GEL Engineering of NC INC
an affiliate of The GEL Group INC
problem solved

GEOPHYSICAL SURVEY AND PRELIMINARY SITE ASSESSMENT REPORT
Marie S. Williams Property
Parcel 42
111 North Main Street (NC 33)
Tarboro, North Carolina
WBS Element # 32782.1.1
Edgecombe County

North Carolina Department of Transportation
Geotechnical Engineering Unit
1589 Mail Service Center
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January 4, 2008

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GEOPHYSICAL SURVEY AND
PRELIMINARY SITE ASSESSMENT REPORT

Marie S. Williams Property
Parcel 42
111 North Main Street (NC 33)
Tarboro, North Carolina
Rocky Mount Northern Outer Loop
From US 258/NC 111-122 (Mutual Boulevard)
to SR 1308 (Albemarle Avenue)
WBS Element # 32782.1.1
State Project B-2965
Edgecombe County

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This document, entitled "Geophysical Survey and Preliminary Site Assessment Report," has been prepared for the Marie S. Williams Property, Parcel 42, located at 111 North Main Street (NC 33) in Tarboro, North Carolina (WBS Element # 32782.1.1, State Project B-2965, Edgecombe County). It has been prepared by GEL Engineering of NC, Inc. in accordance with the Notice to Proceed provided by the North Carolina Department of Transportation-GeoEnvironmental Section, Geotechnical Engineering Unit for the exclusive use of the North Carolina Department of Transportation. It has been prepared in accordance with accepted quality control practices and has been reviewed by the undersigned.

GEL ENGINEERING OF NC, INC.
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Executive Summary

The subject site is Parcel 42 (the Marie S. Williams Property), located at 111 North Main Street (NC 33) in Tarboro, North Carolina. The primary purpose of this investigation was to determine the presence or absence of constituents of concern in soil and groundwater within the proposed North Carolina Department of Transportation (NCDOT) Right-of-Way (ROW) of Parcel 42 as a result of previous and/or current operations at the subject site.

Currently, the site is a gasoline station (Trade Mart #76). GEL Engineering of NC, Inc. (GEL) performed a geophysical evaluation and a preliminary site assessment within the proposed NCDOT ROW at the subject site that included the collection and analysis of soil samples and one groundwater sample. Underground utilities were identified within the proposed ROW during the geophysical survey. Four underground storage tanks (USTs) were detected as well, but not within the proposed ROW.

Soil samples were collected for analysis from five borings constructed on the subject site. The soil samples were analyzed for diesel range organics (DRO) and gasoline range organics (GRO). GRO and DRO were not detected in any of the five soil samples. Therefore, these analytical results indicate that there are no constituents of concern in the soil of the proposed ROW within Parcel 42.

One groundwater sample was collected at soil boring location SS-23, based on the proximity of the boring location to the three on-site USTs. Analytical results for this sample did not indicate any detectable amounts of DRO or GRO. Therefore, there is no indication petroleum contamination in groundwater within the vicinity of boring SS-23.

Based on the soil and groundwater data generated from this investigation, there is no evidence that release(s) of petroleum hydrocarbon constituents of concern has occurred within the proposed NCDOT ROW at the subject site. No additional environmental investigation of potential petroleum hydrocarbon impact to the site soil is recommended at this time.

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1.0 Introduction

This document presents the details of a geophysical survey and preliminary site assessment performed within the proposed North Carolina Department of Transportation (NCDOT) Right-of-Way (ROW) at the above referenced property (the subject site). The subject site is referenced as Parcel 42 (the Marie S. Williams Property), located at 111 North Main Street (NC 33), northeast of the intersection of North Main Street and Saint Andrews Street, in Tarboro, North Carolina. The subject site is owned by Marie S. Williams. The site is a gasoline station (Trade Mart #76). The site location is shown on Figure 1, an excerpt from the United States Geological Survey (USGS) 7.5-minute quadrangle map of Tarboro, North Carolina. This geophysical survey and preliminary site assessment were conducted by GEL Engineering of NC, Inc. (GEL) in accordance with the Notice to Proceed issued by NCDOT on October 15, 2007.

The primary purpose of this investigation was to determine the presence or absence of on-site constituents of concern in soil and groundwater within the proposed NCDOT ROW at the subject site as a result of current and/or former operations.

2.0 Background

NCDOT is planning road improvements to the area in the vicinity of BR 24 over the Tar River on NC 33 (Main Street) from US 258/NC 111-122 (Mutual Boulevard) to SR 1308 (Albemarle Avenue). NCDOT wanted to assess the proposed ROW within Parcel 42 to evaluate the presence or absence of soil and groundwater contamination related to the current and/or former on-site operations, and the impact (if any) of these operations on the proposed road improvements. Figure 2 shows the general site layout**.**

3.0 Local Geology and Hydrogeology

The site is in a developed area of Tarboro in Edgecombe County, North Carolina. Surrounding land uses include residential and light commercial development. The site is located in the Coastal Plain physiographic province of North Carolina. The Coastal Plain consists of a wedge of mostly marine sedimentary rocks that gradually thicken to the east. The Cretaceous Cape Fear and Black Creek Formations underlie the subject site. They consist of sandstone and sandy mudstone comprised of mostly estuarine and marine deposits. These Formations are overlain by Cenozoic unconsolidated alluvial, estuarine, and marine sediments in the vicinity of the subject site.

Uppermost soils are characterized mostly of gravel, sand, and clayey sediments associated with alluvial morphology of the Tar River, including Pleistocene terraces and floodplain deposits. The United States Department of Agriculture's *Soil Survey of Edgecombe County, North Carolina* (1908) classifies the soil in the vicinity of the site as belonging to the Norfolk-Portsmouth series, which typically consists of sand and sandy loam soils. The soil encountered in the vicinity of this site during the preliminary site assessment was predominately brown/tan/orange clayey sand.

Groundwater was encountered during the preliminary site assessment and a groundwater assessment was performed. Groundwater was encountered at a depth of approximately 15 feet below land surface (bls). Based on the topographic map in Figure 1, the subject site is located approximately 20 feet above mean sea level (MSL).

The nearest perennial surface water body to the subject site is the Tar River. The watercourse is located approximately 150 feet south of the subject site. Based on the United States Geological Survey topographic map presented as Figure 1, the groundwater flow direction underlying the subject site is most likely southerly towards the Tar River.

4.0 Subsurface Investigation

To determine the presence or absence of impact to subsurface soil at the subject site, GEL performed a limited site assessment that consisted of the following tasks:

- Performance of a geophysical evaluation to identify the presence or absence of underground storage tanks (USTs) and associated appurtenances, and other underground anomalies, including utilities, at the subject site and their locations.

- Soil vapor screening of soil samples from subsurface soil borings to determine the potential presence or absence of soil impact from petroleum constituents of concern.

- Laboratory analysis of collected soil samples.

The details of these tasks are discussed in the following sections.

4.1 Geophysical Evaluation

The geophysical investigation included the deployment of ground penetrating radar technology, radio frequency electromagnetic technology, and time domain electromagnetic technology to the site. These technologies were used in concert with one another in order to identify subsurface metallic anomalies and, in particular, to identify the presence of underground storage tanks (USTs) on site. A brief description of each technology is presented in the following paragraphs followed by a discussion of the results of the geophysical investigation.

4.1.1 Ground Penetrating Radar Methodology

A RAMAC digital radar control system configured with a 250 Megahertz (MHz) antenna array was used in this investigation. Ground Penetrating Radar (GPR) is an electromagnetic geophysical method that detects interfaces between subsurface materials with differing dielectric constants. The GPR system consists of an antenna that houses the transmitter and receiver, a digital control unit that both generates and digitally records the GPR data, and a color video monitor to view data as they are collected in the field.

The transmitter radiates repetitive short-duration electromagnetic waves (at radar frequencies) into the earth from an antenna moving across the ground surface. These radar waves are reflected back to the receiver from the interface of materials with different dielectric constants. The intensity of the reflected signal is a function of the contrast in the dielectric constant between the materials, the conductivity of the material through which the wave is traveling, and the frequency of the signal. Subsurface features that commonly cause such reflections are: 1) natural geologic conditions, such as changes in sediment composition, bedding, and cementation horizons and voids; or 2) unnatural changes to the subsurface, such as disturbed soils, soil backfill, buried debris, tanks, pipelines, and utilities. The digital control unit processes the signal from the receiver and produces a continuous cross-section of the subsurface interface reflection events.

GPR data profiles are collected along transects, which are measured paths along which the GPR antenna is moved. During a survey, marks are placed in the data by the operator at designated points along the GPR transects or with a survey wheel odometer.

These marks allow for a correlation between the GPR data and the position of the GPR antenna on the ground.

Depth of investigation of the GPR signal is highly site-specific and is limited by signal attenuation (absorption) in the subsurface materials. Signal attenuation is dependent on the electrical conductivity of the subsurface materials. Signal attenuation is greatest in materials with relatively high electrical conductivities, such as clays, brackish groundwater, or groundwater with a high dissolved solid content from natural or man-made sources. Signal attenuation is lowest in relatively low-conductivity materials, such as dry sand or rock. Depth of investigation is also dependent on the antenna's transmitting frequency. Depth of investigation generally increases as transmitting frequency decreases; however, the ability to resolve smaller subsurface features is diminished as frequency is decreased.

The GPR antenna used at this site is internally shielded from aboveground interference sources. Accordingly, the GPR response is not affected by overhead power lines, metallic buildings, or nearby objects.

4.1.2 Radio Frequency Electromagnetic Methodology

A Radio Detection RD4000PXL2 unit was used in this investigation. Radio Frequency Electromagnetic (EM) utility locating equipment consists of a transmitter and a dual-function receiver. The receiver can be operated in a “passive” mode or in an “active” mode. The two modes of operation provide various levels of detection capabilities depending on the specific target or application.

The system is operated in the “active” mode by either inducing or conducting a signal into the underground utility to be traced. A transmitter is placed over and in line with a suspected buried utility. The transmitter induces a signal that propagates along the buried utility. As the receiver is moved back and forth across the suspected path of the utility, the trace signal induces a signal into the receivers coil sensor. A visual and audio response indicates when the receiver is directly over the buried utility. Another means of detecting in the “active” mode utilizes a method to “conduct” a signal within the buried utility. To accomplish this, a cable from the transmitter is clamped onto an exposed section of the buried utility and a signal propagates along the buried line. This technique minimizes any interference caused by parasitic emissions from adjacent cables in congested areas. When the system is utilized in the “passive” mode, the receiver is responding to a 60-Hertz cycle current energized by underground utilities.

Interference can and may occur when buried utilities intersect or are adjacent to each other. This effect, referred to as "bleed-off," may provide a false response to the identification of the tracked utility. "Bleed-off" is caused by utilities that may be energized in the "active" or "passive" mode.

4.1.3 Time Domain Electromagnetic Methodology

The Time Domain Electromagnetic (TDEM) methods measure the electrical conductivity of subsurface materials. The conductivity is determined by inducing (from a transmitter) a time or frequency-varying magnetic field and measuring (with a receiver) the amplitude and phase shift of an induced secondary magnetic field. The secondary magnetic field is created by subsurface conductive materials behaving as an inductor as the primary magnetic field is passed through them.

The Geonics EM-61 system used in this investigation operates within these principles. However, the EM-61 TDEM system can discriminate between moderately conductive earth materials and very conductive metallic targets. The EM-61 consists of a portable coincident loop time domain transmitter and receiver with a 0.5-meter by 1.0-meter coil system. The EM-61 generates 150 pulses per second and measures the response from the ground after transmission or between pulses. The secondary EM responses from metallic targets are of longer duration than those created by conductive earth materials. By recording the later time EM arrivals, only the response from metallic targets is measured, rather than the field generated by the earth material.

4.1.4 Field Procedures

The GPR, EM, and TDEM field investigation was performed on October 29-30, 2007. A GPR system time range setting of 90 nanoseconds (ns) was used during the entire investigation. This range was determined after a series of test lines were conducted to evaluate the GPR response in the local geologic section. A preliminary interpretation of the GPR data was conducted in the field and potential utilities were marked on the ground. Following the completion of the fieldwork, the data were post-processed and analyzed in more detailed. GPR data processing typically included band pass filtering, background removal, horizontal smoothing, and gain adjustments.

EM was used to scan the project site using both the passive (detecting 60-Hertz cycles from active electrical lines or induced 60-Hertz cycles on other metallic lines) and active modes (putting a traceable signal on utilities at points where the utility ties into above ground installations or inducing a traceable signal from the surface). TDEM was

also used to scan the project site. Electromagnetic anomalies indicative of buried metallic objects were marked in the field. Marked utilities, grid corners, buried metallic objects, and other reference points were surveyed with a surveying instrument (Trimble Geodimeter 600).

