTM232-236-MW26
Client Project ID: Site M-232-236
Lab Sample ID: G128-2409-3K
Lab Project ID: G128-2409

Analyzed By: EAW
Date Collected: 7/8/2009 11:15
Date Received: 7/9/2009
Date Extracted: 7/10/2009
Matrix: Water

Initial/Final Amt: 969 mL / 5.0 mL

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	16.0	51.6	7.69	10	7/14/2009	J
Acenaphthylene	12.9	51.6	7.69	10	7/14/2009	J
Anthracene	9.29	51.6	9.03	10	7/14/2009	J
Benzo[a]anthracene	BQL	51.6	7.02	10	7/14/2009	
Benzo[a]pyrene	BQL	51.6	6.55	10	7/14/2009	
Benzo[b]fluoranthene	BQL	51.6	7.38	10	7/14/2009	
Benzo[g,h,i]perylene	BQL	51.6	6.35	10	7/14/2009	
Benzo[k]fluoranthene	BQL	51.6	5.68	10	7/14/2009	
Bis(2-chloroethoxy)methane	BQL	51.6	10.6	10	7/14/2009	
Bis(2-chloroethyl)ether	BQL	51.6	10.7	10	7/14/2009	
Bis(2-chloroisopropyl)ether	BQL	51.6	10.1	10	7/14/2009	
Bis(2-ethylhexyl)phthalate	BQL	51.6	4.23	10	7/14/2009	
4-bromophenyl phenyl ether	BQL	51.6	8.05	10	7/14/2009	
Butylbenzylphthalate	BQL	51.6	4.59	10	7/14/2009	
2-Chloronaphthalene	BQL	51.6	8.93	10	7/14/2009	
2-Chlorophenol	BQL	51.6	12.1	10	7/14/2009	
4-Chloro-3-methylphenol	BQL	51.6	8.20	10	7/14/2009	
4-Chlorophenyl phenyl ether	BQL	51.6	33.6	10	7/14/2009	
Chrysene	BQL	51.6	5.73	10	7/14/2009	
Dibenzo[a,h]anthracene	BQL	51.6	4.54	10	7/14/2009	
Di-n-Butylphthalate	BQL	51.6	8.51	10	7/14/2009	
3,3'-Dichlorobenzidine	BQL	103	12.6	10	7/14/2009	
2,4-Dichlorophenol	BQL	51.6	11.6	10	7/14/2009	
Diethylphthalate	BQL	51.6	7.64	10	7/14/2009	
Dimethylphthalate	BQL	51.6	5.73	10	7/14/2009	
2,4-Dimethylphenol	BQL	51.6	16.7	10	7/14/2009	
Di-n-octylphthalate	BQL	51.6	5.99	10	7/14/2009	
4,6-Dinitro-2-methylphenol	BQL	258	5.68	10	7/14/2009	
2,4-Dinitrophenol	BQL	258	6.60	10	7/14/2009	
2,4-Dinitrotoluene	BQL	51.6	5.52	10	7/14/2009	
2,6-Dinitrotoluene	BQL	51.6	6.71	10	7/14/2009	
Diphenylamine *	81.0	51.6	5.88	10	7/14/2009	
Fluoranthene	BQL	51.6	7.28	10	7/14/2009	
Fluorene	36.6	51.6	7.48	10	7/14/2009	J
Hexachlorobenzene	BQL	51.6	5.21	10	7/14/2009	
Hexachlorobutadiene	BQL	51.6	7.84	10	7/14/2009	
Hexachlorocyclopentadiene	BQL	103	103	10	7/14/2009	
Hexachloroethane	BQL	51.6	7.69	10	7/14/2009	
Indeno(1,2,3-c,d)pyrene	BQL	51.6	23.6	10	7/14/2009	
Isophorone	BQL	51.6	9.13	10	7/14/2009	
Naphthalene	BQL	51.6	9.39	10	7/14/2009	
Nitrobenzene	BQL	51.6	10.8	10	7/14/2009	
2-Nitrophenol	BQL	51.6	12.7	10	7/14/2009	
4-Nitrophenol	BQL	258	11.1	10	7/14/2009	
N-Nitrosodi-n-propylamine	BQL	51.6	15.5	10	7/14/2009	
Pentachlorophenol	BQL	258	14.6	10	7/14/2009	
Phenanthrene	91.3	51.6	4.59	10	7/14/2009	

SGS North America, Inc.

Results for Semivolatiles
by GCMS 625

Client Sample ID: USTM232-236-MW26
Client Project ID: Site M-232-236
Lab Sample ID: G128-2409-3K
Lab Project ID: G128-2409

Analyzed By: EAW
Date Collected: 7/8/2009 11:15
Date Received: 7/9/2009
Date Extracted: 7/10/2009
Matrix: Water

Initial/Final Amt: 969 mL / 5.0 mL

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Phenol	BQL	51.6	10.9	10	7/14/2009	
Pyrene	BQL	51.6	21.3	10	7/14/2009	
1,2,4-Trichlorobenzene	BQL	51.6	7.43	10	7/14/2009	
2,4,6-Trichlorophenol	BQL	51.6	9.55	10	7/14/2009	
		Spike Added	Spike Result	Percent Recovered		
2-Fluorobiphenyl		1	NA	NA		
2-Fluorophenol		1	NA	NA		
Nitrobenzene-d5		1	NA	NA		
Phenol-d6		1	NA	NA		
2,4,6-Tribromophenol		1	NA	NA		
4-Terphenyl-d14		1	NA	NA		

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.
J = Detected below the quantitation limit.

