UNDERGROUND STORAGE TANK
CLOSURE REPORT
TT-2969

TARAWA TERRACE
MARINE CORPS BASE
CAMP LEJEUNE, NORTH CAROLINA

JULY 31, 2009

NAVY CONTRACT No. N62470-05-D-6200
CATLIN PROJECT No. 209-025

PREPARED BY:

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NC ENGINEERING LICENSE NO.: C-0585

TABLE OF CONTENTS

UST-12
UNDERGROUND STORAGE TANK (UST) CLOSURE REPORT
SITE TT-2969
TARAWA TERRACE
MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA

A. GENERAL INFORMATION

1. Facility Information

a. Facility Name:
Site TT-2969
Tarawa Terrace

b. Facility ID Number:
N/A

c. Facility address, telephone number, and county:
Commanding Officer
Director, Installations and Environment Department, Environmental Management Division (EMD)
PSC Box 20004
Marine Corps Base (MCB) Camp Lejeune, North Carolina, 28542-0004
(910) 451-5068
Onslow County

2. Contacts

a. Name, address, telephone number, and job title of primary contact person:
Mr. Bruce Markwick
Installations and Environment Department, EMD
MCB Camp Lejeune, North Carolina 28542
(910) 451-5068

b. Name, address, and telephone number of closure contractor:
TMS
MEC-TMS Laydown Area / Gas House Road
Cherry Point, North Carolina 28533
(252) 447-1700

c. Name, address, and telephone number of primary consultant:
CATLIN Engineers and Scientists (CATLIN)
220 Old Dairy Road
Wilmington, North Carolina 28405
(910) 452-5861

d. Name, address, telephone number, and State certification number of laboratory:
SGS Environmental Services (SGS)
5500 Business Drive
Wilmington, North Carolina 28405
(910) 350-1903
NC Laboratory Certification # 481

3. UST Information

Tank Number	Installation Date	Capacity (Gallons)	Tank Dimensions	Last Contents of Tank
TT-2969	Unknown	550	4 ft x 6 ft	#2 Heating Oil

4. Site Characteristics

a. Describe any past releases at the site:
No previous releases have been reported in conjunction with this tank.

b. Indicate if the facility is active or inactive. If inactive, note the last date that the USTs were in operation:
The UST was an inactive home heating oil tank previously used to store #2 Heating Oil for on-site use.

c. Describe the use of surrounding properties:
The site is located within the Tarawa Terrace Housing Area aboard the MCB Camp Lejeune. The site is in an area where existing housing will be demolished and used to re-build military housing units. As a result, land use should be categorized as Residential.

d. Describe site geology and hydrogeology:
The site lies within the Tidewater Region of the Coastal Plain Physiographic Province of North Carolina, where large streams and many of their tributaries are affected by ocean tides. The predominant soil type at the site is silty sand to sand of Quarternary surficial deposits. The depth to the underlain Tertiary Castle Hayne limestone/sand is unknown, but is estimated to be more than 30 feet. The depth to water is estimated to be approximately eight (8) feet below land surface (BLS).

e. If a release has occurred, describe the results of the receptor survey performed within 1,500 feet of the facility:
As illustrated on Figure 1, the nearest surface water body is an unnamed tributary of the New River, which is approximately 200 feet northeast of the site. Groundwater flow direction in the surficial aquifer is estimated to flow northeast towards the unnamed tributary. There are no water supply wells

within a 1,500 ft radius of the site, and all buildings in the area are supplied by the MCB water supply system, specifically water from the Holcomb Boulevard Water Treatment Plant.

The nearest place of public assembly is unknown at this time as the entire area is being redeveloped with new residential housing units. Community playgrounds may be planned in the area where the new housing units are to be constructed.

B. CLOSURE PROCEDURES

1. Describe preparations for closure including steps taken to notify authorities, permits obtained, and steps taken to clean and purge the tanks:

According to TMS, the UST was pre-located and surveyed prior to removal to prevent damage or UST releases by subcontractors of Actus Lend Lease (Actus). On May 7, 2009 an access hole was cut into the top of the tank in order to remove liquid contents from tank. A vacuum truck, provided by the subcontractor P&F Environmental (P&F) from Rocky Mount, North Carolina was used to remove approximately 550 gallons of contaminated water from the tank.

As documented by TMS, on May 7, 2009, the tank was removed and transported to a laydown area for cleaning and disposal preparation. TMS personnel noted there were signs of deterioration and corrosion on the bottom and sides of the UST. Photographs of the tank are included in Appendix F. The tank was transported to Jacksonville Scrap for disposal on May 8, 2009. The Tank Disposal Manifest is included in Appendix C. Appendix A and B contain North Carolina Department of Environment and Natural Resources (NCDENR) Forms UST-2 and UST-61, respectively.

2. Describe the closure procedure:

The site layout is illustrated on Figure 2. One (1) heating oil tank was found adjacent to building TT-2969. Sufficient soils were removed from the top of tank allowing access for fluid removal. According to TMS, following fluid removal, vapors were measured inside the tank and found to be acceptable for tank removal. Sufficient soils were excavated from the sides of the UST allowing the tank to be lifted from the excavation.

The top of the tank was two (2) feet BLS. The tank was constructed of steel and there were through holes and severe pitting and rust noted.

Based on the holes in the tank, odor and soil staining, additional soils were excavated and loaded into dump trucks and transported to a nearby stockpile for subsequent off-site disposal. A *Site Investigation Report for Permanent Closure or Change-in-Service of UST (UST-2)* form is included in Appendix A.

3. Note the amount of residual material pumped from the tank:
TMS reported that approximately 550 gallons of contaminated water was pumped from the tank.

4. Describe the storage, sampling and disposal of the residual material:
According to TMS, the 550 gallons of contaminated water pumped from the tank, was containerized and properly disposed by EMD, Resource Conservation and Recovery Section (RCRS) at Building 977.

5. Excavation

a. Describe excavation procedures noting the condition of the soil encountered and the dimensions of the excavation in relation to the tank, piping, and/or pumps:
TMS mobilized to the site to conduct a site survey and remove the UST on May 7, 2009. Once the UST was removed, visible staining was noted beneath the tank. Due to heavy rain, additional soil excavating was put on hold and fencing was installed around the site to secure the excavation area.

Excavation activities resumed on May 12, 2009. A Photoionization Detector (PID) was used to identify contamination limits prior to obtaining soil samples. Elevated PID readings were noted in the sidewall soils and bottom soils. One soil sample (TT-2969-B) was collected at approximately six and one-half (6.5) feet BLS, directly below the tank bottom. The soil sample was collected from the backhoe bucket and submitted for Total Petroleum Hydrocarbons (TPH) Gasoline Range Organics (GRO) and Diesel Range Organics (DRO) analysis per Environmental Protection Agency (EPA) Method 8015 and Massachusetts Department of Environmental Protection (MADEP) Extractable and Volatile Petroleum Hydrocarbons (EPH and VPH).

Petroleum impacted soils were excavated surrounding the former tank location to the extent physically possible due to the site constraints (including utilities, sidewalk, and building foundation). Excavation limits were approximately eight (8) feet (length) by six (6) feet (width) by eight (8) feet deep.

Four soil samples were collected at approximately three (3) to four (4) feet BLS along the sidewalls surrounding the tank (TT-2969-1 through TT-2969-4). The soil samples were collected from the backhoe bucket and submitted for TPH-DRO and GRO, and MADEP EPH and VPH analysis.

The excavation was backfilled with clean fill material. The excavation was backfilled to initial land surface level.

b. Note the depth from the land surface to the top of the tank:
The top of the tank was approximately two (2) feet BLS.

c. Note the volume of soil excavated:
Soils removed during this UST closure excavation were stockpiled with additional soils excavated during three (3) other tank closures conducted concurrently at Tarawa Terrace. A total of 67.71 tons of soil were excavated from the four (4) tank basins.

d. Describe the soil type(s) encountered:
Based on observation of the tank excavation, soils encountered were a clayey sand / sandy clay mixture.

e. Describe the type and source of backfill used:
The excavation was filled with clean sandy material from the Camp Lejeune Landfill.

f. Note if water, free product, or bedrock was encountered during the excavation process:
Groundwater was encountered at approximately eight (8) feet BLS. No free product or bedrock was encountered during the excavation process.

6. Contaminated soil
As previously mentioned, during the four (4) concurrent UST removal activities and over excavations, a total of 67.71 tons of contaminated soil were excavated. The 67.71 tons of soil removed during the excavations were transported to the P&F Land Facility, Permit# SR0500106, in Whitakers, NC for disposal. Soil Disposal Manifests are included in Appendix D.

C. SITE INVESTIGATION

1. Provide information of field screening and physical observations, including methods used to calibrate field screening instruments:
Soil discoloration and petroleum odor were observed within the UST excavation. The PID field screening indicated organic vapor readings in the sidewalls, as well as at the bottom of the excavation. The PID instrument was calibrated using the standard procedure as recommended by the manufacturer.

2. Document soil sampling information including the sample locations, sample type, procedure, and analyses used:
Soil sample locations are illustrated on Figure 2.

Soil sample TT-2969-B was obtained from directly beneath the removed tank approximately 6.5 feet BLS. Confirmation soil samples (Sample IDs TT-2969-1 through TT-2969-4) were collected following over excavation from the tank basin sidewalls on May 12, 2009. Soil samples TT-2969-1 through TT-2969-4 were collected from the sidewalls at approximately three (3) to four (4) feet BLS. The samples were placed into laboratory provided glassware, properly labeled, and transported directly to SGS under proper Chain of Custody. All soil samples were analyzed for TPH-GRO and DRO per EPA Method 8015 and volatile and semi-

volatile organics per MADEP EPH and VPH.

3. Document groundwater sampling information:
No groundwater samples were collected during this investigation.

4. Document quality-control measures:
Laboratory provided glassware and containers as well as disposable gloves were used during sampling. Upon collection, soil samples were immediately packed into clean containers and refrigerated for shipment to the analytical laboratory. There was a laboratory trip blank included with each cooler of samples.

5. Describe investigation results:
Some soil discoloration and petroleum odor were observed during tank removal. Elevated PID readings indicated the presence of organic vapors in the sidewalls, as well as the excavation bottom.

Laboratory results of the soil samples collected during this tank removal action are summarized in Tables 1 and 2, illustrated on Figure 2 and the laboratory analytical report is included in Appendix E.

Total Petroleum Hydrocarbons per EPA Method 8015

The tank closure soil sample TT-2969-B analytical results revealed TPH-GRO and TPH-DRO at concentrations of 370 milligrams per kilogram (mg/kg) and 1,250 mg/kg, respectivley. The excavation confirmation sidewall soil samples (Sample IDs TT-2969-1 through TT-2969-4) revealed TPH-DRO concentrations ranging from 108 mg/kg (TT-2969-1) to 1,100 (TT-2969-4). Additionally, TPH-GRO was detected in the TT-2969-2 and TT-2969-4 soil samples at concentrations of 159 mg/kg and 151 mg/kg, respectively.

MADEP EPH and VPH

Laboratory analysis revealed site soil samples TT-2969-1 and TT-2969-3 were Below Quantitation (reporting) Limits (BQL) for all MADEP compounds. The TT-2969-B, TT-2969-2, and TT-2969-4 soil sample analytical results revealed minor EPH and VPH concentrations and the C_9-C_{22} Aromatics concentration was detected above the Residential MSCC in these three (3) samples.

D. CONCLUSIONS AND RECOMMENDATION

A leaking UST and petroleum impacted soils were removed from the TT-2969 site. Laboratory analysis detected TPH-DRO concentrations greater than the 10 mg/kg Action Level in all site soil samples. Additionally, TPH-GRO was detected at concentrations greater than the 10 mg/kg Action Level in the TT-2969-B, TT-2969-2, and TT-2969-4 soil samples. Three (3) of the soil samples, TT-2969-B (collected from beneath the removed tank), TT-2969-2, and TT-2969-4 (collected from the soil excavation sidewalls), revealed concentrations of the C_9-C_{22} Aromatics above the Residential MSCC.

Groundwater was encountered at the base of the excavation, approximately eight (8) feet BLS. No groundwater samples were collected during this investigation.