As shown on Figure 2, underground utilities were identified on the subject site during the investigation, and four active USTs were located on the site. Utilities below the maximum penetration depth were not detected with GPR.

4.2 Subsurface Soil Investigation

To determine the presence or absence of impact to subsurface soil by constituents of concern, GEL collected soil samples from five subsurface soil borings at the subject site on November 8, 2007, for analysis. Soil borings SS-20 through SS-24 were constructed within the subject site. The locations of soil borings SS-20 through SS-24 are shown on Figure 2, and the longitude and latitude coordinates for the boring locations are listed in the table below. The borings were located in areas on the site where there appeared to be a potential of soil impact based on on-site activities and in other areas that are representative of the subject site. No odors or surface staining were observed during the collection of all five soil samples.

All borings were advanced to a total depth of 8 feet bls. Soil samples were collected at 3-4 feet, 5-6 feet, and 7-8 feet bls from each borehole. All soil samples were inspected for indications of impact by constituents of concern including petroleum hydrocarbons, such as odors, discoloration, or visible sheen. This sampling was accomplished using direct push technology (DPT) provided by Regional Probing of Wake Forest, North Carolina (Regional Probing). Soil boring lithologic logs are attached as Appendix I of this document. No groundwater was encountered during construction of the borings.

The soil samples were screened for the presence of organic vapors using a portable photoionization detector (PID). The PID measures the concentration of organic compounds in the vapor space above a soil sample resulting from volatilization of organic compounds contained in the soil. To screen the soils, each sample was placed in a clean, resealable polyethylene bag. The bag was sealed, and the sample was allowed to equilibrate for approximately 5 minutes, after which time a small opening was made in the bag. The probe of the PID was then inserted into the bag, and the airspace above the soil was screened for organic vapors.

To assess the subsurface soil quality, one soil sample was collected from each soil boring at the sampled depth interval with the highest PID reading and submitted for laboratory analysis. The depth intervals and PID measurements of the collected soil samples submitted to the laboratory for analysis are listed below.

Summary of Location Data and PID Measurements for Soil Samples Collected for Analysis

Soil Boring	Depth Interval of Soil Sample Collected for Analysis (feet bls)	PID Reading (ppm)	Latitude/Longitude (NAD83)
SS-20	7-8	2.0	35º53'42.68"N / 77º31'56.60"W
SS-21	7-8	2.3	35º53'42.04"N / 77º31'57.32"W
SS-22	5-6	1.3	35º53'42.86"N / 77º31'59.05"W
SS-23	7-8	0.8	35º53'43.40"N / 77º32'59.59"W
SS-24	0-1	1.8	35°53'43.73"N / 77°32'59.74"W

Notes:
1) Coordinates are based on North American Datum of 1983 (NAD83)
2) bls = below land surface
3) PID = photoionization detector
4) ppm = parts per million

Following completion of the sampling activities, all borings were abandoned by filling the boreholes with hydrated bentonite, and topped with asphalt patching, as required. Soil samples were submitted to Pace Analytical Service, Inc. in Huntersville, North Carolina (North Carolina Certification No. 37706) for analysis of diesel range organics (DRO) by EPA Method 8015 with EPA Method 3545 sample preparation, and gasoline range organics (GRO) by EPA Method 8015 with EPA Method 5035A/5030B sample preparation. The analytical results are summarized in the following table and are included on the Certificates of Analysis provided in Appendix II.

Summary of Analytical Results for Soil Samples

Soil Sample	Depth Interval of Soil Sample Collected for Analysis (feet bls)	DRO	GRO
SS-20	7-8	ND	ND
SS-21	7-8	ND	ND
SS-22	5-6	ND	ND
SS-23	7-8	ND	ND
SS-24	0-1	ND	ND
NCDENR Action Level		**10***	**10**

Notes:
1) ND = Not Detected
2) Concentrations shown are in milligram per kilogram (mg/kg).
3) **Bold** = detected concentration above the NCDENR action level
4) * = Recommended action level for DRO. Currently the enforced NCDENR action level is 40 mg/kg.

DRO and GRO were not detected in any of the five soil samples collected at the site.

4.3 Groundwater Investigation

GEL collected one groundwater sample at the subject site (SS-23-GW) to determine if groundwater has been impacted by constituents of concern. Groundwater sample SS-23-GW was collected after soil boring location SS-23 was converted to a temporary groundwater monitoring well, as shown in Figure 2. Groundwater sample SS-23-GW was collected at this location based on it being hydraulically downgradient from the USTs located on the subject site.

Regional Probing collected the groundwater sample using DPT. To collect the groundwater sample, the DPT probe was advanced to a depth slightly below the water table, which was encountered at a depth of approximately 18 feet bls. The DPT probe was then retracted while an internal PVC slotted screen was released from the bottom of the probe. The groundwater samples were collected from within the slotted screen using new Teflon® tubing and a peristaltic pump. The collected groundwater samples were submitted to Pace Analytical Service, Inc. for analysis of DRO by EPA Method 8015 with EPA Method 3510 sample preparation and GRO by EPA Method 8015 with EPA Method 5030 sample preparation. The analytical results for SS-23-GW indicated that no DRO and GRO constituents were detected. Therefore, groundwater impact in the vicinity of boring SS-23 is not suspected, based on the data collected.

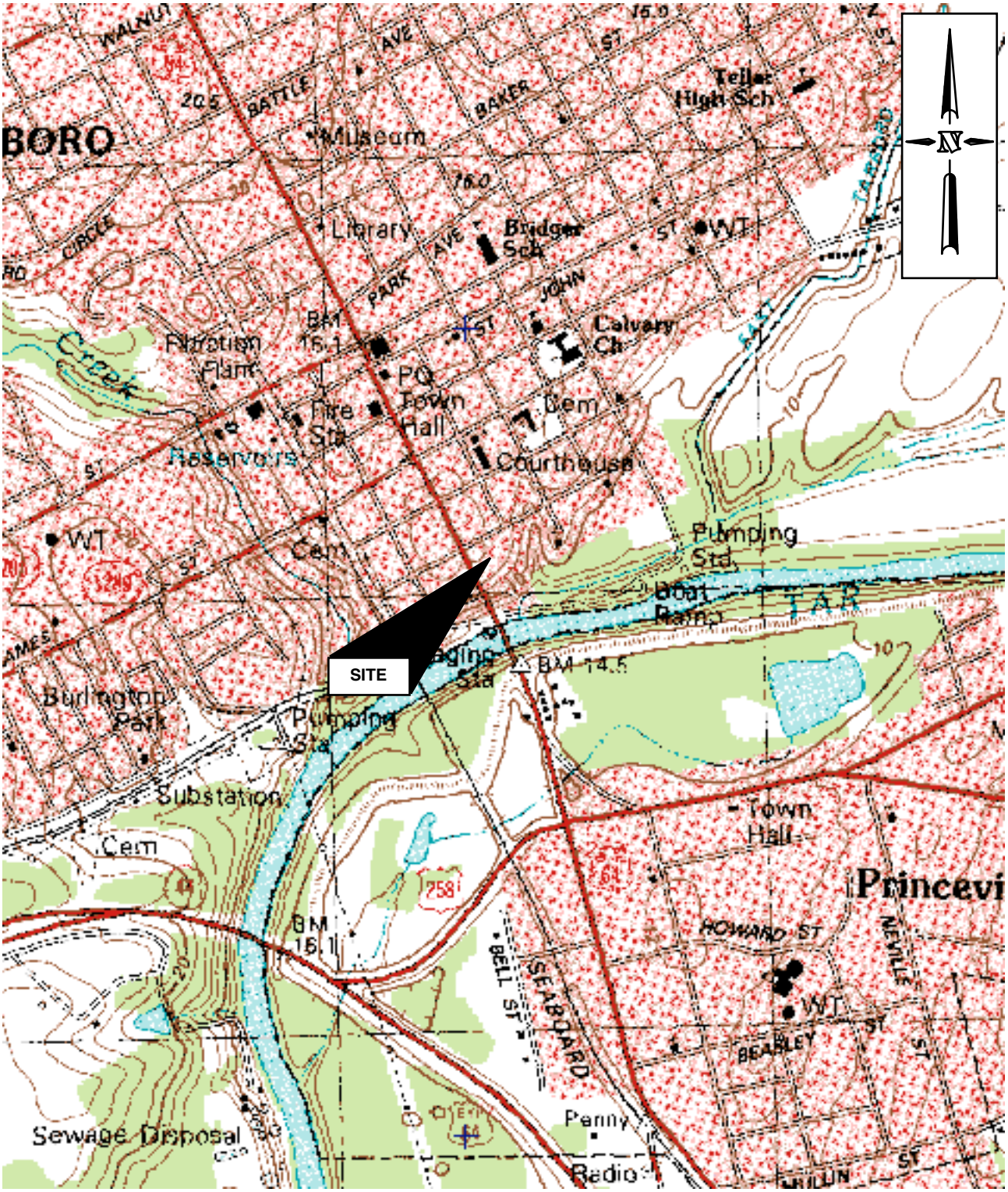
5.0 Conclusions and Recommendations

GEL performed a geophysical evaluation and a preliminary site assessment to determine the presence or absence of impact to subsurface soil by petroleum constituents of concern within the proposed NCDOT ROW at the subject site. Underground utilities were identified within the proposed ROW during the geophysical survey. Four USTs were detected as well, but not within the proposed ROW.

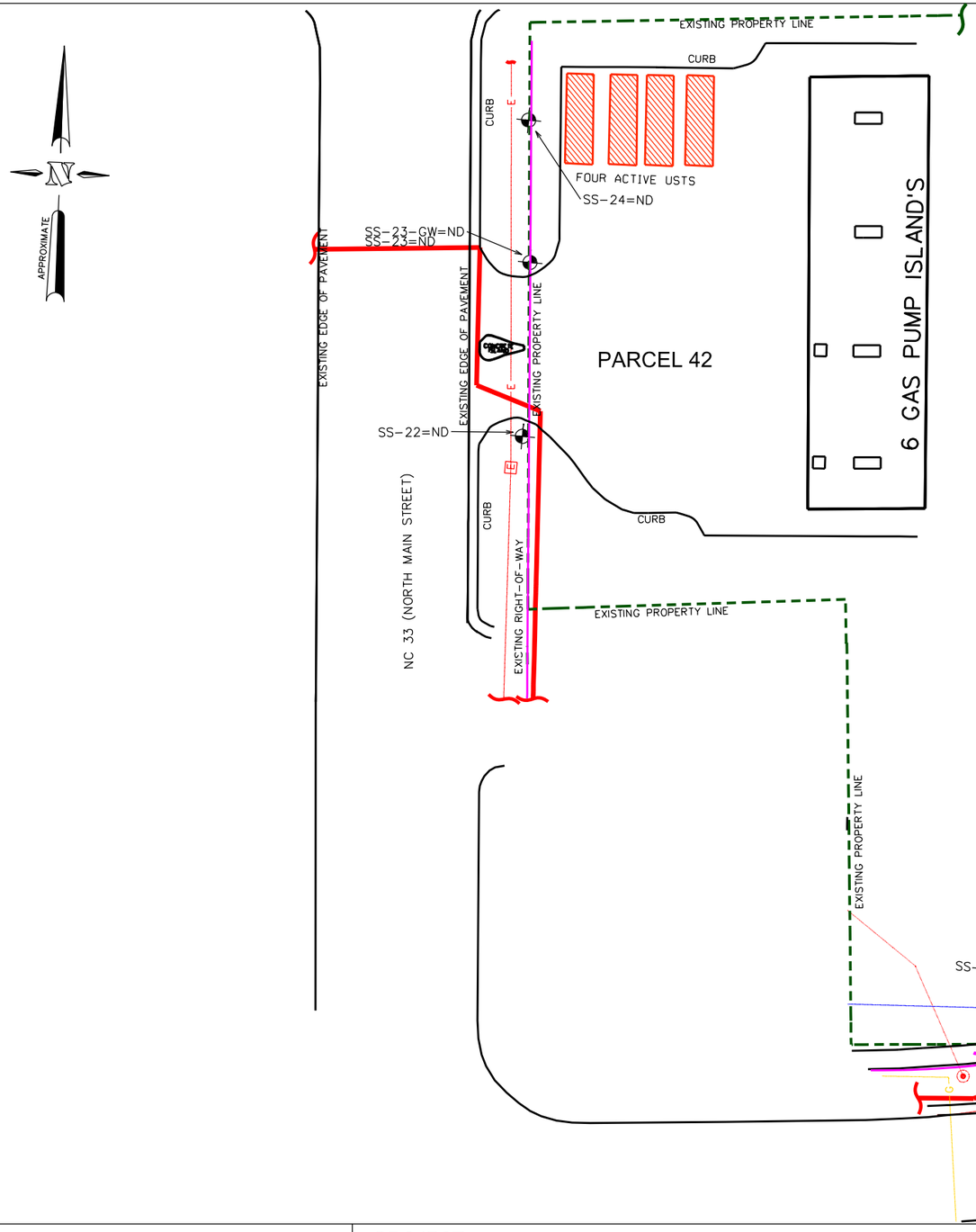
Soil samples were collected for analysis from five borings constructed within the proposed NCDOT ROW on the subject site. The soil samples were analyzed for DRO and GRO. Analytical results for all five soil samples did not detect any contamination. Therefore, these analytical results indicate that there are no constituents of concern in the soil within the proposed ROW of Parcel 42.