Reviewed By: 

Results of Library Search for Semivolatile Compounds
by GCMS

Client Sample ID: USTM232-236-MW26

Client Project ID: Site M-232-236

Lab Sample ID: G128-2409-3K

Lab Project ID: G128-2409

Sample Wt/Vol: 969 ML

Dilution: 10

Analyzed By: DES

Date Collected: 7/8/2009 11:15

Date Received: 7/9/2009

Date Extracted: 7/10/2009

Date Analyzed: 7/14/2009

Matrix: Water

No.	Compound	Retention Time	CAS#	Match Probability	Result ug/L
1	Heptadecane	8.33	629-78-7	93.5	2440
2	Ketone, Unknown	6.91			1500
3	Alkane, Unknown	7.88			1430
4	Heptadecane, 8-methyl-	8.34	13287-23-5	93	1080
5	Alkane, Unknown	6.29			773
6	Hexadecane	8.24	544-76-3	94.3	603
7	Eicosane	9.22	112-95-8	97	543
8	Tetradecane	6.26	629-59-4	91	368
9	Pentadecane	7.85	629-62-9	91	356
10	Heneicosane	9.63	629-94-7	96	290

Comment:

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak area of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak area is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 

SGS North America, Inc.

Results for Semivolatiles
by GCMS 625

Client Sample ID: USTM232-236-MW27
Client Project ID: Site M-232-236
Lab Sample ID: G128-2409-4K
Lab Project ID: G128-2409

Analyzed By: EAW
Date Collected: 7/8/2009 12:15
Date Received: 7/9/2009
Date Extracted: 7/10/2009
Matrix: Water

Initial/Final Amt: 976 mL / 5.0 mL

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	2.15	5.12	0.763	1	7/11/2009	J
Acenaphthylene	6.10	5.12	0.763	1	7/11/2009	
Anthracene	BQL	5.12	0.897	1	7/11/2009	
Benzo[a]anthracene	BQL	5.12	0.697	1	7/11/2009	
Benzo[a]pyrene	BQL	5.12	0.651	1	7/11/2009	
Benzo[b]fluoranthene	BQL	5.12	0.733	1	7/11/2009	
Benzo[g,h,i]perylene	BQL	5.12	0.630	1	7/11/2009	
Benzo[k]fluoranthene	BQL	5.12	0.564	1	7/11/2009	
Bis(2-chloroethoxy)methane	BQL	5.12	1.06	1	7/11/2009	
Bis(2-chloroethyl)ether	BQL	5.12	1.07	1	7/11/2009	
Bis(2-chloroisopropyl)ether	BQL	5.12	0.999	1	7/11/2009	
Bis(2-ethylhexyl)phthalate	BQL	5.12	0.420	1	7/11/2009	
4-bromophenyl phenyl ether	BQL	5.12	0.799	1	7/11/2009	
Butylbenzylphthalate	BQL	5.12	0.456	1	7/11/2009	
2-Chloronaphthalene	BQL	5.12	0.886	1	7/11/2009	
2-Chlorophenol	BQL	5.12	1.20	1	7/11/2009	
4-Chloro-3-methylphenol	BQL	5.12	0.815	1	7/11/2009	
4-Chlorophenyl phenyl ether	BQL	5.12	3.34	1	7/11/2009	
Chrysene	BQL	5.12	0.569	1	7/11/2009	
Dibenzo[a,h]anthracene	BQL	5.12	0.451	1	7/11/2009	
Di-n-Butylphthalate	BQL	5.12	0.845	1	7/11/2009	
3,3'-Dichlorobenzidine	BQL	10.2	1.25	1	7/11/2009	
2,4-Dichlorophenol	BQL	5.12	1.15	1	7/11/2009	
Diethylphthalate	BQL	5.12	0.758	1	7/11/2009	
Dimethylphthalate	BQL	5.12	0.569	1	7/11/2009	
2,4-Dimethylphenol	BQL	5.12	1.66	1	7/11/2009	
Di-n-octylphthalate	BQL	5.12	0.594	1	7/11/2009	
4,6-Dinitro-2-methylphenol	BQL	25.6	0.564	1	7/11/2009	
2,4-Dinitrophenol	BQL	25.6	0.656	1	7/11/2009	
2,4-Dinitrotoluene	BQL	5.12	0.548	1	7/11/2009	
2,6-Dinitrotoluene	BQL	5.12	0.666	1	7/11/2009	
Diphenylamine *	1.23	5.12	0.584	1	7/11/2009	J
Fluoranthene	BQL	5.12	0.722	1	7/11/2009	
Fluorene	2.31	5.12	0.743	1	7/11/2009	J
Hexachlorobenzene	BQL	5.12	0.517	1	7/11/2009	
Hexachlorobutadiene	BQL	5.12	0.779	1	7/11/2009	
Hexachlorocyclopentadiene	BQL	10.2	10.2	1	7/11/2009	
Hexachloroethane	BQL	5.12	0.763	1	7/11/2009	
Indeno(1,2,3-c,d)pyrene	BQL	5.12	2.34	1	7/11/2009	
Isophorone	BQL	5.12	0.907	1	7/11/2009	
Naphthalene	10.7	5.12	0.932	1	7/11/2009	
Nitrobenzene	BQL	5.12	1.08	1	7/11/2009	
2-Nitrophenol	BQL	5.12	1.26	1	7/11/2009	
4-Nitrophenol	BQL	25.6	1.11	1	7/11/2009	
N-Nitrosodi-n-propylamine	BQL	5.12	1.54	1	7/11/2009	
Pentachlorophenol	BQL	25.6	1.45	1	7/11/2009	
Phenanthrene	4.05	5.12	0.456	1	7/11/2009	J

SGS North America, Inc.

