

Preliminary Site Assessment Report

Maola Milk & Ice Cream Co. Property

Parcel 4H
Charlotte
Mecklenburg County, North Carolina

H&H Job No. ROW-407
State Project P-5208H
WBS Element #50000.1.STR13T1B
November 15, 2012



**Preliminary Site Assessment Report
Maola Milk & Ice Cream Co. Property Parcel #4H
Charlotte, Mecklenburg County, North Carolina
H&H Project ROW-407**

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Preliminary Site Assessment Report
Maola Milk & Ice Cream Co. Property Parcel #4H
Charlotte, Mecklenburg County, North Carolina
H&H Project ROW-407

1.0 Introduction

Hart & Hickman, PC (H&H) has prepared this Preliminary Site Assessment (PSA) report documenting assessment activities performed at the Maola Milk & Ice Cream Co. property (Parcel 4H) located at 7303 Orr Road in Charlotte, Mecklenburg County, North Carolina. This assessment was conducted on behalf of the North Carolina Department of Transportation (NC DOT) in accordance with H&H's August 21, 2012 proposal.

The purpose of this assessment was to collect data to evaluate the presence or absence of impacted soil in the southern and eastern portions of the subject property in the proposed right-of-way and construction areas related to the proposed widening of Orr Road (State Project P-5208H). The Parcel 4H property is currently occupied by Maola Milk & Ice Cream Co. A site location map is included as Figure 1, and a site map is presented as Figure 2. The NC DOT preliminary plan of the Orr Road widening area near the Parcel 4H property is attached as Appendix A.

H&H reviewed underground storage tank (UST) incident files for the Parcel 4H property at the North Carolina Department of Environment and Natural Resources (DENR) Mooresville Regional Office to better target UST system areas and to find locations of previously reported petroleum impacts. Based on the SPATCO Environmental *Report of Site Assessment for Underground Storage Tank Closure* dated July 1990, one 10,000-gallon gasoline UST was removed from the site in June 1990. Low level petroleum constituents below DENR target screening levels were detected in a soil sample collected beneath the UST. The UST was located outside of the NC DOT proposed right-of-way and construction easement areas near the center of the Parcel 4H property. According to the DENR *Soil Sample Results from UST Closure* letter dated September 7, 1990, no further action was required for the site based on the soil sample analytical results from the UST closure activities. Copies of the SPATCO *Report of Site Assessment for Underground Storage Tank Closure* and the DENR no further action letter are included in Appendix B.

The PSA activities conducted by H&H in the NC DOT proposed right-of-way and construction easement areas on the Parcel 4H property are discussed below.

2.0 Site Assessment

Soil Assessment Field Activities

H&H mobilized to the Parcel 4H property on September 17, 2012 and advanced seven soil borings (4H-1 through 4H-7) by direct push technology (DPT). Prior to advancing the soil borings, H&H reviewed the results of a geophysical survey performed at the subject site by Schnabel Engineering (Schnabel) in August 2012. Schnabel utilized electromagnetic (EM) induction technology and ground penetrating radar (GPR) to identify potential geophysical anomalies and potential USTs at the site. The EM results indicated the presence of anomalies attributed to unknown cause (likely reinforced concrete) and known metallic features; however, follow up with GPR did not indicate the presence of a UST. Based on the Schnabel EM and GPR results, no potential USTs were identified in the survey area. Schnabel's report, including a site map depicting the results of the EM and GPR survey, is provided in Appendix C.

Prior to conducting soil borings, utilities were marked by NC One Call. Borings were also cleared to a five foot depth by hand auger. H&H utilized Probe Technology, Inc. (PTI) of Concord, North Carolina to advance the soil borings (Figure 2). All borings were advanced to a total depth of 12 ft below ground surface (bgs). To facilitate the selection of soil samples for laboratory analysis, soil from each boring was screened continuously for the presence of volatile organic compounds (VOCs) with an organic vapor analyzer (OVA). Additionally, H&H observed the soil for visual and olfactory indications of petroleum impacts. During soil screening, there were no indications of impacts in soil borings 4H-1 through 4H-7. Soil samples were collected at depths of 2 ft to 4 ft bgs from each boring location. GPS coordinate data for soil borings 4H-1 through 4H-7 are included in Table 1. Soil boring logs are included in Appendix D.

H&H submitted a total of seven soil samples (4H-1 through 4H-7) for laboratory analysis. Samples were sent to Pace Analytical Services, Inc. using standard chain-of-custody protocol for analysis of total petroleum hydrocarbons (TPH) for gasoline-range organics (GRO) and diesel-range organics (DRO) by EPA Method 8015 Modified. Sample depths and analytical results are summarized in Table 2. Laboratory analytical data sheets for the Parcel 4H soil samples and chain-of-custody documentation are provided in Appendix E. The laboratory report includes samples collected from another site during the same mobilization. The analytical results are discussed below.

3.0 Analytical Results

No target analytes were detected in the seven soil samples collected from Parcel 4H. Based on laboratory analytical results and OVA readings, impacted soil does not appear to be present at the site in the vicinity of the soil boring locations.

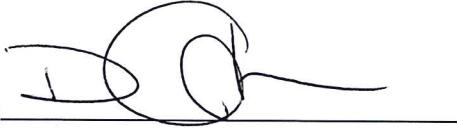
4.0 Summary and Regulatory Considerations

H&H has reviewed DENR incident files, geophysical survey results and analytical results of soil samples collected at the Parcel 4H property. Review of DENR files indicate that one 10,000-gallon gasoline UST was removed from the site in June 1990. Based on analytical results of soil samples collected during UST closure activities, no further action was required at the site. The former UST system was located in the center of the Parcel 4H property and outside of the NC DOT proposed right of way and construction easement areas. Based on GPR survey, no potential USTs were identified in the southern and eastern portions of the property, which are near the proposed road improvements.

Analytical results of soil samples collected by H&H did not indicate TPH DRO and TPH GRO in the seven samples analyzed by the laboratory. DOT plans indicate proposed cut and fill areas on the southern and eastern portions of the property. Based on results of soil sampling activities, impacted soil should not be encountered at this site during NC DOT road work. Although no soil impacts were identified in these areas by H&H, if impacted soil is encountered, it should be properly managed and disposed at a permitted facility.

5.0 Signature Page

This report was prepared by:



David Graham
Senior Project Geologist for
Hart and Hickman, PC

This report was reviewed by:



Matt Bramblett, PE
Principal and Project Manager for
Hart and Hickman, PC



Table 1
Soil Boring GPS Coordinate Data
Maola Milk & Ice Cream Company Property (Parcel 4H)
Charlotte, Mecklenburg County, North Carolina
H&H Job No. ROW-407

Sample ID	Latitude	Longitude
4H-1	35.266746	-80.745004
4H-2	35.266827	-80.744768
4H-3	35.267014	-80.744253
4H-4	35.266936	-80.744472
4H-5	35.267123	-80.743981
4H-6	35.267272	-80.743680
4H-7	35.267522	-80.743923

Notes:

GPS coordinate data points collected using a Magellan Mobile Mapper CX
with sub-meter accuracy.

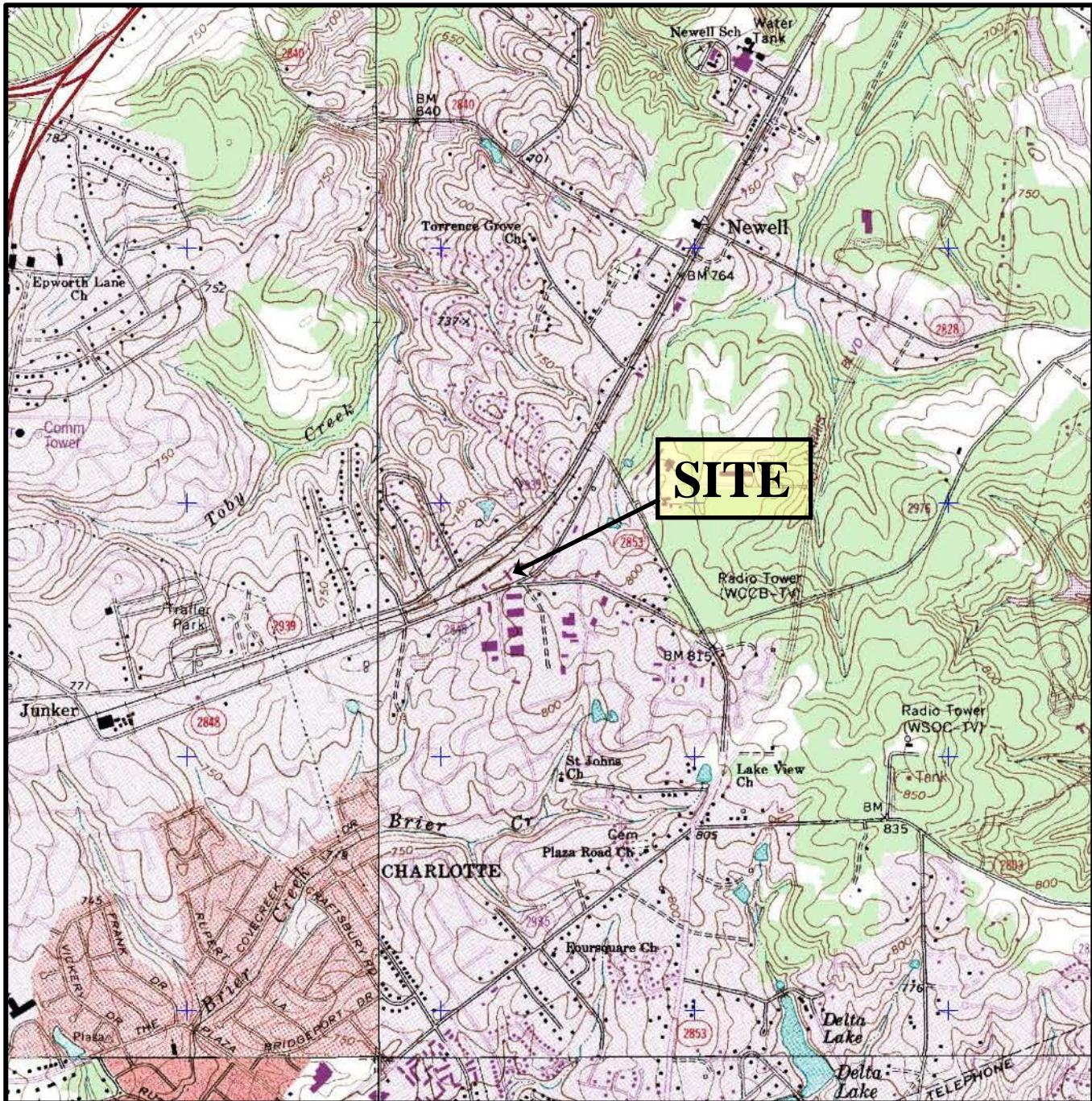
Table 2
Soil Analytical Results
Maola Milk & Ice Cream Company Property (Parcel 4H)
Charlotte, Mecklenburg County, North Carolina
H&H Job No. ROW-407

Sample ID Sample Depth (ft) Sample Date Units	4H-1 2-4 9/17/2012 (mg/kg)	4H-2 2-4 9/17/2012 (mg/kg)	4H-3 2-4 9/17/2012 (mg/kg)	4H-4 2-4 9/17/2012 (mg/kg)	4H-5 2-4 9/17/2012 (mg/kg)	4H-6 2-4 9/17/2012 (mg/kg)	4H-7 2-4 9/17/2012 (mg/kg)	Screening Criteria NCDENR Action Level (mg/kg)
<u>TPH-DRO/GRO (8015)</u>								
Diesel-Range Organics (DRO)	<5.9	<6.0	<6.0	<5.8	<6.4	<6.1	<6.0	10
Gasoline-Range Organics (GRO)	<7.3	<7.9	<7.3	<6.0	<9.6	<5.8	<6.4	10

Notes:

EPA Method follows parameter in parenthesis

mg/kg = milligrams per kilogram



APPROXIMATE
0 2000 4000
SCALE IN FEET

U.S.G.S. QUADRANGLE MAP

Harrisburg, NC 1996

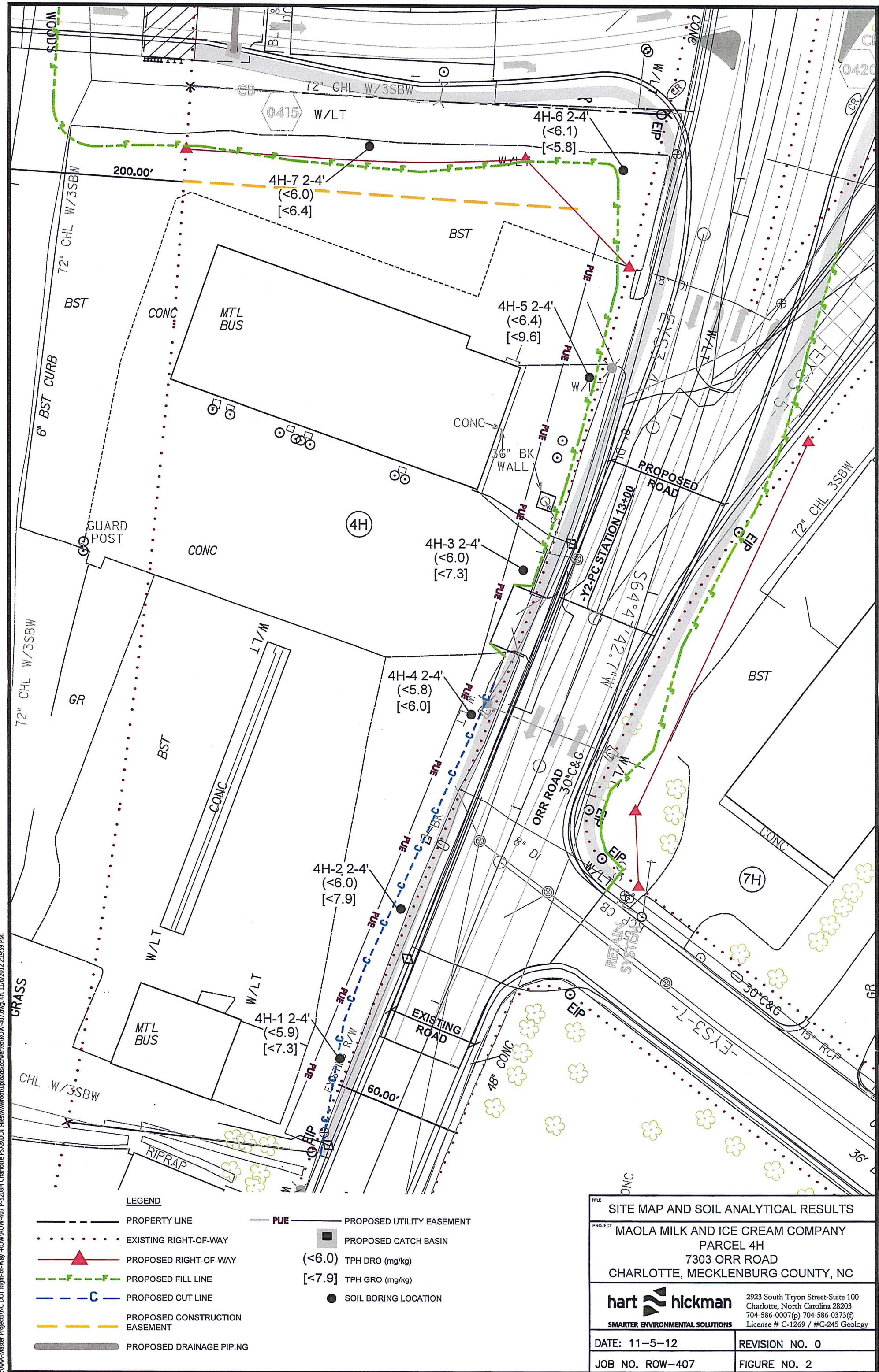
QUADRANGLE
7.5 MINUTE SERIES (TOPOGRAPHIC)

TITLE	
PROJECT MAOLA MILK AND ICE CREAM CO. PROPERTY PARCEL 4H – 7303 ORR ROAD CHARLOTTE, NORTH CAROLINA	

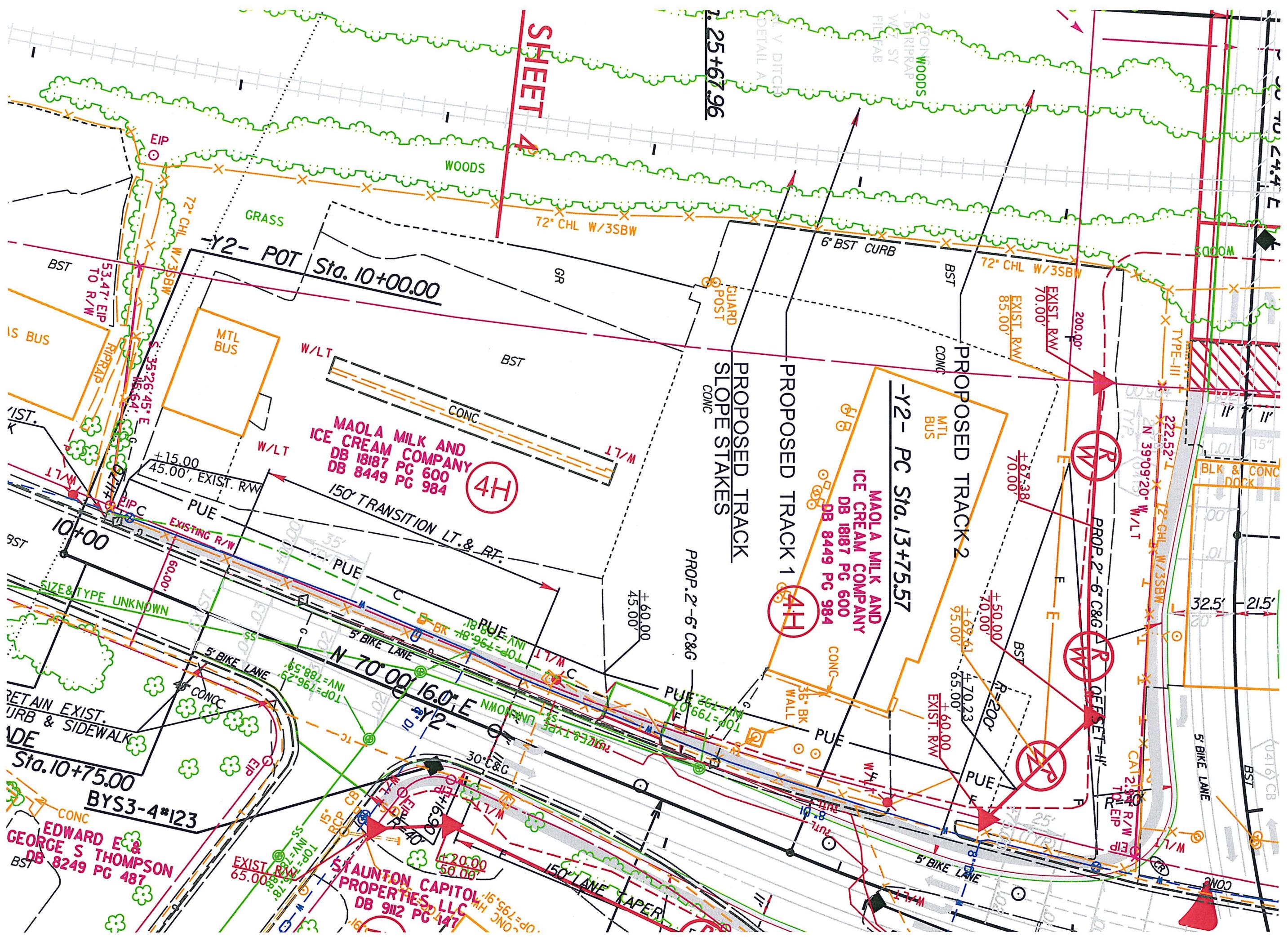
hart **hickman**

SMARTER ENVIRONMENTAL SOLUTIONS

DATE:	10-30-12	REVISION NO:	0
JOB NO:	ROW-407	FIGURE:	1



Appendix A
NC DOT Preliminary Plan



Appendix B

Soil Sample Results from UST Closure Letter and NFA Letter

Local Pump & Tank Company
Box 629
Lexington, NC 27292



July 2, 1990

Coble Dairy
P.O. Box 629
Lexington, NC 27292
Attn: Mr. Vance Yokley

Re: Site Assessment for Underground
Storage Tank Closure
Coble Dairy
7303 Orr Road
Charlotte, North Carolina

Dear Mr. Yokley:

Please find the enclosed site assessment report describing the work performed and presenting the laboratory results obtained along with our comments and recommendations for further action.

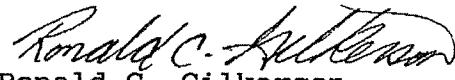
Southern Pump and Tank Company's Environmental Services Division (SPATCO-ESD) appreciates the opportunity to provide our environmental-related services on this project. Please contact us if you have any questions, or when we may be of further service.

Sincerely,

SOUTHERN PUMP AND TANK COMPANY
ENVIRONMENTAL SERVICES DIVISION


Jack Stutts

Staff Geologist


Ronald C. Gilkerson
Branch Manager -
Environmental Services

Enclosure

JS-139

RECEIVED
DIVISION OF ENVIRONMENTAL MANAGEMENT
AUG 17 1990
MOORESVILLE
REGIONAL OFFICE

Report of Site Assessment
for Underground Storage Tank Closure
Coble Dairy
7303 Orr Road
Charlotte, North Carolina

Prepared for:

Mr. Vance Yokley
Coble Dairy
P.O. Box 629
Lexington, North Carolina 27292

Prepared by:

Mr. Jack Stutts
SPATCO Environmental
5100 North I-85, Suite 6
Charlotte, North Carolina 28206

July 1990

Project Background

SPATCO-ESD was contracted by Coble Dairy to determine the absence/presence of soil contamination beneath one underground storage tank (UST labeled T1) at the subject site. The capacity of the UST was 10,000 gallons and the tank contained gasoline.

The removal was performed by SPATCO-ESD on June 13, 1990. The tank was hauled by Southern Tank Disposal to their facility in Charlotte, North Carolina where the tank was properly disposed of in accordance with federal and state guidelines.

The UST was visually inspected by SPATCO-ESD personnel and no obvious perforation was found in the tank.

Soil Sampling

Three soil samples (labeled S1, S2, S3) were obtained beneath the underground tank at the approximate locations shown on the attached site map (Figure 1).

The soil samples were obtained from the base of the tank excavation using a metal hand auger. The hand auger borings were advanced by manually twisting a auger into the ground. The auger was removed from the borehole after penetrating approximately six inches below the base of the excavation.

Each soil sample obtained at the base of the tank excavation was divided into two representative portions. The first portion was placed in the appropriate laboratory glass container, sealed with a teflon lid, and immediately placed in a chilled cooler for shipment to Radian Corporation's laboratory in Morrisville, North Carolina for analysis of benzene, toluene, ethylbenzene, total

xylenes (BTEX), and for total petroleum hydrocarbons (TPH) in the gasoline range.

The second portion of each sample was placed in a zip-lock freezer bag and allowed to volatilize for a period of five minutes. These samples were then screened with an Organic Vapor Analyzer (OVA) by inserting the OVA probe into the sealed bag and recording a head-space reading. Results of OVA screening are shown in the following table:

<u>OVA Screenings (in parts per million)</u>		
Sample ID	Soil	Background *
S1	0	0
S2	0	0
S3	0	0

* Ambient air sampled away from tank basin.

Prior to obtaining each soil sample for chemical testing, the metal hand auger was properly decontaminated in the field. Decontamination procedures consisted of a soap and tap water wash, tap water rinse, isopropyl alcohol rinse, and finally a deionized water rinse. New disposable latex gloves were worn during sampling to reduce the chances of cross-contamination.

In addition, as a part of our quality assurance program, rinse blank samples were prepared in the field by pouring deionized water through the decontaminated hand auger barrel and into the appropriate laboratory container. These quality assurance samples were analyzed for TPH in the gasoline range, and BTEX.

Laboratory Results

Laboratory results for the four soil samples are included in the Appendix, with a summary of the constituents detected in the samples presented in the following table:

Sample ID	Feet below grade	Benzene	Toluene	Ethylbenzene	Xylenes	TPH (gas)
S1	12	ND	ND	ND	ND	ND
S2	12	ND	ND	ND	ND	0.540
S3	12	ND	ND	ND	ND	ND
Rinse Blank	--	ND	0.0014*	0.0064	0.041	ND

All results in parts per million (ppm).

ND = None detected.

* = Estimated result less than five times detection limit.

Comments and Recommendations

It is our understanding that currently the North Carolina Division of Environmental Management (NCDEM) requires that further assessment and or remedial action be taken on soils exceeding 100 ppm total petroleum hydrocarbons (TPH) and may require remedial action to be taken on soils between 10 and 100 ppm depending on site specific characteristics as determined by a site sensitivity evaluation (SSE). Laboratory results indicated that soil samples S1 and S3 were below detection limits. TPH as gasoline was detected in sample S2, however, the level is well below the current acceptable level of 10 ppm set by NCDEM. For this reason, no further action is recommended at this time.

It is suggested that you forward a copy of this report to the NCDEM.

(JS-139)

SPATCO Environmental

TANK CLOSURE - SITE PLAN
JOB: COBLE DAIRY
7303 ORR RD
WIFI 59787
DATE: 6-13

ORR RD



0 30'

grass
pump
vent
shack

SI
S2
S3
T1
fill pipe

asphalt

concrete

PLANT

asphalt



State of North Carolina
Department of Environment, Health, and Natural Resources
Mooresville Regional Office

James G. Martin, Governor
William W. Cobey, Jr., Secretary

Albert F. Hilton, Regional Manager

DIVISION OF ENVIRONMENTAL MANAGEMENT

September 7, 1990

Mr. Vance Yokley
Coble Dairy
Post Office Box 629
Lexington, North Carolina 27292

RE: Soil Sample Results From UST Closure
Coble Dairy - 7303 Orr Road
Mecklenburg County, N.C.

Dear Mr. Vance Yokley:

The Groundwater Section of the Division of Environmental Management has received the laboratory analyses from three soil samples collected during the closure of one underground storage tank at the above referenced site. The report arrived on August 17, 1990. Based on the reported results, no further action is required at this time.

Should you have any questions, please do not hesitate to call me.

Sincerely,

A handwritten signature in black ink, appearing to read "Britt Setzer".
Britt Setzer
Environmental Engineer

BLS/pl

Appendix C

Schnabel Engineering Geophysical Survey Report



September 28, 2012

Mr. Matt Bramblett
Hart & Hickman, PC
2923 South Tryon Street, Suite 100
Charlotte, NC 28203

RE: State Project: P-5208H
WBS Element: 50000.1.STR13T1B
County: Mecklenburg
Description: Grier Road Grade Separation

Subject: **Project 11821014.18, Report on Geophysical Surveys
Parcel 4H, Maola Milk and Ice Cream Property, Charlotte, North Carolina**

Dear Mr. Bramblett:

SCHNABEL ENGINEERING SOUTH, PC (Schnabel) is pleased to present this report on the geophysical surveys we performed on the subject property. The report includes two 11x17 color figures and two 8.5x11 color figures.

INTRODUCTION

The work described in this report was performed on August 23, 24, and 29, 2012, by Schnabel under our 2011 contract with the NCDOT. The surveys were performed over the accessible areas of the property as indicated by the NCDOT to support their environmental assessment of the subject property. Photographs of the property are included on Figure 1. The property is located immediately north of the intersection of Orr Road and Grier Road (7303 Orr Road) in Charlotte, NC. The purpose of the geophysical surveys was to investigate the presence of metal underground storage tanks (USTs) in the accessible areas of the right-of-way and/or easement.

The geophysical surveys consisted of an electromagnetic (EM) induction survey and a ground penetrating radar (GPR) survey. The EM survey was performed using a Geonics EM61-MK2 instrument. The EM61 is a time domain metal detector that is used to locate metal objects buried up to about eight feet below ground surface. When collecting EM61 data, three or four time gates are recorded of the response decay rate. The GPR survey was performed over selected EM61 anomalies, including areas of reinforced concrete, using a Geophysical Survey Systems SIR-3000 system equipped with a 400 MHz antenna. Photographs of the equipment used are shown on Figure 2.

FIELD METHODOLOGY

Locations of geophysical data points were obtained using a sub-meter Trimble Pro-XRS DGPS system. References to direction and location in this report are based on the US State Plane 1983 System, North Carolina 3200 Zone, using the NAD 83 datum, with units in US survey feet. We recorded the locations of existing site features (monitoring wells, signs, etc.) with the Trimble system for later correlation with the geophysical data and locations provided by the NCDOT.

The EM61 data were collected along parallel survey lines spaced approximately 2.5 feet apart. The EM61 and DGPS data were recorded digitally using a field computer and later transferred to a desktop computer for data processing. The GPR data were collected along survey lines spaced one to two feet apart in orthogonal directions over areas of reinforced concrete and anomalous EM readings not attributed to cultural features. The GPR data were reviewed in the field to evaluate the possible presence of USTs. The GPR data also were recorded digitally and later transferred to a desktop computer for further review.