One groundwater sample was collected at soil boring location SS-23, based on the proximity of the boring location to the four on-site USTs. Analytical results for this sample did not indicate any detectable amounts of DRO or GRO. Therefore, there is no indication of petroleum contamination in groundwater within the vicinity of boring SS-23.

Based on the data generated from this investigation, there is no evidence that a significant widespread release(s) of constituents of concern has occurred within the proposed ROW at the subject site. No additional environmental investigation of the site soil or groundwater is recommended at this time.



GEL Engineering OF NC, Inc. *an Affiliate of THE GEL GROUP, Inc.* GEL Post Office Box 14262 Research Triangle Park, NC 27709 (919) 544-1100	PROJECT: ncdt00907c GEOPHYSICAL SURVEY AND PRELIMINARY SITE ASSESSMENT MARIE S. WILLIAMS PROPERTY PARCEL 42 111 NORTH MAIN STREET (NC 33) TARBORO, NORTH CAROLINA WBS ELEMENT # 32782.1.1	SITE LOCATION MAP	FIGURE 1
	DATE: JANUARY 4, 2008	DRAWN BY: ABP APPRV. BY: RMM	



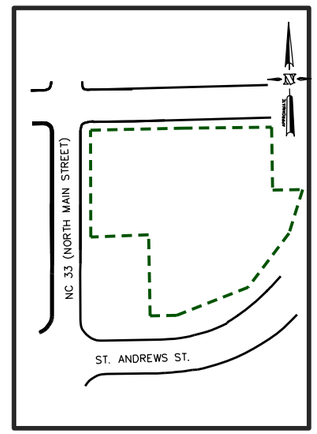
LEGEND

- UK — UNKNOWN SUBSURFACE UTILITY
- E — ELECTRIC SUBSURFACE UTILITY
- END OF DESIGNATION
- ACTIVE UNDERGROUND STORAGE TANK
- PROPERTY BOUNDARY
- PROPOSED RIGHT-OF-WAY
- EXISTING RIGHT-OF-WAY
- E — ELECTRIC PULLBOX
- SOIL BORING LOCATION
- ND — GRO AND DRO NOT DETECTED

GRAPHIC SCALE

0 15 30 60 120

(IN FEET)



KEY MAP (NOT TO SCALE)

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GEOPHYSICAL INVESTIGATION AND PRELIMINARY
SITE ASSESSMENT
ROCKY MOUNT NORTHERN OUTER LOOP
TARBORO, NORTH CAROLINA

SITE MAP SHOWING THE
RESULTS OF GEOPHYSICAL INVESTIGATION AND
SOIL BORING LOCATIONS (MARIE S. WILLIAMS
PROPERTY)

FIGURE
2

DATE: JANUARY 4, 2008

DRAWN BY: DKB

APPRV. BY: RMM

APPENDIX I

SOIL BORING LITHOLOGIC LOGS

SOIL BORING LOG

Boring/Well No.: **SS-20**
Date Started: 11/08/07
Date Completed: 11/08/07

No.	Depth Interval	Blow Counts	PID (ppm)	Soil Description	Soil Type
1	0.0' – 4.0'	--	0.1	Brown sandy silt to orange sandy clay; dry, no odor.	SC
2	4.0' – 5.0'	--		Orange sandy clay to orange clayey sand; no odor.	SC
3	5.0' – 6.0'	--	0.4	Same	SC
4	6.0' – 7.0'	--		Orange sandy clay to orange clayey sand; no odor.	SC
5	7.0' – 8.0'	--	2.0	Same	SC
6				Total depth = 8 feet below land surface	
7					
8					
9					
10					
11					
12					

Notes:

1) 4-foot continuous cores using DPT.

2) PID readings shown are for discrete samples collected at indicated depth intervals.

SOIL BORING LOG

Boring/Well No.: **SS-21**
Date Started: 11/08/07
Date Completed: 11/08/07

No.	Depth Interval	Blow Counts	PID (ppm)	Soil Description	Soil Type
1	0.0' – 4.0'	--	0.5	Orange sandy clay; dry, no odor.	SC
2	4.0' – 5.0'	--		Orange sandy clay to orange/white clayey sand; no odor.	SC
3	5.0' – 6.0'	--	0.2	Same	SC
4	6.0' – 7.0'	--		Orange sandy clay to orange/white clayey sand; no odor.	SC
5	7.0' – 8.0'	--	2.3	Same	SC
6				Total depth = 8 feet below land surface	
7					
8					
9					
10					
11					
12					

Notes:

1) 4-foot continuous cores using DPT.

2) PID readings shown are for discrete samples collected at indicated depth intervals.

SOIL BORING LOG

Boring/Well No.: **SS-22**
Date Started: 11/08/07
Date Completed: 11/08/07

No.	Depth Interval	Blow Counts	PID (ppm)	Soil Description	Soil Type
1	0.0' – 4.0'	--	1.2	Orange sandy clay; plastic, no odor.	SC
2	4.0' – 5.0'	--		Orange sandy clay; no odor, damp at 6'.	SC
3	5.0' – 6.0'	--	0.3	Same	SC
4	6.0' – 7.0'	--		Orange sandy clay to well-graded orange sand; damp, no odor.	SW
5	7.0' – 8.0'	--	1.3	Same	SW
6				Total depth = 8 feet below land surface	
7					
8					
9					
10					
11					
12					

Notes:

1) 4-foot continuous cores using DPT.

2) PID readings shown are for discrete samples collected at indicated depth intervals.

SOIL BORING LOG

Boring/Well No.: **SS-23**
Date Started: 11/08/07
Date Completed: 11/08/07

No.	Depth Interval	Blow Counts	PID (ppm)	Soil Description	Soil Type
1	0.0' – 4.0'	--	0.6	Orange sandy clay; dry, friable, no odor.	SC
2	4.0' – 5.0'	--		Orange sandy clay to orange clayey sand; dry, friable, no odor.	SC
3	5.0' – 6.0'	--	0.7	Same	SC
4	6.0' – 7.0'	--		Orange sandy clay to tan/white well-graded sand; no odor.	SW
5	7.0' – 8.0'	--	3.1	Same	SW
6				Total depth = 8 feet below land surface	
7					
8					
9					
10					
11					
12					

Notes:

1) 4-foot continuous cores using DPT.

2) PID readings shown are for discrete samples collected at indicated depth intervals.

SOIL BORING LOG

Boring/Well No.: **SS-24**
Date Started: 11/08/07
Date Completed: 11/08/07

No.	Depth Interval	Blow Counts	PID (ppm)	Soil Description	Soil Type
1	0.0' – 4.0'	--	2.3	Brown silty clay; dry, no odor.	SM-SC
2	4.0' – 5.0'	--		Brown sandy clay to orange clayey sand; no odor.	SC
3	5.0' – 6.0'	--	1.7	Same	SC
4	6.0' – 7.0'	--		Orange clayey sand to tan well-graded sand; no odor.	SW
5	7.0' – 8.0'	--	1.2	Same	SW
6				Total depth = 8 feet below land surface	
7					
8					
9					
10					
11					
12					

Notes:

1) 4-foot continuous cores using DPT.

2) PID readings shown are for discrete samples collected at indicated depth intervals.

APPENDIX II

CERTIFICATES OF ANALYSIS AND CHAIN OF CUSTODY RECORD FOR SOIL SAMPLES

Pace Analytical®
www.pacelabs.com

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November 26, 2007

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General Engineering
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Research Triangle, NC 27709

RE: Project: NCDOT 00907/WSB#32782.1.1
Pace Project No.: 927329

Dear Mr. Miller:
Enclosed are the analytical results for sample(s) received by the laboratory between November 07, 2007 and November 09, 2007. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

Inorganic Wet Chemistry and Metals analyses were performed at our Pace Asheville laboratory and Organic testing was performed at our Pace Huntersville laboratory unless otherwise footnoted. All Microbiological analyses were performed at the laboratory where the samples were received.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Annette Scott

Annette Scott

annette.scott@pacelabs.com
Project Manager

Enclosures

cc: Mr. Christopher Peoples, NCDOT- Materials & Test Unit

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CERTIFICATIONS

Project: NCDOT 00907/WSB#32782.1.1
Pace Project No.: 927329

Charlotte Certification IDs
Florida/NELAP Certification Number: E87627
Kansas Certification Number: E-10364
Louisiana/LELAP Certification Number: 04034
North Carolina Drinking Water Certification Number: 37706
North Carolina Wastewater Certification Number: 12
North Carolina Field Services Certification Number: 5342
South Carolina Certification Number: 990060001
South Carolina Bioassay Certification Number: 990060003
Tennessee Certification Number: 04010
Virginia Certification Number: 00213

Asheville Certification IDs
Florida/NELAP Certification Number: E87648
Louisiana/LELAP Certification Number: 03095
New Jersey Certification Number: NC011
North Carolina Drinking Water Certification Number: 37712
North Carolina Wastewater Certification Number: 40
North Carolina Bioassay Certification Number: 9
Pennsylvania Certification Number: 68-03578
South Carolina Certification Number: 99030001
South Carolina Bioassay Certification Number: 99030002
Tennessee Certification Number: 2980
Virginia Certification Number: 00072

Eden Certification IDs
North Carolina Drinking Water Certification Number: 37738
Virginia Drinking Water Certification Number: 00424
North Carolina Wastewater Certification Number: 633

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ANALYTICAL RESULTS

Project: NCDOT 00907/WSB#32782.1.1
Pace Project No.: 927329

Sample: SS-12-5 **Lab ID: 927329001** Collected: 11/06/07 12:30 Received: 11/07/07 15:55 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel for ASE	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3545							
Diesel Components	ND	mg/kg	5.4	1	11/10/07 00:00	11/13/07 14:58	68334-30-5	
n-Pentacosane (S)	54	%	50-135	1	11/10/07 00:00	11/13/07 14:58	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B							
Gasoline Range Organics	ND	mg/kg	7.2	1	11/09/07 10:34	11/09/07 19:53	8006-61-9	
4-Bromofluorobenzene (S)	104	%	50-135	1	11/09/07 10:34	11/09/07 19:53	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**7.9**	%	0.10	1		11/08/07 14:03		

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ANALYTICAL RESULTS

Project: NCDOT 00907/WSB#32782.1.1
Pace Project No.: 927329

Sample: SS-13-3 **Lab ID: 927329002** Collected: 11/06/07 12:45 Received: 11/07/07 15:55 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel for ASE	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3545							
Diesel Components	ND	mg/kg	5.9	1	11/10/07 00:00	11/13/07 02:53	68334-30-5	
n-Pentacosane (S)	56	%	50-135	1	11/10/07 00:00	11/13/07 02:53	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B							
Gasoline Range Organics	ND	mg/kg	5.4	1	11/09/07 10:34	11/09/07 20:54	8006-61-9	
4-Bromofluorobenzene (S)	95	%	50-135	1	11/09/07 10:34	11/09/07 20:54	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**15.7**	%	0.10	1		11/08/07 14:03		

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ANALYTICAL RESULTS

Project: NCDOT 00907/WSB#32782.1.1
Pace Project No.: 927329

Sample: SS-14-7 **Lab ID: 927329003** Collected: 11/06/07 13:00 Received: 11/07/07 15:55 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel for ASE	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3545							
Diesel Components	ND	mg/kg	5.9	1	11/10/07 00:00	11/13/07 03:18	68334-30-5	
n-Pentacosane (S)	53	%	50-135	1	11/10/07 00:00	11/13/07 03:18	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B							
Gasoline Range Organics	ND	mg/kg	6.4	1	11/09/07 10:34	11/09/07 21:15	8006-61-9	
4-Bromofluorobenzene (S)	95	%	50-135	1	11/09/07 10:34	11/09/07 21:15	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**15.4**	%	0.10	1		11/08/07 14:04		