Results for Semivolatiles
by GCMS 625

Client Sample ID: USTM232-236-MW27
Client Project ID: Site M-232-236
Lab Sample ID: G128-2409-4K
Lab Project ID: G128-2409

Analyzed By: EAW
Date Collected: 7/8/2009 12:15
Date Received: 7/9/2009
Date Extracted: 7/10/2009
Matrix: Water

Initial/Final Amt: 976 mL / 5.0 mL

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Phenol	BQL	5.12	1.09	1	7/11/2009	
Pyrene	BQL	5.12	2.12	1	7/11/2009	
1,2,4-Trichlorobenzene	BQL	5.12	0.738	1	7/11/2009	
2,4,6-Trichlorophenol	BQL	5.12	0.948	1	7/11/2009	
		Spike Added	Spike Result	Percent Recovered		
2-Fluorobiphenyl		10	5	50		
2-Fluorophenol		10	5.8	58		
Nitrobenzene-d5		10	5.6	56		
Phenol-d6		10	5.6	56		
2,4,6-Tribromophenol		10	5.9	59		
4-Terphenyl-d14		10	7.7	77		

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.
J = Detected below the quantitation limit.

Reviewed By:

Results of Library Search for Semivolatile Compounds
by GCMS

Client Sample ID: USTM232-236-MW27
Client Project ID: Site M-232-236
Lab Sample ID: G128-2409-4K
Lab Project ID: G128-2409
Sample Wt/Vol: 976 ML
Dilution: 1

Analyzed By: DES
Date Collected: 7/8/2009 12:15
Date Received: 7/9/2009
Date Extracted: 7/10/2009
Date Analyzed: 7/11/2009
Matrix: Water

No.	Compound	Retention Time	CAS#	Match Probability	Result ug/L
1	Pentadecane, 2,6,10,14-tetramethyl-	7.87	1921-70-6	91	63.6
2	Alkane, Unknown	6.60			52
3	Naphthalene, 2,3-dimethyl-	6.50	581-40-8	98	32.5
4	Naphthalene, 1,7-dimethyl-	6.42	575-37-1	98	31.1
5	Naphthalene, 1,5-dimethyl-	6.52	571-61-9	98	18.2
6	Alkane, Unknown	5.49			16.1
7	Alkane, Unknown	5.50			15
8	Hexatriacontane	8.36	630-06-8	91	14.4
9	Naphthalene, 1,4,6-trimethyl-	7.29	2131-42-2	96	14.2
10	Aromatic, Unknown	5.43			12.4

Comment:

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak area of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak area is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: MD

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Richard Catlin & AssociatesProject Name: Site M-232-236

Sample Information	
Sample Identification	USTM232-236-MW24
Sample Matrix	Water
Collection Option (for Soil)*	NA
Date Collected	07/08/09 10:15
Date Received	07/09/09
Date Extracted	07/13/09 19:44 - 07/13/09 19:44
Date Analyzed	07/13/09 19:44 - 07/13/09 19:44
Dry Weight	NA
Dilution Factor	1 - 1

Analytical Results				
Analyte	Result µg/L	Report Limit µg/L	Flags	
C ₅ -C ₈ Aliphatics**	BQL	100		
C ₉ -C ₁₂ Aliphatics**	106	100		
C ₉ -C ₁₀ Aromatics**	138	100		
		Percent Recovery	Flags	Limits Lower Upper
Surrogate % Recovery - PID		93.0		70 130
Surrogate % Recovery - FID		111		70 130

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: g128-2409-1d	Lab Info: g128-2409-1d
FID Info: VP071309/022F0101.D	PID Info: VP071309/022R0101.D

Reviewed By: 

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Richard Catlin & AssociatesProject Name: Site M-232-236

Sample Information	
Sample Identification	USTM232-236-MW25
Sample Matrix	Water
Collection Option (for Soil)*	NA
Date Collected	07/08/09 10:45
Date Received	07/09/09
Date Extracted	07/13/09 20:11 - 07/13/09 20:11
Date Analyzed	07/13/09 20:11 - 07/13/09 20:11
Dry Weight	NA
Dilution Factor	1 - 1

Analytical Results			
Analyte	Result µg/L	Report Limit µg/L	Flags
C ₅ -C ₈ Aliphatics**	BQL	100	
C ₉ -C ₁₂ Aliphatics**	205	100	
C ₉ -C ₁₀ Aromatics**	320	100	
	Percent Recovery	Flags	Limits Lower Upper
Surrogate % Recovery - PID	94.6		70 130
Surrogate % Recovery - FID	114		70 130