DISCUSSION OF RESULTS

The contoured EM61 data collected over Parcel 4H are shown on Figures 3 and 4. The EM61 early time gate data are plotted on Figure 3. The early time gate data provide a more sensitive detection of metal objects than the later time gate data. Figure 4 shows the differential response between the top and bottom coils of the EM61 instrument. The differential response data filters out the effect of surface and very shallowly buried metallic objects. Typically, the differential response emphasizes anomalies from deeper and larger objects such as USTs.

The early time gate and differential results show anomalies of unknown cause, in addition to those apparently caused by known site features (Figures 3 and 4). The GPR data indicate that the EM anomalies of unknown cause are probably caused by reinforced concrete. The GPR data collected at the site do not indicate the presence of metallic USTs within the areas surveyed.

CONCLUSIONS

Our evaluation of the geophysical data collected on the subject property on Project P-5208H in Charlotte, NC indicates that metallic USTs are unlikely to be encountered in the areas surveyed on the subject property.

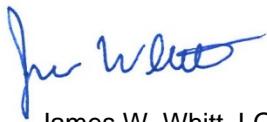
LIMITATIONS

These services have been performed and this report prepared for Hart & Hickman, PC and the North Carolina Department of Transportation in accordance with generally accepted guidelines for conducting geophysical surveys. It is generally recognized that the results of geophysical surveys are non-unique and may not represent actual subsurface conditions.

We appreciate the opportunity to have provided these services. Please call if you need additional information or have any questions.

Sincerely,

SCHNABEL ENGINEERING SOUTH, PC



James W. Whitt, LG
Senior Staff Geophysicist



Jeremy S. Strohmeyer, LG
Project Manager

JW:JS

Attachments: Figures (4)

cc: Craig Haden, NCDOT

FILE: G:\2011-SDE-JOBS\11821014_00_NCDOT_2011_GEOTECHNICAL_UNIT_SERVICES\11821014_18_P-5208H_MECKLENBURG COUNTY\REPORT\PARCEL 4\HISCHNABEL GEOPHYSICAL REPORT ON PARCEL 4H (P-5208H).DOCX



Parcel 4H (Maola Milk & Ice Cream Property), looking west



Parcel 4H (Maola Milk & Ice Cream Property), looking northeast



Schnabel
ENGINEERING

STATE PROJECT P-5208H
NC DEPT. OF TRANSPORTATION
MECKLENBURG COUNTY, NC
PROJECT NO. 11821014.18

PARCEL 4H
SITE PHOTOS

FIGURE 1



Geonics EM61-MK2 Metal Detector with Trimble DGPS Unit



GSSI SIR-3000 Ground-Penetrating Radar with 400 MHz Antenna

Note: Stock photographs – not taken on site.



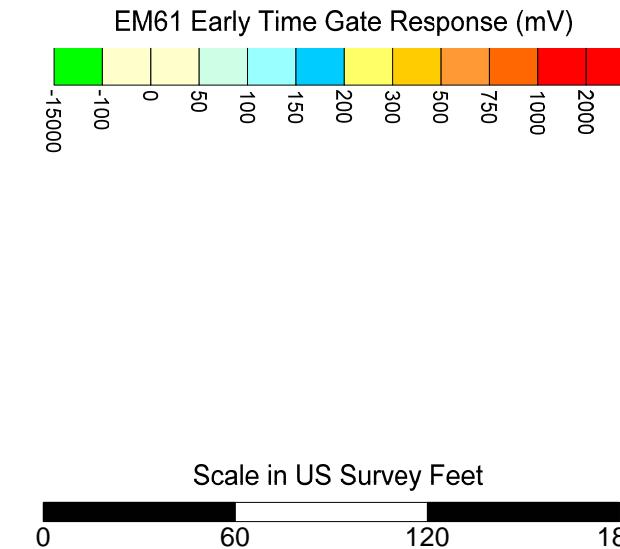
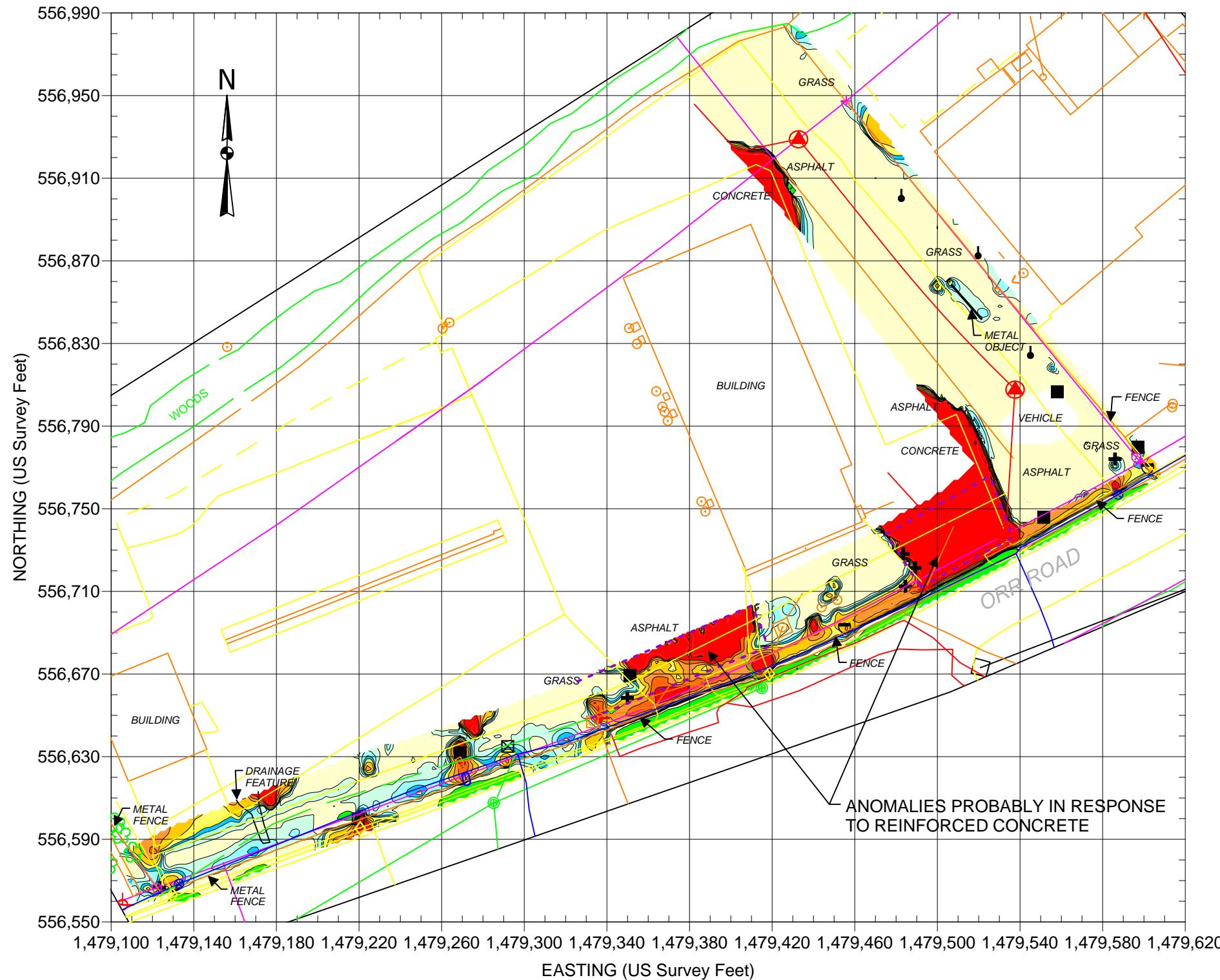
Schnabel
ENGINEERING

STATE PROJECT P-5208H
NC DEPT. OF TRANSPORTATION
MECKLENBURG COUNTY, NC
PROJECT NO. 11821014.18

PHOTOS OF
GEOPHYSICAL
EQUIPMENT USED

FIGURE 2

PARCEL 4H

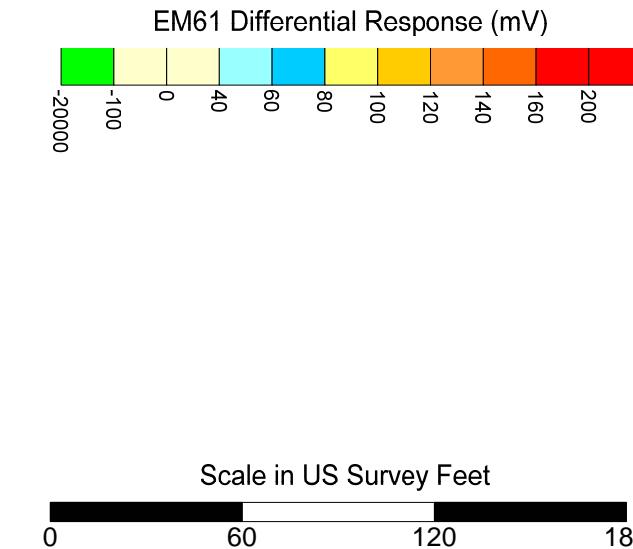
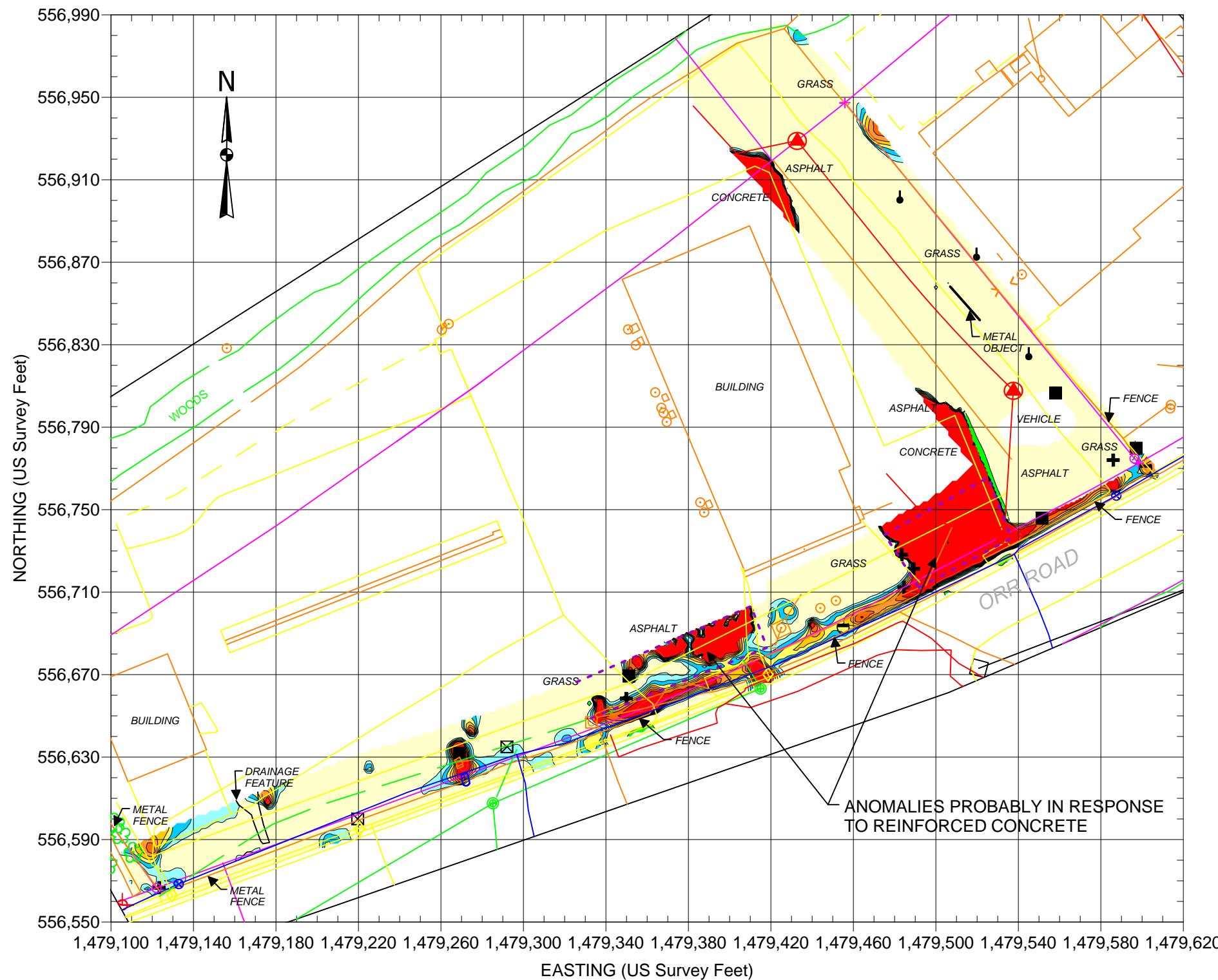


STATE PROJECT P-5208H
NC DEPARTMENT OF TRANSPORTATION
MECKLENBURG COUNTY, NC
PROJECT NO. 11821014.18

EM61
EARLY TIME GATE
RESPONSE

FIGURE 3

PARCEL 4H



Note: The contour plot shows the difference, in millivolts (mV), between the readings from the top and bottom coils of the EM61. The difference is taken to reduce the effect of shallow metal objects and emphasize anomalies caused by deeper metallic objects, such as drums and tanks. The EM data were collected on August 24, 2012, using a Geonics EM61-MK2 instrument. Positioning for the EM61 survey was provided using a submeter Trimble ProXRS DGPS system. Coordinates are in the US State Plane 1983 System, North Carolina 3200 Zone, using the NAD 1983 datum. GPR data were acquired on August 29, 2012, using a Geophysical Survey Systems SIR 3000 equipped with a 400 MHz antenna.



STATE PROJECT P-5208H
NC DEPARTMENT OF TRANSPORTATION
MECKLENBURG COUNTY, NC
PROJECT NO. 11821014.18

EM61
DIFFERENTIAL
RESPONSE

FIGURE 4

Appendix D
Soil Boring Logs

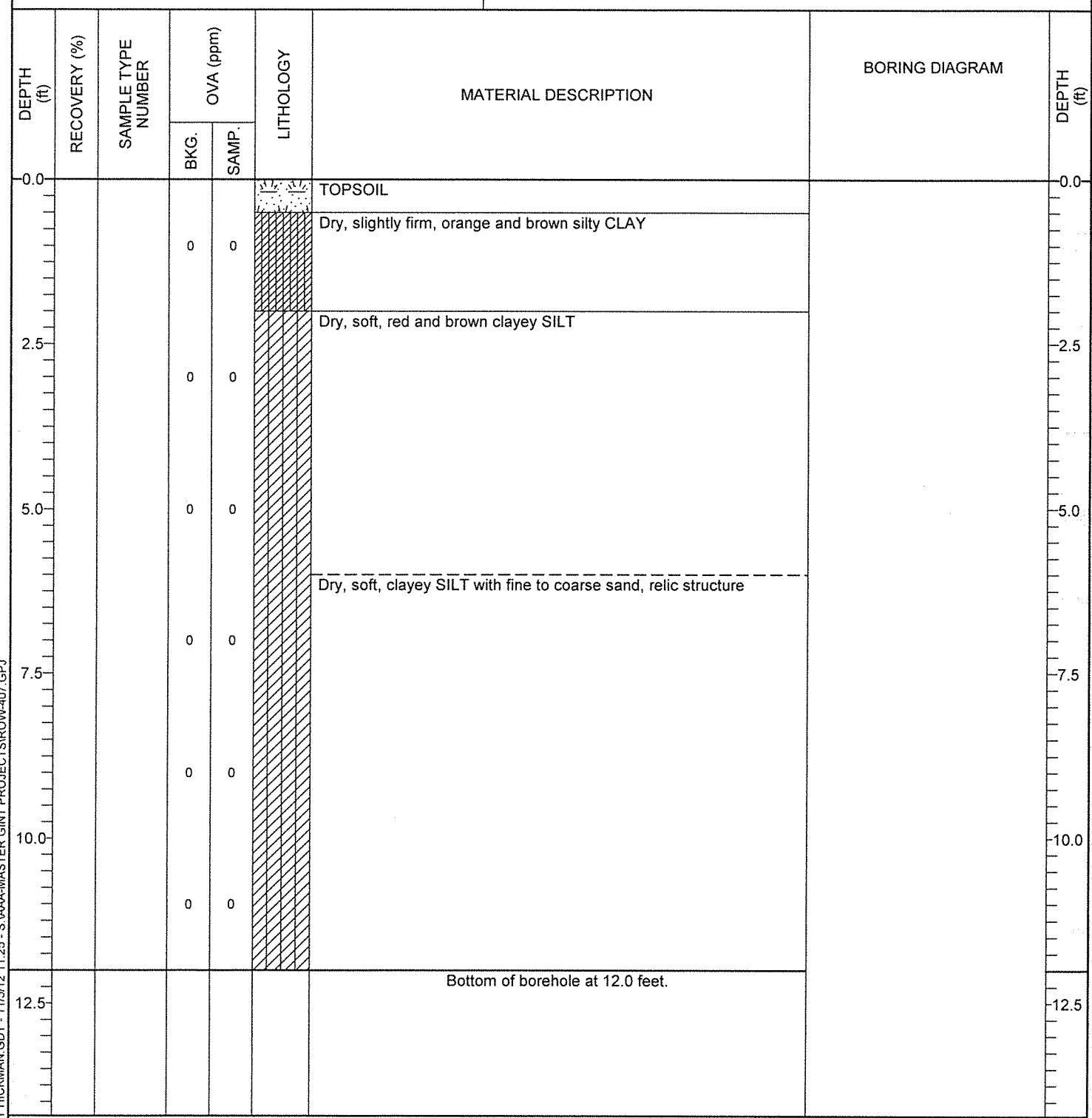


2923 South Tryon Street-Suite 100
Charlotte, North Carolina 28203
704-586-0007(p) 704-586-0373(f)

3334 Hillsborough Street
Raleigh, North Carolina 27607
919-847-4241(p) 919-847-4261(f)

BORING NUMBER 4H-1

PROJECT: NC DOT State Project P-5208H
JOB NUMBER: ROW-407
LOCATION: Charlotte, NC





2923 South Tryon Street-Suite 100
Charlotte, North Carolina 28203
704-586-0007(p) 704-586-0373(f)

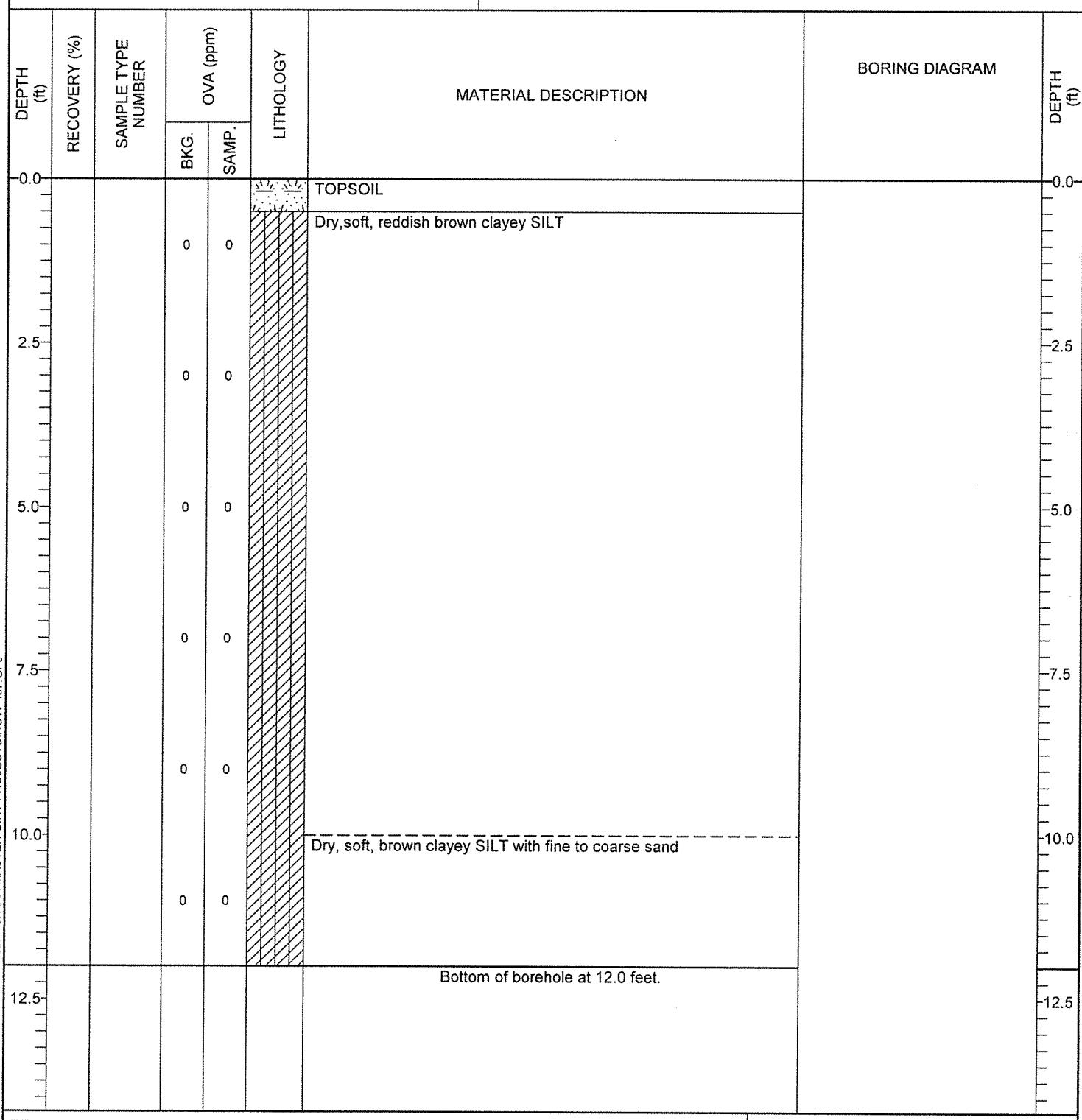
3334 Hillsborough Street
Raleigh, North Carolina 27607
919-847-4241(p) 919-847-4261(f)

BORING NUMBER 4H-2

PROJECT: NC DOT State Project P-5208H

JOB NUMBER: ROW-407

LOCATION: Charlotte, NC



DRILLING CONTRACTOR: PTI

DRILL RIG/ METHOD: Geoprobe 7720 / Direct Push

SAMPLING METHOD: DPT Sleeves

LOGGED BY: JRL/TCD

DRAWN BY: TCD

BORING STARTED: 9/17/12

BORING COMPLETED: 9/17/12

TOTAL DEPTH: 12 ft.

TOP OF CASING ELEV:

DEPTH TO WATER:

Remarks:

Soil sample collected from 2 to 4 ft bgs.



2923 South Tryon Street-Suite 100
Charlotte, North Carolina 28203
704-586-0007(p) 704-586-0373(f)

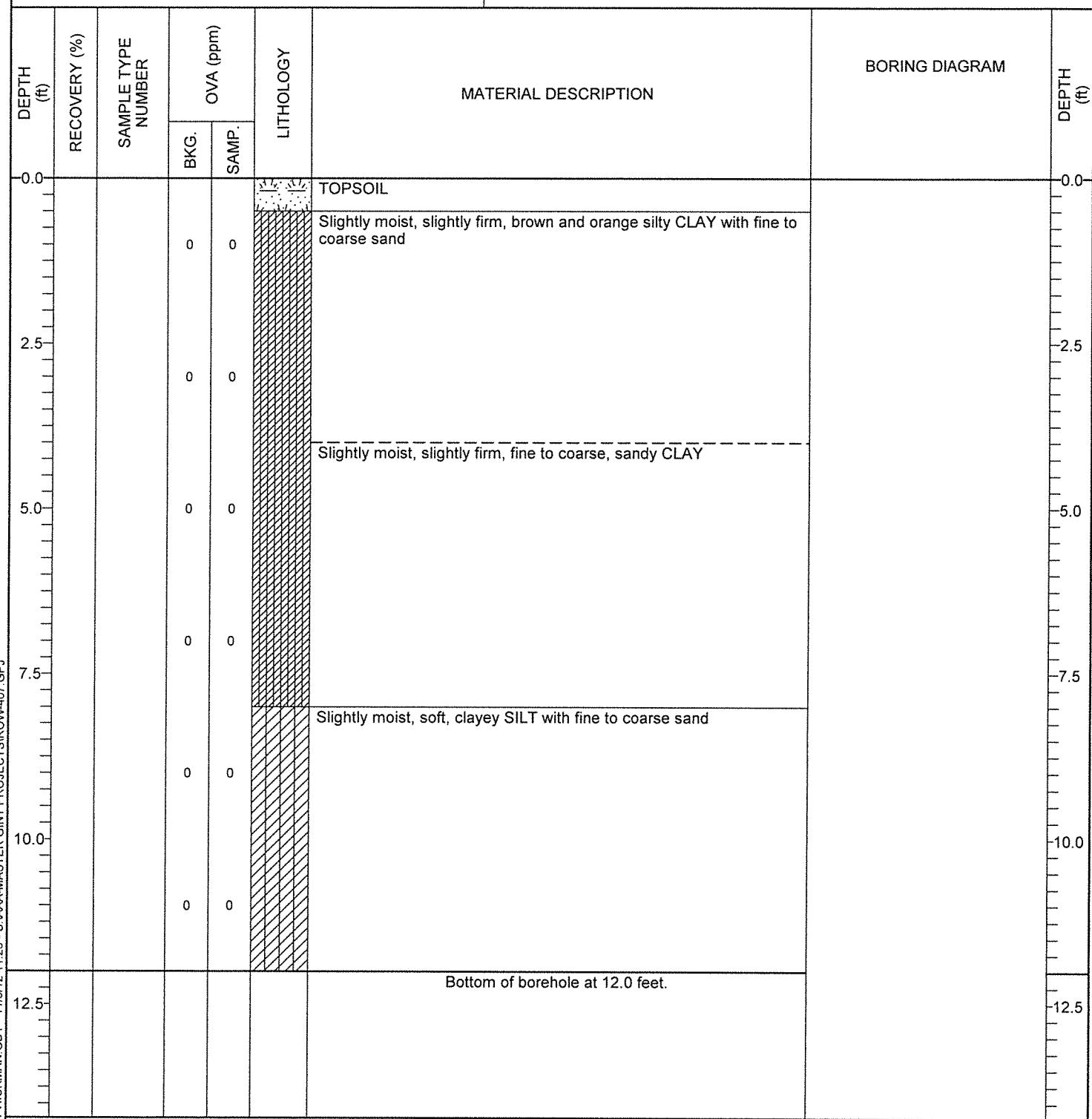
3334 Hillsborough Street
Raleigh, North Carolina 27607
919-847-4241(p) 919-847-4261(f)

BORING NUMBER 4H-3

PROJECT: NC DOT State Project P-5208H

JOB NUMBER: ROW-407

LOCATION: Charlotte, NC



DRILLING CONTRACTOR: PTI

DRILL RIG/ METHOD: Geoprobe 7720 / Direct Push

SAMPLING METHOD: DPT Sleeves

LOGGED BY: JRL/TCD

DRAWN BY: TCD

BORING STARTED: 9/17/12

BORING COMPLETED: 9/17/12

TOTAL DEPTH: 12 ft.

TOP OF CASING ELEV:

DEPTH TO WATER:

Remarks:

Soil sample collected from 2 to 4 ft bgs.