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ANALYTICAL RESULTS

Project: NCDOT 00907/WSB#32782.1.1
Pace Project No.: 927329

Sample: SS-15-5 **Lab ID: 927329004** Collected: 11/06/07 13:15 Received: 11/07/07 15:55 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel for ASE	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3545							
Diesel Components	ND	mg/kg	6.0	1	11/10/07 00:00	11/13/07 03:18	68334-30-5	
n-Pentacosane (S)	70	%	50-135	1	11/10/07 00:00	11/13/07 03:18	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B							
Gasoline Range Organics	ND	mg/kg	8.7	1	11/09/07 10:34	11/09/07 21:35	8006-61-9	
4-Bromofluorobenzene (S)	97	%	50-135	1	11/09/07 10:34	11/09/07 21:35	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**16.3**	%	0.10	1		11/08/07 14:04		

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ANALYTICAL RESULTS

Project: NCDOT 00907/WSB#32782.1.1
Pace Project No.: 927329

Sample: SS-17-5 **Lab ID: 927329005** Collected: 11/06/07 13:55 Received: 11/07/07 15:55 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel for ASE	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3545							
Diesel Components	ND	mg/kg	5.8	1	11/10/07 00:00	11/13/07 03:44	68334-30-5	
n-Pentacosane (S)	64	%	50-135	1	11/10/07 00:00	11/13/07 03:44	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B							
Gasoline Range Organics	ND	mg/kg	5.5	1	11/09/07 10:34	11/09/07 21:56	8006-61-9	
4-Bromofluorobenzene (S)	94	%	50-135	1	11/09/07 10:34	11/09/07 21:56	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**14.5**	%	0.10	1		11/08/07 14:04		

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ANALYTICAL RESULTS

Project: NCDOT 00907/WSB#32782.1.1
Pace Project No.: 927329

Sample: SS-3-5 **Lab ID: 927329006** Collected: 11/06/07 14:25 Received: 11/07/07 15:55 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel for ASE	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3545							
Diesel Components	ND	mg/kg	5.6	1	11/10/07 00:00	11/13/07 03:44	68334-30-5	
n-Pentacosane (S)	68	%	50-135	1	11/10/07 00:00	11/13/07 03:44	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B							
Gasoline Range Organics	ND	mg/kg	5.9	1	11/09/07 10:34	11/09/07 22:16	8006-61-9	
4-Bromofluorobenzene (S)	96	%	50-135	1	11/09/07 10:34	11/09/07 22:16	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**11.4**	%	0.10	1		11/08/07 14:04		

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ANALYTICAL RESULTS

Project: NCDOT 00907/WSB#32782.1.1
Pace Project No.: 927329

Sample: SS-2-3 **Lab ID: 927329007** Collected: 11/06/07 14:45 Received: 11/07/07 15:55 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel for ASE	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3545							
Diesel Components	ND	mg/kg	5.7	1	11/10/07 00:00	11/13/07 04:10	68334-30-5	
n-Pentacosane (S)	65	%	50-135	1	11/10/07 00:00	11/13/07 04:10	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B							
Gasoline Range Organics	ND	mg/kg	5.6	1	11/09/07 10:34	11/09/07 22:36	8006-61-9	
4-Bromofluorobenzene (S)	95	%	50-135	1	11/09/07 10:34	11/09/07 22:36	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**12.4**	%	0.10	1		11/09/07 13:54		

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ANALYTICAL RESULTS

Project: NCDOT 00907/WSB#32782.1.1
Pace Project No.: 927329

Sample: SS-4-5 **Lab ID: 927329008** Collected: 11/06/07 15:00 Received: 11/07/07 15:55 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel for ASE	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3545							
Diesel Components	**41.8**	mg/kg	5.6	1	11/12/07 00:00	11/13/07 19:13	68334-30-5	
n-Pentacosane (S)	108	%	50-135	1	11/12/07 00:00	11/13/07 19:13	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B							
Gasoline Range Organics	ND	mg/kg	5.5	1	11/09/07 10:34	11/09/07 22:57	8006-61-9	
4-Bromofluorobenzene (S)	106	%	50-135	1	11/09/07 10:34	11/09/07 22:57	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**10.2**	%	0.10	1		11/09/07 13:55		

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ANALYTICAL RESULTS

Project: NCDOT 00907/WSB#32782.1.1
Pace Project No.: 927329

Sample: SS-5-7 **Lab ID: 927329009** Collected: 11/06/07 15:20 Received: 11/07/07 15:55 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel for ASE	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3545							
Diesel Components	**69.4**	mg/kg	5.6	1	11/12/07 00:00	11/13/07 19:38	68334-30-5	
n-Pentacosane (S)	114	%	50-135	1	11/12/07 00:00	11/13/07 19:38	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B							
Gasoline Range Organics	**70.1**	mg/kg	6.1	1	11/09/07 10:34	11/09/07 23:17	8006-61-9	
4-Bromofluorobenzene (S)	111	%	50-135	1	11/09/07 10:34	11/09/07 23:17	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**10.2**	%	0.10	1		11/09/07 13:55		

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ANALYTICAL RESULTS

Project: NCDOT 00907/WSB#32782.1.1
Pace Project No.: 927329

Sample: SS-6-7 **Lab ID: 927329010** Collected: 11/06/07 15:40 Received: 11/07/07 15:55 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel for ASE	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3545							
Diesel Components	**114**	mg/kg	5.8	1	11/12/07 00:00	11/13/07 19:38	68334-30-5	
n-Pentacosane (S)	141	%	50-135	1	11/12/07 00:00	11/13/07 19:38	629-99-2	S5
Gasoline Range Organics	Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B							
Gasoline Range Organics	ND	mg/kg	6.8	1	11/09/07 10:34	11/09/07 23:38	8006-61-9	
4-Bromofluorobenzene (S)	91	%	50-135	1	11/09/07 10:34	11/09/07 23:38	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**14.2**	%	0.10	1		11/09/07 13:55		

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ANALYTICAL RESULTS

Project: NCDOT 00907/WSB#32782.1.1
Pace Project No.: 927329

Sample: SS-7-7 **Lab ID: 927329011** Collected: 11/06/07 15:55 Received: 11/07/07 15:55 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel for ASE	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3545							
Diesel Components	ND	mg/kg	5.9	1	11/12/07 00:00	11/13/07 20:04	68334-30-5	
n-Pentacosane (S)	71	%	50-135	1	11/12/07 00:00	11/13/07 20:04	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B							
Gasoline Range Organics	ND	mg/kg	5.1	1	11/09/07 10:34	11/09/07 23:58	8006-61-9	
4-Bromofluorobenzene (S)	94	%	50-135	1	11/09/07 10:34	11/09/07 23:58	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**15.6**	%	0.10	1		11/09/07 13:55		

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ANALYTICAL RESULTS

Project: NCDOT 00907/WSB#32782.1.1
Pace Project No.: 927329

Sample: SS-12-8 **Lab ID: 927329012** Collected: 11/06/07 16:20 Received: 11/09/07 16:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel for ASE	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3545							
Diesel Components	ND	mg/kg	5.7	1	11/12/07 00:00	11/13/07 20:04	68334-30-5	
n-Pentacosane (S)	71	%	50-135	1	11/12/07 00:00	11/13/07 20:04	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B							
Gasoline Range Organics	ND	mg/kg	5.3	1	11/13/07 16:45	11/13/07 21:18	8006-61-9	
4-Bromofluorobenzene (S)	99	%	50-135	1	11/13/07 16:45	11/13/07 21:18	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**12.0**	%	0.10	1		11/14/07 09:05		

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ANALYTICAL RESULTS

Project: NCDOT 00907/WSB#32782.1.1
Pace Project No.: 927329

Sample: SS-9-3 **Lab ID: 927329013** Collected: 11/06/07 16:30 Received: 11/09/07 16:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel for ASE	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3545							
Diesel Components	**18.0**	mg/kg	5.9	1	11/12/07 00:00	11/13/07 20:30	68334-30-5	
n-Pentacosane (S)	82	%	50-135	1	11/12/07 00:00	11/13/07 20:30	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B							
Gasoline Range Organics	ND	mg/kg	7.6	1	11/13/07 16:45	11/13/07 21:39	8006-61-9	
4-Bromofluorobenzene (S)	99	%	50-135	1	11/13/07 16:45	11/13/07 21:39	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**14.9**	%	0.10	1		11/14/07 09:05		

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ANALYTICAL RESULTS

Project: NCDOT 00907/WSB#32782.1.1
Pace Project No.: 927329

Sample: SS8-7 **Lab ID: 927329014** Collected: 11/06/07 16:50 Received: 11/09/07 16:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel for ASE	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3545							
Diesel Components	ND	mg/kg	5.6	1	11/12/07 00:00	11/13/07 20:30	68334-30-5	
n-Pentacosane (S)	70	%	50-135	1	11/12/07 00:00	11/13/07 20:30	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B							
Gasoline Range Organics	ND	mg/kg	6.8	1	11/13/07 16:45	11/13/07 21:59	8006-61-9	
4-Bromofluorobenzene (S)	95	%	50-135	1	11/13/07 16:45	11/13/07 21:59	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**10.7**	%	0.10	1		11/14/07 09:06		

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ANALYTICAL RESULTS

Project: NCDOT 00907/WSB#32782.1.1
Pace Project No.: 927329

Sample: SS-16-7 **Lab ID: 927329015** Collected: 11/07/07 09:35 Received: 11/09/07 16:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel for ASE	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3545							
Diesel Components	**26.3**	mg/kg	5.4	1	11/12/07 00:00	11/13/07 20:55	68334-30-5	
n-Pentacosane (S)	73	%	50-135	1	11/12/07 00:00	11/13/07 20:55	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B							
Gasoline Range Organics	**65.0**	mg/kg	5.8	1	11/13/07 16:45	11/13/07 22:20	8006-61-9	
4-Bromofluorobenzene (S)	113	%	50-135	1	11/13/07 16:45	11/13/07 22:20	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**7.6**	%	0.10	1		11/14/07 09:16		

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ANALYTICAL RESULTS

Project: NCDOT 00907/WSB#32782.1.1
Pace Project No.: 927329

Sample: SS-13-5 **Lab ID: 927329016** Collected: 11/07/07 11:00 Received: 11/09/07 16:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel for ASE	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3545							
Diesel Components	**9.6**	mg/kg	5.8	1	11/12/07 00:00	11/13/07 21:21	68334-30-5	
n-Pentacosane (S)	67	%	50-135	1	11/12/07 00:00	11/13/07 21:21	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B							
Gasoline Range Organics	ND	mg/kg	5.4	1	11/13/07 16:45	11/13/07 22:40	8006-61-9	
4-Bromofluorobenzene (S)	94	%	50-135	1	11/13/07 16:45	11/13/07 22:40	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**13.2**	%	0.10	1		11/14/07 09:17		

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ANALYTICAL RESULTS

Project: NCDOT 00907/WSB#32782.1.1
Pace Project No.: 927329

Sample: SS-14-5 **Lab ID: 927329017** Collected: 11/07/07 11:15 Received: 11/09/07 16:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel for ASE	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3545							
Diesel Components	ND	mg/kg	5.8	1	11/12/07 00:00	11/13/07 21:46	68334-30-5	
n-Pentacosane (S)	77	%	50-135	1	11/12/07 00:00	11/13/07 21:46	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B							
Gasoline Range Organics	ND	mg/kg	5.1	1	11/13/07 16:45	11/13/07 23:00	8006-61-9	
4-Bromofluorobenzene (S)	91	%	50-135	1	11/13/07 16:45	11/13/07 23:00	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**14.4**	%	0.10	1		11/14/07 09:17		

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ANALYTICAL RESULTS

Project: NCDOT 00907/WSB#32782.1.1
Pace Project No.: 927329

Sample: SS-15-5 **Lab ID: 927329018** Collected: 11/07/07 11:45 Received: 11/09/07 16:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel for ASE	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3545							
Diesel Components	ND	mg/kg	5.8	1	11/12/07 00:00	11/13/07 22:11	68334-30-5	
n-Pentacosane (S)	68	%	50-135	1	11/12/07 00:00	11/13/07 22:11	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B							
Gasoline Range Organics	ND	mg/kg	5.3	1	11/13/07 16:45	11/14/07 00:02	8006-61-9	
4-Bromofluorobenzene (S)	91	%	50-135	1	11/13/07 16:45	11/14/07 00:02	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**13.5**	%	0.10	1		11/14/07 09:17		