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: g128-2409-2d	Lab Info: g128-2409-2d
FID Info: VP071309/023F0101.D	PID Info: VP071309/023R0101.D

Reviewed By: MA

VPH (Aliphatics/Aromatics) Laboratory Reporting FormClient Name: Richard Catlin & AssociatesProject Name: Site M-232-236

Sample Information	
Sample Identification	USTM232-236-MW26
Sample Matrix	Water
Collection Option (for Soil)*	NA
Date Collected	07/08/09 11:15
Date Received	07/09/09
Date Extracted	07/16/09 01:48 - 07/16/09 01:48
Date Analyzed	07/16/09 01:48 - 07/16/09 01:48
Dry Weight	NA
Dilution Factor	5 - 5

Analytical Results				
Analyte	Result µg/L	Report Limit µg/L	Flags	
C ₅ -C ₈ Aliphatics**	BQL	100		
C ₉ -C ₁₂ Aliphatics**	328	100		
C ₉ -C ₁₀ Aromatics**	236	100		
	Percent Recovery	Flags	Limits Lower Upper	
Surrogate % Recovery - PID	91.9		70	130
Surrogate % Recovery - FID	105		70	130

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: g128-2409-3b	Lab Info: g128-2409-3b
FID Info: VP071509/031F0101.D	PID Info: VP071509/031R0101.D

Reviewed By: 

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Richard Catlin & AssociatesProject Name: Site M-232-236

Sample Information	
Sample Identification	USTM232-236-MW27
Sample Matrix	Water
Collection Option (for Soil)*	NA
Date Collected	07/08/09 12:15
Date Received	07/09/09
Date Extracted	07/14/09 20:30 - 07/14/09 20:30
Date Analyzed	07/14/09 20:30 - 07/14/09 20:30
Dry Weight	NA
Dilution Factor	1 - 1

Analytical Results				
Analyte	Result µg/L	Report Limit µg/L	Flags	
C ₅ -C ₈ Aliphatics**	BQL	100		
C ₉ -C ₁₂ Aliphatics**	BQL	100		
C ₉ -C ₁₀ Aromatics**	BQL	100		
	Percent Recovery	Flags	Limits	
			Lower	Upper
Surrogate % Recovery - PID	91.6		70	130
Surrogate % Recovery - FID	109		70	130

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: g128-2409-4b	Lab Info: g128-2409-4b
FID Info: VP071409/022F0101.D	PID Info: VP071409/022R0101.D

Reviewed By: 

Attachment 2

VPH Laboratory Reporting Form

Calibration and QA/QC Information

FID Initial Calibration Date: 05/08/09PID Initial Calibration Date: 05/08/09

Calibration Ranges and Limits

Range	MDL		ML		RL	
	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)
C ₅ -C ₈ Aliphatics	2.02	0.175	6.42	0.557	100	10
C ₉ -C ₁₂ Aliphatics	1.51	0.118	4.80	0.375	100	10
C ₉ -C ₁₀ Aromatics	0.902	0.132	2.87	0.420	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR	Method of Quantitation
C ₅ -C ₈ Aliphatics	10	0.8	8.80	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		
C ₉ -C ₁₂ Aliphatics	10	0.8	1.00	Linear Regression
	50	4		
	100	8		
	200	16		
	500	40		
C ₉ -C ₁₀ Aromatics	10	0.8	21.76	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		

Calibration Check Date: 07/13/09Filename: VP071309/002F0101.d

Calibration Check

Range	Levels (µg/L)	Levels (mg/Kg)	%Difference if CF %Drift if LR	Limits
C ₅ -C ₈ Aliphatics	200	16	14.9 ✓	±25%
C ₉ -C ₁₂ Aliphatics	200	16	-1.6 ✓	±25%
C ₉ -C ₁₀ Aromatics	200	16	18.6 ✓	±25%

MDL = Method Detection Limit

ML = Minimum Limit

RL = Reportable Limit

RPD = Relative Percent Difference

%RSD = Percent Relative Standard Deviation

CCC = Correlation Coefficient of Curve

Attachment 2

VPH Laboratory Reporting Form

Calibration and QA/QC Information

FID Initial Calibration Date: 05/08/09PID Initial Calibration Date: 05/08/09

Calibration Ranges and Limits

Range	MDL		ML		RL	
	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)
C ₅ -C ₈ Aliphatics	2.02	0.175	6.42	0.557	100	10
C ₉ -C ₁₂ Aliphatics	1.51	0.118	4.80	0.375	100	10
C ₉ -C ₁₀ Aromatics	0.902	0.132	2.87	0.420	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR	Method of Quantitation
C ₅ -C ₈ Aliphatics	10	0.8	8.80	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		
C ₉ -C ₁₂ Aliphatics	10	0.8	1.00	Linear Regression
	50	4		
	100	8		
	200	16		
	500	40		
C ₉ -C ₁₀ Aromatics	10	0.8	21.76	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		

Calibration Check Date: 07/13/09Filename: VP071309/018F0101.d

Calibration Check

Range	Levels (µg/L)	Levels (mg/Kg)	%Difference if CF %Drift if LR	Limits
C ₅ -C ₈ Aliphatics	200	16	7.8 /	±25%
C ₉ -C ₁₂ Aliphatics	200	16	-5.8 /	±25%
C ₉ -C ₁₀ Aromatics	200	16	10.4 /	±25%