SMARTER ENVIRONMENTAL SOLUTIONS

2923 South Tryon Street-Suite 100
Charlotte, North Carolina 28203
704-586-0007(p) 704-586-0373(f)

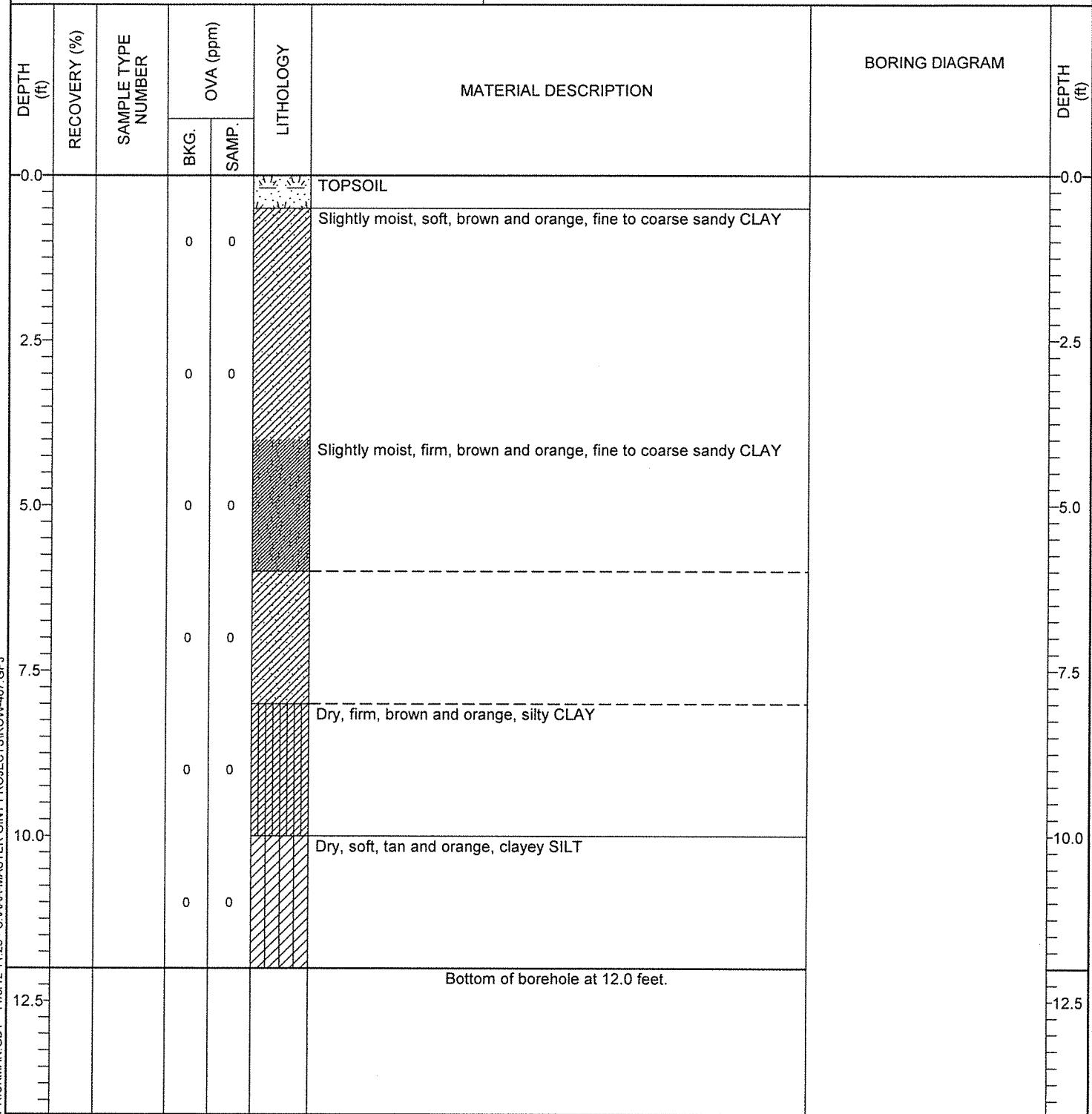
3334 Hillsborough Street
Raleigh, North Carolina 27607
919-847-4241(p) 919-847-4261(f)

BORING NUMBER 4H-4

PROJECT: NC DOT State Project P-5208H

JOB NUMBER: ROW-407

LOCATION: Charlotte, NC



DRILLING CONTRACTOR: PTI

DRILL RIG/ METHOD: Geoprobe 7720 / Direct Push

SAMPLING METHOD: DPT Sleeves

LOGGED BY: JRL/TCD

DRAWN BY: TCD

BORING STARTED: 9/17/12

BORING COMPLETED: 9/17/12

TOTAL DEPTH: 12 ft.

TOP OF CASING ELEV:

DEPTH TO WATER:

Remarks:

Soil sample collected from 2 to 4 ft bgs.



2923 South Tryon Street-Suite 100
Charlotte, North Carolina 28203
704-586-0007(p) 704-586-0373(f)

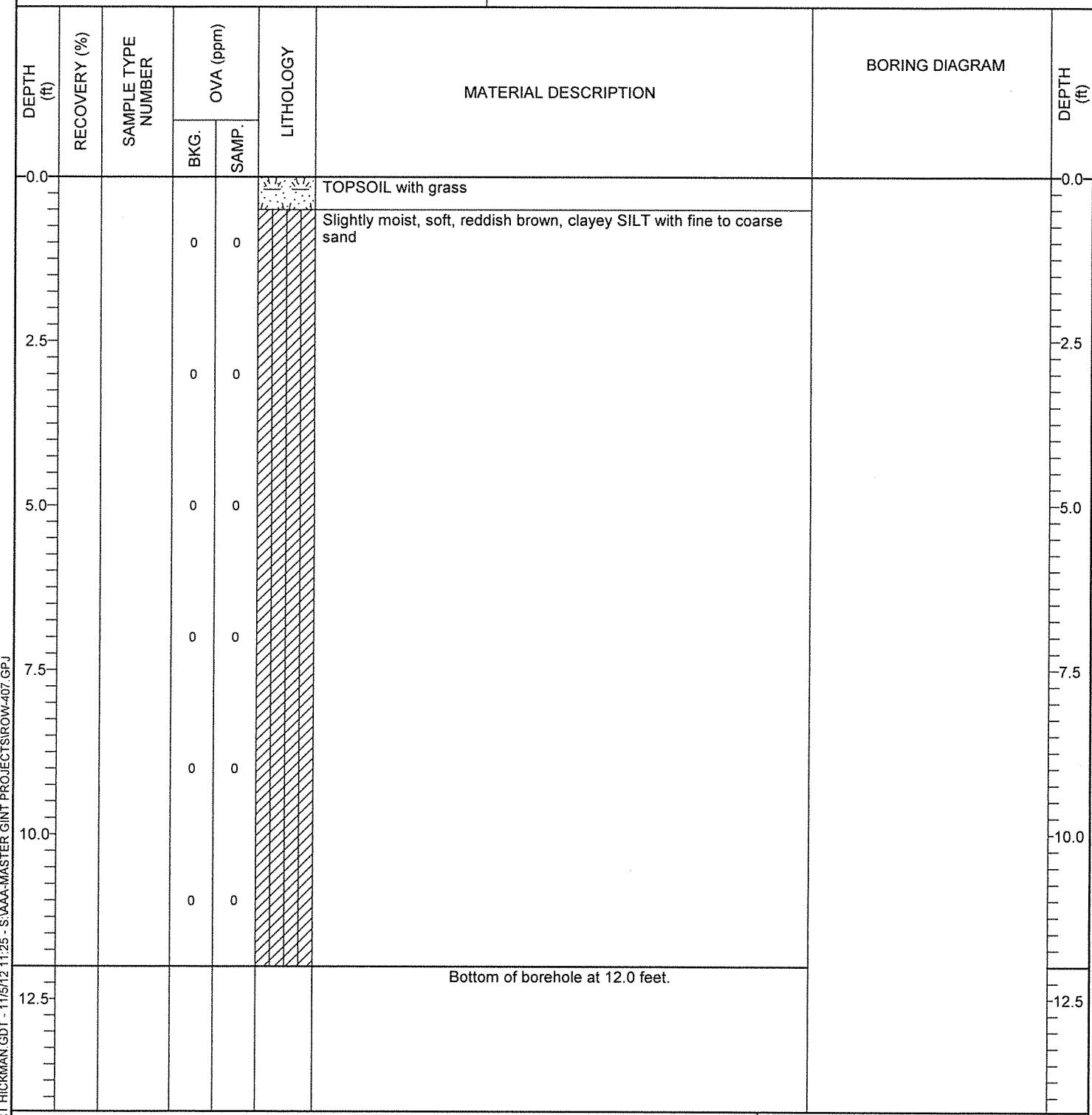
3334 Hillsborough Street
Raleigh, North Carolina 27607
919-847-4241(p) 919-847-4261(f)

BORING NUMBER 4H-5

PROJECT: NC DOT State Project P-5208H

JOB NUMBER: ROW-407

LOCATION: Charlotte, NC



DRILLING CONTRACTOR: PTI

DRILL RIG/ METHOD: Geoprobe 7720 / Direct Push

SAMPLING METHOD: DPT Sleeves

LOGGED BY: JRL/TCD

DRAWN BY: TCD

BORING STARTED: 9/17/12

BORING COMPLETED: 9/17/12

TOTAL DEPTH: 12 ft.

TOP OF CASING ELEV:

DEPTH TO WATER:

Remarks:

Soil sample collected from 2 to 4 ft bgs.



2923 South Tryon Street-Suite 100
Charlotte, North Carolina 28203
704-586-0007(p) 704-586-0373(f)

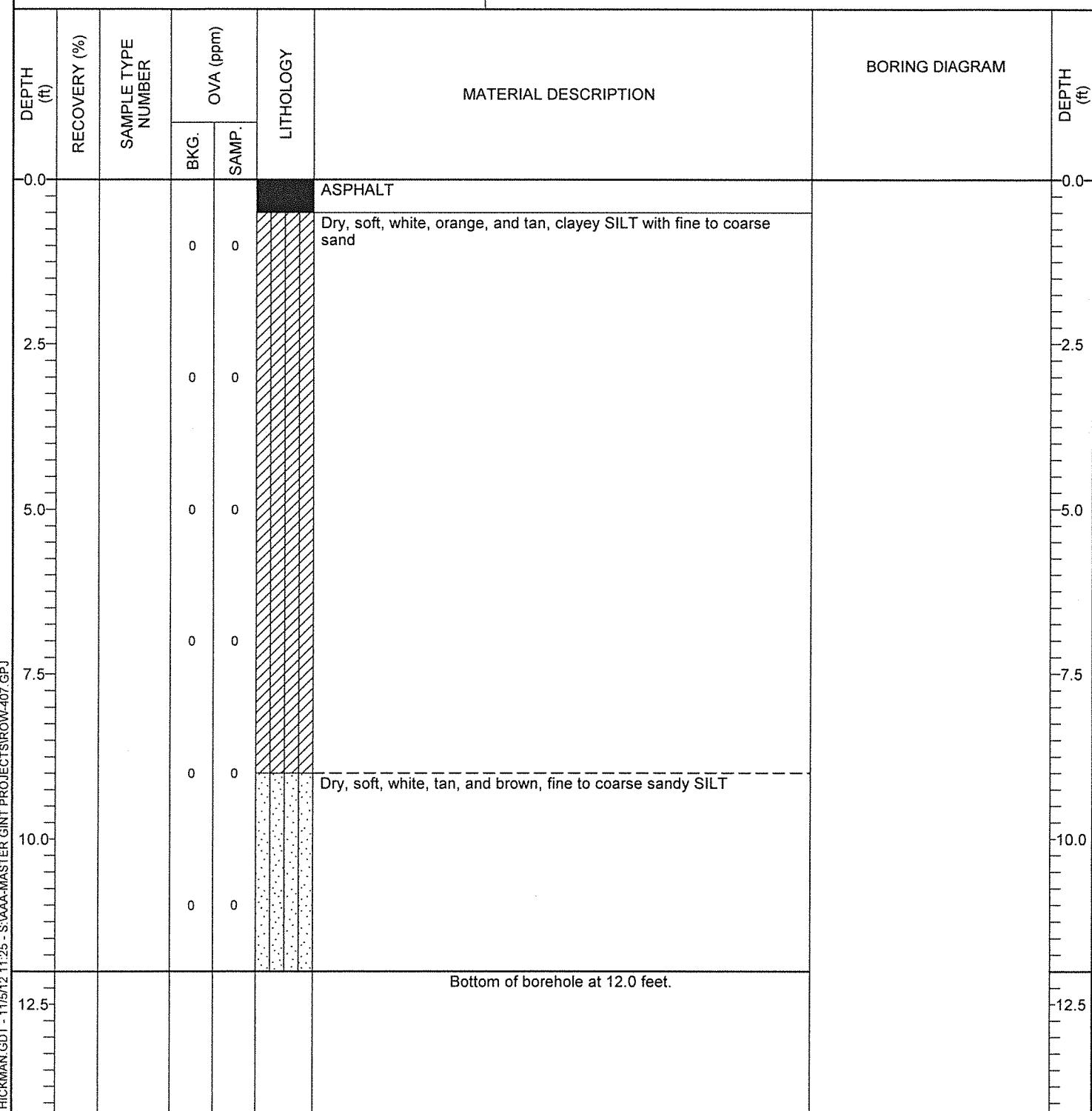
3334 Hillsborough Street
Raleigh, North Carolina 27607
919-847-4241(p) 919-847-4261(f)

BORING NUMBER 4H-6

PROJECT: NC DOT State Project P-5208H

JOB NUMBER: ROW-407

LOCATION: Charlotte, NC





2923 South Tryon Street-Suite 100
Charlotte, North Carolina 28203
704-586-0007(p) 704-586-0373(f)

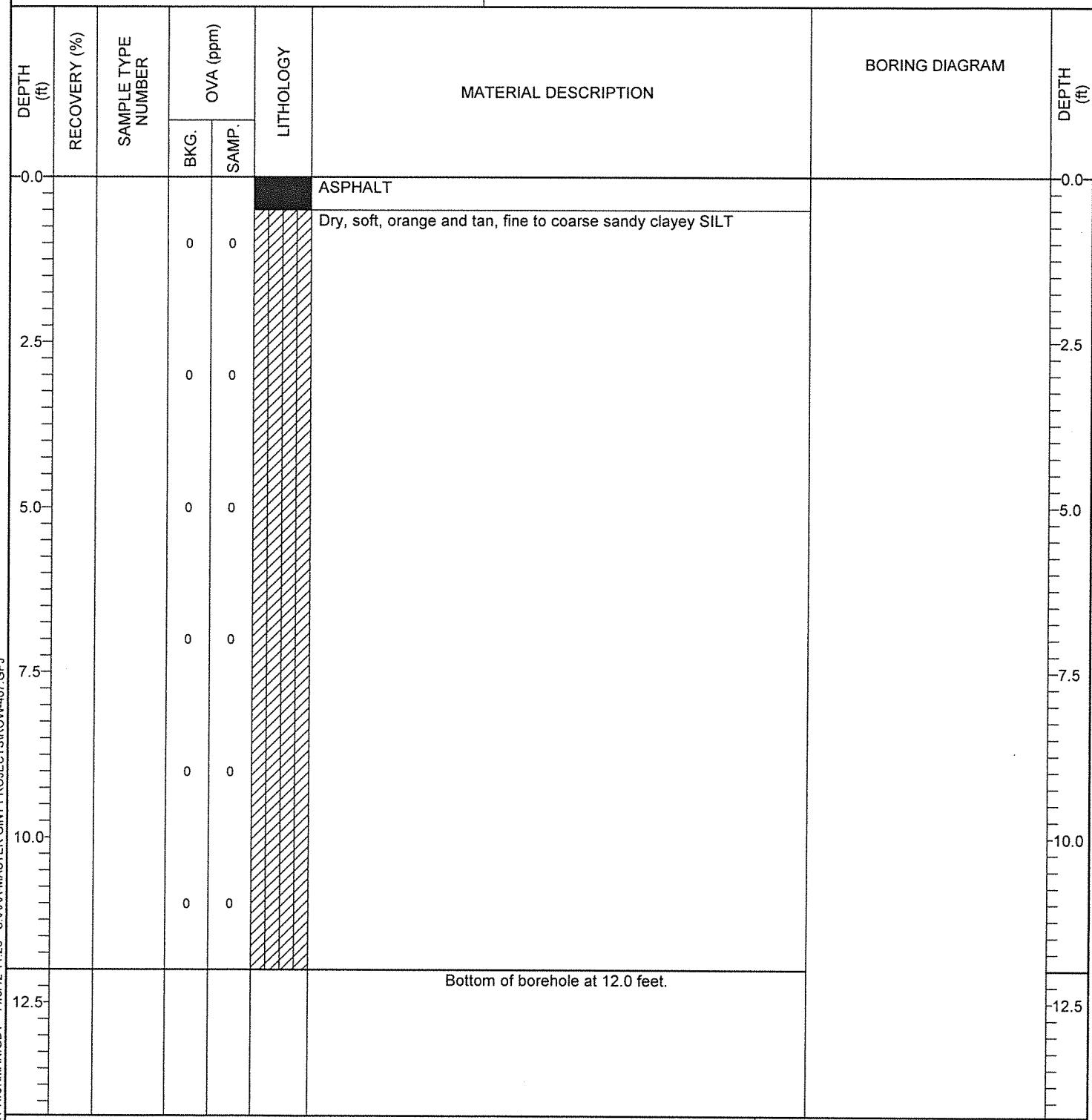
3334 Hillsborough Street
Raleigh, North Carolina 27607
919-847-4241(p) 919-847-4261(f)

BORING NUMBER 4H-7

PROJECT: NC DOT State Project P-5208H

JOB NUMBER: ROW-407

LOCATION: Charlotte, NC



Appendix E
Laboratory Analytical Report

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

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

September 25, 2012

Chemical Testing Engineer
NCDOT
Materials & Tests Unit
1801 Blue Ridge Road
Raleigh, NC 27607

RE: Project: DOT-MECKLENBURG WBS#50000.1
Pace Project No.: 92131883

Dear Chemical Engineer:

Enclosed are the analytical results for sample(s) received by the laboratory on September 18, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

Analyses were performed at the Pace Analytical Services location indicated on the sample analyte page for analysis unless otherwise footnoted.

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

Sincerely,



Kevin Godwin

kevin.godwin@pacelabs.com
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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Asheville, NC 28804
(828)254-7176

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

CERTIFICATIONS

Project: DOT-MECKLENBURG WBS#50000.1
Pace Project No.: 92131883

Charlotte Certification IDs

9800 Kincey Ave. Ste 100, Huntersville, NC 28078
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Certification #: 99006001

Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
West Virginia Certification #: 357
Virginia/VELAP Certification #: 460221

Asheville Certification IDs

2225 Riverside Dr., Asheville, NC 28804
Florida/NELAP Certification #: E87648
Massachusetts Certification #: M-NC030
North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40
South Carolina Certification #: 99030001
West Virginia Certification #: 356
Virginia/VELAP Certification #: 460222

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: DOT-MECKLENBURG WBS#50000.1
Pace Project No.: 92131883

Lab ID	Sample ID	Method	Analysts	Analytics Reported	Laboratory
92131883001	4H-1(2-4)	EPA 8015 Modified	MEJ	2	PASI-C
		EPA 8015 Modified	RGF	2	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
92131883002	4H-2(2-4)	EPA 8015 Modified	MEJ	2	PASI-C
		EPA 8015 Modified	RGF	2	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
92131883003	4H-3(2-4)	EPA 8015 Modified	MEJ	2	PASI-C
		EPA 8015 Modified	RGF	2	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
92131883004	4H-4(2-4)	EPA 8015 Modified	MEJ	2	PASI-C
		EPA 8015 Modified	RGF	2	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
92131883005	4H-5(2-4)	EPA 8015 Modified	MEJ	2	PASI-C
		EPA 8015 Modified	RGF	2	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
92131883006	4H-6(2-4)	EPA 8015 Modified	MEJ	2	PASI-C
		EPA 8015 Modified	RGF	2	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
92131883007	4H-7(2-4)	EPA 8015 Modified	MEJ	2	PASI-C
		EPA 8015 Modified	RGF	2	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
92131883008	SAND-1	EPA 6010	JMW	7	PASI-A
		EPA 7471	SH1	1	PASI-A
		ASTM D2974-87	TNM	1	PASI-C
92131883009	SAND-2	EPA 6010	JMW	7	PASI-A
		EPA 7471	SH1	1	PASI-A
		ASTM D2974-87	TNM	1	PASI-C
92131883010	SAND-3	EPA 6010	JMW	7	PASI-A
		EPA 7471	SH1	1	PASI-A
		ASTM D2974-87	TNM	1	PASI-C
92131883011	5H-1(0-2)	EPA 8015 Modified	MEJ	2	PASI-C
		EPA 8015 Modified	RGF	2	PASI-C
		EPA 6010	JMW	7	PASI-A
92131883012	5H-2(0-2)	EPA 7471	SH1	1	PASI-A
		EPA 8260	DLK	71	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
		EPA 8015 Modified	MEJ	2	PASI-C

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: DOT-MECKLENBURG WBS#50000.1

Pace Project No.: 92131883

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92131883013	5H-3(0-2)	EPA 8015 Modified	RGF	2	PASI-C
		EPA 6010	JMW	7	PASI-A
		EPA 7471	SH1	1	PASI-A
		EPA 8260	DLK	71	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
		EPA 8015 Modified	MEJ	2	PASI-C
		EPA 8015 Modified	RGF	2	PASI-C
		EPA 6010	JMW	7	PASI-A
		EPA 7471	SH1	1	PASI-A
		EPA 8260	DLK	71	PASI-C
92131883014	5H-4(0-2)	ASTM D2974-87	TNM	1	PASI-C
		EPA 8015 Modified	MEJ	2	PASI-C
		EPA 8015 Modified	RGF	2	PASI-C
		EPA 6010	JMW	7	PASI-A
		EPA 7471	SH1	1	PASI-A
		EPA 8260	DLK	71	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
		EPA 8015 Modified	MEJ	2	PASI-C
		EPA 8015 Modified	RGF	2	PASI-C
		EPA 6010	JMW	7	PASI-A
92131883015	5H-5(1-2)	EPA 7471	SH1	1	PASI-A
		EPA 8260	DLK	71	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
		EPA 8015 Modified	MEJ	2	PASI-C
		EPA 8015 Modified	RGF	2	PASI-C
		EPA 6010	JMW	7	PASI-A
		EPA 7471	SH1	1	PASI-A
		EPA 8260	DLK	71	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
		EPA 8015 Modified	MEJ	2	PASI-C
92131883016	5H-6(1-2)	EPA 8015 Modified	RGF	2	PASI-C
		EPA 6010	JMW	7	PASI-A
		EPA 7471	SH1	1	PASI-A
		EPA 8260	DLK	71	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
		EPA 8015 Modified	MEJ	2	PASI-C
		EPA 8015 Modified	RGF	2	PASI-C
		EPA 6010	JMW	7	PASI-A
		EPA 7471	SH1	1	PASI-A
		EPA 8260	DLK	71	PASI-C
92131883017	5H-7(10-12)	ASTM D2974-87	TNM	1	PASI-C
		EPA 8015 Modified	MEJ	2	PASI-C
		EPA 8015 Modified	RGF	2	PASI-C
		EPA 6010	JMW	7	PASI-A
		EPA 7471	SH1	1	PASI-A
		EPA 8260	DLK	71	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
		EPA 8015 Modified	MEJ	2	PASI-C
		EPA 8015 Modified	RGF	2	PASI-C
		EPA 6010	JMW	7	PASI-A
92131883018	5H-8(8-10)	EPA 7471	SH1	1	PASI-A
		EPA 8260	DLK	71	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
		EPA 8015 Modified	MEJ	2	PASI-C

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: DOT-MECKLENBURG WBS#50000.1

Pace Project No.: 92131883

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92131883019	5H-9(2-4)	EPA 6010	JMW	7	PASI-A
		EPA 7471	SH1	1	PASI-A
		EPA 8260	DLK	71	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
		EPA 8015 Modified	MEJ	2	PASI-C
		EPA 8015 Modified	RGF	2	PASI-C
		EPA 6010	JMW	7	PASI-A
92131883020	5H-10(2-4)	EPA 7471	SH1	1	PASI-A
		EPA 8260	DLK	71	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
		EPA 8015 Modified	MEJ	2	PASI-C
		EPA 8015 Modified	RGF	2	PASI-C
		EPA 6010	JMW	7	PASI-A
		EPA 7471	SH1	1	PASI-A
92131883021	5H-11(2-4)	EPA 8260	DLK	71	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
		EPA 8015 Modified	MEJ	2	PASI-C
		EPA 8015 Modified	RGF	2	PASI-C
		EPA 6010	JMW	7	PASI-A
		EPA 7471	SH1	1	PASI-A
		EPA 8260	DLK	71	PASI-C
92131883022	5H-12(2-4)	ASTM D2974-87	TNM	1	PASI-C
		EPA 8015 Modified	MEJ	2	PASI-C
		EPA 8015 Modified	RGF	2	PASI-C
		EPA 6010	JMW	7	PASI-A
		EPA 7471	SH1	1	PASI-A
		EPA 8260	DLK	71	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
92131883023	5H-13(2-4)	EPA 8015 Modified	MEJ	2	PASI-C
		EPA 8015 Modified	RGF	2	PASI-C
		EPA 6010	JMW	7	PASI-A
		EPA 7471	SH1	1	PASI-A
		EPA 8260	DLK	71	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
		ASTM D2974-87	TNM	1	PASI-C

REPORT OF LABORATORY ANALYSIS

Page 5 of 82

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(828)254-7176

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

ANALYTICAL RESULTS

Project: DOT-MECKLENBURG WBS#50000.1

Pace Project No.: 92131883

Sample: 4H-1(2-4) Lab ID: **92131883001** Collected: 09/17/12 11:00 Received: 09/18/12 16:52 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel		Analytical Method: EPA 8015 Modified Preparation Method: EPA 3546						
Diesel Components	ND mg/kg		5.9	1	09/19/12 08:45	09/20/12 17:38	68334-30-5	
Surrogates								
n-Pentacosane (S)	49 %		41-119	1	09/19/12 08:45	09/20/12 17:38	629-99-2	
Gasoline Range Organics		Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B						
Gasoline Range Organics	ND mg/kg		7.3	1	09/19/12 09:41	09/19/12 13:36	8006-61-9	
Surrogates								
4-Bromofluorobenzene (S)	87 %		70-167	1	09/19/12 09:41	09/19/12 13:36	460-00-4	
Percent Moisture		Analytical Method: ASTM D2974-87						
Percent Moisture	14.6 %		0.10	1		09/19/12 13:37		

ANALYTICAL RESULTS

Project: DOT-MECKLENBURG WBS#50000.1

Pace Project No.: 92131883

Sample: 4H-2(2-4) Lab ID: **92131883002** Collected: 09/17/12 11:25 Received: 09/18/12 16:52 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel		Analytical Method: EPA 8015 Modified Preparation Method: EPA 3546						
Diesel Components	ND mg/kg		6.0	1	09/19/12 08:45	09/20/12 17:38	68334-30-5	
Surrogates								
n-Pentacosane (S)	70 %		41-119	1	09/19/12 08:45	09/20/12 17:38	629-99-2	
Gasoline Range Organics		Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B						
Gasoline Range Organics	ND mg/kg		7.9	1	09/19/12 09:41	09/19/12 13:59	8006-61-9	
Surrogates								
4-Bromofluorobenzene (S)	90 %		70-167	1	09/19/12 09:41	09/19/12 13:59	460-00-4	
Percent Moisture		Analytical Method: ASTM D2974-87						
Percent Moisture	16.4 %		0.10	1		09/19/12 13:37		

ANALYTICAL RESULTS

Project: DOT-MECKLENBURG WBS#50000.1

Pace Project No.: 92131883

Sample: 4H-3(2-4) Lab ID: **92131883003** Collected: 09/17/12 11:55 Received: 09/18/12 16:52 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel		Analytical Method: EPA 8015 Modified Preparation Method: EPA 3546						
Diesel Components	ND mg/kg		6.0	1	09/19/12 08:45	09/20/12 18:08	68334-30-5	
Surrogates								
n-Pentacosane (S)	69 %		41-119	1	09/19/12 08:45	09/20/12 18:08	629-99-2	
Gasoline Range Organics		Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B						
Gasoline Range Organics	ND mg/kg		7.3	1	09/19/12 09:41	09/19/12 14:22	8006-61-9	
Surrogates								
4-Bromofluorobenzene (S)	88 %		70-167	1	09/19/12 09:41	09/19/12 14:22	460-00-4	
Percent Moisture		Analytical Method: ASTM D2974-87						
Percent Moisture	16.9 %		0.10	1		09/19/12 13:37		

ANALYTICAL RESULTS

Project: DOT-MECKLENBURG WBS#50000.1

Pace Project No.: 92131883

Sample: 4H-4(2-4) Lab ID: **92131883004** Collected: 09/17/12 14:10 Received: 09/18/12 16:52 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel		Analytical Method: EPA 8015 Modified Preparation Method: EPA 3546						
Diesel Components	ND mg/kg		5.8	1	09/19/12 08:45	09/20/12 18:08	68334-30-5	
Surrogates								
n-Pentacosane (S)	72 %		41-119	1	09/19/12 08:45	09/20/12 18:08	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	09/19/12 09:41	09/19/12 14:45	8006-61-9	
Surrogates								
4-Bromofluorobenzene (S)	90 %		70-167	1	09/19/12 09:41	09/19/12 14:45	460-00-4	
Percent Moisture		Analytical Method: ASTM D2974-87						
Percent Moisture	14.0 %		0.10	1		09/19/12 13:37		

ANALYTICAL RESULTS

Project: DOT-MECKLENBURG WBS#50000.1

Pace Project No.: 92131883

Sample: 4H-5(2-4) Lab ID: **92131883005** Collected: 09/17/12 12:35 Received: 09/18/12 16:52 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel			Analytical Method: EPA 8015 Modified Preparation Method: EPA 3546					
Diesel Components	ND mg/kg		6.4	1	09/19/12 08:45	09/20/12 18:38	68334-30-5	
Surrogates								
n-Pentacosane (S)	64 %		41-119	1	09/19/12 08:45	09/20/12 18:38	629-99-2	
Gasoline Range Organics			Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B					
Gasoline Range Organics	ND mg/kg		9.6	1	09/19/12 09:41	09/19/12 15:08	8006-61-9	
Surrogates								
4-Bromofluorobenzene (S)	90 %		70-167	1	09/19/12 09:41	09/19/12 15:08	460-00-4	
Percent Moisture			Analytical Method: ASTM D2974-87					
Percent Moisture	21.7 %		0.10	1		09/19/12 13:37		

ANALYTICAL RESULTS

Project: DOT-MECKLENBURG WBS#50000.1

Pace Project No.: 92131883

Sample: 4H-6(2-4) Lab ID: **92131883006** Collected: 09/17/12 12:40 Received: 09/18/12 16:52 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel		Analytical Method: EPA 8015 Modified Preparation Method: EPA 3546						
Diesel Components	ND mg/kg		6.1	1	09/19/12 08:45	09/20/12 18:38	68334-30-5	
Surrogates								
n-Pentacosane (S)	64 %		41-119	1	09/19/12 08:45	09/20/12 18:38	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	09/19/12 09:41	09/19/12 15:31	8006-61-9	
Surrogates								
4-Bromofluorobenzene (S)	90 %		70-167	1	09/19/12 09:41	09/19/12 15:31	460-00-4	
Percent Moisture		Analytical Method: ASTM D2974-87						
Percent Moisture	17.5 %		0.10	1		09/19/12 13:37		