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ANALYTICAL RESULTS

Project: NCDOT 00907/WSB#32782.1.1
Pace Project No.: 927329

Sample: SS-16-5 **Lab ID: 927329019** Collected: 11/07/07 13:40 Received: 11/09/07 16:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel for ASE	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3545							
Diesel Components	ND	mg/kg	6.1	1	11/12/07 00:00	11/13/07 22:37	68334-30-5	
n-Pentacosane (S)	62	%	50-135	1	11/12/07 00:00	11/13/07 22:37	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B							
Gasoline Range Organics	ND	mg/kg	6.0	1	11/13/07 16:45	11/14/07 00:22	8006-61-9	
4-Bromofluorobenzene (S)	97	%	50-135	1	11/13/07 16:45	11/14/07 00:22	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**17.5**	%	0.10	1		11/14/07 09:17		

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ANALYTICAL RESULTS

Project: NCDOT 00907/WSB#32782.1.1
Pace Project No.: 927329

Sample: SS-17-5 **Lab ID: 927329020** Collected: 11/07/07 14:00 Received: 11/09/07 16:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel for ASE	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3545							
Diesel Components	ND	mg/kg	5.4	1	11/13/07 00:00	11/14/07 17:14	68334-30-5	
n-Pentacosane (S)	67	%	50-135	1	11/13/07 00:00	11/14/07 17:14	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B							
Gasoline Range Organics	ND	mg/kg	6.0	1	11/13/07 16:45	11/14/07 00:43	8006-61-9	
4-Bromofluorobenzene (S)	94	%	50-135	1	11/13/07 16:45	11/14/07 00:43	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**6.8**	%	0.10	1		11/14/07 09:18		

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ANALYTICAL RESULTS

Project: NCDOT 00907/WSB#32782.1.1
Pace Project No.: 927329

Sample: SS-18-5 **Lab ID: 927329021** Collected: 11/07/07 14:10 Received: 11/09/07 16:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel for ASE	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3545							
Diesel Components	ND	mg/kg	6.3	1	11/15/07 00:00	11/19/07 03:48	68334-30-5	
n-Pentacosane (S)	57	%	50-135	1	11/15/07 00:00	11/19/07 03:48	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B							
Gasoline Range Organics	ND	mg/kg	6.7	1	11/13/07 16:45	11/14/07 01:03	8006-61-9	
4-Bromofluorobenzene (S)	98	%	50-135	1	11/13/07 16:45	11/14/07 01:03	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**20.2**	%	0.10	1		11/14/07 09:18		

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ANALYTICAL RESULTS

Project: NCDOT 00907/WSB#32782.1.1
Pace Project No.: 927329

Sample: SS-19-5 **Lab ID: 927329022** Collected: 11/07/07 15:15 Received: 11/09/07 16:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel for ASE	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3545							
Diesel Components	ND	mg/kg	33.4	1	11/15/07 00:00	11/19/07 04:14	68334-30-5	
n-Pentacosane (S)	65	%	50-135	1	11/15/07 00:00	11/19/07 04:14	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B							
Gasoline Range Organics	ND	mg/kg	6.1	1	11/13/07 16:45	11/14/07 01:24	8006-61-9	
4-Bromofluorobenzene (S)	95	%	50-135	1	11/13/07 16:45	11/14/07 01:24	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**10.1**	%	0.10	1		11/14/07 09:18		

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ANALYTICAL RESULTS

Project: NCDOT 00907/WSB#32782.1.1
Pace Project No.: 927329

Sample: SS-20-7 **Lab ID: 927329023** Collected: 11/08/07 11:40 Received: 11/09/07 16:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel for ASE	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3545							
Diesel Components	ND	mg/kg	5.1	1	11/13/07 00:00	11/14/07 17:39	68334-30-5	
n-Pentacosane (S)	78	%	50-135	1	11/13/07 00:00	11/14/07 17:39	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B							
Gasoline Range Organics	ND	mg/kg	6.7	1	11/13/07 16:45	11/14/07 01:44	8006-61-9	
4-Bromofluorobenzene (S)	97	%	50-135	1	11/13/07 16:45	11/14/07 01:44	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**1.6**	%	0.10	1		11/14/07 09:19		

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ANALYTICAL RESULTS

Project: NCDOT 00907/WSB#32782.1.1
Pace Project No.: 927329

Sample: SS-21-7 **Lab ID: 927329024** Collected: 11/08/07 11:55 Received: 11/09/07 16:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel for ASE	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3545							
Diesel Components	ND	mg/kg	5.7	1	11/13/07 00:00	11/14/07 18:05	68334-30-5	
n-Pentacosane (S)	72	%	50-135	1	11/13/07 00:00	11/14/07 18:05	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B							
Gasoline Range Organics	ND	mg/kg	6.9	1	11/13/07 16:45	11/14/07 02:05	8006-61-9	
4-Bromofluorobenzene (S)	96	%	50-135	1	11/13/07 16:45	11/14/07 02:05	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**12.7**	%	0.10	1		11/14/07 09:19		

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ANALYTICAL RESULTS

Project: NCDOT 00907/WSB#32782.1.1
Pace Project No.: 927329

Sample: SS-22-5 **Lab ID: 927329025** Collected: 11/08/07 13:16 Received: 11/09/07 16:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel for ASE	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3545							
Diesel Components	ND	mg/kg	5.9	1	11/13/07 00:00	11/14/07 18:05	68334-30-5	
n-Pentacosane (S)	75	%	50-135	1	11/13/07 00:00	11/14/07 18:05	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B							
Gasoline Range Organics	ND	mg/kg	5.5	1	11/13/07 16:45	11/14/07 02:26	8006-61-9	
4-Bromofluorobenzene (S)	100	%	50-135	1	11/13/07 16:45	11/14/07 02:26	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**15.4**	%	0.10	1		11/14/07 09:19		

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ANALYTICAL RESULTS

Project: NCDOT 00907/WSB#32782.1.1
Pace Project No.: 927329

Sample: SS-23-7 **Lab ID: 927329026** Collected: 11/08/07 13:30 Received: 11/09/07 16:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel for ASE	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3545							
Diesel Components	ND	mg/kg	5.3	1	11/13/07 00:00	11/14/07 18:30	68334-30-5	
n-Pentacosane (S)	74	%	50-135	1	11/13/07 00:00	11/14/07 18:30	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B							
Gasoline Range Organics	ND	mg/kg	6.4	1	11/13/07 16:45	11/14/07 02:46	8006-61-9	
4-Bromofluorobenzene (S)	99	%	50-135	1	11/13/07 16:45	11/14/07 02:46	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**4.8**	%	0.10	1		11/14/07 09:19		

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ANALYTICAL RESULTS

Project: NCDOT 00907/WSB#32782.1.1
Pace Project No.: 927329

Sample: SS-24-3 **Lab ID: 927329027** Collected: 11/08/07 14:05 Received: 11/09/07 16:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel for ASE	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3545							
Diesel Components	ND	mg/kg	5.9	1	11/13/07 00:00	11/14/07 18:30	68334-30-5	
n-Pentacosane (S)	63	%	50-135	1	11/13/07 00:00	11/14/07 18:30	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B							
Gasoline Range Organics	ND	mg/kg	6.0	1	11/13/07 16:45	11/14/07 03:07	8006-61-9	
4-Bromofluorobenzene (S)	93	%	50-135	1	11/13/07 16:45	11/14/07 03:07	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**14.9**	%	0.10	1		11/14/07 09:19		

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ANALYTICAL RESULTS

Project: NCDOT 00907/WSB#32782.1.1
Pace Project No.: 927329

Sample: SS-25-3 **Lab ID: 927329028** Collected: 11/08/07 14:50 Received: 11/09/07 16:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel for ASE	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3545							
Diesel Components	ND	mg/kg	5.8	1	11/15/07 00:00	11/19/07 04:14	68334-30-5	
n-Pentacosane (S)	66	%	50-135	1	11/15/07 00:00	11/19/07 04:14	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B							
Gasoline Range Organics	ND	mg/kg	6.3	1	11/16/07 17:01	11/17/07 04:02	8006-61-9	
4-Bromofluorobenzene (S)	78	%	50-135	1	11/16/07 17:01	11/17/07 04:02	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**14.3**	%	0.10	1		11/14/07 09:19		

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ANALYTICAL RESULTS

Project: NCDOT 00907/WSB#32782.1.1
Pace Project No.: 927329

Sample: SS-16-GW **Lab ID: 927329029** Collected: 11/07/07 09:40 Received: 11/09/07 16:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3510							
Diesel Components	**0.30**	mg/L	0.14	1	11/14/07 00:00	11/15/07 17:42	68334-30-5	
n-Pentacosane (S)	71	%	50-135	1	11/14/07 00:00	11/15/07 17:42	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 5030/8015 Mod.							
Gasoline Range Organics	ND	mg/L	0.080	1		11/16/07 20:53	8006-61-9	
4-Bromofluorobenzene (S)	80	%	50-150	1		11/16/07 20:53	460-00-4	

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ANALYTICAL RESULTS

Project: NCDOT 00907/WSB#32782.1.1
Pace Project No.: 927329

Sample: SS-15-GW **Lab ID: 927329030** Collected: 11/07/07 11:55 Received: 11/09/07 16:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3510							
Diesel Components	ND	mg/L	0.14	1	11/14/07 00:00	11/15/07 18:07	68334-30-5	
n-Pentacosane (S)	77	%	50-135	1	11/14/07 00:00	11/15/07 18:07	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 5030/8015 Mod.							
Gasoline Range Organics	ND	mg/L	0.080	1		11/14/07 19:13	8006-61-9	
4-Bromofluorobenzene (S)	86	%	50-150	1		11/14/07 19:13	460-00-4	

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ANALYTICAL RESULTS

Project: NCDOT 00907/WSB#32782.1.1
Pace Project No.: 927329

Sample: SS-18-GW **Lab ID: 927329031** Collected: 11/07/07 14:15 Received: 11/09/07 16:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3510							
Diesel Components	ND	mg/L	0.11	1	11/14/07 00:00	11/15/07 18:07	68334-30-5	
n-Pentacosane (S)	71	%	50-135	1	11/14/07 00:00	11/15/07 18:07	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 5030/8015 Mod.							
Gasoline Range Organics	ND	mg/L	0.080	1		11/14/07 19:33	8006-61-9	
4-Bromofluorobenzene (S)	78	%	50-150	1		11/14/07 19:33	460-00-4	

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ANALYTICAL RESULTS

Project: NCDOT 00907/WSB#32782.1.1
Pace Project No.: 927329

Sample: SS-23-GW **Lab ID: 927329032** Collected: 11/08/07 13:35 Received: 11/09/07 16:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3510							
Diesel Components	ND	mg/L	0.12	1	11/14/07 00:00	11/15/07 18:33	68334-30-5	
n-Pentacosane (S)	78	%	50-135	1	11/14/07 00:00	11/15/07 18:33	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 5030/8015 Mod.							
Gasoline Range Organics	ND	mg/L	0.080	1		11/14/07 19:54	8006-61-9	
4-Bromofluorobenzene (S)	90	%	50-150	1		11/14/07 19:54	460-00-4	

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ANALYTICAL RESULTS

Project: NCDOT 00907/WSB#32782.1.1
Pace Project No.: 927329

Sample: SS-26-3 **Lab ID: 927329033** Collected: 11/08/07 15:10 Received: 11/09/07 16:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel for ASE	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3545							
Diesel Components	**19.1**	mg/kg	5.3	1	11/15/07 00:00	11/19/07 04:39	68334-30-5	
n-Pentacosane (S)	70	%	50-135	1	11/15/07 00:00	11/19/07 04:39	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B							
Gasoline Range Organics	ND	mg/kg	5.4	1	11/16/07 17:01	11/17/07 04:55	8006-61-9	
4-Bromofluorobenzene (S)	73	%	50-135	1	11/16/07 17:01	11/17/07 04:55	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**5.5**	%	0.10	1		11/14/07 09:20		

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ANALYTICAL RESULTS

Project: NCDOT 00907/WSB#32782.1.1
Pace Project No.: 927329

Sample: SS-26-GWMW **Lab ID: 927329034** Collected: 11/08/07 15:15 Received: 11/09/07 16:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3510							
Diesel Components	**0.12**	mg/L	0.11	1	11/16/07 00:00	11/20/07 22:12	68334-30-5	
n-Pentacosane (S)	79	%	50-135	1	11/16/07 00:00	11/20/07 22:12	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 5030/8015 Mod.							
Gasoline Range Organics	ND	mg/L	0.080	1		11/20/07 16:49	8006-61-9	
4-Bromofluorobenzene (S)	78	%	50-150	1		11/20/07 16:49	460-00-4	

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QUALITY CONTROL DATA

Project: NCDOT 00907/WSB#32782.1.1
Pace Project No.: 927329

QC Batch: PMST/1203 Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 927329001, 927329002, 927329003, 927329004, 927329005, 927329006