The TT-2969 building is scheduled for demolition. It is recommended that following the demolition of building TT-2969 the residual, petroleum impacted soils be excavated lateral beyond the current excavation limits and properly disposed. Following the subsequent excavation and soil disposal, additional sidewall confirmation soil samples should be collected for laboratory analysis per Risk-Based Methods (EPA Methods 8260 and 8270 and MADEP EPH and VPH). Subsequent to additional soil removal, a permanent groundwater monitoring well should be installed at the former UST basin, sampled, and the groundwater sample submitted for laboratory analysis.

The recommended soil removal, confirmation soil sampling, and groundwater water sampling should be conducted prior to new construction at the site. It is anticipated the additional work may be completed in late 2009. Pending subsequent soil removal confirmation sample results and groundwater sample results, the site may be eligible for "No Further Action" status.

E. SIGNATURE AND SEAL

Signature and seal of certifying Professional Engineer:

Michael E. Mason, PE

F. LIMITATIONS

The soil 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.

G. REFERENCES

CATLIN Engineers and Scientists. *Workplan, UST Closure and Soil Disposal for Twenty Tank Locations at Tarawa Terrace.* Marine Corps Base, Camp Lejeune, NC. April 28, 2009.

North Carolina Department of Environment and Natural Resources. Division of Waste Management, Underground Storage Tank Section, *Guidelines for Site Checks, Tank Closure, and Initial Response and Abatement for UST Releases.* March 1, 2007 Version, Change 3, Effective December 1, 2008.

TABLES

TABLE 1
SUMMARY OF SOIL LABORATORY RESULTS - EPA METHOD 8015

Incident Name and No.: TT-2969 - Pending

Sample ID	Contaminant of Concern →		Gasoline Range Organics	Diesel Range Organics
	Date Collected	Sample Depth (ft. BLS)		
NCDENR Action Level (mg/kg)			10	10
TT-2969-B	5/12/2009	6.5	**370**	**1,250**
TT-2969-1	5/12/2009	3 - 4	<7.27	**108**
TT-2969-2	5/12/2009	3 - 4	**159**	**966**
TT-2969-3	5/12/2009	3 - 4	<7.28	**167**
TT-2969-4	5/12/2009	3 - 4	**151**	**1,100**

All results in milligrams per kilogram (mg/kg).
ft. BLS = Feet Below Land Surface
NCDENR = North Carolina Department of Environment and Natural Resources
< = Less than reporting limit
Bold results indicate concentration above the NCDENR Action Level.

TABLE 2
SUMMARY OF SOIL LABORATORY RESULTS - MADEP EPH AND VPH

Incident Name and No.: TT-2969 - Pending

Sample ID	Contaminant of Concern →		MADEP EPH/VPH			
	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
TT-2969-B	5/12/2009	6.5	40.8	1,978	207	**1,685**
TT-2969-1	5/12/2009	3 - 4	<10	<10	<10	<20
TT-2969-2	5/12/2009	3 - 4	17.2	812	111	**606**
TT-2969-3	5/12/2009	3 - 4	<10	<10	<10	<20
TT-2969-4	5/12/2009	3 - 4	16.7	1,203	105	**1,014**

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

ft. BLS = Feet Below Land Surface

< = Less than reporting limit

STGW = Soil-to-Groundwater

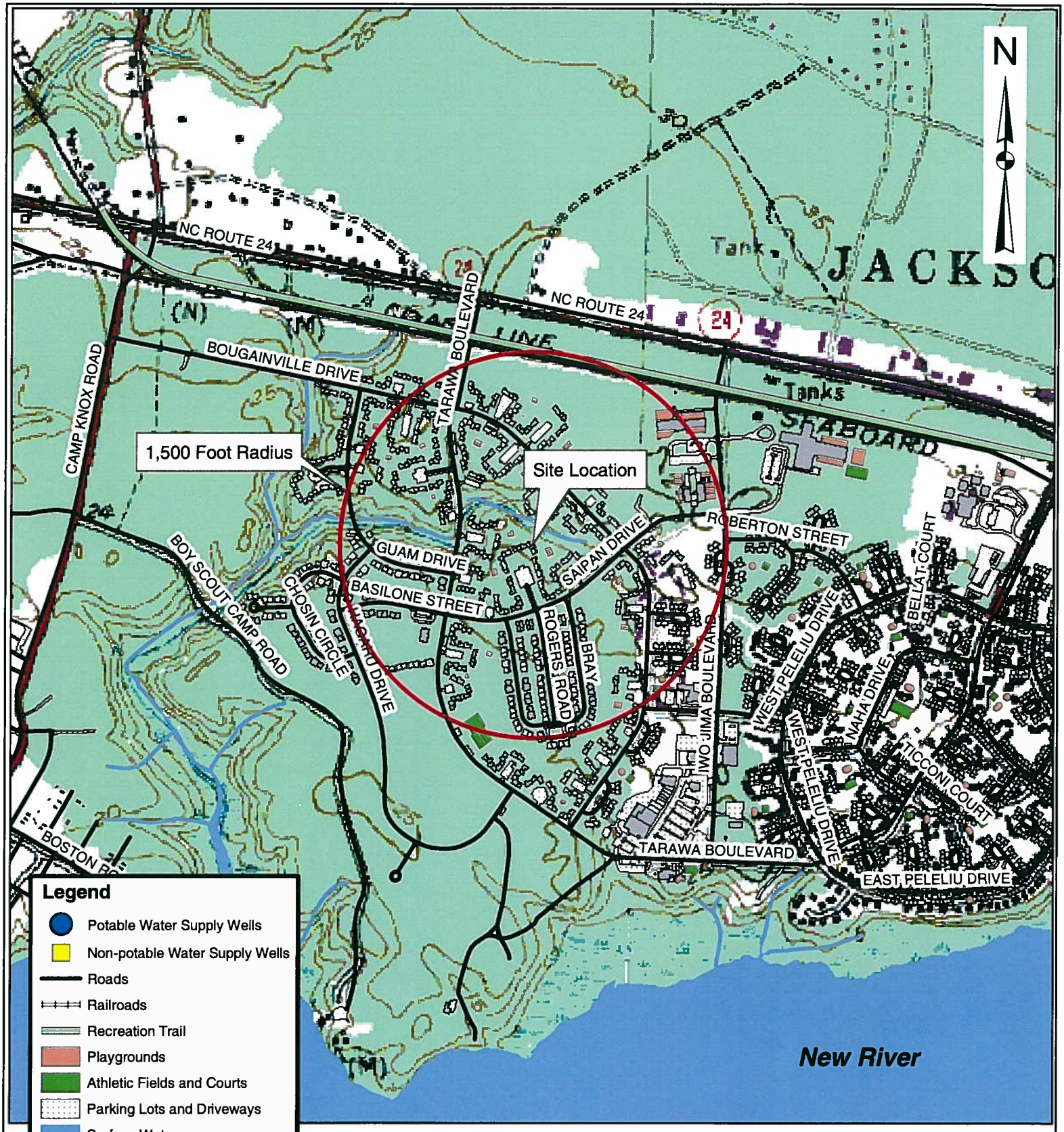
MSCC = Maximum Soil Contaminant Concentration

= Health-Based Level (>100%)

= Considered Immobile

Bold results indicate concentration above the lowest MSCC.

FIGURES



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

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NC Engineering License No.: C-0585

PROJECT	TITLE	FIGURE
TANK CLOSURE REPORT SITE TT-2969 MARINE CORPS BASE CAMP LEJEUNE, NC	**USGS TOPOGRAPHIC SITE LOCATION MAP**	**1**

JOB NO.	DATE	SCALE	DRAWN BY	CHECKED BY
209-025	JULY 2009	AS SHOWN	SAC	BA

TABLE 1
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All results in milligrams per kilogram (mg/kg).
ft. BLS = Feet Below Land Surface
NCDENR = North Carolina Department of Environment and Natural Resources
< = Less than reporting limit
Bold results indicate concentration above the NCDENR Action Level.

TABLE 2
SUMMARY OF SOIL LABORATORY RESULTS - MADEP EPH AND VPH

Incident Name and No.: TT-2969 - Pending

Sample ID	Contaminant of Concern →		MADEP EPH/VPH			
	Date Collected	Sample Depth (ft. BLS)	C5-C8 Aliphatics	C9-C18 Aliphatics	C19-C36 Aliphatics	C9-C22 Aromatics
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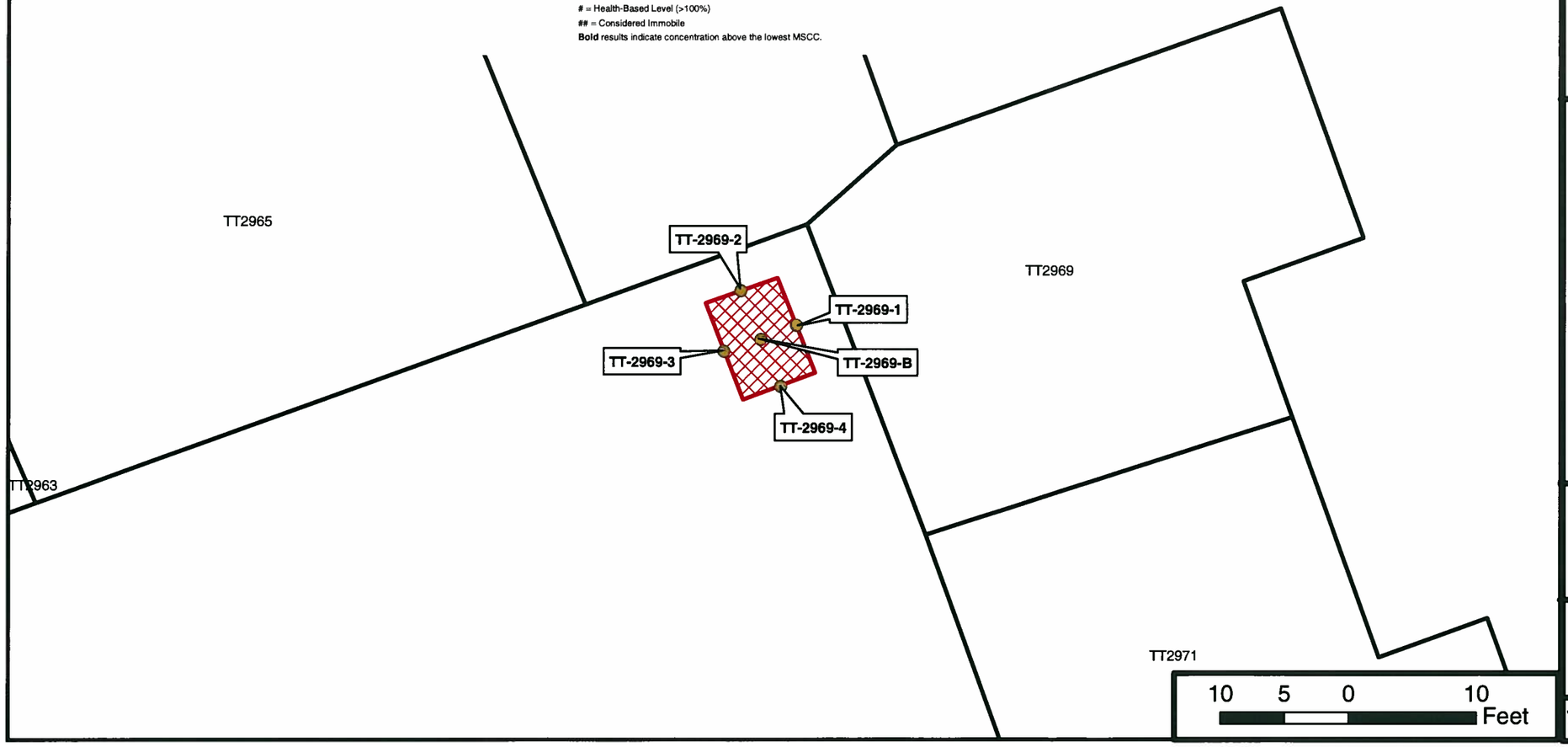
MSCC = Maximum Soil Contaminant Concentration
# = Health-Based Level (>100%)
= Considered Immobile
Bold results indicate concentration above the lowest MSCC.