ANALYTICAL RESULTS

Project: DOT-MECKLENBURG WBS#50000.1

Pace Project No.: 92131883

Sample: 4H-7(2-4) Lab ID: **92131883007** Collected: 09/17/12 13:50 Received: 09/18/12 16:52 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel		Analytical Method: EPA 8015 Modified Preparation Method: EPA 3546						
Diesel Components	ND mg/kg		6.0	1	09/19/12 08:45	09/20/12 19:37	68334-30-5	
Surrogates								
n-Pentacosane (S)	64 %		41-119	1	09/19/12 08:45	09/20/12 19:37	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	09/19/12 09:41	09/19/12 15:54	8006-61-9	
Surrogates								
4-Bromofluorobenzene (S)	100 %		70-167	1	09/19/12 09:41	09/19/12 15:54	460-00-4	
Percent Moisture		Analytical Method: ASTM D2974-87						
Percent Moisture	16.7 %		0.10	1		09/19/12 13:38		

ANALYTICAL RESULTS

Project: DOT-MECKLENBURG WBS#50000.1

Pace Project No.: 92131883

Sample: SAND-1 Lab ID: **92131883008** Collected: 09/17/12 14:35 Received: 09/18/12 16:52 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP		Analytical Method: EPA 6010 Preparation Method: EPA 3050						
Arsenic	0.48 mg/kg		0.47	1	09/19/12 03:50	09/19/12 17:44	7440-38-2	
Barium	1150 mg/kg		9.3	20	09/19/12 03:50	09/20/12 13:42	7440-39-3	
Cadmium	ND mg/kg		0.093	1	09/19/12 03:50	09/19/12 17:44	7440-43-9	
Chromium	20.6 mg/kg		0.47	1	09/19/12 03:50	09/19/12 17:44	7440-47-3	
Lead	8.7 mg/kg		0.47	1	09/19/12 03:50	09/19/12 17:44	7439-92-1	
Selenium	1.4 mg/kg		0.93	1	09/19/12 03:50	09/19/12 17:44	7782-49-2	
Silver	ND mg/kg		0.47	1	09/19/12 03:50	09/19/12 17:44	7440-22-4	
7471 Mercury		Analytical Method: EPA 7471 Preparation Method: EPA 7471						
Mercury	ND mg/kg		0.0038	1	09/25/12 11:25	09/25/12 14:49	7439-97-6	
Percent Moisture		Analytical Method: ASTM D2974-87						
Percent Moisture	0.58 %		0.10	1			09/25/12 08:13	



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ANALYTICAL RESULTS

Project: DOT-MECKLENBURG WBS#50000.1

Pace Project No.: 92131883

Sample: SAND-2 Lab ID: 92131883009 Collected: 09/17/12 14:40 Received: 09/18/12 16:52 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	ND mg/kg		0.51	1	09/19/12 03:50	09/19/12 17:47	7440-38-2	
Barium	12.3 mg/kg		0.51	1	09/19/12 03:50	09/19/12 17:47	7440-39-3	
Cadmium	ND mg/kg		0.10	1	09/19/12 03:50	09/19/12 17:47	7440-43-9	
Chromium	24.7 mg/kg		0.51	1	09/19/12 03:50	09/19/12 17:47	7440-47-3	
Lead	8.6 mg/kg		0.51	1	09/19/12 03:50	09/19/12 17:47	7439-92-1	
Selenium	ND mg/kg		1.0	1	09/19/12 03:50	09/19/12 17:47	7782-49-2	
Silver	ND mg/kg		0.51	1	09/19/12 03:50	09/19/12 17:47	7440-22-4	
7471 Mercury Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	ND mg/kg		0.0046	1	09/25/12 11:25	09/25/12 14:52	7439-97-6	
Percent Moisture Analytical Method: ASTM D2974-87								
Percent Moisture	5.1 %		0.10	1		09/25/12 08:14		

ANALYTICAL RESULTS

Project: DOT-MECKLENBURG WBS#50000.1

Pace Project No.: 92131883

Sample: SAND-3 Lab ID: **92131883010** Collected: 09/17/12 14:45 Received: 09/18/12 16:52 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	ND mg/kg		0.48	1	09/19/12 03:50	09/19/12 17:50	7440-38-2	
Barium	46.8 mg/kg		0.48	1	09/19/12 03:50	09/19/12 17:50	7440-39-3	
Cadmium	0.20 mg/kg		0.096	1	09/19/12 03:50	09/19/12 17:50	7440-43-9	
Chromium	6.7 mg/kg		0.48	1	09/19/12 03:50	09/19/12 17:50	7440-47-3	
Lead	10.9 mg/kg		0.48	1	09/19/12 03:50	09/19/12 17:50	7439-92-1	
Selenium	ND mg/kg		0.96	1	09/19/12 03:50	09/19/12 17:50	7782-49-2	
Silver	ND mg/kg		0.48	1	09/19/12 03:50	09/19/12 17:50	7440-22-4	
7471 Mercury Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	0.0067 mg/kg		0.0049	1	09/25/12 11:25	09/25/12 14:55	7439-97-6	
Percent Moisture Analytical Method: ASTM D2974-87								
Percent Moisture	4.0 %		0.10	1			09/25/12 08:14	

ANALYTICAL RESULTS

Project: DOT-MECKLENBURG WBS#50000.1
Pace Project No.: 92131883

Sample: 5H-1(0-2) Lab ID: **92131883011** Collected: 09/17/12 14:55 Received: 09/18/12 16:52 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel			Analytical Method: EPA 8015 Modified Preparation Method: EPA 3546					
Diesel Components	ND mg/kg		6.1	1	09/19/12 08:45	09/20/12 19:37	68334-30-5	
Surrogates								
n-Pentacosane (S)	70 %		41-119	1	09/19/12 08:45	09/20/12 19:37	629-99-2	
Gasoline Range Organics			Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B					
Gasoline Range Organics	ND mg/kg		8.6	1	09/19/12 09:41	09/19/12 16:17	8006-61-9	
Surrogates								
4-Bromofluorobenzene (S)	93 %		70-167	1	09/19/12 09:41	09/19/12 16:17	460-00-4	
6010 MET ICP			Analytical Method: EPA 6010 Preparation Method: EPA 3050					
Arsenic	0.80 mg/kg		0.55	1	09/19/12 03:50	09/19/12 17:53	7440-38-2	
Barium	53.6 mg/kg		0.55	1	09/19/12 03:50	09/19/12 17:53	7440-39-3	
Cadmium	0.94 mg/kg		0.11	1	09/19/12 03:50	09/19/12 17:53	7440-43-9	
Chromium	4.5 mg/kg		0.55	1	09/19/12 03:50	09/19/12 17:53	7440-47-3	
Lead	5.8 mg/kg		0.55	1	09/19/12 03:50	09/19/12 17:53	7439-92-1	
Selenium	4.4 mg/kg		1.1	1	09/19/12 03:50	09/19/12 17:53	7782-49-2	
Silver	ND mg/kg		0.55	1	09/19/12 03:50	09/19/12 17:53	7440-22-4	
7471 Mercury			Analytical Method: EPA 7471 Preparation Method: EPA 7471					
Mercury	0.039 mg/kg		0.0044	1	09/25/12 11:25	09/25/12 14:57	7439-97-6	
8260/5035A Volatile Organics			Analytical Method: EPA 8260					
Acetone	ND ug/kg		109	1		09/20/12 17:10	67-64-1	
Benzene	ND ug/kg		5.4	1		09/20/12 17:10	71-43-2	
Bromobenzene	ND ug/kg		5.4	1		09/20/12 17:10	108-86-1	
Bromochloromethane	ND ug/kg		5.4	1		09/20/12 17:10	74-97-5	
Bromodichloromethane	ND ug/kg		5.4	1		09/20/12 17:10	75-27-4	
Bromoform	ND ug/kg		5.4	1		09/20/12 17:10	75-25-2	
Bromomethane	ND ug/kg		10.9	1		09/20/12 17:10	74-83-9	
2-Butanone (MEK)	ND ug/kg		109	1		09/20/12 17:10	78-93-3	
n-Butylbenzene	ND ug/kg		5.4	1		09/20/12 17:10	104-51-8	
sec-Butylbenzene	ND ug/kg		5.4	1		09/20/12 17:10	135-98-8	
tert-Butylbenzene	ND ug/kg		5.4	1		09/20/12 17:10	98-06-6	
Carbon tetrachloride	ND ug/kg		5.4	1		09/20/12 17:10	56-23-5	
Chlorobenzene	ND ug/kg		5.4	1		09/20/12 17:10	108-90-7	
Chloroethane	ND ug/kg		10.9	1		09/20/12 17:10	75-00-3	
Chloroform	ND ug/kg		5.4	1		09/20/12 17:10	67-66-3	
Chloromethane	ND ug/kg		10.9	1		09/20/12 17:10	74-87-3	
2-Chlorotoluene	ND ug/kg		5.4	1		09/20/12 17:10	95-49-8	
4-Chlorotoluene	ND ug/kg		5.4	1		09/20/12 17:10	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/kg		5.4	1		09/20/12 17:10	96-12-8	
Dibromochloromethane	ND ug/kg		5.4	1		09/20/12 17:10	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/kg		5.4	1		09/20/12 17:10	106-93-4	
Dibromomethane	ND ug/kg		5.4	1		09/20/12 17:10	74-95-3	
1,2-Dichlorobenzene	ND ug/kg		5.4	1		09/20/12 17:10	95-50-1	

Date: 09/25/2012 05:29 PM

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: DOT-MECKLENBURG WBS#50000.1
Pace Project No.: 92131883

Sample: 5H-1(0-2) Lab ID: **92131883011** Collected: 09/17/12 14:55 Received: 09/18/12 16:52 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
1,3-Dichlorobenzene	ND ug/kg		5.4	1		09/20/12 17:10	541-73-1	
1,4-Dichlorobenzene	ND ug/kg		5.4	1		09/20/12 17:10	106-46-7	
Dichlorodifluoromethane	ND ug/kg		10.9	1		09/20/12 17:10	75-71-8	
1,1-Dichloroethane	ND ug/kg		5.4	1		09/20/12 17:10	75-34-3	
1,2-Dichloroethane	ND ug/kg		5.4	1		09/20/12 17:10	107-06-2	
1,1-Dichloroethene	ND ug/kg		5.4	1		09/20/12 17:10	75-35-4	
cis-1,2-Dichloroethene	ND ug/kg		5.4	1		09/20/12 17:10	156-59-2	
trans-1,2-Dichloroethene	ND ug/kg		5.4	1		09/20/12 17:10	156-60-5	
1,2-Dichloropropane	ND ug/kg		5.4	1		09/20/12 17:10	78-87-5	
1,3-Dichloropropane	ND ug/kg		5.4	1		09/20/12 17:10	142-28-9	
2,2-Dichloropropane	ND ug/kg		5.4	1		09/20/12 17:10	594-20-7	
1,1-Dichloropropene	ND ug/kg		5.4	1		09/20/12 17:10	563-58-6	
cis-1,3-Dichloropropene	ND ug/kg		5.4	1		09/20/12 17:10	10061-01-5	
trans-1,3-Dichloropropene	ND ug/kg		5.4	1		09/20/12 17:10	10061-02-6	
Diisopropyl ether	ND ug/kg		5.4	1		09/20/12 17:10	108-20-3	
Ethylbenzene	ND ug/kg		5.4	1		09/20/12 17:10	100-41-4	
Hexachloro-1,3-butadiene	ND ug/kg		5.4	1		09/20/12 17:10	87-68-3	
2-Hexanone	ND ug/kg		54.4	1		09/20/12 17:10	591-78-6	
Isopropylbenzene (Cumene)	ND ug/kg		5.4	1		09/20/12 17:10	98-82-8	
p-Isopropyltoluene	ND ug/kg		5.4	1		09/20/12 17:10	99-87-6	
Methylene Chloride	ND ug/kg		21.7	1		09/20/12 17:10	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/kg		54.4	1		09/20/12 17:10	108-10-1	
Methyl-tert-butyl ether	ND ug/kg		5.4	1		09/20/12 17:10	1634-04-4	
Naphthalene	ND ug/kg		5.4	1		09/20/12 17:10	91-20-3	
n-Propylbenzene	ND ug/kg		5.4	1		09/20/12 17:10	103-65-1	
Styrene	ND ug/kg		5.4	1		09/20/12 17:10	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/kg		5.4	1		09/20/12 17:10	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/kg		5.4	1		09/20/12 17:10	79-34-5	
Tetrachloroethene	ND ug/kg		5.4	1		09/20/12 17:10	127-18-4	
Toluene	ND ug/kg		5.4	1		09/20/12 17:10	108-88-3	
1,2,3-Trichlorobenzene	ND ug/kg		5.4	1		09/20/12 17:10	87-61-6	
1,2,4-Trichlorobenzene	ND ug/kg		5.4	1		09/20/12 17:10	120-82-1	
1,1,1-Trichloroethane	ND ug/kg		5.4	1		09/20/12 17:10	71-55-6	
1,1,2-Trichloroethane	ND ug/kg		5.4	1		09/20/12 17:10	79-00-5	
Trichloroethene	ND ug/kg		5.4	1		09/20/12 17:10	79-01-6	
Trichlorofluoromethane	ND ug/kg		5.4	1		09/20/12 17:10	75-69-4	
1,2,3-Trichloropropane	ND ug/kg		5.4	1		09/20/12 17:10	96-18-4	
1,2,4-Trimethylbenzene	ND ug/kg		5.4	1		09/20/12 17:10	95-63-6	
1,3,5-Trimethylbenzene	ND ug/kg		5.4	1		09/20/12 17:10	108-67-8	
Vinyl acetate	ND ug/kg		54.4	1		09/20/12 17:10	108-05-4	
Vinyl chloride	ND ug/kg		10.9	1		09/20/12 17:10	75-01-4	
Xylene (Total)	ND ug/kg		10.9	1		09/20/12 17:10	1330-20-7	
m&p-Xylene	ND ug/kg		10.9	1		09/20/12 17:10	179601-23-1	
o-Xylene	ND ug/kg		5.4	1		09/20/12 17:10	95-47-6	
Surrogates								
Dibromofluoromethane (S)	94 %		70-130	1		09/20/12 17:10	1868-53-7	

Date: 09/25/2012 05:29 PM

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: DOT-MECKLENBURG WBS#50000.1

Pace Project No.: 92131883

Sample: 5H-1(0-2) Lab ID: 92131883011 Collected: 09/17/12 14:55 Received: 09/18/12 16:52 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/5035A Volatile Organics		Analytical Method: EPA 8260						
Surrogates								
Toluene-d8 (S)	98 %		70-130	1		09/20/12 17:10	2037-26-5	
4-Bromofluorobenzene (S)	100 %		70-130	1		09/20/12 17:10	460-00-4	
1,2-Dichloroethane-d4 (S)	96 %		70-132	1		09/20/12 17:10	17060-07-0	
Percent Moisture		Analytical Method: ASTM D2974-87						
Percent Moisture	17.7 %		0.10	1		09/19/12 13:38		

ANALYTICAL RESULTS

Project: DOT-MECKLENBURG WBS#50000.1
Pace Project No.: 92131883

Sample: 5H-2(0-2) Lab ID: **92131883012** Collected: 09/17/12 15:30 Received: 09/18/12 16:52 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel			Analytical Method: EPA 8015 Modified Preparation Method: EPA 3546					
Diesel Components	10.6 mg/kg		6.0	1	09/19/12 08:45	09/20/12 20:07	68334-30-5	
Surrogates								
n-Pentacosane (S)	78 %		41-119	1	09/19/12 08:45	09/20/12 20:07	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	09/19/12 09:41	09/19/12 16:39	8006-61-9	
Surrogates								
4-Bromofluorobenzene (S)	91 %		70-167	1	09/19/12 09:41	09/19/12 16:39	460-00-4	
6010 MET ICP			Analytical Method: EPA 6010 Preparation Method: EPA 3050					
Arsenic	ND mg/kg		0.57	1	09/19/12 03:50	09/19/12 17:56	7440-38-2	
Barium	29.0 mg/kg		0.57	1	09/19/12 03:50	09/19/12 17:56	7440-39-3	
Cadmium	7.7 mg/kg		0.11	1	09/19/12 03:50	09/19/12 17:56	7440-43-9	
Chromium	28.9 mg/kg		0.57	1	09/19/12 03:50	09/19/12 17:56	7440-47-3	
Lead	12.2 mg/kg		0.57	1	09/19/12 03:50	09/19/12 17:56	7439-92-1	
Selenium	5.1 mg/kg		1.1	1	09/19/12 03:50	09/19/12 17:56	7782-49-2	
Silver	ND mg/kg		0.57	1	09/19/12 03:50	09/19/12 17:56	7440-22-4	
7471 Mercury			Analytical Method: EPA 7471 Preparation Method: EPA 7471					
Mercury	0.097 mg/kg		0.0058	1	09/25/12 11:25	09/25/12 15:00	7439-97-6	
8260/5035A Volatile Organics			Analytical Method: EPA 8260					
Acetone	ND ug/kg		100	1		09/20/12 17:29	67-64-1	
Benzene	ND ug/kg		5.0	1		09/20/12 17:29	71-43-2	
Bromobenzene	ND ug/kg		5.0	1		09/20/12 17:29	108-86-1	
Bromoform	ND ug/kg		5.0	1		09/20/12 17:29	74-97-5	
Bromochloromethane	ND ug/kg		5.0	1		09/20/12 17:29	75-27-4	
Bromodichloromethane	ND ug/kg		5.0	1		09/20/12 17:29	75-25-2	
Bromoform	ND ug/kg		10.0	1		09/20/12 17:29	74-83-9	
Bromomethane	ND ug/kg		100	1		09/20/12 17:29	78-93-3	
2-Butanone (MEK)	ND ug/kg		5.0	1		09/20/12 17:29	104-51-8	
n-Butylbenzene	ND ug/kg		5.0	1		09/20/12 17:29	135-98-8	
sec-Butylbenzene	ND ug/kg		5.0	1		09/20/12 17:29	98-06-6	
tert-Butylbenzene	ND ug/kg		5.0	1		09/20/12 17:29	56-23-5	
Carbon tetrachloride	ND ug/kg		10.0	1		09/20/12 17:29	108-90-7	
Chlorobenzene	ND ug/kg		10.0	1		09/20/12 17:29	95-49-8	
Chloroethane	ND ug/kg		10.0	1		09/20/12 17:29	106-43-4	
Chloroform	ND ug/kg		5.0	1		09/20/12 17:29	96-12-8	
Chloromethane	ND ug/kg		5.0	1		09/20/12 17:29	124-48-1	
2-Chlorotoluene	ND ug/kg		5.0	1		09/20/12 17:29	106-93-4	
4-Chlorotoluene	ND ug/kg		5.0	1		09/20/12 17:29	74-95-3	
1,2-Dibromo-3-chloropropane	ND ug/kg		5.0	1		09/20/12 17:29	95-50-1	
Dibromochloromethane	ND ug/kg		5.0	1		09/20/12 17:29		
1,2-Dibromoethane (EDB)	ND ug/kg		5.0	1		09/20/12 17:29		
Dibromomethane	ND ug/kg		5.0	1		09/20/12 17:29		
1,2-Dichlorobenzene	ND ug/kg		5.0	1		09/20/12 17:29		

ANALYTICAL RESULTS

Project: DOT-MECKLENBURG WBS#50000.1

Pace Project No.: 92131883

Sample: 5H-2(0-2) Lab ID: **92131883012** Collected: 09/17/12 15:30 Received: 09/18/12 16:52 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
1,3-Dichlorobenzene	ND ug/kg		5.0	1		09/20/12 17:29	541-73-1	
1,4-Dichlorobenzene	ND ug/kg		5.0	1		09/20/12 17:29	106-46-7	
Dichlorodifluoromethane	ND ug/kg		10.0	1		09/20/12 17:29	75-71-8	
1,1-Dichloroethane	ND ug/kg		5.0	1		09/20/12 17:29	75-34-3	
1,2-Dichloroethane	ND ug/kg		5.0	1		09/20/12 17:29	107-06-2	
1,1-Dichloroethene	ND ug/kg		5.0	1		09/20/12 17:29	75-35-4	
cis-1,2-Dichloroethene	ND ug/kg		5.0	1		09/20/12 17:29	156-59-2	
trans-1,2-Dichloroethene	ND ug/kg		5.0	1		09/20/12 17:29	156-60-5	
1,2-Dichloropropane	ND ug/kg		5.0	1		09/20/12 17:29	78-87-5	
1,3-Dichloropropane	ND ug/kg		5.0	1		09/20/12 17:29	142-28-9	
2,2-Dichloropropane	ND ug/kg		5.0	1		09/20/12 17:29	594-20-7	
1,1-Dichloropropene	ND ug/kg		5.0	1		09/20/12 17:29	563-58-6	
cis-1,3-Dichloropropene	ND ug/kg		5.0	1		09/20/12 17:29	10061-01-5	
trans-1,3-Dichloropropene	ND ug/kg		5.0	1		09/20/12 17:29	10061-02-6	
Diisopropyl ether	ND ug/kg		5.0	1		09/20/12 17:29	108-20-3	
Ethylbenzene	ND ug/kg		5.0	1		09/20/12 17:29	100-41-4	
Hexachloro-1,3-butadiene	ND ug/kg		5.0	1		09/20/12 17:29	87-68-3	
2-Hexanone	ND ug/kg		50.1	1		09/20/12 17:29	591-78-6	
Isopropylbenzene (Cumene)	ND ug/kg		5.0	1		09/20/12 17:29	98-82-8	
p-Isopropyltoluene	ND ug/kg		5.0	1		09/20/12 17:29	99-87-6	
Methylene Chloride	ND ug/kg		20.0	1		09/20/12 17:29	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/kg		50.1	1		09/20/12 17:29	108-10-1	
Methyl-tert-butyl ether	ND ug/kg		5.0	1		09/20/12 17:29	1634-04-4	
Naphthalene	ND ug/kg		5.0	1		09/20/12 17:29	91-20-3	
n-Propylbenzene	ND ug/kg		5.0	1		09/20/12 17:29	103-65-1	
Styrene	ND ug/kg		5.0	1		09/20/12 17:29	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/kg		5.0	1		09/20/12 17:29	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/kg		5.0	1		09/20/12 17:29	79-34-5	
Tetrachloroethene	ND ug/kg		5.0	1		09/20/12 17:29	127-18-4	
Toluene	ND ug/kg		5.0	1		09/20/12 17:29	108-88-3	
1,2,3-Trichlorobenzene	ND ug/kg		5.0	1		09/20/12 17:29	87-61-6	
1,2,4-Trichlorobenzene	ND ug/kg		5.0	1		09/20/12 17:29	120-82-1	
1,1,1-Trichloroethane	ND ug/kg		5.0	1		09/20/12 17:29	71-55-6	
1,1,2-Trichloroethane	ND ug/kg		5.0	1		09/20/12 17:29	79-00-5	
Trichloroethene	ND ug/kg		5.0	1		09/20/12 17:29	79-01-6	
Trichlorofluoromethane	ND ug/kg		5.0	1		09/20/12 17:29	75-69-4	
1,2,3-Trichloropropane	ND ug/kg		5.0	1		09/20/12 17:29	96-18-4	
1,2,4-Trimethylbenzene	ND ug/kg		5.0	1		09/20/12 17:29	95-63-6	
1,3,5-Trimethylbenzene	ND ug/kg		5.0	1		09/20/12 17:29	108-67-8	
Vinyl acetate	ND ug/kg		50.1	1		09/20/12 17:29	108-05-4	
Vinyl chloride	ND ug/kg		10.0	1		09/20/12 17:29	75-01-4	
Xylene (Total)	ND ug/kg		10.0	1		09/20/12 17:29	1330-20-7	
m&p-Xylene	ND ug/kg		10.0	1		09/20/12 17:29	179601-23-1	
o-Xylene	ND ug/kg		5.0	1		09/20/12 17:29	95-47-6	
Surrogates								
Dibromofluoromethane (S)	97 %		70-130	1		09/20/12 17:29	1868-53-7	

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ANALYTICAL RESULTS

Project: DOT-MECKLENBURG WBS#50000.1

Pace Project No.: 92131883

Sample: 5H-2(0-2) Lab ID: **92131883012** Collected: 09/17/12 15:30 Received: 09/18/12 16:52 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/5035A Volatile Organics		Analytical Method: EPA 8260						
Surrogates								
Toluene-d8 (S)	98 %		70-130	1		09/20/12 17:29	2037-26-5	
4-Bromofluorobenzene (S)	97 %		70-130	1		09/20/12 17:29	460-00-4	
1,2-Dichloroethane-d4 (S)	94 %		70-132	1		09/20/12 17:29	17060-07-0	
Percent Moisture		Analytical Method: ASTM D2974-87						
Percent Moisture	16.6 %		0.10	1		09/19/12 13:38		

ANALYTICAL RESULTS

Project: DOT-MECKLENBURG WBS#50000.1
Pace Project No.: 92131883

Sample: 5H-3(0-2) Lab ID: **92131883013** Collected: 09/17/12 16:00 Received: 09/18/12 16:52 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel			Analytical Method: EPA 8015 Modified Preparation Method: EPA 3546					
Diesel Components	ND mg/kg		5.9	1	09/19/12 08:45	09/20/12 20:07	68334-30-5	
Surrogates								
n-Pentacosane (S)	82 %		41-119	1	09/19/12 08:45	09/20/12 20:07	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	09/19/12 09:41	09/19/12 17:02	8006-61-9	
Surrogates								
4-Bromofluorobenzene (S)	88 %		70-167	1	09/19/12 09:41	09/19/12 17:02	460-00-4	
6010 MET ICP			Analytical Method: EPA 6010 Preparation Method: EPA 3050					
Arsenic	1.4 mg/kg		0.54	1	09/19/12 03:50	09/19/12 18:00	7440-38-2	
Barium	25.3 mg/kg		0.54	1	09/19/12 03:50	09/19/12 18:00	7440-39-3	
Cadmium	0.57 mg/kg		0.11	1	09/19/12 03:50	09/19/12 18:00	7440-43-9	
Chromium	12.3 mg/kg		0.54	1	09/19/12 03:50	09/19/12 18:00	7440-47-3	
Lead	3.8 mg/kg		0.54	1	09/19/12 03:50	09/19/12 18:00	7439-92-1	
Selenium	3.0 mg/kg		1.1	1	09/19/12 03:50	09/19/12 18:00	7782-49-2	
Silver	ND mg/kg		0.54	1	09/19/12 03:50	09/19/12 18:00	7440-22-4	
7471 Mercury			Analytical Method: EPA 7471 Preparation Method: EPA 7471					
Mercury	0.046 mg/kg		0.0050	1	09/25/12 11:25	09/25/12 15:03	7439-97-6	
8260/5035A Volatile Organics			Analytical Method: EPA 8260					
Acetone	ND ug/kg		103	1		09/20/12 17:47	67-64-1	
Benzene	ND ug/kg		5.1	1		09/20/12 17:47	71-43-2	
Bromobenzene	ND ug/kg		5.1	1		09/20/12 17:47	108-86-1	
Bromoform	ND ug/kg		5.1	1		09/20/12 17:47	74-97-5	
Bromochloromethane	ND ug/kg		5.1	1		09/20/12 17:47	75-27-4	
Bromodichloromethane	ND ug/kg		5.1	1		09/20/12 17:47	75-25-2	
Bromoform	ND ug/kg		10.3	1		09/20/12 17:47	74-83-9	
Bromomethane	ND ug/kg		103	1		09/20/12 17:47	78-93-3	
2-Butanone (MEK)	ND ug/kg		5.1	1		09/20/12 17:47	104-51-8	
n-Butylbenzene	ND ug/kg		5.1	1		09/20/12 17:47	135-98-8	
sec-Butylbenzene	ND ug/kg		5.1	1		09/20/12 17:47	98-06-6	
tert-Butylbenzene	ND ug/kg		5.1	1		09/20/12 17:47	56-23-5	
Carbon tetrachloride	ND ug/kg		5.1	1		09/20/12 17:47	108-90-7	
Chlorobenzene	ND ug/kg		10.3	1		09/20/12 17:47	75-00-3	
Chloroethane	ND ug/kg		5.1	1		09/20/12 17:47	67-66-3	
Chloroform	ND ug/kg		10.3	1		09/20/12 17:47	74-87-3	
Chloromethane	ND ug/kg		5.1	1		09/20/12 17:47	95-49-8	
2-Chlorotoluene	ND ug/kg		5.1	1		09/20/12 17:47	106-43-4	
4-Chlorotoluene	ND ug/kg		5.1	1		09/20/12 17:47	96-12-8	
1,2-Dibromo-3-chloropropane	ND ug/kg		5.1	1		09/20/12 17:47	124-48-1	
Dibromochloromethane	ND ug/kg		5.1	1		09/20/12 17:47	106-93-4	
1,2-Dibromoethane (EDB)	ND ug/kg		5.1	1		09/20/12 17:47	74-95-3	
Dibromomethane	ND ug/kg		5.1	1		09/20/12 17:47	59-18-5	
1,2-Dichlorobenzene	ND ug/kg		5.1	1		09/20/12 17:47	95-50-1	