MDL = Method Detection Limit

ML = Minimum Limit

RL = Reportable Limit

RPD = Relative Percent Difference

%RSD = Percent Relative Standard Deviation

CCC = Correlation Coefficient of Curve

Attachment 2

VPH Laboratory Reporting Form

Calibration and QA/QC Information

FID Initial Calibration Date: 05/08/09PID Initial Calibration Date: 05/08/09

Calibration Ranges and Limits

Range	MDL		ML		RL	
	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)
C ₅ -C ₈ Aliphatics	2.02	0.175	6.42	0.557	100	10
C ₉ -C ₁₂ Aliphatics	1.51	0.118	4.80	0.375	100	10
C ₉ -C ₁₀ Aromatics	0.902	0.132	2.87	0.420	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR	Method of Quantitation
C ₅ -C ₈ Aliphatics	10	0.8	8.80	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		
C ₉ -C ₁₂ Aliphatics	10	0.8	1.00	Linear Regression
	50	4		
	100	8		
	200	16		
	500	40		
C ₉ -C ₁₀ Aromatics	10	0.8	21.76	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		

Calibration Check Date: 07/13/09Filename: VP071309/027F0101.d

Calibration Check

Range	Levels (µg/L)	Levels (mg/Kg)	%Difference if CF %Drift if LR	Limits
C ₅ -C ₈ Aliphatics	200	16	-1.8 ✓	±25%
C ₉ -C ₁₂ Aliphatics	200	16	-9.7 ✓	±25%
C ₉ -C ₁₀ Aromatics	200	16	8.3 ✓	±25%

MDL = Method Detection Limit

ML = Minimum Limit

RL = Reportable Limit

RPD = Relative Percent Difference

%RSD = Percent Relative Standard Deviation

CCC = Correlation Coefficient of Curve

Attachment 2

VPH Laboratory Reporting Form

Calibration and QA/QC Information

FID Initial Calibration Date: 05/08/09 PID Initial Calibration Date: 05/08/09

Calibration Ranges and Limits

Range	MDL		ML		RL	
	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)
C ₅ -C ₈ Aliphatics	2.02	0.175	6.42	0.557	100	10
C ₉ -C ₁₂ Aliphatics	1.51	0.118	4.80	0.375	100	10
C ₉ -C ₁₀ Aromatics	0.902	0.132	2.87	0.420	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR	Method of Quantitation
C ₅ -C ₈ Aliphatics	10	0.8	8.80	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		
C ₉ -C ₁₂ Aliphatics	10	0.8	1.00	Linear Regression
	50	4		
	100	8		
	200	16		
	500	40		
C ₉ -C ₁₀ Aromatics	10	0.8	21.76	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		

Calibration Check Date: 07/14/09 Filename: VP071409/002F0101.d

Calibration Check

Range	Levels (µg/L)	Levels (mg/Kg)	%Difference if CF %Drift if LR	Limits
C ₅ -C ₈ Aliphatics	200	16	8.9 ✓	±25%
C ₉ -C ₁₂ Aliphatics	200	16	-8.4 ✓	±25%
C ₉ -C ₁₀ Aromatics	200	16	14.8 ✓	±25%

MDL = Method Detection Limit
ML = Minimum Limit
RL = Reportable Limit

RPD = Relative Percent Difference
%RSD = Percent Relative Standard Deviation
CCC = Correlation Coefficient of Curve

Attachment 2

VPH Laboratory Reporting Form

Calibration and QA/QC Information

FID Initial Calibration Date:

05/08/09

PID Initial Calibration Date:

05/08/09

Calibration Ranges and Limits

Range	MDL		ML		RL	
	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)
C ₅ -C ₈ Aliphatics	2.02	0.175	6.42	0.557	100	10
C ₉ -C ₁₂ Aliphatics	1.51	0.118	4.80	0.375	100	10
C ₉ -C ₁₀ Aromatics	0.902	0.132	2.87	0.420	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR	Method of Quantitation
C ₅ -C ₈ Aliphatics	10	0.8	8.80	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		
C ₉ -C ₁₂ Aliphatics	10	0.8	1.00	Linear Regression
	50	4		
	100	8		
	200	16		
	500	40		
C ₉ -C ₁₀ Aromatics	10	0.8	21.76	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		

Calibration Check Date:

07/14/09

Filename:

VP071409/031F0101.d

Calibration Check

Range	Levels (µg/L)	Levels (mg/Kg)	%Difference if CF %Drift if LR	Limits
C ₅ -C ₈ Aliphatics	200	16	3.5 ✓	±25%
C ₉ -C ₁₂ Aliphatics	200	16	-8.3 ✓	±25%
C ₉ -C ₁₀ Aromatics	200	16	14.4 ✓	±25%

MDL = Method Detection Limit

ML = Minimum Limit

RL = Reportable Limit

RPD = Relative Percent Difference

%RSD = Percent Relative Standard Deviation

CCC = Correlation Coefficient of Curve

Attachment 2

VPH Laboratory Reporting Form

Calibration and QA/QC Information

FID Initial Calibration Date:

05/08/09

PID Initial Calibration Date:

05/08/09

Calibration Ranges and Limits

Range	MDL		ML		RL	
	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)
C ₅ -C ₈ Aliphatics	2.02	0.175	6.42	0.557	100	10
C ₉ -C ₁₂ Aliphatics	1.51	0.118	4.80	0.375	100	10
C ₉ -C ₁₀ Aromatics	0.902	0.132	2.87	0.420	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR	Method of Quantitation
C ₅ -C ₈ Aliphatics	10	0.8	8.80	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		
C ₉ -C ₁₂ Aliphatics	10	0.8	1.00	Linear Regression
	50	4		
	100	8		
	200	16		
	500	40		
C ₉ -C ₁₀ Aromatics	10	0.8	21.76	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		

Calibration Check Date:

07/15/09

Filename:

VP071509/002F0101.d

Calibration Check

Range	Levels (µg/L)	Levels (mg/Kg)	%Difference if CF %Drift if LR	Limits
C ₅ -C ₈ Aliphatics	200	16	9.4 ✓	±25%
C ₉ -C ₁₂ Aliphatics	200	16	-5.6 ✓	±25%
C ₉ -C ₁₀ Aromatics	200	16	13.7 ✓	±25%

MDL = Method Detection Limit

ML = Minimum Limit

RL = Reportable Limit

RPD = Relative Percent Difference

%RSD = Percent Relative Standard Deviation

CCC = Correlation Coefficient of Curve

Attachment 2

VPH Laboratory Reporting Form

Calibration and QA/QC Information

FID Initial Calibration Date:

05/08/09

PID Initial Calibration Date:

05/08/09

Calibration Ranges and Limits

Range	MDL		ML		RL	
	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)
C ₅ -C ₈ Aliphatics	2.02	0.175	6.42	0.557	100	10
C ₉ -C ₁₂ Aliphatics	1.51	0.118	4.80	0.375	100	10
C ₉ -C ₁₀ Aromatics	0.902	0.132	2.87	0.420	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR	Method of Quantitation
C ₅ -C ₈ Aliphatics	10	0.8	8.80	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		
C ₉ -C ₁₂ Aliphatics	10	0.8	1.00	Linear Regression
	50	4		
	100	8		
	200	16		
	500	40		
C ₉ -C ₁₀ Aromatics	10	0.8	21.76	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		

Calibration Check Date:

07/15/09

Filename:

VP071509/028F0101.d

Calibration Check

Range	Levels (µg/L)	Levels (mg/Kg)	%Difference if CF %Drift if LR	Limits
C ₅ -C ₈ Aliphatics	200	16	0.8 ✓	±25%
C ₉ -C ₁₂ Aliphatics	200	16	-6.2 ✓	±25%
C ₉ -C ₁₀ Aromatics	200	16	11.0 ✓	±25%

MDL = Method Detection Limit

ML = Minimum Limit

RL = Reportable Limit

RPD = Relative Percent Difference

%RSD = Percent Relative Standard Deviation

CCC = Correlation Coefficient of Curve

Attachment 2

VPH Laboratory Reporting Form

Calibration and QA/QC Information

FID Initial Calibration Date: 05/08/09PID Initial Calibration Date: 05/08/09

Calibration Ranges and Limits

Range	MDL		ML		RL	
	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)
C ₅ -C ₈ Aliphatics	2.02	0.175	6.42	0.557	100	10
C ₉ -C ₁₂ Aliphatics	1.51	0.118	4.80	0.375	100	10
C ₉ -C ₁₀ Aromatics	0.902	0.132	2.87	0.420	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR	Method of Quantitation
C ₅ -C ₈ Aliphatics	10	0.8	8.80	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		
C ₉ -C ₁₂ Aliphatics	10	0.8	1.00	Linear Regression
	50	4		
	100	8		
	200	16		
	500	40		
C ₉ -C ₁₀ Aromatics	10	0.8	21.76	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		

Calibration Check Date: 07/15/09Filename: VP071509/035F0101.d

Calibration Check

Range	Levels (µg/L)	Levels (mg/Kg)	%Difference if CF %Drift if LR	Limits
C ₅ -C ₈ Aliphatics	200	16	2.3 ✓	±25%
C ₉ -C ₁₂ Aliphatics	200	16	-11.3 ✓	±25%
C ₉ -C ₁₀ Aromatics	200	16	11.3 /	±25%

MDL = Method Detection Limit

ML = Minimum Limit

RL = Reportable Limit

RPD = Relative Percent Difference

%RSD = Percent Relative Standard Deviation

CCC = Correlation Coefficient of Curve

EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Richard Catlin & AssociatesProject Name: Site M-232-236

Sample Information	
Sample Identification	USTM232-236-MW24
Sample Matrix	Water
Date Collected	07/08/09 10:15
Date Received	07/09/09
Date Extracted	07/13/09
Date Analyzed	07/18/09 13:35 - 07/18/09 14:03
Dry Weight	NA
Dilution Factor	1 - 1
Initial Volume (mL)	917
Final Volume (mL)	5.0

Analytical Results			
Analytes**	Result µg/L	Report Limit µg/L	Flags
C9-C18 Aliphatics	BQL	100	
C19-C36 Aliphatics	BQL	100	
C11-C22 Aromatics	345	100	