TANK CLOSURE REPORT
SITE TT-2969
MARINE CORPS BASE
CAMP LEJEUNE, NC

NAVFAC Naval Facilities Engineering Command
ATLANTIC DIVISION

LEGEND

- Tank Excavation Area
- Soil Sample Location
- Buildings and Structures
- Slabs
- Driveways
- Parking Lots
- Woods

NOTES

1. **Data layers provided by MCB Camp Lejeune GIS office.**
2. **Excavation dimensions were approximately 8 feet by 6 feet by 8 feet deep.**
3. **Excavation boundary and soil sample locations based on site sketch provided by MEC personnel.**

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SITE MAP WITH SOIL LABORATORY RESULTS

FIGURE 2

Job No.:	Date:	Scale:	Drawn By:	Checked By:
209-025	JULY 2009	AS SHOWN	SAC	BA

APPENDICES

APPENDIX A

SITE INVESTIGATION REPORT FOR PERMANENT CLOSURE OR CHANGE-IN-SERVICE OF UST (UST-2)

UST-2 Site Investigation Report for Permanent Closure or Change-in-Service of UST

Return completed form to:
The DWM Regional Office located in the area where the facility is located. Send a copy to the Central Office in Raleigh so that the status of the tank may be changed to "PERMANENTLY CLOSED" and your tank fee account can be closed out.
SEE MAP ON THE BACK OF THIS FORM FOR THE CENTRAL AND REGIONAL OFFICE ADDRESSES.

STATE USE ONLY:
I.D. #_____
Date Received_____

INSTRUCTIONS (READ THIS FIRST)

For more than five UST systems you may attach additional forms as needed.

Permanent closure – For permanent closure, complete all sections of this form.

Change-in-service – For change-in-service where UST systems will be converted from containing a regulated substance to storing a non-regulated substance, complete sections I, II, III, IV, and VIII

Effective February 1, 1995, all UST closure/change-in-service reports must be submitted in the format provided in the UST-12 form. UST closure and change-in-services must be completed in accordance with the latest version of the *Guidelines for Tank Closure*. A copy of the UST-12 form and the *Guidelines for Tank Closure* can be obtained at www.wastenotnc.org.

You must make sure that USTs removed from your property are disposed of properly. When choosing a closure contractor, ask where the tank(s) will be taken for disposal. Usually, USTs are cleaned and cut up for scrap metal. This is dangerous work and must be performed by a qualified company. Tanks disposed of illegally in fields or other dumpsites can leak petroleum products and sludge into the environment. If your tanks are disposed of improperly, you could be held responsible for the cleanup of any environmental damage that occurs.

NOTE: If a release from the tank(s) has occurred, the site assessment portion of the tank closure must be conducted under the supervision of a P.E. or L.G., with all closure site assessment reports bearing the signature and seal of the P.E. or L.G.

I. OWNERSHIP OF TANKS

Owner Name (Corporation, Individual, Public Agency, or Other Entity) Commanding Officer, Marine Corps Base	
Street Address Bldg 1 Holcumb Blvd	
City Camp Lejeune	County Onslow
State NC	Zip Code 28542-0004
Phone Number 910-451-9660	

II. LOCATION OF TANKS

Facility Name or Company Tarawa Terrace Housing		
Facility ID # (If known) N/A		
Street Address TT-2969 Saipan Drive		
City Camp Lejeune	County Onslow	Zip Code 28542
Phone Number		

III. CONTACT PERSONNEL

Contact for Facility: Bruce Markwick		Job Title: Environmental Protection Specialist	Phone. No: 910-451-9660
Closure Contractor Name: TMS	Closure Contractor Company:	Address: MEC-TMS Gas House Rd. Cherry Point	Phone. No: 252-447-1700
Primary Consultant Name: Michael E. Mason	Primary Consultant Company: CATLIN Engineers & Scientists	Address: 220 Old Dairy Rd Wilmingtoin, NC	Phone. No: 910-452-5861

IV. UST INFORMATION FOR REGISTERED UST SYSTEMS

V. EXCAVATION CONDITION

Tank ID No.	Size in Gallons	Tank Dimensions	Last Contents	Last Use Date	Permanent Close Date	Change-in-Service Date	Water in excavation		Free product		Notable odor or visible soil contamination	
							Yes	No	Yes	No	Yes	No
							☐	☐	☐	☐	☐	☐
							☐	☐	☐	☐	☐	☐
							☐	☐	☐	☐	☐	☐
							☐	☐	☐	☐	☐	☐
							☐	☐	☐	☐	☐	☐

VI. UST INFORMATION FOR UNREGISTERED UST SYSTEMS

VII. EXCAVATION CONDITION

Tank ID No.	Size in Gallons	Tank Dimensions	Last Contents	Last Use Date	Permanent Close Date	Tank Owner Name *	Water in excavation		Free product		Notable odor or visible soil contamination	
							Yes	No	Yes	No	Yes	No
1	550	4' x 6'	Heating Oil	Unknown	5/7/09	See Above	☒	☐	☐	☒	☒	☐
							☐	☐	☐	☐	☐	☐
							☐	☐	☐	☐	☐	☐
							☐	☐	☐	☐	☐	☐
							☐	☐	☐	☐	☐	☐

* If the tank owner address is different from the one listed in Section I., then enter the street address, city, state, zip code and telephone no. below:

VII. CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true accurate and complete.

Print name and official title of owner or owner's authorized representative	Signature	Date Signed
Bruce Markwick	Bruce E Markwick	7/29/09

APPENDIX B

24 HOUR RELEASE AND UST LEAK REPORTING FORM (UST-61)

UST-61 | 24-Hour Release and UST Leak Reporting Form.

For Releases in NC

This form should be completed and submitted to the UST Section's regional office following a known or suspected release from an underground storage tank (UST) system. This form is required to be submitted within 24 hours of discovery of a known or suspected release

(DWM USE ONLY)
Incident # _____ Risk (H,I,L,U)_____
Received On _____ Received By _____
Reported by (circle one): Phone, Fax or Report
Region _____

Suspected Contamination? (Y/N) Y
Confirmed GW Contamination? (Y/N) N
Confirmed Soil Contamination ?(Y/N) Y
Samples Taken?(Y/N) Y
Free Product? (Y/N) N If Yes, State Greatest Thickness _____

Facility ID Number N/A
Date Leak Discovered 05/12/2009
Comm/(Non-Commercial) _____
Reg/(Non-regulated) _____

INCIDENT DESCRIPTION

Incident Name: TT2969 Heating Oil Tank

Address: TT2969 Saipan | County: Onslow

City/Town: Camp Lejeune | Zip Code: 28542 | Regional Office (circle one): Asheville, Mooresville, Fayetteville, Raleigh, Washington, (Wilmington), Winston-Salem

Latitude (decimal degrees): 34 44' 15.132" N Longitude (decimal degrees): 77 22' 38.662" W

Obtained by:
- ☐ GPS
- ☐ Topographic map
- ☒ GIS Address matching
- ☐ Other
- ☐ Unknown

Describe location:

Briefly describe suspected or confirmed release: *(including but not limited to: nature of release, date of release, amount of release, amount of free product present and recovery efforts, initial responses conducted, impacts to receptors)*

May 12, 2009 MEC identified and removed the TT2969 heating oil tank. All liquids were removed from the tank (approximately 500 gallons of fuel and water mixture) and disposed of at the EMD OWS at bldg 977. MEC & P & F Environmental removed the tank on 05/12/09 and there was evidence (visual) of a release from the tank. MEC took samples per the state requirements. All contaminated soil will removed and properly disposed of per the regulatory requirements. A UST-12 report will follow.

HOW RELEASE WAS DISCOVERED (Release Code)

(Check one)

- ☐ Release Detection Equipment or Methods
- ☒ During UST Closure/Removal
- ☐ Property Transfer
- ☒ Visual/Odor
- ☐ Water in Tank
- ☐ Water Supply Well Contamination
- ☐ Groundwater Contamination
- ☐ Surface Water Contamination
- ☐ Other (specify) _____

SOURCE OF CONTAMINATION

Source of Release *(Check one to indicate primary source)*
- ☒ Tank
- ☐ Piping
- ☐ Dispenser
- ☐ Submersible Turbine Pump
- ☐ Delivery Problem
- ☐ Other
- ☐ Unknown

Definitions presented on reverse

Cause of Release *(Check one to indicate primary cause)*
- ☐ Spill
- ☐ Overfill
- ☐ Corrosion
- ☐ Physical or Mechanical Damage
- ☐ Install Problem
- ☐ Other
- ☐ Unknown

Definitions presented on reverse

Type of Release *(Check one)*
- ☒ Petroleum
- ☐ Non-Petroleum
- ☐ Both

Location *(Check one)*
- ☐ Facility
- ☒ Residence
- ☐ Other

Product Type Released *(Check one to indicate primary product type released)*
- ☐ Gasoline/ Diesel/ Kerosene
- ☒ Heating Oil
- ☐ Other Petroleum Products
- ☐ Metals
- ☐ Other Inorganics
- ☐ Other Organics
- ☐ Diesel/Veg. Oil Blend
- ☐ Vegetable Oil 100%
- ☐ E10 – E20
- ☐ E21 – E84
- ☐ E85 – E99
- ☐ Ethanol 100%
- ☐ E01 – E09

Ownership
1. Municipal 2. (Military) 3. Unknown 4. Private 5. Federal 6. County 7. State

Operation Type
1. Public Service 2. Agricultural 3. (Residential) 4. Education/Relig. 5. Industrial 6. Commercial 7. Mining

IMPACT ON DRINKING WATER SUPPLIES

Water Supply Wells Affected? 1. Yes (2. No) 3. Unknown

Number of Water Supply Wells Affected _____

Water Supply Wells Contaminated: (*Include Users Names, Addresses and Phone Numbers. Attach additional sheet if necessary*)

1.
2.
3.

UST SYSTEM OWNER

UST Owner/Company			
Commanding Officer, Marine Corps Base,			
Point of Contact		**Address**	
Bruce Markwick			
City	**State**	**Zip Code**	**Telephone Number**
Camp Lejeune	NC	28542	910 451-9660

UST SYSTEM OPERATOR

UST Operator/Company			
Same as above			
City	**State**	**Zip Code**	**Telephone Number**

LANDOWNER AT LOCATION OF UST INCIDENT

Landowner			
Same as above			
City	**State**	**Zip Code**	**Telephone Number**

Draw Sketch of Area (showing two major road intersections) or Attach Map

Person Reporting Incident Bruce Markwick	Company Miltary/USMC	Telephone Number 910 451-9660
Title Environmental Protection Specialist	Address Bldg 12 Post Lane, Camp Lejeune, NC 28542	Date 05/15/09

Definitions of Sources

Tank: means the tank that stores the product and is part of the underground storage tank system

Piping: means the piping and connectors running from the tank or submersible turbine pump to the dispenser or other end-use equipment (Vent, vapor recovery, or fill lines are excluded.)

Dispenser: includes the dispenser and the equipment used to connect the dispenser to the piping (e.g., a release from a suction pump or from components located above the shear valve)

Submersible Turbine Pump (STP) Area includes the submersible turbine pump head (typically located in the tank sump), the line leak detector, and the piping that connects the submersible turbine pump to the tank

Delivery Problem: identifies releases that occurred during product delivery to the tank. (Typical causes associated with this source are spills and overfills.)