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ANALYTICAL RESULTS

Project: DOT-MECKLENBURG WBS#50000.1
Pace Project No.: 92131883

Sample: 5H-3(0-2) Lab ID: 92131883013 Collected: 09/17/12 16:00 Received: 09/18/12 16:52 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
1,3-Dichlorobenzene	ND ug/kg		5.1	1		09/20/12 17:47	541-73-1	
1,4-Dichlorobenzene	ND ug/kg		5.1	1		09/20/12 17:47	106-46-7	
Dichlorodifluoromethane	ND ug/kg		10.3	1		09/20/12 17:47	75-71-8	
1,1-Dichloroethane	ND ug/kg		5.1	1		09/20/12 17:47	75-34-3	
1,2-Dichloroethane	ND ug/kg		5.1	1		09/20/12 17:47	107-06-2	
1,1-Dichloroethene	ND ug/kg		5.1	1		09/20/12 17:47	75-35-4	
cis-1,2-Dichloroethene	ND ug/kg		5.1	1		09/20/12 17:47	156-59-2	
trans-1,2-Dichloroethene	ND ug/kg		5.1	1		09/20/12 17:47	156-60-5	
1,2-Dichloropropane	ND ug/kg		5.1	1		09/20/12 17:47	78-87-5	
1,3-Dichloropropane	ND ug/kg		5.1	1		09/20/12 17:47	142-28-9	
2,2-Dichloropropane	ND ug/kg		5.1	1		09/20/12 17:47	594-20-7	
1,1-Dichloropropene	ND ug/kg		5.1	1		09/20/12 17:47	563-58-6	
cis-1,3-Dichloropropene	ND ug/kg		5.1	1		09/20/12 17:47	10061-01-5	
trans-1,3-Dichloropropene	ND ug/kg		5.1	1		09/20/12 17:47	10061-02-6	
Diisopropyl ether	ND ug/kg		5.1	1		09/20/12 17:47	108-20-3	
Ethylbenzene	ND ug/kg		5.1	1		09/20/12 17:47	100-41-4	
Hexachloro-1,3-butadiene	ND ug/kg		5.1	1		09/20/12 17:47	87-68-3	
2-Hexanone	ND ug/kg		51.3	1		09/20/12 17:47	591-78-6	
Isopropylbenzene (Cumene)	ND ug/kg		5.1	1		09/20/12 17:47	98-82-8	
p-Isopropyltoluene	ND ug/kg		5.1	1		09/20/12 17:47	99-87-6	
Methylene Chloride	ND ug/kg		20.5	1		09/20/12 17:47	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/kg		51.3	1		09/20/12 17:47	108-10-1	
Methyl-tert-butyl ether	ND ug/kg		5.1	1		09/20/12 17:47	1634-04-4	
Naphthalene	ND ug/kg		5.1	1		09/20/12 17:47	91-20-3	
n-Propylbenzene	ND ug/kg		5.1	1		09/20/12 17:47	103-65-1	
Styrene	ND ug/kg		5.1	1		09/20/12 17:47	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/kg		5.1	1		09/20/12 17:47	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/kg		5.1	1		09/20/12 17:47	79-34-5	
Tetrachloroethene	ND ug/kg		5.1	1		09/20/12 17:47	127-18-4	
Toluene	ND ug/kg		5.1	1		09/20/12 17:47	108-88-3	
1,2,3-Trichlorobenzene	ND ug/kg		5.1	1		09/20/12 17:47	87-61-6	
1,2,4-Trichlorobenzene	ND ug/kg		5.1	1		09/20/12 17:47	120-82-1	
1,1,1-Trichloroethane	ND ug/kg		5.1	1		09/20/12 17:47	71-55-6	
1,1,2-Trichloroethane	ND ug/kg		5.1	1		09/20/12 17:47	79-00-5	
Trichloroethene	ND ug/kg		5.1	1		09/20/12 17:47	79-01-6	
Trichlorofluoromethane	ND ug/kg		5.1	1		09/20/12 17:47	75-69-4	
1,2,3-Trichloropropane	ND ug/kg		5.1	1		09/20/12 17:47	96-18-4	
1,2,4-Trimethylbenzene	ND ug/kg		5.1	1		09/20/12 17:47	95-63-6	
1,3,5-Trimethylbenzene	ND ug/kg		5.1	1		09/20/12 17:47	108-67-8	
Vinyl acetate	ND ug/kg		51.3	1		09/20/12 17:47	108-05-4	
Vinyl chloride	ND ug/kg		10.3	1		09/20/12 17:47	75-01-4	
Xylene (Total)	ND ug/kg		10.3	1		09/20/12 17:47	1330-20-7	
m&p-Xylene	ND ug/kg		10.3	1		09/20/12 17:47	179601-23-1	
o-Xylene	ND ug/kg		5.1	1		09/20/12 17:47	95-47-6	
Surrogates								
Dibromofluoromethane (S)	93 %		70-130	1		09/20/12 17:47	1868-53-7	

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ANALYTICAL RESULTS

Project: DOT-MECKLENBURG WBS#50000.1

Pace Project No.: 92131883

Sample: 5H-3(0-2) Lab ID: **92131883013** Collected: 09/17/12 16:00 Received: 09/18/12 16:52 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/5035A Volatile Organics		Analytical Method: EPA 8260						
Surrogates								
Toluene-d8 (S)	99 %		70-130	1		09/20/12 17:47	2037-26-5	
4-Bromofluorobenzene (S)	99 %		70-130	1		09/20/12 17:47	460-00-4	
1,2-Dichloroethane-d4 (S)	89 %		70-132	1		09/20/12 17:47	17060-07-0	
Percent Moisture		Analytical Method: ASTM D2974-87						
Percent Moisture	14.7 %		0.10	1		09/19/12 13:38		

ANALYTICAL RESULTS

Project: DOT-MECKLENBURG WBS#50000.1
Pace Project No.: 92131883

Sample: 5H-4(0-2) Lab ID: **92131883014** Collected: 09/17/12 16:20 Received: 09/18/12 16:52 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel			Analytical Method: EPA 8015 Modified Preparation Method: EPA 3546					
Diesel Components	ND mg/kg		5.9	1	09/19/12 08:45	09/20/12 20:37	68334-30-5	
Surrogates								
n-Pentacosane (S)	58 %		41-119	1	09/19/12 08:45	09/20/12 20:37	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	09/19/12 09:41	09/19/12 17:25	8006-61-9	
Surrogates								
4-Bromofluorobenzene (S)	98 %		70-167	1	09/19/12 09:41	09/19/12 17:25	460-00-4	
6010 MET ICP			Analytical Method: EPA 6010 Preparation Method: EPA 3050					
Arsenic	1.4 mg/kg		0.54	1	09/19/12 03:50	09/19/12 18:03	7440-38-2	
Barium	19.7 mg/kg		0.54	1	09/19/12 03:50	09/19/12 18:03	7440-39-3	
Cadmium	ND mg/kg		0.11	1	09/19/12 03:50	09/19/12 18:03	7440-43-9	
Chromium	7.4 mg/kg		0.54	1	09/19/12 03:50	09/19/12 18:03	7440-47-3	
Lead	3.8 mg/kg		0.54	1	09/19/12 03:50	09/19/12 18:03	7439-92-1	
Selenium	2.0 mg/kg		1.1	1	09/19/12 03:50	09/19/12 18:03	7782-49-2	
Silver	ND mg/kg		0.54	1	09/19/12 03:50	09/19/12 18:03	7440-22-4	
7471 Mercury			Analytical Method: EPA 7471 Preparation Method: EPA 7471					
Mercury	0.022 mg/kg		0.0038	1	09/25/12 11:25	09/25/12 15:05	7439-97-6	
8260/5035A Volatile Organics			Analytical Method: EPA 8260					
Acetone	ND ug/kg		100	1		09/20/12 18:06	67-64-1	
Benzene	ND ug/kg		5.0	1		09/20/12 18:06	71-43-2	
Bromobenzene	ND ug/kg		5.0	1		09/20/12 18:06	108-86-1	
Bromochloromethane	ND ug/kg		5.0	1		09/20/12 18:06	74-97-5	
Bromodichloromethane	ND ug/kg		5.0	1		09/20/12 18:06	75-27-4	
Bromoform	ND ug/kg		5.0	1		09/20/12 18:06	75-25-2	
Bromomethane	ND ug/kg		10.0	1		09/20/12 18:06	74-83-9	
2-Butanone (MEK)	ND ug/kg		100	1		09/20/12 18:06	78-93-3	
n-Butylbenzene	ND ug/kg		5.0	1		09/20/12 18:06	104-51-8	
sec-Butylbenzene	ND ug/kg		5.0	1		09/20/12 18:06	135-98-8	
tert-Butylbenzene	ND ug/kg		5.0	1		09/20/12 18:06	98-06-6	
Carbon tetrachloride	ND ug/kg		5.0	1		09/20/12 18:06	56-23-5	
Chlorobenzene	ND ug/kg		5.0	1		09/20/12 18:06	108-90-7	
Chloroethane	ND ug/kg		10.0	1		09/20/12 18:06	75-00-3	
Chloroform	ND ug/kg		5.0	1		09/20/12 18:06	67-66-3	
Chloromethane	ND ug/kg		10.0	1		09/20/12 18:06	74-87-3	
2-Chlorotoluene	ND ug/kg		5.0	1		09/20/12 18:06	95-49-8	
4-Chlorotoluene	ND ug/kg		5.0	1		09/20/12 18:06	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/kg		5.0	1		09/20/12 18:06	96-12-8	
Dibromochloromethane	ND ug/kg		5.0	1		09/20/12 18:06	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/kg		5.0	1		09/20/12 18:06	106-93-4	
Dibromomethane	ND ug/kg		5.0	1		09/20/12 18:06	74-95-3	
1,2-Dichlorobenzene	ND ug/kg		5.0	1		09/20/12 18:06	95-50-1	

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ANALYTICAL RESULTS

Project: DOT-MECKLENBURG WBS#50000.1
Pace Project No.: 92131883

Sample: 5H-4(0-2) Lab ID: 92131883014 Collected: 09/17/12 16:20 Received: 09/18/12 16:52 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
1,3-Dichlorobenzene	ND ug/kg		5.0	1		09/20/12 18:06	541-73-1	
1,4-Dichlorobenzene	ND ug/kg		5.0	1		09/20/12 18:06	106-46-7	
Dichlorodifluoromethane	ND ug/kg		10.0	1		09/20/12 18:06	75-71-8	
1,1-Dichloroethane	ND ug/kg		5.0	1		09/20/12 18:06	75-34-3	
1,2-Dichloroethane	ND ug/kg		5.0	1		09/20/12 18:06	107-06-2	
1,1-Dichloroethene	ND ug/kg		5.0	1		09/20/12 18:06	75-35-4	
cis-1,2-Dichloroethene	ND ug/kg		5.0	1		09/20/12 18:06	156-59-2	
trans-1,2-Dichloroethene	ND ug/kg		5.0	1		09/20/12 18:06	156-60-5	
1,2-Dichloropropane	ND ug/kg		5.0	1		09/20/12 18:06	78-87-5	
1,3-Dichloropropane	ND ug/kg		5.0	1		09/20/12 18:06	142-28-9	
2,2-Dichloropropane	ND ug/kg		5.0	1		09/20/12 18:06	594-20-7	
1,1-Dichloropropene	ND ug/kg		5.0	1		09/20/12 18:06	563-58-6	
cis-1,3-Dichloropropene	ND ug/kg		5.0	1		09/20/12 18:06	10061-01-5	
trans-1,3-Dichloropropene	ND ug/kg		5.0	1		09/20/12 18:06	10061-02-6	
Diisopropyl ether	ND ug/kg		5.0	1		09/20/12 18:06	108-20-3	
Ethylbenzene	ND ug/kg		5.0	1		09/20/12 18:06	100-41-4	
Hexachloro-1,3-butadiene	ND ug/kg		5.0	1		09/20/12 18:06	87-68-3	
2-Hexanone	ND ug/kg		50.2	1		09/20/12 18:06	591-78-6	
Isopropylbenzene (Cumene)	ND ug/kg		5.0	1		09/20/12 18:06	98-82-8	
p-Isopropyltoluene	ND ug/kg		5.0	1		09/20/12 18:06	99-87-6	
Methylene Chloride	ND ug/kg		20.1	1		09/20/12 18:06	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/kg		50.2	1		09/20/12 18:06	108-10-1	
Methyl-tert-butyl ether	ND ug/kg		5.0	1		09/20/12 18:06	1634-04-4	
Naphthalene	ND ug/kg		5.0	1		09/20/12 18:06	91-20-3	
n-Propylbenzene	ND ug/kg		5.0	1		09/20/12 18:06	103-65-1	
Styrene	ND ug/kg		5.0	1		09/20/12 18:06	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/kg		5.0	1		09/20/12 18:06	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/kg		5.0	1		09/20/12 18:06	79-34-5	
Tetrachloroethene	ND ug/kg		5.0	1		09/20/12 18:06	127-18-4	
Toluene	ND ug/kg		5.0	1		09/20/12 18:06	108-88-3	
1,2,3-Trichlorobenzene	ND ug/kg		5.0	1		09/20/12 18:06	87-61-6	
1,2,4-Trichlorobenzene	ND ug/kg		5.0	1		09/20/12 18:06	120-82-1	
1,1,1-Trichloroethane	ND ug/kg		5.0	1		09/20/12 18:06	71-55-6	
1,1,2-Trichloroethane	ND ug/kg		5.0	1		09/20/12 18:06	79-00-5	
Trichloroethene	ND ug/kg		5.0	1		09/20/12 18:06	79-01-6	
Trichlorofluoromethane	ND ug/kg		5.0	1		09/20/12 18:06	75-69-4	
1,2,3-Trichloropropane	ND ug/kg		5.0	1		09/20/12 18:06	96-18-4	
1,2,4-Trimethylbenzene	ND ug/kg		5.0	1		09/20/12 18:06	95-63-6	
1,3,5-Trimethylbenzene	ND ug/kg		5.0	1		09/20/12 18:06	108-67-8	
Vinyl acetate	ND ug/kg		50.2	1		09/20/12 18:06	108-05-4	
Vinyl chloride	ND ug/kg		10.0	1		09/20/12 18:06	75-01-4	
Xylene (Total)	ND ug/kg		10.0	1		09/20/12 18:06	1330-20-7	
m&p-Xylene	ND ug/kg		10.0	1		09/20/12 18:06	179601-23-1	
o-Xylene	ND ug/kg		5.0	1		09/20/12 18:06	95-47-6	
Surrogates								
Dibromofluoromethane (S)	92 %		70-130	1		09/20/12 18:06	1868-53-7	

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ANALYTICAL RESULTS

Project: DOT-MECKLENBURG WBS#50000.1

Pace Project No.: 92131883

Sample: 5H-4(0-2) Lab ID: **92131883014** Collected: 09/17/12 16:20 Received: 09/18/12 16:52 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/5035A Volatile Organics		Analytical Method: EPA 8260						
Surrogates								
Toluene-d8 (S)	97 %		70-130	1		09/20/12 18:06	2037-26-5	
4-Bromofluorobenzene (S)	98 %		70-130	1		09/20/12 18:06	460-00-4	
1,2-Dichloroethane-d4 (S)	88 %		70-132	1		09/20/12 18:06	17060-07-0	
Percent Moisture		Analytical Method: ASTM D2974-87						
Percent Moisture	15.0 %		0.10	1		09/19/12 13:38		

ANALYTICAL RESULTS

Project: DOT-MECKLENBURG WBS#50000.1
Pace Project No.: 92131883

Sample: 5H-5(1-2) Lab ID: **92131883015** Collected: 09/18/12 09:00 Received: 09/18/12 16:52 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel			Analytical Method: EPA 8015 Modified Preparation Method: EPA 3546					
Diesel Components	29.6 mg/kg		5.9	1	09/19/12 08:45	09/20/12 20:37	68334-30-5	
Surrogates								
n-Pentacosane (S)	83 %		41-119	1	09/19/12 08:45	09/20/12 20:37	629-99-2	
Gasoline Range Organics			Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B					
Gasoline Range Organics	ND mg/kg		5.2	1	09/19/12 09:41	09/19/12 17:48	8006-61-9	
Surrogates								
4-Bromofluorobenzene (S)	97 %		70-167	1	09/19/12 09:41	09/19/12 17:48	460-00-4	
6010 MET ICP			Analytical Method: EPA 6010 Preparation Method: EPA 3050					
Arsenic	2.1 mg/kg		0.49	1	09/19/12 03:50	09/19/12 20:39	7440-38-2	
Barium	26.8 mg/kg		0.49	1	09/19/12 03:50	09/19/12 20:39	7440-39-3	
Cadmium	ND mg/kg		0.097	1	09/19/12 03:50	09/19/12 20:39	7440-43-9	
Chromium	6.5 mg/kg		0.49	1	09/19/12 03:50	09/19/12 20:39	7440-47-3	
Lead	9.0 mg/kg		0.49	1	09/19/12 03:50	09/19/12 20:39	7439-92-1	
Selenium	2.4 mg/kg		0.97	1	09/19/12 03:50	09/19/12 20:39	7782-49-2	
Silver	ND mg/kg		0.49	1	09/19/12 03:50	09/19/12 20:39	7440-22-4	
7471 Mercury			Analytical Method: EPA 7471 Preparation Method: EPA 7471					
Mercury	0.037 mg/kg		0.0052	1	09/25/12 11:25	09/25/12 15:08	7439-97-6	
8260/5035A Volatile Organics			Analytical Method: EPA 8260					
Acetone	ND ug/kg		98.4	1		09/20/12 18:24	67-64-1	
Benzene	ND ug/kg		4.9	1		09/20/12 18:24	71-43-2	
Bromobenzene	ND ug/kg		4.9	1		09/20/12 18:24	108-86-1	
Bromoform	ND ug/kg		4.9	1		09/20/12 18:24	74-97-5	
Bromochloromethane	ND ug/kg		4.9	1		09/20/12 18:24	75-27-4	
Bromodichloromethane	ND ug/kg		4.9	1		09/20/12 18:24	75-25-2	
Bromoform	ND ug/kg		4.9	1		09/20/12 18:24	74-83-9	
Bromomethane	ND ug/kg		9.8	1		09/20/12 18:24	28-93-3	
2-Butanone (MEK)	ND ug/kg		98.4	1		09/20/12 18:24	104-51-8	
n-Butylbenzene	ND ug/kg		4.9	1		09/20/12 18:24	135-98-8	
sec-Butylbenzene	ND ug/kg		4.9	1		09/20/12 18:24	98-06-6	
tert-Butylbenzene	ND ug/kg		4.9	1		09/20/12 18:24	56-23-5	
Carbon tetrachloride	ND ug/kg		4.9	1		09/20/12 18:24	108-90-7	
Chlorobenzene	ND ug/kg		4.9	1		09/20/12 18:24	75-00-3	
Chloroethane	ND ug/kg		9.8	1		09/20/12 18:24	67-66-3	
Chloroform	ND ug/kg		4.9	1		09/20/12 18:24	74-87-3	
Chloromethane	ND ug/kg		4.9	1		09/20/12 18:24	95-49-8	
2-Chlorotoluene	ND ug/kg		4.9	1		09/20/12 18:24	106-43-4	
4-Chlorotoluene	ND ug/kg		4.9	1		09/20/12 18:24	96-12-8	
1,2-Dibromo-3-chloropropane	ND ug/kg		4.9	1		09/20/12 18:24	124-48-1	
Dibromochloromethane	ND ug/kg		4.9	1		09/20/12 18:24	106-93-4	
1,2-Dibromoethane (EDB)	ND ug/kg		4.9	1		09/20/12 18:24	74-95-3	
Dibromomethane	ND ug/kg		4.9	1		09/20/12 18:24	98-06-6	
1,2-Dichlorobenzene	ND ug/kg		4.9	1		09/20/12 18:24	95-50-1	

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ANALYTICAL RESULTS

Project: DOT-MECKLENBURG WBS#50000.1
Pace Project No.: 92131883

Sample: 5H-5(1-2) Lab ID: 92131883015 Collected: 09/18/12 09:00 Received: 09/18/12 16:52 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
1,3-Dichlorobenzene	ND ug/kg		4.9	1		09/20/12 18:24	541-73-1	
1,4-Dichlorobenzene	ND ug/kg		4.9	1		09/20/12 18:24	106-46-7	
Dichlorodifluoromethane	ND ug/kg		9.8	1		09/20/12 18:24	75-71-8	
1,1-Dichloroethane	ND ug/kg		4.9	1		09/20/12 18:24	75-34-3	
1,2-Dichloroethane	ND ug/kg		4.9	1		09/20/12 18:24	107-06-2	
1,1-Dichloroethene	ND ug/kg		4.9	1		09/20/12 18:24	75-35-4	
cis-1,2-Dichloroethene	ND ug/kg		4.9	1		09/20/12 18:24	156-59-2	
trans-1,2-Dichloroethene	ND ug/kg		4.9	1		09/20/12 18:24	156-60-5	
1,2-Dichloropropane	ND ug/kg		4.9	1		09/20/12 18:24	78-87-5	
1,3-Dichloropropane	ND ug/kg		4.9	1		09/20/12 18:24	142-28-9	
2,2-Dichloropropane	ND ug/kg		4.9	1		09/20/12 18:24	594-20-7	
1,1-Dichloropropene	ND ug/kg		4.9	1		09/20/12 18:24	563-58-6	
cis-1,3-Dichloropropene	ND ug/kg		4.9	1		09/20/12 18:24	10061-01-5	
trans-1,3-Dichloropropene	ND ug/kg		4.9	1		09/20/12 18:24	10061-02-6	
Diisopropyl ether	ND ug/kg		4.9	1		09/20/12 18:24	108-20-3	
Ethylbenzene	ND ug/kg		4.9	1		09/20/12 18:24	100-41-4	
Hexachloro-1,3-butadiene	ND ug/kg		4.9	1		09/20/12 18:24	87-68-3	
2-Hexanone	ND ug/kg		49.2	1		09/20/12 18:24	591-78-6	
Isopropylbenzene (Cumene)	ND ug/kg		4.9	1		09/20/12 18:24	98-82-8	
p-Isopropyltoluene	ND ug/kg		4.9	1		09/20/12 18:24	99-87-6	
Methylene Chloride	ND ug/kg		19.7	1		09/20/12 18:24	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/kg		49.2	1		09/20/12 18:24	108-10-1	
Methyl-tert-butyl ether	ND ug/kg		4.9	1		09/20/12 18:24	1634-04-4	
Naphthalene	ND ug/kg		4.9	1		09/20/12 18:24	91-20-3	
n-Propylbenzene	ND ug/kg		4.9	1		09/20/12 18:24	103-65-1	
Styrene	ND ug/kg		4.9	1		09/20/12 18:24	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/kg		4.9	1		09/20/12 18:24	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/kg		4.9	1		09/20/12 18:24	79-34-5	
Tetrachloroethene	ND ug/kg		4.9	1		09/20/12 18:24	127-18-4	
Toluene	ND ug/kg		4.9	1		09/20/12 18:24	108-88-3	
1,2,3-Trichlorobenzene	ND ug/kg		4.9	1		09/20/12 18:24	87-61-6	
1,2,4-Trichlorobenzene	ND ug/kg		4.9	1		09/20/12 18:24	120-82-1	
1,1,1-Trichloroethane	ND ug/kg		4.9	1		09/20/12 18:24	71-55-6	
1,1,2-Trichloroethane	ND ug/kg		4.9	1		09/20/12 18:24	79-00-5	
Trichloroethene	ND ug/kg		4.9	1		09/20/12 18:24	79-01-6	
Trichlorofluoromethane	ND ug/kg		4.9	1		09/20/12 18:24	75-69-4	
1,2,3-Trichloropropane	ND ug/kg		4.9	1		09/20/12 18:24	96-18-4	
1,2,4-Trimethylbenzene	ND ug/kg		4.9	1		09/20/12 18:24	95-63-6	
1,3,5-Trimethylbenzene	ND ug/kg		4.9	1		09/20/12 18:24	108-67-8	
Vinyl acetate	ND ug/kg		49.2	1		09/20/12 18:24	108-05-4	
Vinyl chloride	ND ug/kg		9.8	1		09/20/12 18:24	75-01-4	
Xylene (Total)	ND ug/kg		9.8	1		09/20/12 18:24	1330-20-7	
m-&p-Xylene	ND ug/kg		9.8	1		09/20/12 18:24	179601-23-1	
o-Xylene	ND ug/kg		4.9	1		09/20/12 18:24	95-47-6	
Surrogates								
Dibromofluoromethane (S)	127 %		70-130	1		09/20/12 18:24	1868-53-7	

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ANALYTICAL RESULTS

Project: DOT-MECKLENBURG WBS#50000.1

Pace Project No.: 92131883

Sample: 5H-5(1-2) Lab ID: **92131883015** Collected: 09/18/12 09:00 Received: 09/18/12 16:52 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/5035A Volatile Organics		Analytical Method: EPA 8260						
Surrogates								
Toluene-d8 (S)	99 %		70-130	1		09/20/12 18:24	2037-26-5	
4-Bromofluorobenzene (S)	94 %		70-130	1		09/20/12 18:24	460-00-4	
1,2-Dichloroethane-d4 (S)	120 %		70-132	1		09/20/12 18:24	17060-07-0	
Percent Moisture		Analytical Method: ASTM D2974-87						
Percent Moisture	15.6 %		0.10	1		09/19/12 13:38		

ANALYTICAL RESULTS

Project: DOT-MECKLENBURG WBS#50000.1
Pace Project No.: 92131883

Sample: 5H-6(1-2) Lab ID: **92131883016** Collected: 09/18/12 10:50 Received: 09/18/12 16:52 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel			Analytical Method: EPA 8015 Modified Preparation Method: EPA 3546					
Diesel Components	ND mg/kg		5.6	1	09/19/12 08:45	09/20/12 21:07	68334-30-5	
Surrogates								
n-Pentacosane (S)	74 %		41-119	1	09/19/12 08:45	09/20/12 21:07	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	09/19/12 09:41	09/19/12 18:11	8006-61-9	
Surrogates								
4-Bromofluorobenzene (S)	96 %		70-167	1	09/19/12 09:41	09/19/12 18:11	460-00-4	
6010 MET ICP			Analytical Method: EPA 6010 Preparation Method: EPA 3050					
Arsenic	1.9 mg/kg		0.56	1	09/19/12 03:50	09/19/12 20:46	7440-38-2	
Barium	10.9 mg/kg		0.56	1	09/19/12 03:50	09/19/12 20:46	7440-39-3	
Cadmium	ND mg/kg		0.11	1	09/19/12 03:50	09/19/12 20:46	7440-43-9	
Chromium	7.7 mg/kg		0.56	1	09/19/12 03:50	09/19/12 20:46	7440-47-3	
Lead	4.7 mg/kg		0.56	1	09/19/12 03:50	09/19/12 20:46	7439-92-1	
Selenium	2.1 mg/kg		1.1	1	09/19/12 03:50	09/19/12 20:46	7782-49-2	
Silver	ND mg/kg		0.56	1	09/19/12 03:50	09/19/12 20:46	7440-22-4	
7471 Mercury			Analytical Method: EPA 7471 Preparation Method: EPA 7471					
Mercury	0.016 mg/kg		0.0041	1	09/25/12 11:25	09/25/12 15:10	7439-97-6	
8260/5035A Volatile Organics			Analytical Method: EPA 8260					
Acetone	ND ug/kg		87.9	1		09/20/12 18:42	67-64-1	
Benzene	ND ug/kg		4.4	1		09/20/12 18:42	71-43-2	
Bromobenzene	ND ug/kg		4.4	1		09/20/12 18:42	108-86-1	
Bromoform	ND ug/kg		4.4	1		09/20/12 18:42	74-97-5	
Bromochloromethane	ND ug/kg		4.4	1		09/20/12 18:42	75-27-4	
Bromodichloromethane	ND ug/kg		4.4	1		09/20/12 18:42	75-25-2	
Bromoform	ND ug/kg		4.4	1		09/20/12 18:42	74-83-9	
Bromomethane	ND ug/kg		8.8	1		09/20/12 18:42	28-93-3	
2-Butanone (MEK)	ND ug/kg		87.9	1		09/20/12 18:42	104-51-8	
n-Butylbenzene	ND ug/kg		4.4	1		09/20/12 18:42	135-98-8	
sec-Butylbenzene	ND ug/kg		4.4	1		09/20/12 18:42	98-06-6	
tert-Butylbenzene	ND ug/kg		4.4	1		09/20/12 18:42	56-23-5	
Carbon tetrachloride	ND ug/kg		4.4	1		09/20/12 18:42	108-90-7	
Chlorobenzene	ND ug/kg		4.4	1		09/20/12 18:42	75-00-3	
Chloroethane	ND ug/kg		8.8	1		09/20/12 18:42	67-66-3	
Chloroform	ND ug/kg		4.4	1		09/20/12 18:42	74-87-3	
Chloromethane	ND ug/kg		8.8	1		09/20/12 18:42	95-49-8	
2-Chlorotoluene	ND ug/kg		4.4	1		09/20/12 18:42	106-43-4	
4-Chlorotoluene	ND ug/kg		4.4	1		09/20/12 18:42	96-12-8	
1,2-Dibromo-3-chloropropane	ND ug/kg		4.4	1		09/20/12 18:42	124-48-1	
Dibromochloromethane	ND ug/kg		4.4	1		09/20/12 18:42	106-93-4	
1,2-Dibromoethane (EDB)	ND ug/kg		4.4	1		09/20/12 18:42	74-95-3	
Dibromomethane	ND ug/kg		4.4	1		09/20/12 18:42	97-50-1	
1,2-Dichlorobenzene	ND ug/kg		4.4	1		09/20/12 18:42		