Surrogates	Percent Recovery	Flags	Limits	
			Lower	Upper
Aliphatic (tricosane)	86.2		40	140
Aromatic (ortho-terphenyl)	88.4		40	140
Fractionation 1 (2-bromonaphthalene)	99.4		40	140
Fractionation 2 (2-fluorobiphenyl)	102		40	140

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: G128-2409-1M	Lab Info: G128-2409-1M
Aliphatic: EP071709/048F4401.D	Aromatic: EP071709/049F4501.D

Reviewed By: 

EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Richard Catlin & AssociatesProject Name: Site M-232-236

Sample Information	
Sample Identification	USTM232-236-MW25
Sample Matrix	Water
Date Collected	07/08/09 10:45
Date Received	07/09/09
Date Extracted	07/13/09
Date Analyzed	07/18/09 14:32 - 07/18/09 15:01
Dry Weight	NA
Dilution Factor	1 - 1
Initial Volume (mL)	963
Final Volume (mL)	5.0

Analytical Results			
Analytes**	Result µg/L	Report Limit µg/L	Flags
C9-C18 Aliphatics	937	100	
C19-C36 Aliphatics	BQL	100	
C11-C22 Aromatics	655	100	

Surrogates	Percent Recovery	Flags	Limits	
			Lower	Upper
Aliphatic (tricosane)	53.5		40	140
Aromatic (ortho-terphenyl)	69.9		40	140
Fractionation 1 (2-bromonaphthalene)	91.6		40	140
Fractionation 2 (2-fluorobiphenyl)	105		40	140

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: G128-2409-2M	Lab Info: G128-2409-2M
Aliphatic: EP071709/050F4601.D	Aromatic: EP071709/051F4701.D

Reviewed By: CD

EPH (Aliphatics/Aromatics) Laboratory Reporting FormClient Name: Richard Catlin & AssociatesProject Name: Site M-232-236

Sample Information	
Sample Identification	USTM232-236-MW26
Sample Matrix	Water
Date Collected	07/08/09 11:15
Date Received	07/09/09
Date Extracted	07/13/09
Date Analyzed	07/18/09 15:29 - 07/18/09 15:57
Dry Weight	NA
Dilution Factor	50 - 10
Initial Volume (mL)	977
Final Volume (mL)	5.0

Analytical Results			
Analytes**	Result µg/L	Report Limit µg/L	Flags
C9-C18 Aliphatics	110000	128	
C19-C36 Aliphatics	11600	128	
C11-C22 Aromatics	34000	100	

Surrogates	Percent Recovery	Flags	Limits	
			Lower	Upper
Aliphatic (tricosane)	N/A		40	140
Aromatic (ortho-terphenyl)	N/A		40	140
Fractionation 1 (2-bromonaphthalene)	N/A		40	140
Fractionation 2 (2-fluorobiphenyl)	N/A		40	140

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

N/A = Surrogates diluted out.

Lab Info: G128-2409-3M	Lab Info: G128-2409-3M
Aliphatic: EP071709/052F4801.D	Aromatic: EP071709/053F4901.D

Reviewed By: 

EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Richard Catlin & AssociatesProject Name: Site M-232-236

Sample Information	
Sample Identification	USTM232-236-MW27
Sample Matrix	Water
Date Collected	07/08/09 12:15
Date Received	07/09/09
Date Extracted	07/13/09
Date Analyzed	07/18/09 16:26 - 07/18/09 16:55
Dry Weight	NA
Dilution Factor	5 - 2
Initial Volume (mL)	971
Final Volume (mL)	5.0

Analytical Results			
Analytes**	Result µg/L	Report Limit µg/L	Flags
C9-C18 Aliphatics	4210	100	
C19-C36 Aliphatics	193	100	
C11-C22 Aromatics	2230	100	

Surrogates	Percent Recovery	Flags	Limits	
			Lower	Upper
Aliphatic (tricosane)	57.7		40	140
Aromatic (ortho-terphenyl)	91.8		40	140
Fractionation 1 (2-bromonaphthalene)	110		40	140
Fractionation 2 (2-fluorobiphenyl)	114		40	140

** = Excludes any surrogates or internal standards and are unadjusted for individual analytes.

Lab Info: G128-2409-4M	Lab Info: G128-2409-4M
Aliphatic: EP071709/054F5001.D	Aromatic: EP071709/055F5101.D

Reviewed By: 

Attachment 3

EPH Laboratory Reporting Form

Calibration and QA/QC Information

Initial Calibration Date: 07/17/09

Calibration Ranges and Limits

Range	MDL		ML		RL	
	(02/15/08) (µg/L)	(02/11/08) (mg/Kg)	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)
C9-C18 Aliphatics	1.66	0.274	5.28	0.871	100	10
C19-C36 Aliphatics	2.79	0.201	8.87	0.639	100	10
C11-C22 Aromatics	2.64	0.110	8.40	0.350	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR	Method of Quantitation
C ₉ -C ₁₈ Aliphatics	200	33.3	14.33	Calibration Factor
	100	16.7		
	50	8.33		
	25	4.17		
	5	0.833		
C ₁₉ -C ₃₆ Aliphatics	200	33.3	16.98	Calibration Factor
	100	16.7		
	50	8.33		
	25	4.17		
	5	0.833		
C ₁₁ -C ₂₂ Aromatics	200	33.3	7.33	Calibration Factor
	100	16.7		
	50	8.33		
	25	4.17		
	5	0.833		