SAMPLE DUPLICATE: 38089

Parameter	Units	927298001 Result	Dup Result	RPD	Qualifiers
Percent Moisture	%	15.2	13.1	15	

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QUALITY CONTROL DATA

Project: NCDOT 00907/WSB#32782.1.1
Pace Project No.: 927329

QC Batch: PMST/1208
Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87
Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 927329007, 927329008, 927329009, 927329010, 927329011

SAMPLE DUPLICATE: 38744

Parameter	Units	927467001 Result	Dup Result	RPD	Qualifiers
Percent Moisture	%	16.7	12.6	28	R1

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QUALITY CONTROL DATA

Project: NCDOT 00907/WSB#32782.1.1
Pace Project No.: 927329

QC Batch: GCV/1342 Analysis Method: EPA 8015 Modified
QC Batch Method: EPA 5035A/5030B Analysis Description: Gasoline Range Organics
Associated Lab Samples: 927329001, 927329002, 927329003, 927329004, 927329005, 927329006, 927329007, 927329008, 927329009, 927329010, 927329011

METHOD BLANK: 38850
Associated Lab Samples: 927329001, 927329002, 927329003, 927329004, 927329005, 927329006, 927329007, 927329008, 927329009, 927329010, 927329011

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Gasoline Range Organics	mg/kg	ND	6.0	
4-Bromofluorobenzene (S)	%	101	50-135	

LABORATORY CONTROL SAMPLE: 38851

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Gasoline Range Organics	mg/kg	25	29.5	118	70-150	
4-Bromofluorobenzene (S)	%			104	50-135	

MATRIX SPIKE SAMPLE: 38852

Parameter	Units	927295001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Gasoline Range Organics	mg/kg	ND	32.1	38.2	111	70-148	
4-Bromofluorobenzene (S)	%				95	50-135	

SAMPLE DUPLICATE: 38853

Parameter	Units	927295002 Result	Dup Result	RPD	Qualifiers
Gasoline Range Organics	mg/kg	ND	ND	89	
4-Bromofluorobenzene (S)	%		104	3	

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QUALITY CONTROL DATA

Project: NCDOT 00907/WSB#32782.1.1
Pace Project No.: 927329

QC Batch: OEXT/1697 Analysis Method: EPA 8015 Modified
QC Batch Method: EPA 3545 Analysis Description: 8015 Solid GCSV
Associated Lab Samples: 927329001, 927329002, 927329003, 927329004, 927329005, 927329006, 927329007

METHOD BLANK: 39631
Associated Lab Samples: 927329001, 927329002, 927329003, 927329004, 927329005, 927329006, 927329007

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Diesel Components	mg/kg	ND	5.0	
n-Pentacosane (S)	%	88	50-135	

LABORATORY CONTROL SAMPLE: 39632

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Diesel Components	mg/kg	167	100	60	50-114	
n-Pentacosane (S)	%			68	50-135	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 40587 40588

Parameter	Units	927170003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Diesel Components	mg/kg	59.9	167	167	178	215	71	93	50-107	19	
n-Pentacosane (S)	%						97	103	50-135		

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QUALITY CONTROL DATA

Project: NCDOT 00907/WSB#32782.1.1
Pace Project No.: 927329

QC Batch: OEXT/1707 Analysis Method: EPA 8015 Modified
QC Batch Method: EPA 3545 Analysis Description: 8015 Solid GCSV
Associated Lab Samples: 927329008, 927329009, 927329010, 927329011, 927329012, 927329013, 927329014, 927329015, 927329016, 927329017, 927329018, 927329019

METHOD BLANK: 39873
Associated Lab Samples: 927329008, 927329009, 927329010, 927329011, 927329012, 927329013, 927329014, 927329015, 927329016, 927329017, 927329018, 927329019

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Diesel Components	mg/kg	ND	5.0	
n-Pentacosane (S)	%	71	50-135	

LABORATORY CONTROL SAMPLE: 39874

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Diesel Components	mg/kg	167	115	69	50-114	
n-Pentacosane (S)	%			99	50-135	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 39875 39876

Parameter	Units	927329015 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Diesel Components	mg/kg	26.3	181	181	181	188	86	90	50-107	4	
n-Pentacosane (S)	%						101	95	50-135		

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QUALITY CONTROL DATA

Project: NCDOT 00907/WSB#32782.1.1
Pace Project No.: 927329

QC Batch: OEXT/1720 Analysis Method: EPA 8015 Modified
QC Batch Method: EPA 3545 Analysis Description: 8015 Solid GCSV
Associated Lab Samples: 927329020, 927329023, 927329024, 927329025, 927329026, 927329027

METHOD BLANK: 40371
Associated Lab Samples: 927329020, 927329023, 927329024, 927329025, 927329026, 927329027

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Diesel Components	mg/kg	ND	5.0	
n-Pentacosane (S)	%	74	50-135	

LABORATORY CONTROL SAMPLE: 40372

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Diesel Components	mg/kg	167	118	71	50-114	
n-Pentacosane (S)	%			80	50-135	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 40373 40374

Parameter	Units	927631001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Diesel Components	mg/kg	10800	190	190	10400	9080	-204	-916	50-107	14	1g
n-Pentacosane (S)	%						4520	12000	50-135		S5

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QUALITY CONTROL DATA

Project: NCDOT 00907/WSB#32782.1.1
Pace Project No.: 927329

QC Batch: PMST/1219
Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87
Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 927329012, 927329013, 927329014

SAMPLE DUPLICATE: 40497

Parameter	Units	927509001 Result	Dup Result	RPD	Qualifiers
Percent Moisture	%	42.0	43.2	3	

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QUALITY CONTROL DATA

Project: NCDOT 00907/WSB#32782.1.1
Pace Project No.: 927329

QC Batch: PMST/1220
Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87
Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 927329015, 927329016, 927329017, 927329018, 927329019, 927329020, 927329021, 927329022, 927329023, 927329024, 927329025, 927329026, 927329027, 927329028, 927329033

SAMPLE DUPLICATE: 40502

Parameter	Units	927631001 Result	Dup Result	RPD	Qualifiers
Percent Moisture	%	11.9	12.4	4	

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QUALITY CONTROL DATA

Project: NCDOT 00907/WSB#32782.1.1
Pace Project No.: 927329

QC Batch: GCV/1363 Analysis Method: EPA 8015 Modified
QC Batch Method: EPA 5035A/5030B Analysis Description: Gasoline Range Organics
Associated Lab Samples: 927329012, 927329013, 927329014, 927329015, 927329016, 927329017, 927329018, 927329019, 927329020, 927329021, 927329022, 927329023, 927329024, 927329025, 927329026, 927329027

METHOD BLANK: 40536
Associated Lab Samples: 927329012, 927329013, 927329014, 927329015, 927329016, 927329017, 927329018, 927329019, 927329020, 927329021, 927329022, 927329023, 927329024, 927329025, 927329026, 927329027

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Gasoline Range Organics	mg/kg	ND	6.0	
4-Bromofluorobenzene (S)	%	98	50-135	

LABORATORY CONTROL SAMPLE: 40537

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Gasoline Range Organics	mg/kg	25	26.7	107	70-150	
4-Bromofluorobenzene (S)	%			100	50-135	

MATRIX SPIKE SAMPLE: 40538

Parameter	Units	927566001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Gasoline Range Organics	mg/kg	ND	25.9	27.7	100	70-148	
4-Bromofluorobenzene (S)	%				103	50-135	

SAMPLE DUPLICATE: 40539

Parameter	Units	927566003 Result	Dup Result	RPD	Qualifiers
Gasoline Range Organics	mg/kg	ND	ND	113	
4-Bromofluorobenzene (S)	%		102	2	

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QUALITY CONTROL DATA

Project: NCDOT 00907/WSB#32782.1.1
Pace Project No.: 927329

QC Batch: GCV/1366 Analysis Method: EPA 5030/8015 Mod.
QC Batch Method: EPA 5030/8015 Mod. Analysis Description: Gasoline Range Organics
Associated Lab Samples: 927329029, 927329030, 927329031, 927329032

METHOD BLANK: 40795
Associated Lab Samples: 927329029, 927329030, 927329031, 927329032

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Gasoline Range Organics	mg/L	ND	0.080	
4-Bromofluorobenzene (S)	%	104	50-150	

LABORATORY CONTROL SAMPLE: 40796

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Gasoline Range Organics	mg/L	.5	0.54	107	70-137	
4-Bromofluorobenzene (S)	%			99	50-150	

MATRIX SPIKE SAMPLE: 40797

Parameter	Units	927030001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Gasoline Range Organics	mg/L	ND	.5	0.47	90	53-150	
4-Bromofluorobenzene (S)	%				94	50-150	

SAMPLE DUPLICATE: 40798

Parameter	Units	927030002 Result	Dup Result	RPD	Qualifiers
Gasoline Range Organics	mg/L	3.2	3.2	1	
4-Bromofluorobenzene (S)	%	101	101	0	

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QUALITY CONTROL DATA

Project: NCDOT 00907/WSB#32782.1.1
Pace Project No.: 927329

QC Batch: OEXT/1729 Analysis Method: EPA 8015 Modified
QC Batch Method: EPA 3510 Analysis Description: 8015 GCS
Associated Lab Samples: 927329029, 927329030, 927329031, 927329032

METHOD BLANK: 41069
Associated Lab Samples: 927329029, 927329030, 927329031, 927329032

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Diesel Components	mg/L	ND	0.10	
n-Pentacosane (S)	%	76	50-135	

LABORATORY CONTROL SAMPLE & LCSD: 41070 41071

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Diesel Components	mg/L	5	3.6	4.1	72	81	50-110	12	30	
n-Pentacosane (S)	%				84	85	50-135			

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QUALITY CONTROL DATA

Project: NCDOT 00907/WSB#32782.1.1
Pace Project No.: 927329

QC Batch: OEXT/1743 Analysis Method: EPA 8015 Modified
QC Batch Method: EPA 3545 Analysis Description: 8015 Solid GCSV
Associated Lab Samples: 927329021, 927329022, 927329028, 927329033

METHOD BLANK: 41892
Associated Lab Samples: 927329021, 927329022, 927329028, 927329033

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Diesel Components	mg/kg	ND	5.0	
n-Pentacosane (S)	%	73	50-135	

LABORATORY CONTROL SAMPLE: 41893

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Diesel Components	mg/kg	167	120	72	50-114	
n-Pentacosane (S)	%			85	50-135	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 41894 41895

Parameter	Units	927895001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Diesel Components	mg/kg	837	185	185	858	706	12	-71	50-107	19	2g
n-Pentacosane (S)	%						78	71	50-135		

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QUALITY CONTROL DATA

Project: NCDOT 00907/WSB#32782.1.1
Pace Project No.: 927329

QC Batch: OEXT/1762
QC Batch Method: EPA 3510
Analysis Method: EPA 8015 Modified
Analysis Description: 8015 GCS
Associated Lab Samples: 927329034

METHOD BLANK: 42530
Associated Lab Samples: 927329034

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Diesel Components	mg/L	ND	0.10	
n-Pentacosane (S)	%	89	50-135	

LABORATORY CONTROL SAMPLE & LCSD: 42531 42532

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Diesel Components	mg/L	5	4.1	4.1	81	81	50-110	.2	30	
n-Pentacosane (S)	%				96	93	50-135			

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QUALITY CONTROL DATA

Project: NCDOT 00907/WSB#32782.1.1
Pace Project No.: 927329

QC Batch: GCV/1380
QC Batch Method: EPA 5035A/5030B
Analysis Method: EPA 8015 Modified
Analysis Description: Gasoline Range Organics
Associated Lab Samples: 927329028, 927329033

METHOD BLANK: 42698
Associated Lab Samples: 927329028, 927329033

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Gasoline Range Organics	mg/kg	ND	6.0	
4-Bromofluorobenzene (S)	%	64	50-135	

LABORATORY CONTROL SAMPLE: 42699

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Gasoline Range Organics	mg/kg	25	26.7	107	70-150	
4-Bromofluorobenzene (S)	%			82	50-135	

MATRIX SPIKE SAMPLE: 42700

Parameter	Units	927329028 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Gasoline Range Organics	mg/kg	ND	26.1	28.9	111	70-148	
4-Bromofluorobenzene (S)	%				81	50-135	

SAMPLE DUPLICATE: 42701

Parameter	Units	927329033 Result	Dup Result	RPD	Qualifiers
Gasoline Range Organics	mg/kg	ND	ND	0	
4-Bromofluorobenzene (S)	%		75	3	

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QUALITY CONTROL DATA

Project: NCDOT 00907/WSB#32782.1.1
Pace Project No.: 927329

QC Batch: GCV/1393
QC Batch Method: EPA 5030/8015 Mod.
Analysis Method: EPA 5030/8015 Mod.
Analysis Description: Gasoline Range Organics
Associated Lab Samples: 927329034

METHOD BLANK: 43953
Associated Lab Samples: 927329034

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Gasoline Range Organics	mg/L	ND	0.080	
4-Bromofluorobenzene (S)	%	77	50-150	

LABORATORY CONTROL SAMPLE: 43954

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Gasoline Range Organics	mg/L	.5	0.55	111	70-137	
4-Bromofluorobenzene (S)	%			85	50-150	

SAMPLE DUPLICATE: 43955

Parameter	Units	927329034 Result	Dup Result	RPD	Qualifiers
Gasoline Range Organics	mg/L	ND	ND	0	
4-Bromofluorobenzene (S)	%	78	79	1	

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QUALIFIERS

Project: NCDOT 00907/WSB#32782.1.1
Pace Project No.: 927329

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

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ANALYTE QUALIFIERS

R1	RPD value was outside control limits.
S5	Surrogate recovery outside control limits due to matrix interferences (not confirmed by re-analysis).
1g	The spike Recovery was outside acceptance limits for the MS and MSD due to an analyte concentration in the sample at four times greater than the spike concentration. The QC batch was accepted based upon LCS recoveries within acceptance limits.
2g	The spike recovery was outside acceptance limits for the MS and MSD due to an analyte concentration in the sample at four times greater than the spike concentration. The QC batch was accepted based upon LCS recoveries within acceptance limits.