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ANALYTICAL RESULTS

Project: DOT-MECKLENBURG WBS#50000.1
Pace Project No.: 92131883

Sample: 5H-6(1-2) Lab ID: 92131883016 Collected: 09/18/12 10:50 Received: 09/18/12 16:52 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
1,3-Dichlorobenzene	ND ug/kg		4.4	1		09/20/12 18:42	541-73-1	
1,4-Dichlorobenzene	ND ug/kg		4.4	1		09/20/12 18:42	106-46-7	
Dichlorodifluoromethane	ND ug/kg		8.8	1		09/20/12 18:42	75-71-8	
1,1-Dichloroethane	ND ug/kg		4.4	1		09/20/12 18:42	75-34-3	
1,2-Dichloroethane	ND ug/kg		4.4	1		09/20/12 18:42	107-06-2	
1,1-Dichloroethene	ND ug/kg		4.4	1		09/20/12 18:42	75-35-4	
cis-1,2-Dichloroethene	ND ug/kg		4.4	1		09/20/12 18:42	156-59-2	
trans-1,2-Dichloroethene	ND ug/kg		4.4	1		09/20/12 18:42	156-60-5	
1,2-Dichloropropane	ND ug/kg		4.4	1		09/20/12 18:42	78-87-5	
1,3-Dichloropropane	ND ug/kg		4.4	1		09/20/12 18:42	142-28-9	
2,2-Dichloropropane	ND ug/kg		4.4	1		09/20/12 18:42	594-20-7	
1,1-Dichloropropene	ND ug/kg		4.4	1		09/20/12 18:42	563-58-6	
cis-1,3-Dichloropropene	ND ug/kg		4.4	1		09/20/12 18:42	10061-01-5	
trans-1,3-Dichloropropene	ND ug/kg		4.4	1		09/20/12 18:42	10061-02-6	
Diisopropyl ether	ND ug/kg		4.4	1		09/20/12 18:42	108-20-3	
Ethylbenzene	ND ug/kg		4.4	1		09/20/12 18:42	100-41-4	
Hexachloro-1,3-butadiene	ND ug/kg		4.4	1		09/20/12 18:42	87-68-3	
2-Hexanone	ND ug/kg		44.0	1		09/20/12 18:42	591-78-6	
Isopropylbenzene (Cumene)	ND ug/kg		4.4	1		09/20/12 18:42	98-82-8	
p-Isopropyltoluene	ND ug/kg		4.4	1		09/20/12 18:42	99-87-6	
Methylene Chloride	ND ug/kg		17.6	1		09/20/12 18:42	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/kg		44.0	1		09/20/12 18:42	108-10-1	
Methyl-tert-butyl ether	ND ug/kg		4.4	1		09/20/12 18:42	1634-04-4	
Naphthalene	ND ug/kg		4.4	1		09/20/12 18:42	91-20-3	
n-Propylbenzene	ND ug/kg		4.4	1		09/20/12 18:42	103-65-1	
Styrene	ND ug/kg		4.4	1		09/20/12 18:42	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/kg		4.4	1		09/20/12 18:42	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/kg		4.4	1		09/20/12 18:42	79-34-5	
Tetrachloroethene	ND ug/kg		4.4	1		09/20/12 18:42	127-18-4	
Toluene	ND ug/kg		4.4	1		09/20/12 18:42	108-88-3	
1,2,3-Trichlorobenzene	ND ug/kg		4.4	1		09/20/12 18:42	87-61-6	
1,2,4-Trichlorobenzene	ND ug/kg		4.4	1		09/20/12 18:42	120-82-1	
1,1,1-Trichloroethane	ND ug/kg		4.4	1		09/20/12 18:42	71-55-6	
1,1,2-Trichloroethane	ND ug/kg		4.4	1		09/20/12 18:42	79-00-5	
Trichloroethene	ND ug/kg		4.4	1		09/20/12 18:42	79-01-6	
Trichlorofluoromethane	ND ug/kg		4.4	1		09/20/12 18:42	75-69-4	
1,2,3-Trichloropropane	ND ug/kg		4.4	1		09/20/12 18:42	96-18-4	
1,2,4-Trimethylbenzene	ND ug/kg		4.4	1		09/20/12 18:42	95-63-6	
1,3,5-Trimethylbenzene	ND ug/kg		4.4	1		09/20/12 18:42	108-67-8	
Vinyl acetate	ND ug/kg		44.0	1		09/20/12 18:42	108-05-4	
Vinyl chloride	ND ug/kg		8.8	1		09/20/12 18:42	75-01-4	
Xylene (Total)	ND ug/kg		8.8	1		09/20/12 18:42	1330-20-7	
m&p-Xylene	ND ug/kg		8.8	1		09/20/12 18:42	179601-23-1	
o-Xylene	ND ug/kg		4.4	1		09/20/12 18:42	95-47-6	
Surrogates								
Dibromofluoromethane (S)	125 %		70-130	1		09/20/12 18:42	1868-53-7	

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ANALYTICAL RESULTS

Project: DOT-MECKLENBURG WBS#50000.1

Pace Project No.: 92131883

Sample: 5H-6(1-2) Lab ID: **92131883016** Collected: 09/18/12 10:50 Received: 09/18/12 16:52 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/5035A Volatile Organics		Analytical Method: EPA 8260						
Surrogates								
Toluene-d8 (S)	100 %		70-130	1		09/20/12 18:42	2037-26-5	
4-Bromofluorobenzene (S)	93 %		70-130	1		09/20/12 18:42	460-00-4	
1,2-Dichloroethane-d4 (S)	118 %		70-132	1		09/20/12 18:42	17060-07-0	
Percent Moisture		Analytical Method: ASTM D2974-87						
Percent Moisture	10.2 %		0.10	1		09/19/12 13:38		

ANALYTICAL RESULTS

Project: DOT-MECKLENBURG WBS#50000.1
Pace Project No.: 92131883

Sample: 5H-7(10-12) Lab ID: **92131883017** Collected: 09/18/12 09:50 Received: 09/18/12 16:52 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel			Analytical Method: EPA 8015 Modified Preparation Method: EPA 3546					
Diesel Components	281 mg/kg		6.0	1	09/19/12 08:45	09/20/12 21:07	68334-30-5	
Surrogates								
n-Pentacosane (S)	77 %		41-119	1	09/19/12 08:45	09/20/12 21:07	629-99-2	
Gasoline Range Organics			Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B					
Gasoline Range Organics	97.2 mg/kg		7.0	1	09/19/12 09:41	09/19/12 18:34	8006-61-9	
Surrogates								
4-Bromofluorobenzene (S)	145 %		70-167	1	09/19/12 09:41	09/19/12 18:34	460-00-4	
6010 MET ICP			Analytical Method: EPA 6010 Preparation Method: EPA 3050					
Arsenic	2.7 mg/kg		0.59	1	09/19/12 03:50	09/19/12 21:01	7440-38-2	
Barium	17.1 mg/kg		0.59	1	09/19/12 03:50	09/19/12 21:01	7440-39-3	
Cadmium	ND mg/kg		0.12	1	09/19/12 03:50	09/19/12 21:01	7440-43-9	
Chromium	2.5 mg/kg		0.59	1	09/19/12 03:50	09/19/12 21:01	7440-47-3	
Lead	9.1 mg/kg		0.59	1	09/19/12 03:50	09/19/12 21:01	7439-92-1	
Selenium	1.5 mg/kg		1.2	1	09/19/12 03:50	09/19/12 21:01	7782-49-2	
Silver	ND mg/kg		0.59	1	09/19/12 03:50	09/19/12 21:01	7440-22-4	
7471 Mercury			Analytical Method: EPA 7471 Preparation Method: EPA 7471					
Mercury	0.0095 mg/kg		0.0058	1	09/25/12 11:25	09/25/12 15:13	7439-97-6	
8260/5035A Volatile Organics			Analytical Method: EPA 8260					
Acetone	ND ug/kg		6830	50		09/20/12 19:01	67-64-1	
Benzene	ND ug/kg		342	50		09/20/12 19:01	71-43-2	
Bromobenzene	ND ug/kg		342	50		09/20/12 19:01	108-86-1	
Bromoform	ND ug/kg		342	50		09/20/12 19:01	74-97-5	
Bromochloromethane	ND ug/kg		342	50		09/20/12 19:01	75-27-4	
Bromodichloromethane	ND ug/kg		342	50		09/20/12 19:01	75-25-2	
2-Butanone (MEK)	ND ug/kg		6830	50		09/20/12 19:01	78-93-3	
n-Butylbenzene	464 ug/kg		342	50		09/20/12 19:01	104-51-8	
sec-Butylbenzene	ND ug/kg		342	50		09/20/12 19:01	135-98-8	
tert-Butylbenzene	ND ug/kg		342	50		09/20/12 19:01	98-06-6	
Carbon tetrachloride	ND ug/kg		342	50		09/20/12 19:01	56-23-5	
Chlorobenzene	ND ug/kg		342	50		09/20/12 19:01	108-90-7	
Chloroethane	ND ug/kg		683	50		09/20/12 19:01	75-00-3	
Chloroform	ND ug/kg		342	50		09/20/12 19:01	67-66-3	
Chloromethane	ND ug/kg		683	50		09/20/12 19:01	74-87-3	
2-Chlorotoluene	ND ug/kg		342	50		09/20/12 19:01	95-49-8	
4-Chlorotoluene	ND ug/kg		342	50		09/20/12 19:01	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/kg		342	50		09/20/12 19:01	96-12-8	
Dibromochloromethane	ND ug/kg		342	50		09/20/12 19:01	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/kg		342	50		09/20/12 19:01	106-93-4	
Dibromomethane	ND ug/kg		342	50		09/20/12 19:01	74-95-3	
1,2-Dichlorobenzene	ND ug/kg		342	50		09/20/12 19:01	95-50-1	

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ANALYTICAL RESULTS

Project: DOT-MECKLENBURG WBS#50000.1

Pace Project No.: 92131883

Sample: 5H-7(10-12) Lab ID: **92131883017** Collected: 09/18/12 09:50 Received: 09/18/12 16:52 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
1,3-Dichlorobenzene	ND ug/kg		342	50		09/20/12 19:01	541-73-1	
1,4-Dichlorobenzene	ND ug/kg		342	50		09/20/12 19:01	106-46-7	
Dichlorodifluoromethane	ND ug/kg		683	50		09/20/12 19:01	75-71-8	D3
1,1-Dichloroethane	ND ug/kg		342	50		09/20/12 19:01	75-34-3	
1,2-Dichloroethane	ND ug/kg		342	50		09/20/12 19:01	107-06-2	
1,1-Dichloroethene	ND ug/kg		342	50		09/20/12 19:01	75-35-4	
cis-1,2-Dichloroethene	ND ug/kg		342	50		09/20/12 19:01	156-59-2	
trans-1,2-Dichloroethene	ND ug/kg		342	50		09/20/12 19:01	156-60-5	
1,2-Dichloropropane	ND ug/kg		342	50		09/20/12 19:01	78-87-5	
1,3-Dichloropropane	ND ug/kg		342	50		09/20/12 19:01	142-28-9	
2,2-Dichloropropane	ND ug/kg		342	50		09/20/12 19:01	594-20-7	
1,1-Dichloropropene	ND ug/kg		342	50		09/20/12 19:01	563-58-6	
cis-1,3-Dichloropropene	ND ug/kg		342	50		09/20/12 19:01	10061-01-5	
trans-1,3-Dichloropropene	ND ug/kg		342	50		09/20/12 19:01	10061-02-6	
Diisopropyl ether	ND ug/kg		342	50		09/20/12 19:01	108-20-3	
Ethylbenzene	ND ug/kg		342	50		09/20/12 19:01	100-41-4	
Hexachloro-1,3-butadiene	ND ug/kg		342	50		09/20/12 19:01	87-68-3	
2-Hexanone	ND ug/kg		3420	50		09/20/12 19:01	591-78-6	
Isopropylbenzene (Cumene)	ND ug/kg		342	50		09/20/12 19:01	98-82-8	
p-Isopropyltoluene	623 ug/kg		342	50		09/20/12 19:01	99-87-6	
Methylene Chloride	ND ug/kg		1370	50		09/20/12 19:01	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/kg		3420	50		09/20/12 19:01	108-10-1	
Methyl-tert-butyl ether	ND ug/kg		342	50		09/20/12 19:01	1634-04-4	
Naphthalene	1050 ug/kg		342	50		09/20/12 19:01	91-20-3	
n-Propylbenzene	ND ug/kg		342	50		09/20/12 19:01	103-65-1	
Styrene	ND ug/kg		342	50		09/20/12 19:01	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/kg		342	50		09/20/12 19:01	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/kg		342	50		09/20/12 19:01	79-34-5	
Tetrachloroethene	ND ug/kg		342	50		09/20/12 19:01	127-18-4	
Toluene	ND ug/kg		342	50		09/20/12 19:01	108-88-3	
1,2,3-Trichlorobenzene	ND ug/kg		342	50		09/20/12 19:01	87-61-6	
1,2,4-Trichlorobenzene	ND ug/kg		342	50		09/20/12 19:01	120-82-1	
1,1,1-Trichloroethane	ND ug/kg		342	50		09/20/12 19:01	71-55-6	
1,1,2-Trichloroethane	ND ug/kg		342	50		09/20/12 19:01	79-00-5	
Trichloroethene	ND ug/kg		342	50		09/20/12 19:01	79-01-6	
Trichlorofluoromethane	ND ug/kg		342	50		09/20/12 19:01	75-69-4	
1,2,3-Trichloropropane	ND ug/kg		342	50		09/20/12 19:01	96-18-4	
1,2,4-Trimethylbenzene	2550 ug/kg		342	50		09/20/12 19:01	95-63-6	
1,3,5-Trimethylbenzene	1030 ug/kg		342	50		09/20/12 19:01	108-67-8	
Vinyl acetate	ND ug/kg		3420	50		09/20/12 19:01	108-05-4	
Vinyl chloride	ND ug/kg		683	50		09/20/12 19:01	75-01-4	
Xylene (Total)	1720 ug/kg		683	50		09/20/12 19:01	1330-20-7	
m&p-Xylene	1240 ug/kg		683	50		09/20/12 19:01	179601-23-1	
o-Xylene	482 ug/kg		342	50		09/20/12 19:01	95-47-6	
Surrogates								
Dibromofluoromethane (S)	142 %		70-130	50		09/20/12 19:01	1868-53-7	S5

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ANALYTICAL RESULTS

Project: DOT-MECKLENBURG WBS#50000.1

Pace Project No.: 92131883

Sample: 5H-7(10-12) Lab ID: 92131883017 Collected: 09/18/12 09:50 Received: 09/18/12 16:52 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/5035A Volatile Organics		Analytical Method: EPA 8260						
Surrogates								
Toluene-d8 (S)	98 %		70-130	50		09/20/12 19:01	2037-26-5	
4-Bromofluorobenzene (S)	96 %		70-130	50		09/20/12 19:01	460-00-4	
1,2-Dichloroethane-d4 (S)	126 %		70-132	50		09/20/12 19:01	17060-07-0	
Percent Moisture		Analytical Method: ASTM D2974-87						
Percent Moisture	16.3 %		0.10	1		09/19/12 13:39		

ANALYTICAL RESULTS

Project: DOT-MECKLENBURG WBS#50000.1
Pace Project No.: 92131883

Sample: 5H-8(8-10) Lab ID: 92131883018 Collected: 09/18/12 10:25 Received: 09/18/12 16:52 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel			Analytical Method: EPA 8015 Modified Preparation Method: EPA 3546					
Diesel Components	80.6 mg/kg		6.3	1	09/19/12 08:45	09/20/12 21:37	68334-30-5	
Surrogates								
n-Pentacosane (S)	74 %		41-119	1	09/19/12 08:45	09/20/12 21:37	629-99-2	
Gasoline Range Organics			Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B					
Gasoline Range Organics	15.4 mg/kg		7.0	1	09/19/12 09:41	09/19/12 18:57	8006-61-9	
Surrogates								
4-Bromofluorobenzene (S)	117 %		70-167	1	09/19/12 09:41	09/19/12 18:57	460-00-4	
6010 MET ICP			Analytical Method: EPA 6010 Preparation Method: EPA 3050					
Arsenic	1.5 mg/kg		0.63	1	09/19/12 03:50	09/19/12 21:04	7440-38-2	
Barium	16.5 mg/kg		0.63	1	09/19/12 03:50	09/19/12 21:04	7440-39-3	
Cadmium	ND mg/kg		0.13	1	09/19/12 03:50	09/19/12 21:04	7440-43-9	
Chromium	8.2 mg/kg		0.63	1	09/19/12 03:50	09/19/12 21:04	7440-47-3	
Lead	6.8 mg/kg		0.63	1	09/19/12 03:50	09/19/12 21:04	7439-92-1	
Selenium	2.5 mg/kg		1.3	1	09/19/12 03:50	09/19/12 21:04	7782-49-2	
Silver	ND mg/kg		0.63	1	09/19/12 03:50	09/19/12 21:04	7440-22-4	
7471 Mercury			Analytical Method: EPA 7471 Preparation Method: EPA 7471					
Mercury	0.016 mg/kg		0.0055	1	09/25/12 11:25	09/25/12 15:21	7439-97-6	
8260/5035A Volatile Organics			Analytical Method: EPA 8260					
Acetone	ND ug/kg		1920	20		09/21/12 13:10	67-64-1	
Benzene	ND ug/kg		96.0	20		09/21/12 13:10	71-43-2	
Bromobenzene	ND ug/kg		96.0	20		09/21/12 13:10	108-86-1	
Bromoform	ND ug/kg		96.0	20		09/21/12 13:10	74-97-5	
Bromochloromethane	ND ug/kg		96.0	20		09/21/12 13:10	75-27-4	
Bromodichloromethane	ND ug/kg		96.0	20		09/21/12 13:10	75-25-2	
Bromoform	ND ug/kg		96.0	20		09/21/12 13:10	75-25-2	
Bromomethane	ND ug/kg		192	20		09/21/12 13:10	74-83-9	
2-Butanone (MEK)	ND ug/kg		1920	20		09/21/12 13:10	78-93-3	
n-Butylbenzene	ND ug/kg		96.0	20		09/21/12 13:10	104-51-8	
sec-Butylbenzene	ND ug/kg		96.0	20		09/21/12 13:10	135-98-8	
tert-Butylbenzene	ND ug/kg		96.0	20		09/21/12 13:10	98-06-6	
Carbon tetrachloride	ND ug/kg		96.0	20		09/21/12 13:10	56-23-5	
Chlorobenzene	ND ug/kg		96.0	20		09/21/12 13:10	108-90-7	
Chloroethane	ND ug/kg		192	20		09/21/12 13:10	75-00-3	
Chloroform	ND ug/kg		96.0	20		09/21/12 13:10	67-66-3	
Chloromethane	ND ug/kg		192	20		09/21/12 13:10	74-87-3	
2-Chlorotoluene	ND ug/kg		96.0	20		09/21/12 13:10	95-49-8	
4-Chlorotoluene	ND ug/kg		96.0	20		09/21/12 13:10	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/kg		96.0	20		09/21/12 13:10	96-12-8	
Dibromochloromethane	ND ug/kg		96.0	20		09/21/12 13:10	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/kg		96.0	20		09/21/12 13:10	106-93-4	
Dibromomethane	ND ug/kg		96.0	20		09/21/12 13:10	74-95-3	
1,2-Dichlorobenzene	ND ug/kg		96.0	20		09/21/12 13:10	95-50-1	

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ANALYTICAL RESULTS

Project: DOT-MECKLENBURG WBS#50000.1
Pace Project No.: 92131883

Sample: 5H-8(8-10) Lab ID: 92131883018 Collected: 09/18/12 10:25 Received: 09/18/12 16:52 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
1,3-Dichlorobenzene	ND ug/kg		96.0	20		09/21/12 13:10	541-73-1	
1,4-Dichlorobenzene	ND ug/kg		96.0	20		09/21/12 13:10	106-46-7	
Dichlorodifluoromethane	ND ug/kg		192	20		09/21/12 13:10	75-71-8	D3
1,1-Dichloroethane	ND ug/kg		96.0	20		09/21/12 13:10	75-34-3	
1,2-Dichloroethane	ND ug/kg		96.0	20		09/21/12 13:10	107-06-2	
1,1-Dichloroethene	ND ug/kg		96.0	20		09/21/12 13:10	75-35-4	
cis-1,2-Dichloroethene	ND ug/kg		96.0	20		09/21/12 13:10	156-59-2	
trans-1,2-Dichloroethene	ND ug/kg		96.0	20		09/21/12 13:10	156-60-5	
1,2-Dichloropropane	ND ug/kg		96.0	20		09/21/12 13:10	78-87-5	
1,3-Dichloropropane	ND ug/kg		96.0	20		09/21/12 13:10	142-28-9	
2,2-Dichloropropane	ND ug/kg		96.0	20		09/21/12 13:10	594-20-7	
1,1-Dichloropropene	ND ug/kg		96.0	20		09/21/12 13:10	563-58-6	
cis-1,3-Dichloropropene	ND ug/kg		96.0	20		09/21/12 13:10	10061-01-5	
trans-1,3-Dichloropropene	ND ug/kg		96.0	20		09/21/12 13:10	10061-02-6	
Diisopropyl ether	ND ug/kg		96.0	20		09/21/12 13:10	108-20-3	
Ethylbenzene	ND ug/kg		96.0	20		09/21/12 13:10	100-41-4	
Hexachloro-1,3-butadiene	ND ug/kg		96.0	20		09/21/12 13:10	87-68-3	
2-Hexanone	ND ug/kg		960	20		09/21/12 13:10	591-78-6	
Isopropylbenzene (Cumene)	ND ug/kg		96.0	20		09/21/12 13:10	98-82-8	
p-Isopropyltoluene	ND ug/kg		96.0	20		09/21/12 13:10	99-87-6	
Methylene Chloride	ND ug/kg		384	20		09/21/12 13:10	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/kg		960	20		09/21/12 13:10	108-10-1	
Methyl-tert-butyl ether	ND ug/kg		96.0	20		09/21/12 13:10	1634-04-4	
Naphthalene	ND ug/kg		96.0	20		09/21/12 13:10	91-20-3	
n-Propylbenzene	ND ug/kg		96.0	20		09/21/12 13:10	103-65-1	
Styrene	ND ug/kg		96.0	20		09/21/12 13:10	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/kg		96.0	20		09/21/12 13:10	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/kg		96.0	20		09/21/12 13:10	79-34-5	
Tetrachloroethene	ND ug/kg		96.0	20		09/21/12 13:10	127-18-4	
Toluene	ND ug/kg		96.0	20		09/21/12 13:10	108-88-3	
1,2,3-Trichlorobenzene	ND ug/kg		96.0	20		09/21/12 13:10	87-61-6	
1,2,4-Trichlorobenzene	ND ug/kg		96.0	20		09/21/12 13:10	120-82-1	
1,1,1-Trichloroethane	ND ug/kg		96.0	20		09/21/12 13:10	71-55-6	
1,1,2-Trichloroethane	ND ug/kg		96.0	20		09/21/12 13:10	79-00-5	
Trichloroethene	ND ug/kg		96.0	20		09/21/12 13:10	79-01-6	
Trichlorofluoromethane	ND ug/kg		96.0	20		09/21/12 13:10	75-69-4	
1,2,3-Trichloropropane	ND ug/kg		96.0	20		09/21/12 13:10	96-18-4	
1,2,4-Trimethylbenzene	ND ug/kg		96.0	20		09/21/12 13:10	95-63-6	
1,3,5-Trimethylbenzene	ND ug/kg		96.0	20		09/21/12 13:10	108-67-8	
Vinyl acetate	ND ug/kg		960	20		09/21/12 13:10	108-05-4	
Vinyl chloride	ND ug/kg		192	20		09/21/12 13:10	75-01-4	
Xylene (Total)	ND ug/kg		192	20		09/21/12 13:10	1330-20-7	
m-&p-Xylene	ND ug/kg		192	20		09/21/12 13:10	179601-23-1	
o-Xylene	ND ug/kg		96.0	20		09/21/12 13:10	95-47-6	
Surrogates								
Dibromofluoromethane (S)	121 %		70-130	20		09/21/12 13:10	1868-53-7	S5

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ANALYTICAL RESULTS

Project: DOT-MECKLENBURG WBS#50000.1

Pace Project No.: 92131883

Sample: 5H-8(8-10) Lab ID: 92131883018 Collected: 09/18/12 10:25 Received: 09/18/12 16:52 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
Surrogates								
Toluene-d8 (S)	101 %		70-130	20		09/21/12 13:10	2037-26-5	
4-Bromofluorobenzene (S)	96 %		70-130	20		09/21/12 13:10	460-00-4	
1,2-Dichloroethane-d4 (S)	107 %		70-132	20		09/21/12 13:10	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	20.4 %		0.10	1		09/19/12 13:39		

ANALYTICAL RESULTS

Project: DOT-MECKLENBURG WBS#50000.1
Pace Project No.: 92131883

Sample: 5H-9(2-4) Lab ID: **92131883019** Collected: 09/18/12 11:20 Received: 09/18/12 16:52 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel			Analytical Method: EPA 8015 Modified Preparation Method: EPA 3546					
Diesel Components	ND mg/kg		6.8	1	09/19/12 08:45	09/20/12 21:37	68334-30-5	
Surrogates								
n-Pentacosane (S)	74 %		41-119	1	09/19/12 08:45	09/20/12 21:37	629-99-2	
Gasoline Range Organics			Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B					
Gasoline Range Organics	ND mg/kg		8.4	1	09/19/12 14:00	09/19/12 21:14	8006-61-9	
Surrogates								
4-Bromofluorobenzene (S)	87 %		70-167	1	09/19/12 14:00	09/19/12 21:14	460-00-4	
6010 MET ICP			Analytical Method: EPA 6010 Preparation Method: EPA 3050					
Arsenic	ND mg/kg		0.66	1	09/19/12 03:50	09/19/12 21:07	7440-38-2	
Barium	10.8 mg/kg		0.66	1	09/19/12 03:50	09/19/12 21:07	7440-39-3	
Cadmium	22.1 mg/kg		0.13	1	09/19/12 03:50	09/19/12 21:07	7440-43-9	
Chromium	99.3 mg/kg		0.66	1	09/19/12 03:50	09/19/12 21:07	7440-47-3	
Lead	20.9 mg/kg		0.66	1	09/19/12 03:50	09/19/12 21:07	7439-92-1	
Selenium	10.3 mg/kg		1.3	1	09/19/12 03:50	09/19/12 21:07	7782-49-2	
Silver	ND mg/kg		0.66	1	09/19/12 03:50	09/19/12 21:07	7440-22-4	
7471 Mercury			Analytical Method: EPA 7471 Preparation Method: EPA 7471					
Mercury	0.17 mg/kg		0.0064	1	09/25/12 11:25	09/25/12 15:24	7439-97-6	
8260/5035A Volatile Organics			Analytical Method: EPA 8260					
Acetone	ND ug/kg		153	1		09/20/12 19:37	67-64-1	
Benzene	ND ug/kg		7.7	1		09/20/12 19:37	71-43-2	
Bromobenzene	ND ug/kg		7.7	1		09/20/12 19:37	108-86-1	
Bromoform	ND ug/kg		7.7	1		09/20/12 19:37	74-97-5	
Bromochloromethane	ND ug/kg		7.7	1		09/20/12 19:37	75-27-4	
Bromodichloromethane	ND ug/kg		7.7	1		09/20/12 19:37	75-25-2	
Bromoform	ND ug/kg		7.7	1		09/20/12 19:37	74-83-9	
Bromomethane	ND ug/kg		15.3	1		09/20/12 19:37	78-93-3	
2-Butanone (MEK)	ND ug/kg		153	1		09/20/12 19:37	104-51-8	
n-Butylbenzene	ND ug/kg		7.7	1		09/20/12 19:37	135-98-8	
sec-Butylbenzene	ND ug/kg		7.7	1		09/20/12 19:37	98-06-6	
tert-Butylbenzene	ND ug/kg		7.7	1		09/20/12 19:37	56-23-5	
Carbon tetrachloride	ND ug/kg		7.7	1		09/20/12 19:37	108-90-7	
Chlorobenzene	ND ug/kg		7.7	1		09/20/12 19:37	106-43-4	
Chloroethane	ND ug/kg		15.3	1		09/20/12 19:37	96-12-8	
Chloroform	ND ug/kg		7.7	1		09/20/12 19:37	124-48-1	
Chloromethane	ND ug/kg		15.3	1		09/20/12 19:37	106-93-4	
2-Chlorotoluene	ND ug/kg		7.7	1		09/20/12 19:37	74-95-3	
4-Chlorotoluene	ND ug/kg		7.7	1		09/20/12 19:37	74-95-3	
1,2-Dibromo-3-chloropropane	ND ug/kg		7.7	1		09/20/12 19:37	95-49-8	
Dibromochloromethane	ND ug/kg		7.7	1		09/20/12 19:37	106-43-4	
1,2-Dibromoethane (EDB)	ND ug/kg		7.7	1		09/20/12 19:37	74-95-1	
Dibromomethane	ND ug/kg		7.7	1		09/20/12 19:37	98-06-6	
1,2-Dichlorobenzene	ND ug/kg		7.7	1		09/20/12 19:37	56-23-5	