Other: serves as the option to use when the release source is known but does not fit into one of the preceding categories (e.g., for releases from vent lines, vapor recovery lines, and fill lines)

Unknown: identifies releases for which the source has not been determined

Definitions of Causes

Spill: use this cause when a spill occurs (e.g., when the delivery hose is disconnected from the tank fill pipe or when the nozzle is removed from the dispenser)

Overfill: use when an overfill occurs (e.g., overfills may occur from the fill pipe at the tank or when the nozzle fails to shut off at the dispenser)

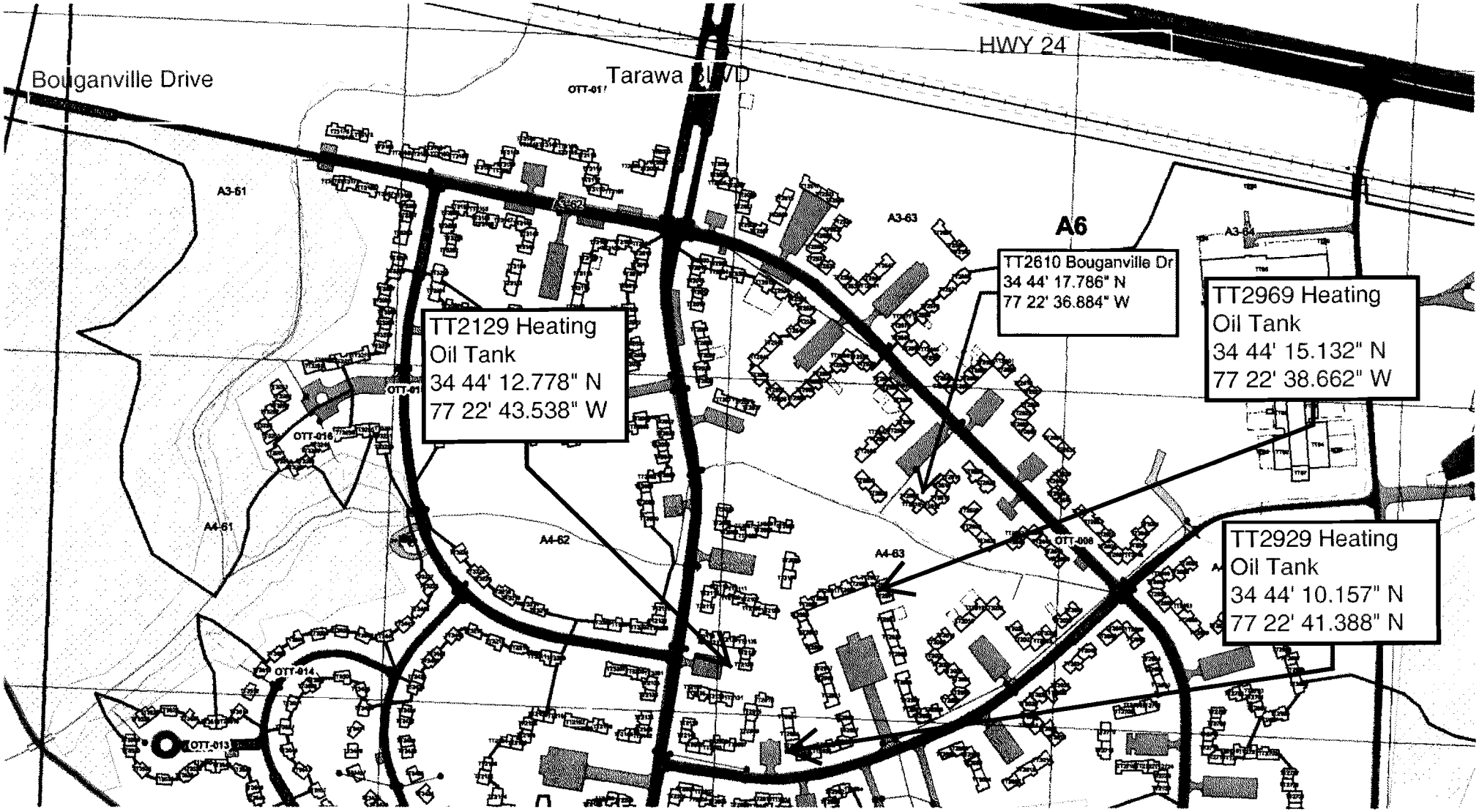
Physical or Mechanical Damage: use for all types of physical or mechanical damage, except corrosion (e.g., puncture of tank or piping, loose fittings, broken components, and components that have changed dimension)

Corrosion: use when a metal tank, piping, or other component has a release due to corrosion (e.g., for steel, corrosion takes the form of rust)

Installation Problem: use when the problem is determined to have occurred specifically because the UST system was not installed properly

Other: use this option when the cause is known but does not fit into one of the preceding categories (e.g., putting regulated substances into monitoring wells)

Unknown: use when the cause has not been determined


Bouganville Drive
Tarawa BLVD
HWY 24
A3-61
A3-63
A3-64
A6
TT2610 Bouganville Dr
34 44' 17.786" N
77 22' 36.884" W
TT2969 Heating
Oil Tank
34 44' 15.132" N
77 22' 38.662" W
TT2129 Heating
Oil Tank
34 44' 12.778" N
77 22' 43.538" W
TT2929 Heating
Oil Tank
34 44' 10.157" N
77 22' 41.388" N
A4-61
A4-62
A4-63
OTT-013
OTT-014
OTT-016
OTT-008

APPENDIX C

CERTIFICATE OF UST DISPOSAL

Tank Disposal Manifest

Tank Owner:

Commanding Officer, Marine Corps Base, Camp Lejeune

Tank/Owner Authorized Representative

Contact: Bruce Markwick

Phone #: 910 451-9660

Primary Consultant:

Desription Of tank:

Tank I.D.	Capacity/Dimensions	Previous Contents	Comments
TT-2999	550 gal /4x6'	#2 Fuel oil	Small Holes
TT-2957	550 gal /4x6'	#2 Fuel oil	Small Holes Ends
TT-2935	550 GAL /4x6	#2 Fuel oil	Small Holes
TT-2929	558 GAL /4x6	#2 Fuel oil	Large Hole Side
TT-2969	550 GAL /4x6'	#2 Fuel oil	Small Hole Side
TT-2927	550 GAL / 4x6'	#2 Fuel Oil	Holes Bottom + Sides

Transporter: P+F

The undersigned certifies that the above named storage tank (s) have been turned in for recycling.

Bryant Pridgen Bryant Pridgen 5-8-09

Print Name **Signature** **Month/Day/Year**

Name of Receiving Facility:
Jacksonville Scrap

Received by:
Lucy Roberts Lucy Roberts 5/8/09

Print Name **Signature** **Month/Day/Year**

APPENDIX D

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

07412

APPROVAL# 1125 LOAD # _____

GENERATOR

TT-II / Phase 6
Camp Lejeune
Jacksonville NC

PHONE: _____

DESTINATION

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

PHONE: (252) 443-4083

WASTE DESCRIPTION: Non-Hazardous Petroleum Contaminated Soil

WASTE ORIGINATION: _____

Transporter: P+F Environmental
Truck #: PF 105
Truck Tag #/State: ZB 37964
Driver Name (Print): Bryant Pridgen

Gross Weight (lbs.): 75660
Tare Weight (lbs.): 24500
Net Weight (lbs.): 51160
Net Weight (tons): 25.58

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

Bryant Pridgen 5.26.09
Driver Signature Date

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

Bryant Pridgen 5.26.09
Driver Signature Date

Inspected and Accepted By: Jared Pridgen

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 # 11125 LOAD # 07414

GENERATOR

TT: II / Phase 6
Camp Lejeune
Jacksonville NC

PHONE: _____

DESTINATION

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

PHONE: (252) 443-4083

WASTE DESCRIPTION: Non-Hazardous Petroleum Contaminated Soil

WASTE ORIGINATION: _____

Transporter: P+F Environmental
Truck #: PF 103
Truck Tag #/State: ZB 16949
Driver Name (Print): Walter Parker

Gross Weight (lbs.): 75860
Tare Weight (lbs.): 33060
Net Weight (lbs.): 42800
Net Weight (tons): 21.4

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

Walter Parker 5.26.09
Driver Signature Date

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

Walter Parker 5.26.09
Driver Signature Date

Inspected and Accepted By: 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# 11125 LOAD # 07413

GENERATOR

TT II / Phase 6
Camp Lejeune
Jacksonville NC

PHONE: _____

DESTINATION

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

PHONE: (252) 443-4083

WASTE DESCRIPTION: Non-Hazardous Petroleum Contaminated Soil

WASTE ORIGINATION: _____

Transporter: P & F Environmental
Truck #: PF 101
Truck Tag #/State: ZB 12254
Driver Name (Print): Franklin Rhodes

Gross Weight (lbs.): 65020
Tare Weight (lbs.): 23560
Net Weight (lbs.): 41460
Net Weight (tons): 20.73

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

Driver Signature _____ Date 5.26.09

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

Driver Signature _____ Date 5.26.09

Inspected and Accepted By: _____ Janet 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*

APPENDIX E

LABORATORY REPORTS AND CHAIN-OF-CUSTODY DOCUMENTATION

Rob Finley
MEC Corporation
MEC Laydown Area
MCAS Cherry Point, NC 28533

Report Number: G894-151

Client Project: TT-2

Dear Rob Finley,

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.

Ashley Nifong 5/15/09

Project Manager
Ashley Nifong

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

% soilds = 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 Total Petroleum Hydrocarbons
by **GC/FID 8015**

Client Sample ID: TT-2129-1
Client Project ID: TT-2
Lab Sample ID: G894-151-1E
Lab Project ID: G894-151

Date Collected: 5/12/2009 8:30
Date Received: 5/13/2009
Matrix: Soil
Solids 75.08
Report Basis: Dry Weight

Parameter	Result	RL	Units	Dilution Factor	Date Analyzed
Diesel Range Organics	**4830**	427	mg/Kg	50	05/14/09 19:48

Surrogate Spike Results	Spike Added	Control Limits	Spike Result	Percent Recovery
OTP	40	40-140	NA	NA

Comments:

Batch Information

Analytical Batch: EP051409
Analytical Method: 8015
Instrument: GC6
Analyst: EAW

Prep batch: 14253
Prep Method: 3541
Prep Date: 05/13/09
Initial Prep Wt/Vol: 31.22 G
Prep Final Vol: 10 mL

Analyst: _____

NC Certification #481

Reviewed By: _____

SGS North America, Inc.

Results for Total Petroleum Hydrocarbons
by **GC/FID 8015**

Client Sample ID: TT-2129-2
Client Project ID: TT-2
Lab Sample ID: G894-151-2E
Lab Project ID: G894-151

Date Collected: 5/12/2009 8:30
Date Received: 5/13/2009
Matrix: Soil
Solids 75.54
Report Basis: Dry Weight

Parameter	Result	RL	Units	Dilution Factor	Date Analyzed
Diesel Range Organics	**2100**	83.4	mg/Kg	10	05/14/09 20:17

Surrogate Spike Results	Spike Added	Control Limits	Spike Result	Percent Recovery
OTP	40	40-140	NA	NA

Comments:

Batch Information

Analytical Batch: EP051409
Analytical Method: 8015
Instrument: GC6
Analyst: EAW

Prep batch: 14253
Prep Method: 3541
Prep Date: 05/13/09
Initial Prep Wt/Vol: 31.75 G
Prep Final Vol: 10 mL

Analyst: _____

NC Certification #481

Reviewed By: _____

SGS North America, Inc.

Results for Total Petroleum Hydrocarbons
by GC/FID 8015

Client Sample ID: TT-2129-3
Client Project ID: TT-2
Lab Sample ID: G894-151-3E
Lab Project ID: G894-151

Date Collected: 5/12/2009 8:30
Date Received: 5/13/2009
Matrix: Soil
Solids 78.57
Report Basis: Dry Weight

Parameter	Result	RL	Units	Dilution Factor	Date Analyzed
Diesel Range Organics	BQL	7.87	mg/Kg	1	05/14/09 14:29

Surrogate Spike Results	Spike Added	Control Limits	Spike Result	Percent Recovery
OTP	40	40-140	42.5	106

Comments:

Batch Information

Analytical Batch: EP051409
Analytical Method: 8015
Instrument: GC6
Analyst: EAW

Prep batch: 14253
Prep Method: 3541
Prep Date: 05/13/09
Initial Prep Wt/Vol: 32.35 G
Prep Final Vol: 10 mL

Analyst: _____

NC Certification #481

Reviewed By: _____

SGS North America, Inc.