Calibration Check Date: 07/17/09
07/18/09Filenames: ep071709/036f3201.d
ep071709/037f3302.d

Calibration Check

Range	Levels (mg/Kg)	(µg/L)	%Difference if CF %Drift if LR	Limits
C9-C18 Aliphatics	100	16.7	10.3	±25%
C19-C36 Aliphatics	100	16.7	10.6	±25%
C11-C22 Aromatics	100	16.7	10.8	±25%

MDL = Method Detection Limit
ML = Minimum Limit
RL = Reportable LimitRPD = Relative Percent Difference
%RSD = Percent Relative Standard Deviation
CCC = Correlation Coefficient of Curve

Attachment 3

EPH Laboratory Reporting Form

Calibration and QA/QC Information

Initial Calibration Date: 07/17/09

Calibration Ranges and Limits

Range	MDL		ML		RL	
	(02/15/08) (µg/L)	(02/11/08) (mg/Kg)	(µg/L)	(mg/Kg)	(µg/L)	(mg/Kg)
C9-C18 Aliphatics	1.66	0.274	5.28	0.871	100	10
C19-C36 Aliphatics	2.79	0.201	8.87	0.639	100	10
C11-C22 Aromatics	2.64	0.110	8.40	0.350	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR	Method of Quantitation
C ₉ -C ₁₈ Aliphatics	200	33.3	14.33	Calibration Factor
	100	16.7		
	50	8.33		
	25	4.17		
	5	0.833		
C ₁₉ -C ₃₆ Aliphatics	200	33.3	16.98	Calibration Factor
	100	16.7		
	50	8.33		
	25	4.17		
	5	0.833		
C ₁₁ -C ₂₂ Aromatics	200	33.3	7.33	Calibration Factor
	100	16.7		
	50	8.33		
	25	4.17		
	5	0.833		

Calibration Check Date: 07/17/09
07/18/09Filenames: ep071709/058f5402.d
ep071709/059f5501.d

Calibration Check

Range	Levels (µg/L) (mg/Kg)	%Difference if CF %Drift if LR	Limits
C9-C18 Aliphatics	100 16.7	8.2	≤±25%
C19-C36 Aliphatics	100 16.7	9.6	≤±25%
C11-C22 Aromatics	100 16.7	7.7	≤±25%

MDL = Method Detection Limit
ML = Minimum Limit
RL = Reportable LimitRPD = Relative Percent Difference
%RSD = Percent Relative Standard Deviation
CCC = Correlation Coefficient of Curve



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1 CLIENT: <u>Catlin</u>					SGS Reference: <u>G128-2409</u>					PAGE <u>1</u> OF <u>1</u>			
CONTACT: <u>Shane Chasteen</u> PHONE NO.: <u>(910) 452-5861</u>					CONTAINERS					Preservatives Used: <u>HC1</u> <u>1</u> <u>HC1</u> <u>HC1</u>		Analysis Required: <u>3</u> <u>EPA 602 + 195</u> <u>MTBE</u> <u>EPA 625 + TICS</u> <u>MAEP EPA</u> <u>MAEP VPH</u>	
PROJECT: <u>Site M-232-236</u> SITE/PWSID#:													
REPORTS TO: <u>Shane @ Catlin</u> FAX NO.: <u>(910) 452-7563</u>													
INVOICE TO: <u>Shila @ Catlin</u> QUOTE #: <u>DOD 101</u> P.O. NUMBER: <u>290709-1</u>													
LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX									REMARKS
	<u>USTM232-236-MW24</u>	<u>7-8-09</u>	<u>10:15a</u>	<u>GW</u>	<u>9</u>	<u>G</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>			
	<u>USTM232-236-MW25</u>	<u>7-8-09</u>	<u>10:45a</u>	<u>GW</u>	<u>9</u>	<u>G</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>			
	<u>USTM232-236-MW26</u>	<u>7-8-09</u>	<u>11:15a</u>	<u>GW</u>	<u>9</u>	<u>G</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>			
	<u>USTM232-236-MW27</u>	<u>7-8-09</u>	<u>12:15</u>	<u>GW</u>	<u>9</u>	<u>G</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>			
	<u>USTM232-236-MW27 DUP</u>	<u>7-8-09</u>	<u>12:15</u>	<u>GW</u>	<u>3</u>	<u>G</u>	<u>✓</u>						
	<u>Trip blank</u>						<u>✓</u>						
5 Collected/Relinquished By: (1) <u>Tom BTT</u> Date <u>7-9-09</u> Time <u>09:04</u> Received By: <u>[Signature]</u>					4 Shipping Carrier:					Samples Received Cold? (Circle) <u>YES</u> NO			
Relinquished By: (2)					Shipping Ticket No:					Temperature °C: <u>5.5, 5.8</u>			
Relinquished By: (3)					Special Deliverable Requirements:					Chain of Custody Seal: (Circle) <u>INTACT</u> <u>BROKEN</u> <u>ABSENT</u>			
Relinquished By: (4)					Special Instructions:					Requested Turnaround Time: <u>STD</u>			