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November 27, 2007

Mr. Bob Miller
General Engineering
PO Box 14262
Research Triangle, NC 27709

RE: Project: NCDT00907C/WBS#32782.1.1
Pace Project No.: 927717

Dear Mr. Miller:
Enclosed are the analytical results for sample(s) received by the laboratory on November 13, 2007. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

Inorganic Wet Chemistry and Metals analyses were performed at our Pace Asheville laboratory and Organic testing was performed at our Pace Huntersville laboratory unless otherwise footnoted. All Microbiological analyses were performed at the laboratory where the samples were received.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Annette Scott

Annette Scott

annette.scott@pacelabs.com
Project Manager

Enclosures

cc: Mr. Christopher Peoples, NCDOT- Materials & Test Unit

REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: NCDT00907C/WBS#32782.1.1
Pace Project No.: 927717

Charlotte Certification IDs
Florida/NELAP Certification Number: E87627
Kansas Certification Number: E-10364
Louisiana/LELAP Certification Number: 04034
North Carolina Drinking Water Certification Number: 37706
North Carolina Wastewater Certification Number: 12
North Carolina Field Services Certification Number: 5342
South Carolina Certification Number: 990060001
South Carolina Bioassay Certification Number: 990060003
Tennessee Certification Number: 04010
Virginia Certification Number: 00213

Asheville Certification IDs
Florida/NELAP Certification Number: E87648
Louisiana/LELAP Certification Number: 03095
New Jersey Certification Number: NC011
North Carolina Drinking Water Certification Number: 37712
North Carolina Wastewater Certification Number: 40
North Carolina Bioassay Certification Number: 9
Pennsylvania Certification Number: 68-03578
South Carolina Certification Number: 99030001
South Carolina Bioassay Certification Number: 99030002
Tennessee Certification Number: 2980
Virginia Certification Number: 00072

Eden Certification IDs
North Carolina Drinking Water Certification Number: 37738
Virginia Drinking Water Certification Number: 00424
North Carolina Wastewater Certification Number: 633

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ANALYTICAL RESULTS

Project: NCDT00907C/WBS#32782.1.1
Pace Project No.: 927717

Sample: SS-27-7 **Lab ID: 927717001** Collected: 11/09/07 09:25 Received: 11/13/07 16:35 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel for ASE	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3545							
Diesel Components	ND	mg/kg	5.1	1	11/16/07 00:00	11/19/07 20:22	68334-30-5	
n-Pentacosane (S)	69	%	50-135	1	11/16/07 00:00	11/19/07 20:22	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B							
Gasoline Range Organics	ND	mg/kg	5.8	1	11/16/07 18:50	11/16/07 22:36	8006-61-9	
4-Bromofluorobenzene (S)	83	%	50-135	1	11/16/07 18:50	11/16/07 22:36	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**2.2**	%	0.10	1		11/15/07 15:49		

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ANALYTICAL RESULTS

Project: NCDT00907C/WBS#32782.1.1
Pace Project No.: 927717

Sample: SS-28-7 **Lab ID: 927717002** Collected: 11/09/07 10:30 Received: 11/13/07 16:35 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel for ASE	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3545							
Diesel Components	**9.9**	mg/kg	5.5	1	11/16/07 00:00	11/19/07 20:22	68334-30-5	
n-Pentacosane (S)	73	%	50-135	1	11/16/07 00:00	11/19/07 20:22	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B							
Gasoline Range Organics	ND	mg/kg	5.0	1	11/16/07 18:50	11/16/07 23:37	8006-61-9	
4-Bromofluorobenzene (S)	81	%	50-135	1	11/16/07 18:50	11/16/07 23:37	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**9.1**	%	0.10	1		11/15/07 15:49		

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ANALYTICAL RESULTS

Project: NCDT00907C/WBS#32782.1.1
Pace Project No.: 927717

Sample: SS-29-7 **Lab ID: 927717003** Collected: 11/09/07 10:45 Received: 11/13/07 16:35 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel for ASE	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3545							
Diesel Components	ND	mg/kg	6.3	1	11/16/07 00:00	11/19/07 20:48	68334-30-5	
n-Pentacosane (S)	61	%	50-135	1	11/16/07 00:00	11/19/07 20:48	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B							
Gasoline Range Organics	ND	mg/kg	7.2	1	11/16/07 18:50	11/16/07 23:58	8006-61-9	
4-Bromofluorobenzene (S)	71	%	50-135	1	11/16/07 18:50	11/16/07 23:58	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**21.2**	%	0.10	1		11/15/07 15:49		

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ANALYTICAL RESULTS

Project: NCDT00907C/WBS#32782.1.1
Pace Project No.: 927717

Sample: SS-30-5 **Lab ID: 927717004** Collected: 11/09/07 11:05 Received: 11/13/07 16:35 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel for ASE	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3545							
Diesel Components	ND	mg/kg	5.1	1	11/16/07 00:00	11/19/07 20:48	68334-30-5	
n-Pentacosane (S)	78	%	50-135	1	11/16/07 00:00	11/19/07 20:48	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B							
Gasoline Range Organics	ND	mg/kg	6.3	1	11/16/07 18:50	11/17/07 00:18	8006-61-9	
4-Bromofluorobenzene (S)	81	%	50-135	1	11/16/07 18:50	11/17/07 00:18	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**1.7**	%	0.10	1		11/15/07 15:50		

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ANALYTICAL RESULTS

Project: NCDT00907C/WBS#32782.1.1
Pace Project No.: 927717

Sample: SS-31-3 **Lab ID: 927717005** Collected: 11/09/07 11:25 Received: 11/13/07 16:35 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel for ASE	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3545							
Diesel Components	ND	mg/kg	5.3	1	11/16/07 00:00	11/19/07 21:13	68334-30-5	
n-Pentacosane (S)	72	%	50-135	1	11/16/07 00:00	11/19/07 21:13	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B							
Gasoline Range Organics	ND	mg/kg	4.8	1	11/16/07 18:50	11/17/07 00:39	8006-61-9	
4-Bromofluorobenzene (S)	81	%	50-135	1	11/16/07 18:50	11/17/07 00:39	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**6.5**	%	0.10	1		11/15/07 15:50		

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ANALYTICAL RESULTS

Project: NCDT00907C/WBS#32782.1.1
Pace Project No.: 927717

Sample: SS-32-7 **Lab ID: 927717006** Collected: 11/09/07 11:45 Received: 11/13/07 16:35 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel for ASE	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3545							
Diesel Components	ND	mg/kg	5.3	1	11/16/07 00:00	11/19/07 21:13	68334-30-5	
n-Pentacosane (S)	67	%	50-135	1	11/16/07 00:00	11/19/07 21:13	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B							
Gasoline Range Organics	ND	mg/kg	6.2	1	11/16/07 18:50	11/17/07 00:59	8006-61-9	
4-Bromofluorobenzene (S)	79	%	50-135	1	11/16/07 18:50	11/17/07 00:59	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**5.6**	%	0.10	1		11/15/07 15:50		

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ANALYTICAL RESULTS

Project: NCDT00907C/WBS#32782.1.1
Pace Project No.: 927717

Sample: SS-33-5 **Lab ID: 927717007** Collected: 11/09/07 12:00 Received: 11/13/07 16:35 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel for ASE	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3545							
Diesel Components	ND	mg/kg	10.9	1	11/16/07 00:00	11/19/07 21:39	68334-30-5	
n-Pentacosane (S)	73	%	50-135	1	11/16/07 00:00	11/19/07 21:39	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B							
Gasoline Range Organics	ND	mg/kg	5.0	1	11/16/07 18:50	11/17/07 01:19	8006-61-9	
4-Bromofluorobenzene (S)	78	%	50-135	1	11/16/07 18:50	11/17/07 01:19	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**8.6**	%	0.10	1		11/15/07 15:50		

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ANALYTICAL RESULTS

Project: NCDT00907C/WBS#32782.1.1
Pace Project No.: 927717

Sample: SS-34-7 **Lab ID: 927717008** Collected: 11/09/07 12:15 Received: 11/13/07 16:35 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel for ASE	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3545							
Diesel Components	ND	mg/kg	5.8	1	11/16/07 00:00	11/19/07 21:39	68334-30-5	
n-Pentacosane (S)	64	%	50-135	1	11/16/07 00:00	11/19/07 21:39	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B							
Gasoline Range Organics	ND	mg/kg	4.6	1	11/16/07 18:50	11/17/07 01:40	8006-61-9	
4-Bromofluorobenzene (S)	80	%	50-135	1	11/16/07 18:50	11/17/07 01:40	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**14.1**	%	0.10	1		11/15/07 15:50		

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ANALYTICAL RESULTS

Project: NCDT00907C/WBS#32782.1.1
Pace Project No.: 927717

Sample: SS-35-3 **Lab ID: 927717009** Collected: 11/09/07 12:30 Received: 11/13/07 16:35 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel for ASE	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3545							
Diesel Components	ND	mg/kg	5.8	1	11/16/07 00:00	11/20/07 09:33	68334-30-5	
n-Pentacosane (S)	89	%	50-135	1	11/16/07 00:00	11/20/07 09:33	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B							
Gasoline Range Organics	ND	mg/kg	5.4	1	11/16/07 18:50	11/17/07 02:00	8006-61-9	
4-Bromofluorobenzene (S)	80	%	50-135	1	11/16/07 18:50	11/17/07 02:00	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**14.0**	%	0.10	1		11/15/07 15:51		

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ANALYTICAL RESULTS

Project: NCDT00907C/WBS#32782.1.1
Pace Project No.: 927717

Sample: SS-27-GW **Lab ID: 927717010** Collected: 11/09/07 09:35 Received: 11/13/07 16:35 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3510							
Diesel Components	ND	mg/L	0.12	1	11/14/07 00:00	11/15/07 18:58	68334-30-5	
n-Pentacosane (S)	75	%	50-135	1	11/14/07 00:00	11/15/07 18:58	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 5030/8015 Mod.							
Gasoline Range Organics	ND	mg/L	0.080	1		11/20/07 17:30	8006-61-9	
4-Bromofluorobenzene (S)	80	%	50-150	1		11/20/07 17:30	460-00-4	

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ANALYTICAL RESULTS

Project: NCDT00907C/WBS#32782.1.1
Pace Project No.: 927717

Sample: SS-35-GW **Lab ID: 927717011** Collected: 11/09/07 14:00 Received: 11/13/07 16:35 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3510							
Diesel Components	**0.70**	mg/L	0.50	1	11/14/07 00:00	11/15/07 18:58	68334-30-5	
n-Pentacosane (S)	76	%	50-135	1	11/14/07 00:00	11/15/07 18:58	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 5030/8015 Mod.							
Gasoline Range Organics	**2.8**	mg/L	0.080	1		11/20/07 17:50	8006-61-9	
4-Bromofluorobenzene (S)	91	%	50-150	1		11/20/07 17:50	460-00-4	

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QUALITY CONTROL DATA

Project: NCDT00907C/WBS#32782.1.1
Pace Project No.: 927717

QC Batch: OEXT/1729
QC Batch Method: EPA 3510
Analysis Method: EPA 8015 Modified
Analysis Description: 8015 GCS
Associated Lab Samples: 927717010, 927717011