Results for Total Petroleum Hydrocarbons
by **GC/FID 8015**

Client Sample ID: TT-2129-4
Client Project ID: TT-2
Lab Sample ID: G894-151-4E
Lab Project ID: G894-151

Date Collected: 5/12/2009 8:30
Date Received: 5/13/2009
Matrix: Soil
Solids 77.93
Report Basis: Dry Weight

Parameter	Result	RL	Units	Dilution Factor	Date Analyzed
Diesel Range Organics	**8.02**	7.88	mg/Kg	1	05/14/09 14:57

Surrogate Spike Results	Spike Added	Control Limits	Spike Result	Percent Recovery
OTP	40	40-140	36.6	91.6

Comments:

Batch Information

Analytical Batch: EP051409
Analytical Method: 8015
Instrument: GC6
Analyst: EAW

Prep batch: 14253
Prep Method: 3541
Prep Date: 05/13/09
Initial Prep Wt/Vol: 32.57 G
Prep Final Vol: 10 mL

Analyst: _____

NC Certification #481

Reviewed By: _____

SGS North America, Inc.

Results for Total Petroleum Hydrocarbons
by **GC/FID 8015**

Client Sample ID: TT-2129-B
Client Project ID: TT-2
Lab Sample ID: G894-151-5F
Lab Project ID: G894-151

Date Collected: 5/12/2009 8:30
Date Received: 5/13/2009
Matrix: Soil
Solids 83.29
Report Basis: Dry Weight

Parameter	Result	RL	Units	Dilution Factor	Date Analyzed
Diesel Range Organics	**11800**	736	mg/Kg	100	05/14/09 15:30

Surrogate Spike Results	Spike Added	Control Limits	Spike Result	Percent Recovery
OTP	40	40-140	NA	NA

Comments:

Batch Information

Analytical Batch: EP051409
Analytical Method: 8015
Instrument: GC6
Analyst: EAW

Prep batch: 14253
Prep Method: 3541
Prep Date: 05/13/09
Initial Prep Wt/Vol: 32.62 G
Prep Final Vol: 10 mL

Analyst: _____

NC Certification #481

Reviewed By: _____

SGS North America, Inc.

Results for Total Petroleum Hydrocarbons
by **GC/FID 8015**

Client Sample ID: TT-2969-1
Client Project ID: TT-2
Lab Sample ID: G894-151-6E
Lab Project ID: G894-151

Date Collected: 5/12/2009 12:45
Date Received: 5/13/2009
Matrix: Soil
Solids 77.58
Report Basis: Dry Weight

Parameter	Result	RL	Units	Dilution Factor	Date Analyzed
Diesel Range Organics	**108**	7.69	mg/Kg	1	05/14/09 15:58

Surrogate Spike Results	Spike Added	Control Limits	Spike Result	Percent Recovery
OTP	40	40-140	39.7	99.3

Comments:

Batch Information

Analytical Batch: EP051409
Analytical Method: 8015
Instrument: GC6
Analyst: EAW

Prep batch: 14253
Prep Method: 3541
Prep Date: 05/13/09
Initial Prep Wt/Vol: 33.52 G
Prep Final Vol: 10 mL

Analyst: _____

NC Certification #481

Reviewed By: _____

SGS North America, Inc.

Results for Total Petroleum Hydrocarbons
by **GC/FID 8015**

Client Sample ID: TT-2969-2
Client Project ID: TT-2
Lab Sample ID: G894-151-7E
Lab Project ID: G894-151

Date Collected: 5/12/2009 12:45
Date Received: 5/13/2009
Matrix: Soil
Solids 82.13
Report Basis: Dry Weight

Parameter	Result	RL	Units	Dilution Factor	Date Analyzed
Diesel Range Organics	**966**	75.4	mg/Kg	10	05/15/09 10:05

Surrogate Spike Results	Spike Added	Control Limits	Spike Result	Percent Recovery
OTP	40	40-140	NA	NA

Comments:

Batch Information

Analytical Batch: EP051509
Analytical Method: 8015
Instrument: GC6
Analyst: EAW

Prep batch: 14253
Prep Method: 3541
Prep Date: 05/13/09
Initial Prep Wt/Vol: 32.29 G
Prep Final Vol: 10 mL

Analyst: _____

NC Certification #481

Reviewed By: _____

SGS North America, Inc.

Results for Total Petroleum Hydrocarbons
by **GC/FID 8015**

Client Sample ID: TT-2969-3
Client Project ID: TT-2
Lab Sample ID: G894-151-8E
Lab Project ID: G894-151

Date Collected: 5/12/2009 12:45
Date Received: 5/13/2009
Matrix: Soil
Solids 76.88
Report Basis: Dry Weight

Parameter	Result	RL	Units	Dilution Factor	Date Analyzed
Diesel Range Organics	**167**	7.98	mg/Kg	1	05/14/09 16:55

Surrogate Spike Results	Spike Added	Control Limits	Spike Result	Percent Recovery
OTP	40	40-140	42.8	107

Comments:

Batch Information

Analytical Batch: EP051409
Analytical Method: 8015
Instrument: GC6
Analyst: EAW

Prep batch: 14253
Prep Method: 3541
Prep Date: 05/13/09
Initial Prep Wt/Vol: 32.58 G
Prep Final Vol: 10 mL

Analyst: _____

NC Certification #481

Reviewed By: _____

SGS North America, Inc.

Results for Total Petroleum Hydrocarbons
by **GC/FID 8015**

Client Sample ID: TT-2969-4
Client Project ID: TT-2
Lab Sample ID: G894-151-9E
Lab Project ID: G894-151

Date Collected: 5/12/2009 12:45
Date Received: 5/13/2009
Matrix: Soil
Solids 80.73
Report Basis: Dry Weight

Parameter	Result	RL	Units	Dilution Factor	Date Analyzed
Diesel Range Organics	**1100**	72.7	mg/Kg	10	05/14/09 17:24

Surrogate Spike Results	Spike Added	Control Limits	Spike Result	Percent Recovery
OTP	40	40-140	NA	NA

Comments:

Batch Information

Analytical Batch: EP051409
Analytical Method: 8015
Instrument: GC6
Analyst: EAW

Prep batch: 14253
Prep Method: 3541
Prep Date: 05/13/09
Initial Prep Wt/Vol: 34.06 G
Prep Final Vol: 10 mL

Analyst: _____

NC Certification #481

Reviewed By: _____

SGS North America, Inc.

Results for Total Petroleum Hydrocarbons
by **GC/FID 8015**

Client Sample ID: TT-2969-B
Client Project ID: TT-2
Lab Sample ID: G894-151-10H
Lab Project ID: G894-151

Date Collected: 5/12/2009 12:45
Date Received: 5/13/2009
Matrix: Soil
Solids 83.70
Report Basis: Dry Weight

Parameter	Result	RL	Units	Dilution Factor	Date Analyzed
Diesel Range Organics	**1250**	73.5	mg/Kg	10	05/15/09 10:33

Surrogate Spike Results	Spike Added	Control Limits	Spike Result	Percent Recovery
OTP	40	40-140	NA	NA

Comments:

Batch Information

Analytical Batch: EP051509
Analytical Method: 8015
Instrument: GC6
Analyst: EAW

Prep batch: 14253
Prep Method: 3541
Prep Date: 05/13/09
Initial Prep Wt/Vol: 32.52 G
Prep Final Vol: 10 mL

Analyst: _____

NC Certification #481

Reviewed By: _____

SGS North America, Inc.

Results for Total Petroleum Hydrocarbons
by **GC/FID 8015**

Client Sample ID: Stockpile Composite
Client Project ID: TT-2
Lab Sample ID: G894-151-12B
Lab Project ID: G894-151

Date Collected: 5/12/2009 12:30
Date Received: 5/13/2009
Matrix: Soil
Solids 80.77
Report Basis: Dry Weight

Parameter	Result	RL	Units	Dilution Factor	Date Analyzed
Diesel Range Organics	**503**	71.8	mg/Kg	10	05/15/09 11:01

Surrogate Spike Results	Spike Added	Control Limits	Spike Result	Percent Recovery
OTP	40	40-140	NA	NA

Comments:

Batch Information

Analytical Batch: EP051509
Analytical Method: 8015
Instrument: GC6
Analyst: EAW

Prep batch: 14253
Prep Method: 3541
Prep Date: 05/13/09
Initial Prep Wt/Vol: 34.49 G
Prep Final Vol: 10 mL

Analyst: _____

NC Certification #481

Reviewed By: _____

SGS North America, Inc.

Results for Total Petroleum Hydrocarbons
by **GC/FID 8015**

Client Sample ID:	TT-2129-1	Analyzed By:	DVO
Client Project ID:	TT-2	Date Collected:	5/12/2009 8:30
Lab Sample ID:	G894-151-1B	Date Received:	5/13/2009
Lab Project ID:	G894-151	Matrix:	Soil
Report Basis:	Dry Weight	Solids	75.08

Analyte	Result	RL	Units	Dilution Factor	Date Analyzed
Gasoline Range Organics	**209**	7.23	mg/Kg	10	05/14/09 14:13

Surrogate Spike Results

	Added	Result	Recovery	Flag	Limits
BFB	100	101.0	101.0		70-130

Comments:

Batch Information

Analytical Batch:	VP051409	Prep Method:	5035
Analytical Method:	8015	Initial Wt/Vol:	5.53 g
Instrument ID:	GC4	Final Volume:	5 mL
Analyst:	DVO		

Analyst: DVO

NC Certification #481

Reviewed By:

SGS North America, Inc.

Results for Total Petroleum Hydrocarbons
by GC/FID 8015

Client Sample ID: TT-2129-2
Client Project ID: TT-2
Lab Sample ID: G894-151-2B
Lab Project ID: G894-151
Report Basis: Dry Weight

Analyzed By: DVO
Date Collected: 5/12/2009 8:30
Date Received: 5/13/2009
Matrix: Soil
Solids 75.54

Analyte	Result	RL	Units	Dilution Factor	Date Analyzed
Gasoline Range Organics	**300**	6.69	mg/Kg	10	05/14/09 14:40

Surrogate Spike Results

	Added	Result	Recovery	Flag	Limits
BFB	100	98.2	98.2		70-130

Comments:

Batch Information

Analytical Batch: VP051409
Analytical Method: 8015
Instrument ID: GC4
Analyst: DVO

Prep Method: 5035
Initial Wt/Vol: 5.94 g
Final Volume: 5 mL

Analyst: DVO

NC Certification #481

Reviewed By:

SGS North America, Inc.

Results for Total Petroleum Hydrocarbons
by **GC/FID 8015**

Client Sample ID:	TT-2129-3	Analyzed By:	DVO
Client Project ID:	TT-2	Date Collected:	5/12/2009 8:30
Lab Sample ID:	G894-151-3B	Date Received:	5/13/2009
Lab Project ID:	G894-151	Matrix:	Soil
Report Basis:	Dry Weight	Solids	78.57

Analyte	Result	RL	Units	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	6.01	mg/Kg	1	05/13/09 15:18

Surrogate Spike Results

	Added	Result	Recovery	Flag	Limits
BFB	100	98.0	98.0		70-130

Comments:

Batch Information

Analytical Batch:	VP051309	Prep Method:	5035
Analytical Method:	8015	Initial Wt/Vol:	6.35 g
Instrument ID:	GC4	Final Volume:	5 mL
Analyst:	DVO		

Analyst: DVD

NC Certification #481
N.C. Certification #481

Reviewed By:

SGS North America, Inc.

Results for Total Petroleum Hydrocarbons
by **GC/FID 8015**

Client Sample ID: TT-2129-4
Client Project ID: TT-2
Lab Sample ID: G894-151-4B
Lab Project ID: G894-151
Report Basis: Dry Weight

Analyzed By: DVO
Date Collected: 5/12/2009 8:30
Date Received: 5/13/2009
Matrix: Soil
Solids 77.93

Analyte	Result	RL	Units	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	5.47	mg/Kg	1	05/13/09 15:44

Surrogate Spike Results

	Added	Result	Recovery	Flag	Limits
BFB	100	97.3	97.3		70-130

Comments:

Batch Information

Analytical Batch: VP051309
Analytical Method: 8015
Instrument ID: GC4
Analyst: DVO

Prep Method: 5035
Initial Wt/Vol: 7.04 g
Final Volume: 5 mL

Analyst: DVO

NC Certification #481

Reviewed By:

SGS North America, Inc.