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ANALYTICAL RESULTS

Project: DOT-MECKLENBURG WBS#50000.1
Pace Project No.: 92131883

Sample: 5H-9(2-4) Lab ID: 92131883019 Collected: 09/18/12 11:20 Received: 09/18/12 16:52 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
1,3-Dichlorobenzene	ND ug/kg		7.7	1		09/20/12 19:37	541-73-1	
1,4-Dichlorobenzene	ND ug/kg		7.7	1		09/20/12 19:37	106-46-7	
Dichlorodifluoromethane	ND ug/kg		15.3	1		09/20/12 19:37	75-71-8	
1,1-Dichloroethane	ND ug/kg		7.7	1		09/20/12 19:37	75-34-3	
1,2-Dichloroethane	ND ug/kg		7.7	1		09/20/12 19:37	107-06-2	
1,1-Dichloroethene	ND ug/kg		7.7	1		09/20/12 19:37	75-35-4	
cis-1,2-Dichloroethene	ND ug/kg		7.7	1		09/20/12 19:37	156-59-2	
trans-1,2-Dichloroethene	ND ug/kg		7.7	1		09/20/12 19:37	156-60-5	
1,2-Dichloropropane	ND ug/kg		7.7	1		09/20/12 19:37	78-87-5	
1,3-Dichloropropane	ND ug/kg		7.7	1		09/20/12 19:37	142-28-9	
2,2-Dichloropropane	ND ug/kg		7.7	1		09/20/12 19:37	594-20-7	
1,1-Dichloropropene	ND ug/kg		7.7	1		09/20/12 19:37	563-58-6	
cis-1,3-Dichloropropene	ND ug/kg		7.7	1		09/20/12 19:37	10061-01-5	
trans-1,3-Dichloropropene	ND ug/kg		7.7	1		09/20/12 19:37	10061-02-6	
Diisopropyl ether	ND ug/kg		7.7	1		09/20/12 19:37	108-20-3	
Ethylbenzene	ND ug/kg		7.7	1		09/20/12 19:37	100-41-4	
Hexachloro-1,3-butadiene	ND ug/kg		7.7	1		09/20/12 19:37	87-68-3	
2-Hexanone	ND ug/kg		76.7	1		09/20/12 19:37	591-78-6	
Isopropylbenzene (Cumene)	ND ug/kg		7.7	1		09/20/12 19:37	98-82-8	
p-Isopropyltoluene	ND ug/kg		7.7	1		09/20/12 19:37	99-87-6	
Methylene Chloride	ND ug/kg		30.7	1		09/20/12 19:37	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/kg		76.7	1		09/20/12 19:37	108-10-1	
Methyl-tert-butyl ether	ND ug/kg		7.7	1		09/20/12 19:37	1634-04-4	
Naphthalene	ND ug/kg		7.7	1		09/20/12 19:37	91-20-3	
n-Propylbenzene	ND ug/kg		7.7	1		09/20/12 19:37	103-65-1	
Styrene	ND ug/kg		7.7	1		09/20/12 19:37	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/kg		7.7	1		09/20/12 19:37	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/kg		7.7	1		09/20/12 19:37	79-34-5	
Tetrachloroethene	ND ug/kg		7.7	1		09/20/12 19:37	127-18-4	
Toluene	ND ug/kg		7.7	1		09/20/12 19:37	108-88-3	
1,2,3-Trichlorobenzene	ND ug/kg		7.7	1		09/20/12 19:37	87-61-6	
1,2,4-Trichlorobenzene	ND ug/kg		7.7	1		09/20/12 19:37	120-82-1	
1,1,1-Trichloroethane	ND ug/kg		7.7	1		09/20/12 19:37	71-55-6	
1,1,2-Trichloroethane	ND ug/kg		7.7	1		09/20/12 19:37	79-00-5	
Trichloroethene	ND ug/kg		7.7	1		09/20/12 19:37	79-01-6	
Trichlorofluoromethane	ND ug/kg		7.7	1		09/20/12 19:37	75-69-4	
1,2,3-Trichloropropane	ND ug/kg		7.7	1		09/20/12 19:37	96-18-4	
1,2,4-Trimethylbenzene	ND ug/kg		7.7	1		09/20/12 19:37	95-63-6	
1,3,5-Trimethylbenzene	ND ug/kg		7.7	1		09/20/12 19:37	108-67-8	
Vinyl acetate	ND ug/kg		76.7	1		09/20/12 19:37	108-05-4	
Vinyl chloride	ND ug/kg		15.3	1		09/20/12 19:37	75-01-4	
Xylene (Total)	ND ug/kg		15.3	1		09/20/12 19:37	1330-20-7	
m&p-Xylene	ND ug/kg		15.3	1		09/20/12 19:37	179601-23-1	
o-Xylene	ND ug/kg		7.7	1		09/20/12 19:37	95-47-6	
Surrogates								
Dibromofluoromethane (S)	142 %		70-130	1		09/20/12 19:37	1868-53-7	S3

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ANALYTICAL RESULTS

Project: DOT-MECKLENBURG WBS#50000.1

Pace Project No.: 92131883

Sample: 5H-9(2-4) Lab ID: **92131883019** Collected: 09/18/12 11:20 Received: 09/18/12 16:52 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/5035A Volatile Organics		Analytical Method: EPA 8260						
Surrogates								
Toluene-d8 (S)	101 %		70-130	1		09/20/12 19:37	2037-26-5	
4-Bromofluorobenzene (S)	95 %		70-130	1		09/20/12 19:37	460-00-4	
1,2-Dichloroethane-d4 (S)	128 %		70-132	1		09/20/12 19:37	17060-07-0	
Percent Moisture		Analytical Method: ASTM D2974-87						
Percent Moisture	26.2 %		0.10	1		09/19/12 13:39		

ANALYTICAL RESULTS

Project: DOT-MECKLENBURG WBS#50000.1
Pace Project No.: 92131883

Sample: 5H-10(2-4) Lab ID: 92131883020 Collected: 09/18/12 11:35 Received: 09/18/12 16:52 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel			Analytical Method: EPA 8015 Modified Preparation Method: EPA 3546					
Diesel Components	ND mg/kg		6.8	1	09/19/12 08:45	09/20/12 22:06	68334-30-5	
Surrogates								
n-Pentacosane (S)	71 %		41-119	1	09/19/12 08:45	09/20/12 22:06	629-99-2	
Gasoline Range Organics			Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B					
Gasoline Range Organics	ND mg/kg		6.5	1	09/19/12 14:00	09/19/12 22:22	8006-61-9	
Surrogates								
4-Bromofluorobenzene (S)	88 %		70-167	1	09/19/12 14:00	09/19/12 22:22	460-00-4	
6010 MET ICP			Analytical Method: EPA 6010 Preparation Method: EPA 3050					
Arsenic	1.2 mg/kg		0.62	1	09/19/12 03:50	09/19/12 21:11	7440-38-2	
Barium	12.4 mg/kg		0.62	1	09/19/12 03:50	09/19/12 21:11	7440-39-3	
Cadmium	2.7 mg/kg		0.12	1	09/19/12 03:50	09/19/12 21:11	7440-43-9	
Chromium	35.4 mg/kg		0.62	1	09/19/12 03:50	09/19/12 21:11	7440-47-3	
Lead	7.2 mg/kg		0.62	1	09/19/12 03:50	09/19/12 21:11	7439-92-1	
Selenium	6.1 mg/kg		1.2	1	09/19/12 03:50	09/19/12 21:11	7782-49-2	
Silver	ND mg/kg		0.62	1	09/19/12 03:50	09/19/12 21:11	7440-22-4	
7471 Mercury			Analytical Method: EPA 7471 Preparation Method: EPA 7471					
Mercury	0.36 mg/kg		0.024	5	09/25/12 11:25	09/25/12 15:37	7439-97-6	
8260/5035A Volatile Organics			Analytical Method: EPA 8260					
Acetone	ND ug/kg		124	1		09/20/12 19:55	67-64-1	
Benzene	ND ug/kg		6.2	1		09/20/12 19:55	71-43-2	
Bromobenzene	ND ug/kg		6.2	1		09/20/12 19:55	108-86-1	
Bromoform	ND ug/kg		6.2	1		09/20/12 19:55	74-97-5	
Bromochloromethane	ND ug/kg		6.2	1		09/20/12 19:55	75-27-4	
Bromodichloromethane	ND ug/kg		6.2	1		09/20/12 19:55	75-25-2	
Bromomethane	ND ug/kg		12.4	1		09/20/12 19:55	74-83-9	
2-Butanone (MEK)	ND ug/kg		124	1		09/20/12 19:55	78-93-3	
n-Butylbenzene	ND ug/kg		6.2	1		09/20/12 19:55	104-51-8	
sec-Butylbenzene	ND ug/kg		6.2	1		09/20/12 19:55	135-98-8	
tert-Butylbenzene	ND ug/kg		6.2	1		09/20/12 19:55	98-06-6	
Carbon tetrachloride	ND ug/kg		6.2	1		09/20/12 19:55	56-23-5	
Chlorobenzene	ND ug/kg		6.2	1		09/20/12 19:55	108-90-7	
Chloroethane	ND ug/kg		12.4	1		09/20/12 19:55	75-00-3	
Chloroform	ND ug/kg		6.2	1		09/20/12 19:55	67-66-3	
Chloromethane	ND ug/kg		12.4	1		09/20/12 19:55	74-87-3	
2-Chlorotoluene	ND ug/kg		6.2	1		09/20/12 19:55	95-49-8	
4-Chlorotoluene	ND ug/kg		6.2	1		09/20/12 19:55	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/kg		6.2	1		09/20/12 19:55	96-12-8	
Dibromochloromethane	ND ug/kg		6.2	1		09/20/12 19:55	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/kg		6.2	1		09/20/12 19:55	106-93-4	
Dibromomethane	ND ug/kg		6.2	1		09/20/12 19:55	74-95-3	
1,2-Dichlorobenzene	ND ug/kg		6.2	1		09/20/12 19:55	95-50-1	

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ANALYTICAL RESULTS

Project: DOT-MECKLENBURG WBS#50000.1
Pace Project No.: 92131883

Sample: 5H-10(2-4) Lab ID: 92131883020 Collected: 09/18/12 11:35 Received: 09/18/12 16:52 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
1,3-Dichlorobenzene	ND ug/kg		6.2	1		09/20/12 19:55	541-73-1	
1,4-Dichlorobenzene	ND ug/kg		6.2	1		09/20/12 19:55	106-46-7	
Dichlorodifluoromethane	ND ug/kg		12.4	1		09/20/12 19:55	75-71-8	
1,1-Dichloroethane	ND ug/kg		6.2	1		09/20/12 19:55	75-34-3	
1,2-Dichloroethane	ND ug/kg		6.2	1		09/20/12 19:55	107-06-2	
1,1-Dichloroethene	ND ug/kg		6.2	1		09/20/12 19:55	75-35-4	
cis-1,2-Dichloroethene	ND ug/kg		6.2	1		09/20/12 19:55	156-59-2	
trans-1,2-Dichloroethene	ND ug/kg		6.2	1		09/20/12 19:55	156-60-5	
1,2-Dichloropropane	ND ug/kg		6.2	1		09/20/12 19:55	78-87-5	
1,3-Dichloropropane	ND ug/kg		6.2	1		09/20/12 19:55	142-28-9	
2,2-Dichloropropane	ND ug/kg		6.2	1		09/20/12 19:55	594-20-7	
1,1-Dichloropropene	ND ug/kg		6.2	1		09/20/12 19:55	563-58-6	
cis-1,3-Dichloropropene	ND ug/kg		6.2	1		09/20/12 19:55	10061-01-5	
trans-1,3-Dichloropropene	ND ug/kg		6.2	1		09/20/12 19:55	10061-02-6	
Diisopropyl ether	ND ug/kg		6.2	1		09/20/12 19:55	108-20-3	
Ethylbenzene	ND ug/kg		6.2	1		09/20/12 19:55	100-41-4	
Hexachloro-1,3-butadiene	ND ug/kg		6.2	1		09/20/12 19:55	87-68-3	
2-Hexanone	ND ug/kg		62.2	1		09/20/12 19:55	591-78-6	
Isopropylbenzene (Cumene)	ND ug/kg		6.2	1		09/20/12 19:55	98-82-8	
p-Isopropyltoluene	ND ug/kg		6.2	1		09/20/12 19:55	99-87-6	
Methylene Chloride	ND ug/kg		24.9	1		09/20/12 19:55	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/kg		62.2	1		09/20/12 19:55	108-10-1	
Methyl-tert-butyl ether	ND ug/kg		6.2	1		09/20/12 19:55	1634-04-4	
Naphthalene	ND ug/kg		6.2	1		09/20/12 19:55	91-20-3	
n-Propylbenzene	ND ug/kg		6.2	1		09/20/12 19:55	103-65-1	
Styrene	ND ug/kg		6.2	1		09/20/12 19:55	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/kg		6.2	1		09/20/12 19:55	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/kg		6.2	1		09/20/12 19:55	79-34-5	
Tetrachloroethene	ND ug/kg		6.2	1		09/20/12 19:55	127-18-4	
Toluene	ND ug/kg		6.2	1		09/20/12 19:55	108-88-3	
1,2,3-Trichlorobenzene	ND ug/kg		6.2	1		09/20/12 19:55	87-61-6	
1,2,4-Trichlorobenzene	ND ug/kg		6.2	1		09/20/12 19:55	120-82-1	
1,1,1-Trichloroethane	ND ug/kg		6.2	1		09/20/12 19:55	71-55-6	
1,1,2-Trichloroethane	ND ug/kg		6.2	1		09/20/12 19:55	79-00-5	
Trichloroethene	ND ug/kg		6.2	1		09/20/12 19:55	79-01-6	
Trichlorofluoromethane	ND ug/kg		6.2	1		09/20/12 19:55	75-69-4	
1,2,3-Trichloropropane	ND ug/kg		6.2	1		09/20/12 19:55	96-18-4	
1,2,4-Trimethylbenzene	ND ug/kg		6.2	1		09/20/12 19:55	95-63-6	
1,3,5-Trimethylbenzene	ND ug/kg		6.2	1		09/20/12 19:55	108-67-8	
Vinyl acetate	ND ug/kg		62.2	1		09/20/12 19:55	108-05-4	
Vinyl chloride	ND ug/kg		12.4	1		09/20/12 19:55	75-01-4	
Xylene (Total)	ND ug/kg		12.4	1		09/20/12 19:55	1330-20-7	
m&p-Xylene	ND ug/kg		12.4	1		09/20/12 19:55	179601-23-1	
o-Xylene	ND ug/kg		6.2	1		09/20/12 19:55	95-47-6	
Surrogates								
Dibromofluoromethane (S)	97 %		70-130	1		09/20/12 19:55	1868-53-7	

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ANALYTICAL RESULTS

Project: DOT-MECKLENBURG WBS#50000.1

Pace Project No.: 92131883

Sample: 5H-10(2-4) **Lab ID: 92131883020** Collected: 09/18/12 11:35 Received: 09/18/12 16:52 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
Surrogates								
Toluene-d8 (S)	99 %		70-130	1		09/20/12 19:55	2037-26-5	
4-Bromofluorobenzene (S)	97 %		70-130	1		09/20/12 19:55	460-00-4	
1,2-Dichloroethane-d4 (S)	94 %		70-132	1		09/20/12 19:55	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	26.9 %		0.10	1		09/19/12 13:39		

ANALYTICAL RESULTS

Project: DOT-MECKLENBURG WBS#50000.1
Pace Project No.: 92131883

Sample: 5H-11(2-4) Lab ID: 92131883021 Collected: 09/18/12 11:45 Received: 09/18/12 16:52 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel			Analytical Method: EPA 8015 Modified Preparation Method: EPA 3546					
Diesel Components	21.4 mg/kg		6.1	1	09/19/12 08:45	09/20/12 22:06	68334-30-5	
Surrogates								
n-Pentacosane (S)	76 %		41-119	1	09/19/12 08:45	09/20/12 22:06	629-99-2	
Gasoline Range Organics			Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B					
Gasoline Range Organics	ND mg/kg		7.5	1	09/19/12 14:00	09/19/12 22:45	8006-61-9	
Surrogates								
4-Bromofluorobenzene (S)	88 %		70-167	1	09/19/12 14:00	09/19/12 22:45	460-00-4	
6010 MET ICP			Analytical Method: EPA 6010 Preparation Method: EPA 3050					
Arsenic	0.97 mg/kg		0.60	1	09/19/12 03:50	09/19/12 21:14	7440-38-2	
Barium	14.9 mg/kg		0.60	1	09/19/12 03:50	09/19/12 21:14	7440-39-3	
Cadmium	0.91 mg/kg		0.12	1	09/19/12 03:50	09/19/12 21:14	7440-43-9	
Chromium	12.5 mg/kg		0.60	1	09/19/12 03:50	09/19/12 21:14	7440-47-3	
Lead	4.5 mg/kg		0.60	1	09/19/12 03:50	09/19/12 21:14	7439-92-1	
Selenium	3.9 mg/kg		1.2	1	09/19/12 03:50	09/19/12 21:14	7782-49-2	
Silver	ND mg/kg		0.60	1	09/19/12 03:50	09/19/12 21:14	7440-22-4	
7471 Mercury			Analytical Method: EPA 7471 Preparation Method: EPA 7471					
Mercury	0.24 mg/kg		0.023	5	09/25/12 11:25	09/25/12 15:51	7439-97-6	
8260/5035A Volatile Organics			Analytical Method: EPA 8260					
Acetone	ND ug/kg		133	1		09/20/12 20:14	67-64-1	
Benzene	ND ug/kg		6.6	1		09/20/12 20:14	71-43-2	
Bromobenzene	ND ug/kg		6.6	1		09/20/12 20:14	108-86-1	
Bromoform	ND ug/kg		6.6	1		09/20/12 20:14	74-97-5	
Bromochloromethane	ND ug/kg		6.6	1		09/20/12 20:14	75-27-4	
Bromodichloromethane	ND ug/kg		6.6	1		09/20/12 20:14	75-25-2	
Bromoform	ND ug/kg		13.3	1		09/20/12 20:14	74-83-9	
Bromomethane	ND ug/kg		133	1		09/20/12 20:14	78-93-3	
2-Butanone (MEK)	ND ug/kg		6.6	1		09/20/12 20:14	104-51-8	
n-Butylbenzene	ND ug/kg		6.6	1		09/20/12 20:14	135-98-8	
sec-Butylbenzene	ND ug/kg		6.6	1		09/20/12 20:14	98-06-6	
tert-Butylbenzene	ND ug/kg		6.6	1		09/20/12 20:14	56-23-5	
Carbon tetrachloride	ND ug/kg		13.3	1		09/20/12 20:14	108-90-7	
Chlorobenzene	ND ug/kg		13.3	1		09/20/12 20:14	75-00-3	
Chloroethane	ND ug/kg		6.6	1		09/20/12 20:14	67-66-3	
Chloroform	ND ug/kg		6.6	1		09/20/12 20:14	74-87-3	
Chloromethane	ND ug/kg		6.6	1		09/20/12 20:14	95-49-8	
2-Chlorotoluene	ND ug/kg		6.6	1		09/20/12 20:14	106-43-4	
4-Chlorotoluene	ND ug/kg		6.6	1		09/20/12 20:14	96-12-8	
1,2-Dibromo-3-chloropropane	ND ug/kg		6.6	1		09/20/12 20:14	124-48-1	
Dibromochloromethane	ND ug/kg		6.6	1		09/20/12 20:14	106-93-4	
1,2-Dibromoethane (EDB)	ND ug/kg		6.6	1		09/20/12 20:14	74-95-3	
Dibromomethane	ND ug/kg		6.6	1		09/20/12 20:14	95-50-1	
1,2-Dichlorobenzene	ND ug/kg		6.6	1		09/20/12 20:14		

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ANALYTICAL RESULTS

Project: DOT-MECKLENBURG WBS#50000.1
Pace Project No.: 92131883

Sample: 5H-11(2-4) Lab ID: 92131883021 Collected: 09/18/12 11:45 Received: 09/18/12 16:52 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
1,3-Dichlorobenzene	ND ug/kg		6.6	1		09/20/12 20:14	541-73-1	
1,4-Dichlorobenzene	ND ug/kg		6.6	1		09/20/12 20:14	106-46-7	
Dichlorodifluoromethane	ND ug/kg		13.3	1		09/20/12 20:14	75-71-8	
1,1-Dichloroethane	ND ug/kg		6.6	1		09/20/12 20:14	75-34-3	
1,2-Dichloroethane	ND ug/kg		6.6	1		09/20/12 20:14	107-06-2	
1,1-Dichloroethene	ND ug/kg		6.6	1		09/20/12 20:14	75-35-4	
cis-1,2-Dichloroethene	ND ug/kg		6.6	1		09/20/12 20:14	156-59-2	
trans-1,2-Dichloroethene	ND ug/kg		6.6	1		09/20/12 20:14	156-60-5	
1,2-Dichloropropane	ND ug/kg		6.6	1		09/20/12 20:14	78-87-5	
1,3-Dichloropropane	ND ug/kg		6.6	1		09/20/12 20:14	142-28-9	
2,2-Dichloropropane	ND ug/kg		6.6	1		09/20/12 20:14	594-20-7	
1,1-Dichloropropene	ND ug/kg		6.6	1		09/20/12 20:14	563-58-6	
cis-1,3-Dichloropropene	ND ug/kg		6.6	1		09/20/12 20:14	10061-01-5	
trans-1,3-Dichloropropene	ND ug/kg		6.6	1		09/20/12 20:14	10061-02-6	
Diisopropyl ether	ND ug/kg		6.6	1		09/20/12 20:14	108-20-3	
Ethylbenzene	ND ug/kg		6.6	1		09/20/12 20:14	100-41-4	
Hexachloro-1,3-butadiene	ND ug/kg		6.6	1		09/20/12 20:14	87-68-3	
2-Hexanone	ND ug/kg		66.4	1		09/20/12 20:14	591-78-6	
Isopropylbenzene (Cumene)	ND ug/kg		6.6	1		09/20/12 20:14	98-82-8	
p-Isopropyltoluene	ND ug/kg		6.6	1		09/20/12 20:14	99-87-6	
Methylene Chloride	ND ug/kg		26.6	1		09/20/12 20:14	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/kg		66.4	1		09/20/12 20:14	108-10-1	
Methyl-tert-butyl ether	ND ug/kg		6.6	1		09/20/12 20:14	1634-04-4	
Naphthalene	ND ug/kg		6.6	1		09/20/12 20:14	91-20-3	
n-Propylbenzene	ND ug/kg		6.6	1		09/20/12 20:14	103-65-1	
Styrene	ND ug/kg		6.6	1		09/20/12 20:14	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/kg		6.6	1		09/20/12 20:14	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/kg		6.6	1		09/20/12 20:14	79-34-5	
Tetrachloroethene	ND ug/kg		6.6	1		09/20/12 20:14	127-18-4	
Toluene	ND ug/kg		6.6	1		09/20/12 20:14	108-88-3	
1,2,3-Trichlorobenzene	ND ug/kg		6.6	1		09/20/12 20:14	87-61-6	
1,2,4-Trichlorobenzene	ND ug/kg		6.6	1		09/20/12 20:14	120-82-1	
1,1,1-Trichloroethane	ND ug/kg		6.6	1		09/20/12 20:14	71-55-6	
1,1,2-Trichloroethane	ND ug/kg		6.6	1		09/20/12 20:14	79-00-5	
Trichloroethene	ND ug/kg		6.6	1		09/20/12 20:14	79-01-6	
Trichlorofluoromethane	ND ug/kg		6.6	1		09/20/12 20:14	75-69-4	
1,2,3-Trichloropropane	ND ug/kg		6.6	1		09/20/12 20:14	96-18-4	
1,2,4-Trimethylbenzene	ND ug/kg		6.6	1		09/20/12 20:14	95-63-6	
1,3,5-Trimethylbenzene	ND ug/kg		6.6	1		09/20/12 20:14	108-67-8	
Vinyl acetate	ND ug/kg		66.4	1		09/20/12 20:14	108-05-4	
Vinyl chloride	ND ug/kg		13.3	1		09/20/12 20:14	75-01-4	
Xylene (Total)	ND ug/kg		13.3	1		09/20/12 20:14	1330-20-7	
m&p-Xylene	ND ug/kg		13.3	1		09/20/12 20:14	179601-23-1	
o-Xylene	ND ug/kg		6.6	1		09/20/12 20:14	95-47-6	
Surrogates								
Dibromofluoromethane (S)	150 %		70-130	1		09/20/12 20:14	1868-53-7	S3

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ANALYTICAL RESULTS

Project: DOT-MECKLENBURG WBS#50000.1

Pace Project No.: 92131883

Sample: 5H-11(2-4) Lab ID: 92131883021 Collected: 09/18/12 11:45 Received: 09/18/12 16:52 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/5035A Volatile Organics		Analytical Method: EPA 8260						
Surrogates								
Toluene-d8 (S)	100 %		70-130	1		09/20/12 20:14	2037-26-5	
4-Bromofluorobenzene (S)	94 %		70-130	1		09/20/12 20:14	460-00-4	
1,2-Dichloroethane-d4 (S)	136 %		70-132	1		09/20/12 20:14	17060-07-0	S3
Percent Moisture		Analytical Method: ASTM D2974-87						
Percent Moisture	18.7 %		0.10	1		09/19/12 13:39		

ANALYTICAL RESULTS

Project: DOT-MECKLENBURG WBS#50000.1
Pace Project No.: 92131883

Sample: 5H-12(2-4) Lab ID: **92131883022** Collected: 09/18/12 13:40 Received: 09/18/12 16:52 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel			Analytical Method: EPA 8015 Modified Preparation Method: EPA 3546					
Diesel Components	604 mg/kg		11.8	2	09/19/12 08:45	09/21/12 11:39	68334-30-5	
Surrogates								
n-Pentacosane (S)	71 %		41-119	2	09/19/12 08:45	09/21/12 11:39	629-99-2	
Gasoline Range Organics			Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B					
Gasoline Range Organics	45.5 mg/kg		5.1	1	09/19/12 14:00	09/19/12 23:08	8006-61-9	
Surrogates								
4-Bromofluorobenzene (S)	159 %		70-167	1	09/19/12 14:00	09/19/12 23:08	460-00-4	
6010 MET ICP			Analytical Method: EPA 6010 Preparation Method: EPA 3050					
Arsenic	1.1 mg/kg		0.52	1	09/19/12 03:50	09/19/12 21:17	7440-38-2	
Barium	20.0 mg/kg		0.52	1	09/19/12 03:50	09/19/12 21:17	7440-39-3	
Cadmium	0.35 mg/kg		0.10	1	09/19/12 03:50	09/19/12 21:17	7440-43-9	
Chromium	12.7 mg/kg		0.52	1	09/19/12 03:50	09/19/12 21:17	7440-47-3	
Lead	4.6 mg/kg		0.52	1	09/19/12 03:50	09/19/12 21:17	7439-92-1	
Selenium	2.5 mg/kg		1.0	1	09/19/12 03:50	09/19/12 21:17	7782-49-2	
Silver	ND mg/kg		0.52	1	09/19/12 03:50	09/19/12 21:17	7440-22-4	
7471 Mercury			Analytical Method: EPA 7471 Preparation Method: EPA 7471					
Mercury	0.027 mg/kg		0.0042	1	09/25/12 11:25	09/25/12 15:46	7439-97-6	
8260/5035A Volatile Organics			Analytical Method: EPA 8260					
Acetone	ND ug/kg		8960	100		09/21/12 13:28	67-64-1	
Benzene	ND ug/kg		448	100		09/21/12 13:28	71-43-2	
Bromobenzene	ND ug/kg		448	100		09/21/12 13:28	108-86-1	
Bromoform	ND ug/kg		448	100		09/21/12 13:28	74-97-5	
Bromochloromethane	ND ug/kg		448	100		09/21/12 13:28	75-27-4	
Bromodichloromethane	ND ug/kg		448	100		09/21/12 13:28	75-25-2	
Carbon tetrachloride	ND ug/kg		448	100		09/21/12 13:28	74-83-9	
Chlorobenzene	ND ug/kg		448	100		09/21/12 13:28	78-93-3	
Chloroethane	ND ug/kg		896	100		09/21/12 13:28	104-51-8	
Chloroform	ND ug/kg		8960	100		09/21/12 13:28	135-98-8	
Chloromethane	ND ug/kg		448	100		09/21/12 13:28	98-06-6	
2-Chlorotoluene	ND ug/kg		448	100		09/21/12 13:28	56-23-5	
4-Chlorotoluene	ND ug/kg		448	100		09/21/12 13:28	108-90-7	
1,2-Dibromo-3-chloropropane	ND ug/kg		448	100		09/21/12 13:28	75-00-3	
Dibromochloromethane	ND ug/kg		448	100		09/21/12 13:28	67-66-3	
1,2-Dibromoethane (EDB)	ND ug/kg		448	100		09/21/12 13:28	74-87-3	
Dibromomethane	ND ug/kg		448	100		09/21/12 13:28	95-49-8	
1,2-Dichlorobenzene	ND ug/kg		448	100		09/21/12 13:28	106-43-4	
1,2-Dichloropropane	ND ug/kg		448	100		09/21/12 13:28	96-12-8	
1,2-Dibromoethane (EDB)	ND ug/kg		448	100		09/21/12 13:28	124-48-1	
Dibromomethane	ND ug/kg		448	100		09/21/12 13:28	106-93-4	
1,2-Dichlorobenzene	ND ug/kg		448	100		09/21/12 13:28	74-95-3	
1,2-Dichloropropane	ND ug/kg		448	100		09/21/12 13:28	95-50-1	