METHOD BLANK: 41069
Associated Lab Samples: 927717010, 927717011

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Diesel Components	mg/L	ND	0.10	
n-Pentacosane (S)	%	76	50-135	

LABORATORY CONTROL SAMPLE & LCSD: 41070 41071

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Diesel Components	mg/L	5	3.6	4.1	72	81	50-110	12	30	
n-Pentacosane (S)	%				84	85	50-135			

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QUALITY CONTROL DATA

Project: NCDT00907C/WBS#32782.1.1
Pace Project No.: 927717

QC Batch: PMST/1228
Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87
Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 927717001, 927717002, 927717003, 927717004, 927717005, 927717006, 927717007, 927717008, 927717009

SAMPLE DUPLICATE: 41469

Parameter	Units	927619005 Result	Dup Result	RPD	Qualifiers
Percent Moisture	%	18.7	18.1	3	

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QUALITY CONTROL DATA

Project: NCDT00907C/WBS#32782.1.1
Pace Project No.: 927717

QC Batch: OEXT/1765 Analysis Method: EPA 8015 Modified
QC Batch Method: EPA 3545 Analysis Description: 8015 Solid GCSV
Associated Lab Samples: 927717001, 927717002, 927717003, 927717004, 927717005, 927717006, 927717007, 927717008, 927717009

METHOD BLANK: 42760
Associated Lab Samples: 927717001, 927717002, 927717003, 927717004, 927717005, 927717006, 927717007, 927717008, 927717009

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Diesel Components	mg/kg	ND	5.0	
n-Pentacosane (S)	%	87	50-135	

LABORATORY CONTROL SAMPLE: 42761

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Diesel Components	mg/kg	167	115	69	50-114	
n-Pentacosane (S)	%			86	50-135	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 42762 42763

Parameter	Units	928026008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Diesel Components	mg/kg	161	193	193	261	254	52	48	50-107	3	M0
n-Pentacosane (S)	%						174	216	50-135		S5

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QUALITY CONTROL DATA

Project: NCDT00907C/WBS#32782.1.1
Pace Project No.: 927717

QC Batch: GCV/1382 Analysis Method: EPA 8015 Modified
QC Batch Method: EPA 5035A/5030B Analysis Description: Gasoline Range Organics
Associated Lab Samples: 927717001, 927717002, 927717003, 927717004, 927717005, 927717006, 927717007, 927717008, 927717009

METHOD BLANK: 42859
Associated Lab Samples: 927717001, 927717002, 927717003, 927717004, 927717005, 927717006, 927717007, 927717008, 927717009

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Gasoline Range Organics	mg/kg	ND	6.0	
4-Bromofluorobenzene (S)	%	84	50-135	

LABORATORY CONTROL SAMPLE: 42860

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Gasoline Range Organics	mg/kg	25	29.3	117	70-150	
4-Bromofluorobenzene (S)	%			80	50-135	

MATRIX SPIKE SAMPLE: 42861

Parameter	Units	927626001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Gasoline Range Organics	mg/kg	ND	32.5	37.9	117	70-148	
4-Bromofluorobenzene (S)	%				92	50-135	

SAMPLE DUPLICATE: 42862

Parameter	Units	927626002 Result	Dup Result	RPD	Qualifiers
Gasoline Range Organics	mg/kg	ND	ND	0	
4-Bromofluorobenzene (S)	%		78	3	

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QUALITY CONTROL DATA

Project: NCDT00907C/WBS#32782.1.1
Pace Project No.: 927717

QC Batch: GCV/1393
QC Batch Method: EPA 5030/8015 Mod.
Analysis Method: EPA 5030/8015 Mod.
Analysis Description: Gasoline Range Organics
Associated Lab Samples: 927717010, 927717011

METHOD BLANK: 43953
Associated Lab Samples: 927717010, 927717011

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Gasoline Range Organics	mg/L	ND	0.080	
4-Bromofluorobenzene (S)	%	77	50-150	

LABORATORY CONTROL SAMPLE: 43954

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Gasoline Range Organics	mg/L	.5	0.55	111	70-137	
4-Bromofluorobenzene (S)	%			85	50-150	

SAMPLE DUPLICATE: 43955

Parameter	Units	927329034 Result	Dup Result	RPD	Qualifiers
Gasoline Range Organics	mg/L	ND	ND	0	
4-Bromofluorobenzene (S)	%	78	79	1	

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALIFIERS

Project: NCDT00907C/WBS#32782.1.1
Pace Project No.: 927717

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

ANALYTE QUALIFIERS

M0	Matrix spike recovery was outside laboratory control limits.
S5	Surrogate recovery outside control limits due to matrix interferences (not confirmed by re-analysis).

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 1

1135394

Section A Required Client Information:

Company:	GEL Engineering of NC, Inc.
Address:	P.O. Box 14262
	RTP, NC 27709
Email To:	bob.mills@gel.com
Phone:	919-544-1106
Fax:	919-544-4355
Requested Due Date/TAT:	

Section B Required Project Information:

Report To:	Same
Copy To:	"
	"
Purchase Order No.:	N
Project Name:	NCDT00907
Project Number:	WBS No. 32782.1.1

Section C Invoice Information:

Attention:	Invoice
Company Name:	
Address:	TO
Pace Quote Reference:	NCDOT
Pace Project Manager:	
Pace Profile #:	

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER _____

Site Location STATE: NC

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Matrix Codes (MATRIX / CODE): Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Tissue TS; Other OT

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	DRO	GRO	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	SS-12-5					11/6/07	10:20		4	2						2						
2	SS-12-3					11/6/07	10:40															
3	SS-14-7					11/6/07	11:00															
4	SS-15-5					11/6/07	11:20															
5	~~SS-17-5~~ SS-17-5					11/6/07	13:00															
6	~~SS-3-5~~ SS-3-5					11/6/07	11:40															
7	SS-2-3					11/6/07	11:55															
8	SS-4-5					11/6/07	12:10															
9	SS-5-7					11/6/07	12:30															
10	SS-6-7					11/6/07	12:45															
11	SS-7-7					11/6/07	13:00															
12																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[signature] / GEL	11/7/07	0900	[signature] / Pace	11/7/07	9:43	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Andrew Dyer

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 11/07/07

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

2

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

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CHAIN-OF-CUSTODY / Analytical Request Document

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Page: 1 of 2

1135395

Section A Required Client Information:

- Company: GEL Engineering of NC, Inc.
- Address: P.O. Box 14262, RTP, NC 27709
- Email To: bob.miller@gel.com
- Phone: 919-544-1100 Fax: 919-544-4755
- Requested Due Date/TAT: std

Section B Required Project Information:

- Report To: Bob Miller
- Copy To:
- Purchase Order No.: NCDOT...
- Project Name:
- Project Number: State Project B-2965 ...

Section C Invoice Information:

- Attention:
- Company Name: NCDOT
- Address: State Project B-2965
- Pace Quote Reference:
- Pace Project Manager:
- Pace Profile #:

REGULATORY AGENCY

NPDES / GROUND WATER / DRINKING WATER / ✓ UST / RCRA / OTHER

Site Location STATE: NC

Section D Required Client Information

Matrix Codes (MATRIX / CODE): Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Tissue TS, Other OT

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	Composite Start DATE	Composite Start TIME	Composite End/Grab DATE	Composite End/Grab TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	DRO	GRO	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	SS-12-3 (SS-10-8)	SL	G			11/6/07	16:20		4									X	X		
2	SS-9-3	SL	G			11/6/07	16:36		4									X	X		
3	SS-8-7	SL	G			11/6/07	16:50		4									X	X		
4	SS-16-7	SL	G			11/7/07	9:35		4									X	X		
5	SS-16-GW	WT	G			11/7/07	9:40		5									X	X		
6	SS-13-5	SL	G			11/7/07	11:00		4									X	X		
7	SS-14-5	SL	G			11/7/07	11:15		4									X	X		
8	SS-15-5	SL	G			11/7/07	11:45		4									X	X		
9	SS-15-GW	WT	G			11/7/07	11:55		5									X	X		
10	SS-16-5	SL	G			11/7/07	13:40		4									X	X		
11	SS-17-5	SL	G			11/7/07	14:00		4									X	X		
12	SS-18-5	SL	G			11/7/07	14:10		4									X	X		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Bob Miller	11-9-07	12:01	[signature] Pace	11/9/07	12:01	

2

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Adam B. Phillips

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 11/9/07

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

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www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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Page: 2 of 2

1135396

Section A Required Client Information:

Company:	GEL Engineering of NC, Inc.
Address:	P.O. Box 14262 RTP, NC 27709
Email To:	bob.miller@gel.com
Phone:	919-544-1100
Fax:	919-544-4758
Requested Due Date/TAT:	Std.

Section B Required Project Information:

Report To:	Bob Miller
Copy To:	
Purchase Order No.:	NC07009177C
Project Name:	Ledge Combo Creek Br...
Project Number:	State Project B-7965 WBS 32782.1.1

Section C Invoice Information:

Attention:	
Company Name:	NC DOT
Address:	State Project B-7965
Pace Quote Reference:	WBS 32782.1.1
Pace Project Manager:	
Pace Profile #:	

REGULATORY AGENCY

NPDES | GROUND WATER | DRINKING WATER | ✓ UST | RCRA | OTHER ______

Site Location STATE: NC

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Matrix Codes MATRIX / CODE: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Tissue TS, Other OT

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test	DRO	GRO	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	SS-18-GW	WT	G			11/7/07	14:15		5										X	X		
2	SS-19-5	SL	G			11/7/07	15:15		4										X	X		
3	SS-20-7 (SS-16-8)	SL	G			11/8/07	11:40		4										X	X		
4	SS-21-7	SL	G			11/8/07	11:55		4										X	X		
5	SS-22-5	SL	G			11/8/07	13:10		4										X	X		
6	SS-23-7	SL	G			11/8/07	13:30		4										X	X		
7	SS-23-GW	WT	G			11/8/07	13:35		5										X	X		
8	SS-24-3	SL	G			11/8/07	14:05		4										X	X		
9	SS-25-3	SL	G			11/8/07	14:50		4										X	X		
10	SS-26-GWMW	WT	G			11/8/07	15:15		5										X	X		
11																						
12																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	[signature]	11-9-07	12:01	[signature] Pace	11-9-07	12:01				
							Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

2

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Adam B. Phillips

SIGNATURE of SAMPLER: [signature]

DATE Signed (MM/DD/YY): 11/9/07

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Pace Analytical
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CHAIN-OF-CUSTODY / Analytical Request Document

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1135397

Section A Required Client Information:

- Company: GEL Engineering of NC, Inc.
- Address: P.O. Box 14262, RTP, NC 27709
- Email To: Bob.miller@gel.com
- Phone: 919-544-1100 Fax: 919-544-4755
- Requested Due Date/TAT:

Section B Required Project Information:

- Report To: Bob Miller
- Copy To:
- Purchase Order No.: NCDOT [illegible]
- Project Name: Edgecombe County PSA's
- Project Number: DOT Project B-2965 WBS # 32782.1.1

Section C Invoice Information:

- Attention: Invoice
- Company Name: NC DOT
- Address:
- Pace Quote Reference: WBS 32782.1.1
- Pace Project Manager:
- Pace Profile #:

REGULATORY AGENCY

NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐ UST ☑ RCRA ☐ OTHER ☐

Site Location STATE: NC

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Matrix Codes	MATRIX / CODE
Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Tissue	TS
Other	OT

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	Composite Start DATE	Composite Start TIME	Composite End/Grab DATE	Composite End/Grab TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	DRO	GRO	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	SS-27-7	SL	G			11/9/07	9:25		4										X	X		
2	SS-27-GW	WT	G			11/9/07	9:35		5													
3	SS-28-7	SL	G			11/9/07	10:30		4													
4	SS-29-7	SL	G			11/9/07	10:45		4													
5	SS-30-5	SL	G			11/9/07	11:05		4													
6	SS-31-3	SL	G			11/9/07	11:25		4													
7	SS-32-7	SL	G			11/9/07	11:45		4													
8	SS-33-5	SL	G			11/9/07	12:00		4													
9	SS-34-7	SL	G			11/9/07	12:15		4													
10	SS-35-3	SL	G			11/9/07	12:30		4													
11	SS-35-GW	WT	G			11/9/07	14:00		4													
12																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
SS-35-GW 24 OB Well was dry. After little recharge, well was sampled, still very little water. Please use amount provided.	Bob Miller	11/?/07	9:55	[signature] / Pace	11/13/07	9:50	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Adam B. Phillips

SIGNATURE of SAMPLER: [signature]

DATE Signed (MM/DD/YY): 11/9/07

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

2

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

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