Results for Total Petroleum Hydrocarbons
by **GC/FID 8015**

Client Sample ID: TT-2129-B
Client Project ID: TT-2
Lab Sample ID: G894-151-5B
Lab Project ID: G894-151
Report Basis: Dry Weight

Analyzed By: DVO
Date Collected: 5/12/2009 8:30
Date Received: 5/13/2009
Matrix: Soil
Solids 83.29

Analyte	Result	RL	Units	Dilution Factor	Date Analyzed
Gasoline Range Organics	**295**	7.03	mg/Kg	10	05/14/09 15:06

Surrogate Spike Results

	Added	Result	Recovery	Flag	Limits
BFB	100	100.0	100.0		70-130

Comments:

Batch Information

Analytical Batch: VP051409
Analytical Method: 8015
Instrument ID: GC4
Analyst: DVO

Prep Method: 5035
Initial Wt/Vol: 5.12 g
Final Volume: 5 mL

Analyst: DVO

NC Certification #481
N.C. Certification #481

Reviewed By:

SGS North America, Inc.

Results for Total Petroleum Hydrocarbons
by GC/FID 8015

Client Sample ID:	TT-2969-1	Analyzed By:	DVO
Client Project ID:	TT-2	Date Collected:	5/12/2009 12:45
Lab Sample ID:	G894-151-6B	Date Received:	5/13/2009
Lab Project ID:	G894-151	Matrix:	Soil
Report Basis:	Dry Weight	Solids	77.58

Analyte	Result	RL	Units	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	7.27	mg/Kg	1	05/14/09 11:09

Surrogate Spike Results

	Added	Result	Recovery	Flag	Limits
BFB	100	110.0	110.0		70-130

Comments:

Batch Information

Analytical Batch:	VP051409	Prep Method:	5035
Analytical Method:	8015	Initial Wt/Vol:	5.32 g
Instrument ID:	GC4	Final Volume:	5 mL
Analyst:	DVO		

Analyst: DVO

NC Certification #481

Reviewed By:

SGS North America, Inc.

Results for Total Petroleum Hydrocarbons
by GC/FID 8015

Client Sample ID:	TT-2969-2	Analyzed By:	DVO
Client Project ID:	TT-2	Date Collected:	5/12/2009 12:45
Lab Sample ID:	G894-151-7B	Date Received:	5/13/2009
Lab Project ID:	G894-151	Matrix:	Soil
Report Basis:	Dry Weight	Solids	82.13

Analyte	Result	RL	Units	Dilution Factor	Date Analyzed
Gasoline Range Organics	**159**	7.12	mg/Kg	5	05/14/09 13:21

Surrogate Spike Results

	Added	Result	Recovery	Flag	Limits
BFB	100	102.0	102.0		70-130

Comments:

Batch Information

Analytical Batch:	VP051409	Prep Method:	5035
Analytical Method:	8015	Initial Wt/Vol:	5.13 g
Instrument ID:	GC4	Final Volume:	5 mL
Analyst:	DVO		

Analyst: DVO

Reviewed By:

SGS North America, Inc.

Results for Total Petroleum Hydrocarbons
by **GC/FID 8015**

Client Sample ID:	TT-2969-3	Analyzed By:	DVO
Client Project ID:	TT-2	Date Collected:	5/12/2009 12:45
Lab Sample ID:	G894-151-8B	Date Received:	5/13/2009
Lab Project ID:	G894-151	Matrix:	Soil
Report Basis:	Dry Weight	Solids	76.88

Analyte	Result	RL	Units	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	7.28	mg/Kg	1	05/13/09 17:30

Surrogate Spike Results

	Added	Result	Recovery	Flag	Limits
BFB	100	98.1	98.1		70-130

Comments:

Batch Information

Analytical Batch:	VP051309	Prep Method:	5035
Analytical Method:	8015	Initial Wt/Vol:	5.36 g
Instrument ID:	GC4	Final Volume:	5 mL
Analyst:	DVO		

Analyst: DVO

NC Certification #481

Reviewed By:

SGS North America, Inc.

Results for Total Petroleum Hydrocarbons
by **GC/FID 8015**

Client Sample ID: TT-2969-4
Client Project ID: TT-2
Lab Sample ID: G894-151-9B
Lab Project ID: G894-151
Report Basis: Dry Weight

Analyzed By: DVO
Date Collected: 5/12/2009 12:45
Date Received: 5/13/2009
Matrix: Soil
Solids 80.73

Analyte	Result	RL	Units	Dilution Factor	Date Analyzed
Gasoline Range Organics	**151**	7.00	mg/Kg	5	05/14/09 13:47

Surrogate Spike Results

	Added	Result	Recovery	Flag	Limits
BFB	100	103.0	103.0		70-130

Comments:

Batch Information

Analytical Batch: VP051409
Analytical Method: 8015
Instrument ID: GC4
Analyst: DVO

Prep Method: 5035
Initial Wt/Vol: 5.31 g
Final Volume: 5 mL

Analyst: DVO

NC Certification #481
N.C. Certification #481

Reviewed By:

SGS North America, Inc.

Results for Total Petroleum Hydrocarbons
by **GC/FID 8015**

Client Sample ID:	TT-2969-B	Analyzed By:	DVO
Client Project ID:	TT-2	Date Collected:	5/12/2009 12:45
Lab Sample ID:	G894-151-10B	Date Received:	5/13/2009
Lab Project ID:	G894-151	Matrix:	Soil
Report Basis:	Dry Weight	Solids	83.70

Analyte	Result	RL	Units	Dilution Factor	Date Analyzed
Gasoline Range Organics	**370**	6.87	mg/Kg	10	05/14/09 15:32

Surrogate Spike Results

	Added	Result	Recovery	Flag	Limits
BFB	100	102.0	102.0		70-130

Comments:

Batch Information

Analytical Batch:	VP051409	Prep Method:	5035
Analytical Method:	8015	Initial Wt/Vol:	5.22 g
Instrument ID:	GC4	Final Volume:	5 mL
Analyst:	DVO		

Analyst: DVO

NC Certification #481
N.C. Certification #481

Reviewed By:

SGS North America, Inc.

Results for Total Petroleum Hydrocarbons
by GC/FID 8015

Client Sample ID:	Stockpile Composite	Analyzed By:	DVO
Client Project ID:	TT-2	Date Collected:	5/12/2009 12:30
Lab Sample ID:	G894-151-12A	Date Received:	5/13/2009
Lab Project ID:	G894-151	Matrix:	Soil
Report Basis:	Dry Weight	Solids	80.77

Analyte	Result	RL	Units	Dilution Factor	Date Analyzed
Gasoline Range Organics	**10.2**	6.82	mg/Kg	1	05/14/09 12:28

Surrogate Spike Results

	Added	Result	Recovery	Flag	Limits
BFB	100	98.6	98.6		70-130

Comments:

Batch Information

Analytical Batch:	VP051409	Prep Method:	5030
Analytical Method:	8015	Initial Wt/Vol:	5.45 g
Instrument ID:	GC4	Final Volume:	5 mL
Analyst:	DVO		

Analyst: DVO

NC Certification #481
N.C. Certification #481

Reviewed By:

EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: MEC Corporation

Project Name: TT-2

Sample Information	
Sample Identification	TT-2129-1
Sample Matrix	Soil
Date Collected	05/12/09 08:30
Date Received	05/13/09
Date Extracted	05/13/09
Date Analyzed	05/14/09 20:45 - 05/14/09 21:14
Dry Weight	75.1
Dilution Factor	20 - 5
Initial weight (g)	12.88
Final Volume (mL)	10.0

Analytical Results			
Analytes**	Result mg/Kg	Report Limit mg/Kg	Flags
C9-C18 Aliphatics	2690	15.5	
C19-C36 Aliphatics	275	15.5	
C11-C22 Aromatics	1300	10.0	

Surrogates	Percent Recovery	Flags	Limits	
			Lower	Upper
Aliphatic (tricosane)	NA		40	140
Aromatic (ortho-terphenyl)	105		40	140
Fractionation 1 (2-bromonaphthalene)	112		40	140
Fractionation 2 (2-fluorobiphenyl)	110		40	140

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

NA = Non-applicable, surrogate diluted out.

Lab Info: G894-151-1D	Lab Info: G894-151-1D
Aliphatic: EP051409/024F1001.D	Aromatic: EP051409/025F1101.D

Reviewed By:

EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: MEC Corporation

Project Name: TT-2

Sample Information	
Sample Identification	TT-2129-2
Sample Matrix	Soil
Date Collected	05/12/09 08:30
Date Received	05/13/09
Date Extracted	05/13/09
Date Analyzed	05/14/09 21:43 - 05/14/09 22:11
Dry Weight	75.5
Dilution Factor	10 - 2
Initial weight (g)	13.76
Final Volume (mL)	10.0

Analytical Results			
Analytes**	Result mg/Kg	Report Limit mg/Kg	Flags
C9-C18 Aliphatics	1830	10.0	
C19-C36 Aliphatics	292	10.0	
C11-C22 Aromatics	934	10.0	

Surrogates	Percent Recovery	Flags	Limits	
			Lower	Upper
Aliphatic (tricosane)	99.7		40	140
Aromatic (ortho-terphenyl)	106		40	140
Fractionation 1 (2-bromonaphthalene)	111		40	140
Fractionation 2 (2-fluorobiphenyl)	111		40	140

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

Lab Info: G894-151-2D	Lab Info: G894-151-2D
Aliphatic: EP051409/026F1201.D	Aromatic: EP051409/027F1301.D

Reviewed By:

EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: MEC Corporation

Project Name: TT-2

Sample Information	
Sample Identification	TT-2129-3
Sample Matrix	Soil
Date Collected	05/12/09 08:30
Date Received	05/13/09
Date Extracted	05/13/09
Date Analyzed	05/14/09 10:49 - 05/14/09 10:49
Dry Weight	78.6
Dilution Factor	1 - 1
Initial weight (g)	12.26
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)	102		40	140
Aromatic (ortho-terphenyl)	99.4		40	140

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

Lab Info: G894-151-3D	Lab Info: G894-151-3D
Aliphatic: EP051409/005F0501.D	Aromatic: EP051409/005F0501.D

Reviewed By:

EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: MEC Corporation

Project Name: TT-2

Sample Information	
Sample Identification	TT-2129-4
Sample Matrix	Soil
Date Collected	05/12/09 08:30
Date Received	05/13/09
Date Extracted	05/13/09
Date Analyzed	05/14/09 11:17 - 05/14/09 11:17
Dry Weight	77.9
Dilution Factor	1 - 1
Initial weight (g)	12.85
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	Limits Upper
Aliphatic (tricosane)	98.7		40	140
Aromatic (ortho-terphenyl)	96.0		40	140

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

Lab Info: G894-151-4D	Lab Info: G894-151-4D
Aliphatic: EP051409/006F0601.D	Aromatic: EP051409/006F0601.D

Reviewed By:

EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: MEC Corporation

Project Name: TT-2

Sample Information	
Sample Identification	TT-2129-B
Sample Matrix	Soil
Date Collected	05/12/09 08:30
Date Received	05/13/09
Date Extracted	05/13/09
Date Analyzed	05/14/09 22:40 - 05/14/09 23:08
Dry Weight	83.3
Dilution Factor	50 - 10
Initial weight (g)	13.55
Final Volume (mL)	10.0

Analytical Results			
Analytes**	Result mg/Kg	Report Limit mg/Kg	Flags
C9-C18 Aliphatics	7000	36.9	
C19-C36 Aliphatics	886	36.9	
C11-C22 Aromatics	3440	10.0	

Surrogates	Percent Recovery	Flags	Limits	
			Lower	Upper
Aliphatic (tricosane)	NA		40	140
Aromatic (ortho-terphenyl)	88.7		40	140
Fractionation 1 (2-bromonaphthalene)	116		40	140
Fractionation 2 (2-fluorobiphenyl)	113		40	140

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

NA = Non-applicable, surrogate diluted out.

Lab Info: G894-151-5E	Lab Info: G894-151-5E
Aliphatic: EP051409/028F1401.D	Aromatic: EP051409/029F1501.D

Reviewed By:

EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: MEC Corporation

Project Name: TT-2

Sample Information	
Sample Identification	TT-2969-1
Sample Matrix	Soil
Date Collected	05/12/09 12:45
Date Received	05/13/09
Date Extracted	05/13/09
Date Analyzed	05/14/09 23:37 - 05/15/09 00:05
Dry Weight	77.6
Dilution Factor	1 - 1
Initial weight (g)	12.43
Final Volume (mL)	10.0

Analytical Results			
Analytes**	Result mg/Kg	Report Limit mg/Kg	Flags
C9-C18 Aliphatics	15.1	10.0	
C19-C36 Aliphatics	BQL	10.0	
C11-C22 Aromatics	BQL	10.0	

Surrogates	Percent Recovery	Flags	Limits	
			Lower	Upper
Aliphatic (tricosane)	96.8		40	140
Aromatic (ortho-terphenyl)	93.3		40	140
Fractionation 1 (2-bromonaphthalene)	106		40	140
Fractionation 2 (2-fluorobiphenyl)	109		40	140

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

Lab Info: G894-151-6D	Lab Info: G894-151-6D
Aliphatic: EP051409/030F1601.D	Aromatic: EP051409/031F1701.D

Reviewed By:

EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: MEC Corporation

Project Name: TT-2

Sample Information	
Sample Identification	TT-2969-2
Sample Matrix	Soil
Date Collected	05/12/09 12:45
Date Received	05/13/09
Date Extracted	05/13/09
Date Analyzed	05/15/09 00:34 - 05/15/09 01:02
Dry Weight	82.1
Dilution Factor	5 - 1
Initial weight (g)	12.63
Final Volume (mL)	10.0

Analytical Results			
Analytes**	Result mg/Kg	Report Limit mg/Kg	Flags
C9-C18 Aliphatics	833	10.0	
C19-C36 Aliphatics	111	10.0	
C11-C22 Aromatics	415	10.0	

Surrogates	Percent Recovery	Flags	Limits Lower	Limits Upper
Aliphatic (tricosane)	108		40	140
Aromatic (ortho-terphenyl)	99.6		40	140
Fractionation 1 (2-bromonaphthalene)	103		40	140
Fractionation 2 (2-fluorobiphenyl)	103		40	140

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

Lab Info: G894-151-7D	Lab Info: G894-151-7D
Aliphatic: EP051409/032F1801.D	Aromatic: EP051409/033F1901.D

Reviewed By:

EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: MEC Corporation

Project Name: TT-2

Sample Information	
Sample Identification	TT-2969-3
Sample Matrix	Soil
Date Collected	05/12/09 12:45
Date Received	05/13/09
Date Extracted	05/13/09
Date Analyzed	05/15/09 01:32 - 05/15/09 02:00
Dry Weight	76.9
Dilution Factor	1 - 1
Initial weight (g)	12.08
Final Volume (mL)	10.0

Analytical Results			
Analytes**	Result mg/Kg	Report Limit mg/Kg	Flags
C9-C18 Aliphatics	20.9	10.0	
C19-C36 Aliphatics	BQL	10.0	
C11-C22 Aromatics	BQL	10.0	

Surrogates	Percent Recovery	Flags	Limits	
			Lower	Upper
Aliphatic (tricosane)	93.4		40	140
Aromatic (ortho-terphenyl)	78.1		40	140
Fractionation 1 (2-bromonaphthalene)	99.4		40	140
Fractionation 2 (2-fluorobiphenyl)	100		40	140

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

Lab Info: G894-151-8D	Lab Info: G894-151-8D
Aliphatic: EP051409/034F2001.D	Aromatic: EP051409/035F2101.D

Reviewed By:

EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: MEC Corporation

Project Name: TT-2

Sample Information	
Sample Identification	TT-2969-4
Sample Matrix	Soil
Date Collected	05/12/09 12:45
Date Received	05/13/09
Date Extracted	05/13/09
Date Analyzed	05/15/09 02:28 - 05/15/09 02:57
Dry Weight	80.7
Dilution Factor	10 - 2
Initial weight (g)	12.02
Final Volume (mL)	10.0

Analytical Results			
Analytes**	Result mg/Kg	Report Limit mg/Kg	Flags
C9-C18 Aliphatics	1270	10.0	
C19-C36 Aliphatics	105	10.0	
C11-C22 Aromatics	785	10.0	

Surrogates	Percent Recovery	Flags	Limits	
			Lower	Upper
Aliphatic (tricosane)	96.6		40	140
Aromatic (ortho-terphenyl)	88.4		40	140
Fractionation 1 (2-bromonaphthalene)	101		40	140
Fractionation 2 (2-fluorobiphenyl)	98.5		40	140

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

Lab Info: G894-151-9D	Lab Info: G894-151-9D
Aliphatic: EP051409/036F2201.D	Aromatic: EP051409/037F2301.D

Reviewed By:

EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: MEC Corporation

Project Name: TT-2

Sample Information	
Sample Identification	TT-2969-B
Sample Matrix	Soil
Date Collected	05/12/09 12:45
Date Received	05/13/09
Date Extracted	05/13/09
Date Analyzed	05/15/09 09:36 - 05/15/09 10:05
Dry Weight	83.7
Dilution Factor	10 - 5
Initial weight (g)	13.39
Final Volume (mL)	10.0

Analytical Results			
Analytes**	Result mg/Kg	Report Limit mg/Kg	Flags
C9-C18 Aliphatics	2100	10.0	
C19-C36 Aliphatics	207	10.0	
C11-C22 Aromatics	1220	10.0	

Surrogates	Percent Recovery	Flags	Limits	
			Lower	Upper
Aliphatic (tricosane)	93.6		40	140
Aromatic (ortho-terphenyl)	98.9		40	140
Fractionation 1 (2-bromonaphthalene)	103		40	140
Fractionation 2 (2-fluorobiphenyl)	101		40	140

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

Lab Info: G894-151-10E	Lab Info: G894-151-10E
Aliphatic: EP051509/003F0301.D	Aromatic: EP051509/004F0401.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 (02/15/08) (µg/L)	MDL (02/11/08) (mg/Kg)	ML (µg/L)	ML (mg/Kg)	RL (µg/L)	RL (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: 05/14/09 / 05/14/09

Filenames: ep051409/001f0101.d / ep051409/002f0201.d

Calibration Check

Range	Levels (µg/L)	Levels (mg/Kg)	%Difference if CF %Drift if LR	Limits
C9-C18 Aliphatics	100	16.7	10.8	≤±25%
C19-C36 Aliphatics	100	16.7	14.1	≤±25%
C11-C22 Aromatics	100	16.7	-5.4	≤±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 3

EPH Laboratory Reporting Form

Calibration and QA/QC Information

Initial Calibration Date: 04/27/09

Calibration Ranges and Limits

Range	MDL (02/15/08) (µg/L)	MDL (02/11/08) (mg/Kg)	ML (µg/L)	ML (mg/Kg)	RL (µg/L)	RL (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: 05/14/09 / 05/14/09

Filenames: ep051409/022f0801.d / ep051409/023f0901.d

Calibration Check

Range	Levels (µg/L)	Levels (mg/Kg)	%Difference if CF %Drift if LR	Limits
C9-C18 Aliphatics	100	16.7	10.2	≤±25%
C19-C36 Aliphatics	100	16.7	12.6	≤±25%
C11-C22 Aromatics	100	16.7	2.4	≤±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 3

EPH Laboratory Reporting Form

Calibration and QA/QC Information

Initial Calibration Date: 04/27/09

Calibration Ranges and Limits

Range	MDL (02/15/08) (µg/L)	MDL (02/11/08) (mg/Kg)	ML (µg/L)	ML (mg/Kg)	RL (µg/L)	RL (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: 05/14/09, 05/15/09

Filenames: ep051409/038f2401.d, ep051409/039f2501.d

Calibration Check

Range	Levels (µg/L)	Levels (mg/Kg)	%Difference if CF %Drift if LR	Limits
C9-C18 Aliphatics	100	16.7	13.6	≤±25%
C19-C36 Aliphatics	100	16.7	17.6	≤±25%
C11-C22 Aromatics	100	16.7	5.4	≤±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 3

EPH Laboratory Reporting Form

Calibration and QA/QC Information

Initial Calibration Date: 04/27/09

Calibration Ranges and Limits

Range	MDL (02/15/08) (µg/L)	MDL (02/11/08) (mg/Kg)	ML (µg/L)	ML (mg/Kg)	RL (µg/L)	RL (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: 05/15/09
05/15/09

Filenames: ep051509/001f0101.d
ep051509/002f0201.d

Calibration Check

Range	Levels (µg/L)	Levels (mg/Kg)	%Difference if CF %Drift if LR	Limits
C9-C18 Aliphatics	100	16.7	7.7	≤±25%
C19-C36 Aliphatics	100	16.7	11.7	≤±25%
C11-C22 Aromatics	100	16.7	2.5	≤±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

Attachment 3

EPH Laboratory Reporting Form

Calibration and QA/QC Information

Initial Calibration Date: 04/27/09

Calibration Ranges and Limits

Range	MDL (02/15/08) (µg/L)	MDL (02/11/08) (mg/Kg)	ML (µg/L)	ML (mg/Kg)	RL (µg/L)	RL (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: 05/15/09
05/15/09

Filenames: ep051509/009f0901.d
ep051509/011f0101.d

Calibration Check

Range	Levels (µg/L)	Levels (mg/Kg)	%Difference if CF %Drift if LR	Limits
C9-C18 Aliphatics	100	16.7	11.3	≤±25%
C19-C36 Aliphatics	100	16.7	15.0	≤±25%
C11-C22 Aromatics	100	16.7	5.8	≤±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

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: MEC Corporation

Project Name: TT-2

Sample Information	
Sample Identification	TT-2129-1
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	05/12/09 08:30
Date Received	05/13/09
Date Extracted	05/13/09
Date Analyzed	05/14/09 14:13 - 05/14/09 14:13
Dry Weight	75.1
Dilution Factor	10 - 10

Analytical Results			
Analyte	Result mg/Kg	Report Limit mg/Kg	Flags
C_5-C_8 Aliphatics**	23.5	10.0	
C_9-C_{12} Aliphatics**	206	10.0	
C_9-C_{10} Aromatics**	255	10.0	

	Percent Recovery	Flags	Limits Lower	Limits Upper
Surrogate % Recovery - PID	91.2		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:	g894-151-1b	Lab Info:	g894-151-1b
FID Info:	VP051409/014F0101.D	PID Info:	VP051409/014R0101.D

Reviewed By:

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: MEC Corporation

Project Name: TT-2

Sample Information	
Sample Identification	TT-2129-2
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	05/12/09 08:30
Date Received	05/13/09
Date Extracted	05/13/09
Date Analyzed	05/14/09 14:40 - 05/14/09 14:40
Dry Weight	75.5
Dilution Factor	10 - 10

Analytical Results			
Analyte	Result mg/Kg	Report Limit mg/Kg	Flags
C_5-C_8 Aliphatics**	44.5	10.0	
C_9-C_{12} Aliphatics**	262	10.0	
C_9-C_{10} Aromatics**	366	10.0	

	Percent Recovery	Flags	Limits Lower	Limits Upper
Surrogate % Recovery - PID	92.1		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:	g894-151-2b	Lab Info:	g894-151-2b
FID Info:	VP051409/015F0101.D	PID Info:	VP051409/015R0101.D

Reviewed By:

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: MEC Corporation

Project Name: TT-2

Sample Information	
Sample Identification	TT-2129-3
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	05/12/09 08:30
Date Received	05/13/09
Date Extracted	05/13/09
Date Analyzed	05/13/09 15:18 - 05/13/09 15:18
Dry Weight	78.6
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	Limits Upper
Surrogate % Recovery - PID	90.9		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:	g894-151-3b	Lab Info:	g894-151-3b
FID Info:	VP051309/016F0101.D	PID Info:	VP051309/016R0101.D

Reviewed By:

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: MEC Corporation

Project Name: TT-2

Sample Information	
Sample Identification	TT-2129-4
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	05/12/09 08:30
Date Received	05/13/09
Date Extracted	05/13/09
Date Analyzed	05/13/09 15:44 - 05/13/09 15:44
Dry Weight	77.9
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	Limits Upper
Surrogate % Recovery - PID	89.7		70	130
Surrogate % Recovery - FID	100		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: g894-151-4b	Lab Info: g894-151-4b
FID Info: VP051309/017F0101.D	PID Info: VP051309/017R0101.D

Reviewed By:

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: MEC Corporation

Project Name: TT-2

Sample Information	
Sample Identification	TT-2129-B
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	05/12/09 08:30
Date Received	05/13/09
Date Extracted	05/13/09
Date Analyzed	05/14/09 15:06 - 05/14/09 15:06
Dry Weight	83.3
Dilution Factor	10 - 10

Analytical Results			
Analyte	Result mg/Kg	Report Limit mg/Kg	Flags
C_5-C_8 Aliphatics**	25.5	10.0	
C_9-C_{12} Aliphatics**	303	10.0	
C_9-C_{10} Aromatics**	353	10.0	

	Percent Recovery	Flags	Limits Lower	Limits Upper
Surrogate % Recovery - PID	93.6		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:	g894-151-5b	Lab Info:	g894-151-5b
FID Info:	VP051409/016F0101.D	PID Info:	VP051409/016R0101.D

Reviewed By:

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: MEC Corporation

Project Name: TT-2

Sample Information	
Sample Identification	TT-2969-1
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	05/12/09 12:45
Date Received	05/13/09
Date Extracted	05/13/09
Date Analyzed	05/14/09 11:09 - 05/14/09 11:09
Dry Weight	77.6
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	Limits Upper
Surrogate % Recovery - PID	99.3		70	130
Surrogate % Recovery - FID	113		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:	g894-151-6b	Lab Info:	g894-151-6b
FID Info:	VP051409/007F0101.D	PID Info:	VP051409/007R0101.D

Reviewed By:

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: MEC Corporation

Project Name: TT-2

Sample Information	
Sample Identification	TT-2969-2
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	05/12/09 12:45
Date Received	05/13/09
Date Extracted	05/13/09
Date Analyzed	05/14/09 13:21 - 05/14/09 13:21
Dry Weight	82.1
Dilution Factor	5 - 5

Analytical Results			
Analyte	Result mg/Kg	Report Limit mg/Kg	Flags
C_5-C_8 Aliphatics**	17.2	10.0	
C_9-C_{12} Aliphatics**	170	10.0	
C_9-C_{10} Aromatics**	191	10.0	

	Percent Recovery	Flags	Limits Lower	Limits Upper
Surrogate % Recovery - PID	101		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:	g894-151-7b	Lab Info:	g894-151-7b
FID Info:	VP051409/012F0101.D	PID Info:	VP051409/012R0101.D

Reviewed By:

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: MEC Corporation

Project Name: TT-2

Sample Information	
Sample Identification	TT-2969-3
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	05/12/09 12:45
Date Received	05/13/09
Date Extracted	05/13/09
Date Analyzed	05/13/09 17:30 - 05/13/09 17:30
Dry Weight	76.9
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	Limits Upper
Surrogate % Recovery - PID	90.0		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:	g894-151-8b	Lab Info:	g894-151-8b
FID Info:	VP051309/021F0101.D	PID Info:	VP051309/021R0101.D

Reviewed By:

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: MEC Corporation

Project Name: TT-2

Sample Information	
Sample Identification	TT-2969-4
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	05/12/09 12:45
Date Received	05/13/09
Date Extracted	05/13/09
Date Analyzed	05/14/09 13:47 - 05/14/09 13:47
Dry Weight	80.7
Dilution Factor	5 - 5

Analytical Results			
Analyte	Result mg/Kg	Report Limit mg/Kg	Flags
C_5-C_8 Aliphatics**	16.7	10.0	
C_9-C_{12} Aliphatics**	162	10.0	
C_9-C_{10} Aromatics**	229	10.0	

	Percent Recovery	Flags	Limits Lower	Limits Upper
Surrogate % Recovery - PID	91.7		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: g894-151-9b	Lab Info: g894-151-9b
FID Info: VP051409/013F0101.D	PID Info: VP051409/013R0101.D

Reviewed By:

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: MEC Corporation

Project Name: TT-2

Sample Information	
Sample Identification	TT-2969-B
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	05/12/09 12:45
Date Received	05/13/09
Date Extracted	05/13/09
Date Analyzed	05/14/09 15:32 - 05/14/09 15:32
Dry Weight	83.7
Dilution Factor	10 - 10

Analytical Results			
Analyte	Result mg/Kg	Report Limit mg/Kg	Flags
C_5-C_8 Aliphatics**	40.8	10.0	
C_9-C_{12} Aliphatics**	343	10.0	
C_9-C_{10} Aromatics**	465	10.0	

	Percent Recovery	Flags	Limits Lower	Limits Upper
Surrogate % Recovery - PID	94.5		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:	g894-151-10b	Lab Info:	g894-151-10b
FID Info:	VP051409/017F0101.D	PID Info:	VP051409/017R0101.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 (µg/L)	MDL (mg/Kg)	ML (µg/L)	ML (mg/Kg)	RL (µg/L)	RL (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: 05/13/09 Filename: VP051309/002F0101.d

Calibration Check

Range	Levels (µg/L)	Levels (mg/Kg)	%Difference if CF %Drift if LR	Limits
C_5-C_8 Aliphatics	200	16	-0.9	±25%
C_9-C_{12} Aliphatics	200	16	-13.2	±25%
C_9-C_{10} Aromatics	200	16	9.8	±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 (µg/L)	MDL (mg/Kg)	ML (µg/L)	ML (mg/Kg)	RL (µg/L)	RL (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: 05/13/09 Filename: VP051309/028F0101.d

Calibration Check

Range	Levels (µg/L)	Levels (mg/Kg)	%Difference if CF %Drift if LR	Limits
C_5-C_8 Aliphatics	200	16	2.7	±25%
C_9-C_{12} Aliphatics	200	16	-7.8	±25%
C_9-C_{10} Aromatics	200	16	15.3	±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 (µg/L)	MDL (mg/Kg)	ML (µg/L)	ML (mg/Kg)	RL (µg/L)	RL (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: 05/14/09 Filename: VP051409/002F0101.d

Calibration Check

Range	Levels (µg/L)	Levels (mg/Kg)	%Difference if CF %Drift if LR	Limits
C_5-C_8 Aliphatics	200	16	8.1	±25%
C_9-C_{12} Aliphatics	200	16	-4.9	±25%
C_9-C_{10} Aromatics	200	16	18.7	±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 (µg/L)	MDL (mg/Kg)	ML (µg/L)	ML (mg/Kg)	RL (µg/L)	RL (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: 05/14/09 Filename: VP051409/023F0101.d

Calibration Check

Range	Levels (µg/L)	Levels (mg/Kg)	%Difference if CF %Drift if LR	Limits
C_5-C_8 Aliphatics	200	16	7.2	±25%
C_9-C_{12} Aliphatics	200	16	-0.5	±25%
C_9-C_{10} Aromatics	200	16	15.5	±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

CHAIN OF CUSTODY RECORD
SGS Environmental Services Inc.

Locations Nationwide
- Alaska
- Ohio
- New Jersey
- West Virginia
- Hawaii
- Maryland
- North Carolina

www.us.sgs.com

087244

(1)
CLIENT: MEC Corp
CONTACT: Rob Fidley — PHONE NO:(252) 447-1700
PROJECT: TT-2 — SITE/PWSID#:
REPORTS TO: Rob Fidley — E-MAIL:
FAX NO.:(252) 447-2012
INVOICE TO: Julie Smith — QUOTE #
P.O. NUMBER

SGS Reference: 6-894-151

PAGE 1 OF 2

(2)

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	No CONTAINERS	SAMPLE TYPE C=COMP G=GRAB	Preservatives Used	Analysis Required (3)	REMARKS
	TT-2129 -1	5/12/09	0830	Soil	1	G	N/A	DRO, GRO, Hadep EPH, Hadep VPH	Send Results to Rob Fidley
	TT-2129 -2	5/12/09	0830	Soil	1	G	N/A		
	TT-2129 -3	5/12/09	0830	Soil	1	G	N/A		
	TT-2129 -4	5/12/09	0830	Soil	1	G	N/A		
	TT-2129 -B	5/12/09	0830	Soil	2	G	N/A		
	TT-2969 -1	5/12/09	1245	Soil	1	G	N/A		
	TT-2969 -2	5/12/09	1245	Soil	1	G	N/A		
	TT-2969 -3	5/12/09	1245	Soil	1	G	N/A		
	TT-2969 -4	5/12/09	1245	Soil	1	G	N/A		
	TT-2969 -B	5/12/09	1245	Soil	2	G	N/A		

(5)

Collected/Relinquished By:(1)	Date: 5/12/09	Time: 1330	Received By:	Date: 5/13/09	Time: 9:55
Relinquished By:(2)	Date	Time	Received By:	Date	Time
Relinquished By: (3)	Date	Time	Received By:	Date	Time
Relinquished By: (4)	Date	Time	Received By:	Date	Time

(4)
Shipping Carrier:
Shipping Ticket No:
Samples Received Cold? (Circle) YES NO
Temperature °C: 3.1 °F
Special Deliverable Requirements:
Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT
Special Instructions:
Requested Turnaround Time: ☒ RUSH 48 hr turn — Date Needed ☐ STD

☐ 200 W. Potter Drive Anchorage, AK 99518 Tel: (907) 562-2343 Fax: (907) 561-5301
☐ 5500 Business Drive Wilmington, NC 28405 Tel: (910) 350-1903 Fax: (910) 350-1557
☐ 1270 Greenbrier Street Charleston, WV 25311 Tel: (304) 346-0725 Fax: (304) 346-0761

White - Retained by Lab
Yellow - Returned with Report
Pink - Retained by Sampler

CHAIN OF CUSTODY RECORD
SGS Environmental Services Inc.

Locations Nationwide
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- North Carolina
- West Virginia

www.us.sgs.com

087292

(1)

CLIENT: MEL CORP

CONTACT: Rob Finley — PHONE NO:(252) 448-8700

PROJECT: TT-2 — SITE/PWSID# :

REPORTS TO: Rob Finley — E-MAIL:

FAX NO.:(252) 447-2012

INVOICE TO: Julie Smith — QUOTE #

P.O. NUMBER

SGS Reference:

PAGE 2 OF 2

(2)

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	No CONTAINERS	SAMPLE TYPE C=COMP G=GRAB	Preservatives Used	Analysis Required (3)	REMARKS
	STOCKPILE	5/12/09	1230	SOIL	4	G	N/O	DRO	Lab to composite Stockpile Samples
							N/O	GRO	

(5)

Collected/Relinquished By:(1)	Date	Time	Received By:	Date	Time
[signature]	5/12/09	1330	[signature]	5/13/09	7:55
Relinquished By: (2)	Date	Time	Received By:	Date	Time
Relinquished By: (3)	Date	Time	Received By:	Date	Time
Relinquished By: (4)	Date	Time	Received By:	Date	Time

(4)

Shipping Carrier:

Shipping Ticket No:

Samples Received Cold? (Circle) YES NO

Temperature °C: 3.1 °F

Special Deliverable Requirements:

Chain of Custody Seal: (Circle)

INTACT BROKEN ABSENT

Special Instructions:

Requested Turnaround Time:

☑ RUSH 48 hr Turn ☐ STD

Date Needed

☐ 200 W. Potter Drive Anchorage, AK 99518 Tel: (907) 562-2343 Fax: (907) 561-5301
☐ 5500 Business Drive Wilmington, NC 28405 Tel: (910) 350-1903 Fax: (910) 350-1557
☐ 1270 Greenbrier Street Charleston, WV 25311 Tel: (304) 346-0725 Fax: (304) 346-0761

White - Retained by Lab
Yellow - Returned with Report
Pink - Retained by Sampler

APPENDIX F

PHOTOGRAPHS

Removed UST TT-2969

Former UST TT-2969 location

UST TT-2969 soil removal activities

Backfilled former UST TT-2969 location