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ANALYTICAL RESULTS

Project: DOT-MECKLENBURG WBS#50000.1
Pace Project No.: 92131883

Sample: 5H-12(2-4) Lab ID: 92131883022 Collected: 09/18/12 13:40 Received: 09/18/12 16:52 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
1,3-Dichlorobenzene	ND ug/kg		448	100		09/21/12 13:28	541-73-1	
1,4-Dichlorobenzene	ND ug/kg		448	100		09/21/12 13:28	106-46-7	
Dichlorodifluoromethane	ND ug/kg		896	100		09/21/12 13:28	75-71-8	D3
1,1-Dichloroethane	ND ug/kg		448	100		09/21/12 13:28	75-34-3	
1,2-Dichloroethane	ND ug/kg		448	100		09/21/12 13:28	107-06-2	
1,1-Dichloroethene	ND ug/kg		448	100		09/21/12 13:28	75-35-4	
cis-1,2-Dichloroethene	ND ug/kg		448	100		09/21/12 13:28	156-59-2	
trans-1,2-Dichloroethene	ND ug/kg		448	100		09/21/12 13:28	156-60-5	
1,2-Dichloropropane	ND ug/kg		448	100		09/21/12 13:28	78-87-5	
1,3-Dichloropropane	ND ug/kg		448	100		09/21/12 13:28	142-28-9	
2,2-Dichloropropane	ND ug/kg		448	100		09/21/12 13:28	594-20-7	
1,1-Dichloropropene	ND ug/kg		448	100		09/21/12 13:28	563-58-6	
cis-1,3-Dichloropropene	ND ug/kg		448	100		09/21/12 13:28	10061-01-5	
trans-1,3-Dichloropropene	ND ug/kg		448	100		09/21/12 13:28	10061-02-6	
Diisopropyl ether	ND ug/kg		448	100		09/21/12 13:28	108-20-3	
Ethylbenzene	474 ug/kg		448	100		09/21/12 13:28	100-41-4	
Hexachloro-1,3-butadiene	ND ug/kg		448	100		09/21/12 13:28	87-68-3	
2-Hexanone	ND ug/kg		4480	100		09/21/12 13:28	591-78-6	
Isopropylbenzene (Cumene)	ND ug/kg		448	100		09/21/12 13:28	98-82-8	
p-Isopropyltoluene	ND ug/kg		448	100		09/21/12 13:28	99-87-6	
Methylene Chloride	ND ug/kg		1790	100		09/21/12 13:28	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/kg		4480	100		09/21/12 13:28	108-10-1	
Methyl-tert-butyl ether	ND ug/kg		448	100		09/21/12 13:28	1634-04-4	
Naphthalene	1460 ug/kg		448	100		09/21/12 13:28	91-20-3	
n-Propylbenzene	ND ug/kg		448	100		09/21/12 13:28	103-65-1	
Styrene	ND ug/kg		448	100		09/21/12 13:28	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/kg		448	100		09/21/12 13:28	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/kg		448	100		09/21/12 13:28	79-34-5	
Tetrachloroethene	ND ug/kg		448	100		09/21/12 13:28	127-18-4	
Toluene	ND ug/kg		448	100		09/21/12 13:28	108-88-3	
1,2,3-Trichlorobenzene	ND ug/kg		448	100		09/21/12 13:28	87-61-6	
1,2,4-Trichlorobenzene	ND ug/kg		448	100		09/21/12 13:28	120-82-1	
1,1,1-Trichloroethane	ND ug/kg		448	100		09/21/12 13:28	71-55-6	
1,1,2-Trichloroethane	ND ug/kg		448	100		09/21/12 13:28	79-00-5	
Trichloroethene	ND ug/kg		448	100		09/21/12 13:28	79-01-6	
Trichlorofluoromethane	ND ug/kg		448	100		09/21/12 13:28	75-69-4	
1,2,3-Trichloropropane	ND ug/kg		448	100		09/21/12 13:28	96-18-4	
1,2,4-Trimethylbenzene	ND ug/kg		448	100		09/21/12 13:28	95-63-6	
1,3,5-Trimethylbenzene	ND ug/kg		448	100		09/21/12 13:28	108-67-8	
Vinyl acetate	ND ug/kg		4480	100		09/21/12 13:28	108-05-4	
Vinyl chloride	ND ug/kg		896	100		09/21/12 13:28	75-01-4	
Xylene (Total)	ND ug/kg		896	100		09/21/12 13:28	1330-20-7	
m&p-Xylene	ND ug/kg		896	100		09/21/12 13:28	179601-23-1	
o-Xylene	ND ug/kg		448	100		09/21/12 13:28	95-47-6	
Surrogates								
Dibromofluoromethane (S)	101 %		70-130	100		09/21/12 13:28	1868-53-7	

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ANALYTICAL RESULTS

Project: DOT-MECKLENBURG WBS#50000.1

Pace Project No.: 92131883

Sample: 5H-12(2-4) **Lab ID: 92131883022** Collected: 09/18/12 13:40 Received: 09/18/12 16:52 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
Surrogates								
Toluene-d8 (S)	102 %		70-130	100		09/21/12 13:28	2037-26-5	
4-Bromofluorobenzene (S)	98 %		70-130	100		09/21/12 13:28	460-00-4	
1,2-Dichloroethane-d4 (S)	97 %		70-132	100		09/21/12 13:28	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	15.6 %		0.10	1		09/21/12 13:22		

ANALYTICAL RESULTS

Project: DOT-MECKLENBURG WBS#50000.1
Pace Project No.: 92131883

Sample: 5H-13(2-4) Lab ID: 92131883023 Collected: 09/18/12 14:10 Received: 09/18/12 16:52 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel			Analytical Method: EPA 8015 Modified Preparation Method: EPA 3546					
Diesel Components	ND mg/kg		6.0	1	09/19/12 08:45	09/20/12 22:36	68334-30-5	
Surrogates								
n-Pentacosane (S)	78 %		41-119	1	09/19/12 08:45	09/20/12 22:36	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	09/19/12 14:00	09/19/12 23:31	8006-61-9	
Surrogates								
4-Bromofluorobenzene (S)	90 %		70-167	1	09/19/12 14:00	09/19/12 23:31	460-00-4	
6010 MET ICP			Analytical Method: EPA 6010 Preparation Method: EPA 3050					
Arsenic	0.74 mg/kg		0.51	1	09/19/12 03:50	09/19/12 21:20	7440-38-2	
Barium	48.4 mg/kg		0.51	1	09/19/12 03:50	09/19/12 21:20	7440-39-3	
Cadmium	0.11 mg/kg		0.10	1	09/19/12 03:50	09/19/12 21:20	7440-43-9	
Chromium	3.2 mg/kg		0.51	1	09/19/12 03:50	09/19/12 21:20	7440-47-3	
Lead	4.6 mg/kg		0.51	1	09/19/12 03:50	09/19/12 21:20	7439-92-1	
Selenium	1.3 mg/kg		1.0	1	09/19/12 03:50	09/19/12 21:20	7782-49-2	
Silver	ND mg/kg		0.51	1	09/19/12 03:50	09/19/12 21:20	7440-22-4	
7471 Mercury			Analytical Method: EPA 7471 Preparation Method: EPA 7471					
Mercury	0.0062 mg/kg		0.0042	1	09/25/12 10:25	09/25/12 15:59	7439-97-6	M1
8260/5035A Volatile Organics			Analytical Method: EPA 8260					
Acetone	ND ug/kg		103	1			09/21/12 13:47	67-64-1
Benzene	ND ug/kg		5.2	1			09/21/12 13:47	71-43-2
Bromobenzene	ND ug/kg		5.2	1			09/21/12 13:47	108-86-1
Bromochloromethane	ND ug/kg		5.2	1			09/21/12 13:47	74-97-5
Bromodichloromethane	ND ug/kg		5.2	1			09/21/12 13:47	75-27-4
Bromoform	ND ug/kg		5.2	1			09/21/12 13:47	75-25-2
Bromomethane	ND ug/kg		10.3	1			09/21/12 13:47	74-83-9
2-Butanone (MEK)	ND ug/kg		103	1			09/21/12 13:47	78-93-3
n-Butylbenzene	ND ug/kg		5.2	1			09/21/12 13:47	104-51-8
sec-Butylbenzene	ND ug/kg		5.2	1			09/21/12 13:47	135-98-8
tert-Butylbenzene	ND ug/kg		5.2	1			09/21/12 13:47	98-06-6
Carbon tetrachloride	ND ug/kg		5.2	1			09/21/12 13:47	56-23-5
Chlorobenzene	ND ug/kg		5.2	1			09/21/12 13:47	108-90-7
Chloroethane	ND ug/kg		10.3	1			09/21/12 13:47	75-00-3
Chloroform	ND ug/kg		5.2	1			09/21/12 13:47	67-66-3
Chloromethane	ND ug/kg		10.3	1			09/21/12 13:47	74-87-3
2-Chlorotoluene	ND ug/kg		5.2	1			09/21/12 13:47	95-49-8
4-Chlorotoluene	ND ug/kg		5.2	1			09/21/12 13:47	106-43-4
1,2-Dibromo-3-chloropropane	ND ug/kg		5.2	1			09/21/12 13:47	96-12-8
Dibromochloromethane	ND ug/kg		5.2	1			09/21/12 13:47	124-48-1
1,2-Dibromoethane (EDB)	ND ug/kg		5.2	1			09/21/12 13:47	106-93-4
Dibromomethane	ND ug/kg		5.2	1			09/21/12 13:47	74-95-3
1,2-Dichlorobenzene	ND ug/kg		5.2	1			09/21/12 13:47	95-50-1

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ANALYTICAL RESULTS

Project: DOT-MECKLENBURG WBS#50000.1
Pace Project No.: 92131883

Sample: 5H-13(2-4) Lab ID: 92131883023 Collected: 09/18/12 14:10 Received: 09/18/12 16:52 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
1,3-Dichlorobenzene	ND ug/kg		5.2	1		09/21/12 13:47	541-73-1	
1,4-Dichlorobenzene	ND ug/kg		5.2	1		09/21/12 13:47	106-46-7	
Dichlorodifluoromethane	ND ug/kg		10.3	1		09/21/12 13:47	75-71-8	
1,1-Dichloroethane	ND ug/kg		5.2	1		09/21/12 13:47	75-34-3	
1,2-Dichloroethane	ND ug/kg		5.2	1		09/21/12 13:47	107-06-2	
1,1-Dichloroethene	ND ug/kg		5.2	1		09/21/12 13:47	75-35-4	
cis-1,2-Dichloroethene	ND ug/kg		5.2	1		09/21/12 13:47	156-59-2	
trans-1,2-Dichloroethene	ND ug/kg		5.2	1		09/21/12 13:47	156-60-5	
1,2-Dichloropropane	ND ug/kg		5.2	1		09/21/12 13:47	78-87-5	
1,3-Dichloropropane	ND ug/kg		5.2	1		09/21/12 13:47	142-28-9	
2,2-Dichloropropane	ND ug/kg		5.2	1		09/21/12 13:47	594-20-7	
1,1-Dichloropropene	ND ug/kg		5.2	1		09/21/12 13:47	563-58-6	
cis-1,3-Dichloropropene	ND ug/kg		5.2	1		09/21/12 13:47	10061-01-5	
trans-1,3-Dichloropropene	ND ug/kg		5.2	1		09/21/12 13:47	10061-02-6	
Diisopropyl ether	ND ug/kg		5.2	1		09/21/12 13:47	108-20-3	
Ethylbenzene	ND ug/kg		5.2	1		09/21/12 13:47	100-41-4	
Hexachloro-1,3-butadiene	ND ug/kg		5.2	1		09/21/12 13:47	87-68-3	
2-Hexanone	ND ug/kg		51.7	1		09/21/12 13:47	591-78-6	
Isopropylbenzene (Cumene)	ND ug/kg		5.2	1		09/21/12 13:47	98-82-8	
p-Isopropyltoluene	ND ug/kg		5.2	1		09/21/12 13:47	99-87-6	
Methylene Chloride	ND ug/kg		20.7	1		09/21/12 13:47	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/kg		51.7	1		09/21/12 13:47	108-10-1	
Methyl-tert-butyl ether	ND ug/kg		5.2	1		09/21/12 13:47	1634-04-4	
Naphthalene	ND ug/kg		5.2	1		09/21/12 13:47	91-20-3	
n-Propylbenzene	ND ug/kg		5.2	1		09/21/12 13:47	103-65-1	
Styrene	ND ug/kg		5.2	1		09/21/12 13:47	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/kg		5.2	1		09/21/12 13:47	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/kg		5.2	1		09/21/12 13:47	79-34-5	
Tetrachloroethene	ND ug/kg		5.2	1		09/21/12 13:47	127-18-4	
Toluene	ND ug/kg		5.2	1		09/21/12 13:47	108-88-3	
1,2,3-Trichlorobenzene	ND ug/kg		5.2	1		09/21/12 13:47	87-61-6	
1,2,4-Trichlorobenzene	ND ug/kg		5.2	1		09/21/12 13:47	120-82-1	
1,1,1-Trichloroethane	ND ug/kg		5.2	1		09/21/12 13:47	71-55-6	
1,1,2-Trichloroethane	ND ug/kg		5.2	1		09/21/12 13:47	79-00-5	
Trichloroethene	ND ug/kg		5.2	1		09/21/12 13:47	79-01-6	
Trichlorofluoromethane	ND ug/kg		5.2	1		09/21/12 13:47	75-69-4	
1,2,3-Trichloropropane	ND ug/kg		5.2	1		09/21/12 13:47	96-18-4	
1,2,4-Trimethylbenzene	ND ug/kg		5.2	1		09/21/12 13:47	95-63-6	
1,3,5-Trimethylbenzene	ND ug/kg		5.2	1		09/21/12 13:47	108-67-8	
Vinyl acetate	ND ug/kg		51.7	1		09/21/12 13:47	108-05-4	
Vinyl chloride	ND ug/kg		10.3	1		09/21/12 13:47	75-01-4	
Xylene (Total)	ND ug/kg		10.3	1		09/21/12 13:47	1330-20-7	
m-&p-Xylene	ND ug/kg		10.3	1		09/21/12 13:47	179601-23-1	
o-Xylene	ND ug/kg		5.2	1		09/21/12 13:47	95-47-6	
Surrogates								
Dibromofluoromethane (S)	83 %		70-130	1		09/21/12 13:47	1868-53-7	

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ANALYTICAL RESULTS

Project: DOT-MECKLENBURG WBS#50000.1

Pace Project No.: 92131883

Sample: 5H-13(2-4) Lab ID: 92131883023 Collected: 09/18/12 14:10 Received: 09/18/12 16:52 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/5035A Volatile Organics		Analytical Method: EPA 8260						
Surrogates								
Toluene-d8 (S)	104 %		70-130	1		09/21/12 13:47	2037-26-5	
4-Bromofluorobenzene (S)	107 %		70-130	1		09/21/12 13:47	460-00-4	
1,2-Dichloroethane-d4 (S)	72 %		70-132	1		09/21/12 13:47	17060-07-0	
Percent Moisture		Analytical Method: ASTM D2974-87						
Percent Moisture	16.9 %		0.10	1		09/21/12 13:22		

QUALITY CONTROL DATA

Project: DOT-MECKLENBURG WBS#50000.1

Pace Project No.: 92131883

QC Batch: GCV/6273 Analysis Method: EPA 8015 Modified

QC Batch Method: EPA 5035A/5030B Analysis Description: Gasoline Range Organics

Associated Lab Samples: 92131883001, 92131883002, 92131883003, 92131883004, 92131883005, 92131883006, 92131883007,
92131883011, 92131883012, 92131883013, 92131883014, 92131883015, 92131883016, 92131883017,
92131883018

METHOD BLANK: 835900 Matrix: Solid

Associated Lab Samples: 92131883001, 92131883002, 92131883003, 92131883004, 92131883005, 92131883006, 92131883007,
92131883011, 92131883012, 92131883013, 92131883014, 92131883015, 92131883016, 92131883017,
92131883018

Parameter	Units	Blank	Reporting	Analyzed	Qualifiers
		Result	Limit		
Gasoline Range Organics	mg/kg	ND	5.6	09/19/12 10:11	
4-Bromofluorobenzene (S)	%	93	70-167	09/19/12 10:11	

LABORATORY CONTROL SAMPLE: 835901

Parameter	Units	Spike	LCS	LCS	% Rec	Qualifiers
		Conc.	Result	% Rec	Limits	
Gasoline Range Organics	mg/kg	23.4	24.6	105	70-165	
4-Bromofluorobenzene (S)	%			96	70-167	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 835902 835903

Parameter	Units	92131838001	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
		Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits		
Gasoline Range Organics	mg/kg	ND	22.3	22.3	25.1	25.5	109	111	47-187	2	
4-Bromofluorobenzene (S)	%						95	89	70-167		

QUALITY CONTROL DATA

Project: DOT-MECKLENBURG WBS#50000.1

Pace Project No.: 92131883

QC Batch: GCV/6275 Analysis Method: EPA 8015 Modified

QC Batch Method: EPA 5035A/5030B Analysis Description: Gasoline Range Organics

Associated Lab Samples: 92131883019, 92131883020, 92131883021, 92131883022, 92131883023

METHOD BLANK: 836408 Matrix: Solid

Associated Lab Samples: 92131883019, 92131883020, 92131883021, 92131883022, 92131883023

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Gasoline Range Organics	mg/kg	ND	5.9	09/19/12 20:51	
4-Bromofluorobenzene (S)	%	86	70-167	09/19/12 20:51	

LABORATORY CONTROL SAMPLE: 836409

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Gasoline Range Organics	mg/kg	24.7	24.6	100	70-165	
4-Bromofluorobenzene (S)	%			89	70-167	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 836410 836411

Parameter	Units	92131883019 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Gasoline Range Organics	mg/kg	ND	35.1	35.1	35.3	35.9	98	100	47-187	2	
4-Bromofluorobenzene (S)	%						87	90	70-167		

QUALITY CONTROL DATA

Project: DOT-MECKLENBURG WBS#50000.1

Pace Project No.: 92131883

QC Batch:	MERP/4524	Analysis Method:	EPA 7471
QC Batch Method:	EPA 7471	Analysis Description:	7471 Mercury
Associated Lab Samples:	92131883008, 92131883009, 92131883010, 92131883011, 92131883012, 92131883013, 92131883014, 92131883015, 92131883016, 92131883017, 92131883018, 92131883019, 92131883020, 92131883021, 92131883022		

METHOD BLANK: 837162 Matrix: Solid

Associated Lab Samples: 92131883008, 92131883009, 92131883010, 92131883011, 92131883012, 92131883013, 92131883014, 92131883015, 92131883016, 92131883017, 92131883018, 92131883019, 92131883020, 92131883021, 92131883022

Parameter	Units	Blank	Reporting	Analyzed	Qualifiers
		Result	Limit		
Mercury	mg/kg	ND	0.0050	09/25/12 14:17	

LABORATORY CONTROL SAMPLE: 837163

Parameter	Units	Spike	LCS	LCS	% Rec	Qualifiers
		Conc.	Result	% Rec	Limits	
Mercury	mg/kg	.067	0.056	84	80-120	

MATRIX SPIKE SAMPLE: 837164

Parameter	Units	92131565001	Spike	MS	MS	% Rec	Qualifiers
		Result	Conc.	Result	% Rec	Limits	
Mercury	mg/kg	0.12	.069	0.17	77	75-125	

SAMPLE DUPLICATE: 837165

Parameter	Units	92131565002	Dup	RPD	Qualifiers
		Result	Result		
Mercury	mg/kg	0.048	0.050	5	

QUALITY CONTROL DATA

Project: DOT-MECKLENBURG WBS#50000.1

Pace Project No.: 92131883

QC Batch:	MERP/4526	Analysis Method:	EPA 7471
QC Batch Method:	EPA 7471	Analysis Description:	7471 Mercury
Associated Lab Samples:	92131883023		

METHOD BLANK: 837184 Matrix: Solid

Associated Lab Samples: 92131883023

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/kg	ND	0.0050	09/25/12 15:54	

LABORATORY CONTROL SAMPLE: 837185

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	.067	0.066	98	80-120	

MATRIX SPIKE SAMPLE: 837186

Parameter	Units	92131883023 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	0.0062	.071	0.051	63	75-125	M1

SAMPLE DUPLICATE: 837187

Parameter	Units	92131970001 Result	Dup Result	RPD	Qualifiers
Mercury	mg/kg	ND	.0015J		

QUALITY CONTROL DATA

Project: DOT-MECKLENBURG WBS#50000.1

Pace Project No.: 92131883

QC Batch: MPRP/11526 Analysis Method: EPA 6010

QC Batch Method: EPA 3050 Analysis Description: 6010 MET

Associated Lab Samples: 92131883008, 92131883009, 92131883010, 92131883011, 92131883012, 92131883013, 92131883014

METHOD BLANK: 835859 Matrix: Solid

Associated Lab Samples: 92131883008, 92131883009, 92131883010, 92131883011, 92131883012, 92131883013, 92131883014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/kg	ND	0.50	09/19/12 16:10	
Barium	mg/kg	ND	0.50	09/19/12 16:10	
Cadmium	mg/kg	ND	0.10	09/19/12 16:10	
Chromium	mg/kg	ND	0.50	09/19/12 16:10	
Lead	mg/kg	ND	0.50	09/19/12 16:10	
Selenium	mg/kg	ND	1.0	09/19/12 16:10	
Silver	mg/kg	ND	0.50	09/19/12 16:10	

LABORATORY CONTROL SAMPLE: 835860

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/kg	50	48.5	97	80-120	
Barium	mg/kg	50	48.6	97	80-120	
Cadmium	mg/kg	50	49.9	100	80-120	
Chromium	mg/kg	50	53.1	106	80-120	
Lead	mg/kg	50	49.8	100	80-120	
Selenium	mg/kg	50	50.0	100	80-120	
Silver	mg/kg	25	25.4	102	80-120	

MATRIX SPIKE SAMPLE: 835861

Parameter	Units	92130767004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/kg	6.2	60.9	58.6	86	75-125	
Barium	mg/kg	25.1	60.9	83.7	96	75-125	
Cadmium	mg/kg	2.2	60.9	59.7	94	75-125	
Chromium	mg/kg	19.3	60.9	89.1	114	75-125	
Lead	mg/kg	21.7	60.9	74.6	87	75-125	
Selenium	mg/kg	5.1	60.9	51.2	76	75-125	
Silver	mg/kg	ND	30.5	31.1	102	75-125	

SAMPLE DUPLICATE: 835863

Parameter	Units	92130767005 Result	Dup Result	RPD	Qualifiers
Arsenic	mg/kg	4.2	5.3	23 D6	
Barium	mg/kg	30.2	32.4	7	
Cadmium	mg/kg	0.51	1.6	102 D6	
Chromium	mg/kg	12.5	23.0	59 D6	
Lead	mg/kg	16.9	22.0	26 D6	

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QUALITY CONTROL DATA

Project: DOT-MECKLENBURG WBS#50000.1

Pace Project No.: 92131883

SAMPLE DUPLICATE: 835863

Parameter	Units	92130767005	Dup Result	RPD	Qualifiers
Selenium	mg/kg	1.9	3.8	69	D6
Silver	mg/kg	ND	.077J		

QUALITY CONTROL DATA

Project: DOT-MECKLENBURG WBS#50000.1

Pace Project No.: 92131883

QC Batch:	MPRP/11527	Analysis Method:	EPA 6010
QC Batch Method:	EPA 3050	Analysis Description:	6010 MET
Associated Lab Samples:	92131883015, 92131883016, 92131883017, 92131883018, 92131883019, 92131883020, 92131883021, 92131883022, 92131883023		

METHOD BLANK:	835864	Matrix:	Solid
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Associated Lab Samples: 92131883015, 92131883016, 92131883017, 92131883018, 92131883019, 92131883020, 92131883021,
92131883022, 92131883023

Parameter	Units	Blank	Reporting		Qualifiers
		Result	Limit	Analyzed	
Arsenic	mg/kg	ND	0.50	09/19/12 20:33	
Barium	mg/kg	ND	0.50	09/19/12 20:33	
Cadmium	mg/kg	ND	0.10	09/19/12 20:33	
Chromium	mg/kg	ND	0.50	09/19/12 20:33	
Lead	mg/kg	ND	0.50	09/19/12 20:33	
Selenium	mg/kg	ND	1.0	09/19/12 20:33	
Silver	mg/kg	ND	0.50	09/19/12 20:33	

LABORATORY CONTROL SAMPLE:	835865	Spike Conc.		LCS Result	LCS % Rec	% Rec Limits
Parameter	Units					
Arsenic	mg/kg	50	47.7	95	80-120	
Barium	mg/kg	50	47.4	95	80-120	
Cadmium	mg/kg	50	48.2	96	80-120	
Chromium	mg/kg	50	51.7	103	80-120	
Lead	mg/kg	50	48.1	96	80-120	
Selenium	mg/kg	50	48.9	98	80-120	
Silver	mg/kg	25	24.6	98	80-120	

MATRIX SPIKE SAMPLE:	835866	92131883015 Result		Spike Conc.	MS Result	MS % Rec	% Rec Limits
Parameter	Units						
Arsenic	mg/kg	2.1	51.1	43.2	81	75-125	
Barium	mg/kg	26.8	51.1	77.5	99	75-125	
Cadmium	mg/kg	ND	51.1	45.6	89	75-125	
Chromium	mg/kg	6.5	51.1	58.0	101	75-125	
Lead	mg/kg	9.0	51.1	51.8	84	75-125	
Selenium	mg/kg	2.4	51.1	43.2	80	75-125	
Silver	mg/kg	ND	25.6	24.1	94	75-125	

SAMPLE DUPLICATE:	835868	92131883016 Result		Dup Result	RPD
Parameter	Units				
Arsenic	mg/kg	1.9	1.2	51	D6
Barium	mg/kg	10.9	10.1	7	
Cadmium	mg/kg	ND	ND		
Chromium	mg/kg	7.7	6.7	14	

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QUALITY CONTROL DATA

Project: DOT-MECKLENBURG WBS#50000.1

Pace Project No.: 92131883

SAMPLE DUPLICATE: 835868

Parameter	Units	92131883016	Dup Result	RPD	Qualifiers
Lead	mg/kg	4.7	4.2	12	
Selenium	mg/kg	2.1	2.0	4	
Silver	mg/kg	ND	ND		

QUALITY CONTROL DATA

Project: DOT-MECKLENBURG WBS#50000.1

Pace Project No.: 92131883

QC Batch: MSV/20444

Analysis Method: EPA 8260

QC Batch Method: EPA 8260

Analysis Description: 8260 MSV 5035A Volatile Organics

Associated Lab Samples: 92131883011, 92131883012, 92131883013, 92131883014, 92131883015, 92131883016, 92131883017,
92131883019, 92131883020, 92131883021

METHOD BLANK: 837065

Matrix: Solid

Associated Lab Samples: 92131883011, 92131883012, 92131883013, 92131883014, 92131883015, 92131883016, 92131883017,
92131883019, 92131883020, 92131883021

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	5.4	09/20/12 12:52	
1,1,1-Trichloroethane	ug/kg	ND	5.4	09/20/12 12:52	
1,1,2,2-Tetrachloroethane	ug/kg	ND	5.4	09/20/12 12:52	
1,1,2-Trichloroethane	ug/kg	ND	5.4	09/20/12 12:52	
1,1-Dichloroethane	ug/kg	ND	5.4	09/20/12 12:52	
1,1-Dichloroethene	ug/kg	ND	5.4	09/20/12 12:52	
1,1-Dichloropropene	ug/kg	ND	5.4	09/20/12 12:52	
1,2,3-Trichlorobenzene	ug/kg	ND	5.4	09/20/12 12:52	
1,2,3-Trichloropropane	ug/kg	ND	5.4	09/20/12 12:52	
1,2,4-Trichlorobenzene	ug/kg	ND	5.4	09/20/12 12:52	
1,2,4-Trimethylbenzene	ug/kg	ND	5.4	09/20/12 12:52	
1,2-Dibromo-3-chloropropane	ug/kg	ND	5.4	09/20/12 12:52	
1,2-Dibromoethane (EDB)	ug/kg	ND	5.4	09/20/12 12:52	
1,2-Dichlorobenzene	ug/kg	ND	5.4	09/20/12 12:52	
1,2-Dichloroethane	ug/kg	ND	5.4	09/20/12 12:52	
1,2-Dichloropropane	ug/kg	ND	5.4	09/20/12 12:52	
1,3,5-Trimethylbenzene	ug/kg	ND	5.4	09/20/12 12:52	
1,3-Dichlorobenzene	ug/kg	ND	5.4	09/20/12 12:52	
1,3-Dichloropropane	ug/kg	ND	5.4	09/20/12 12:52	
1,4-Dichlorobenzene	ug/kg	ND	5.4	09/20/12 12:52	
2,2-Dichloropropane	ug/kg	ND	5.4	09/20/12 12:52	
2-Butanone (MEK)	ug/kg	ND	107	09/20/12 12:52	
2-Chlorotoluene	ug/kg	ND	5.4	09/20/12 12:52	
2-Hexanone	ug/kg	ND	53.6	09/20/12 12:52	
4-Chlorotoluene	ug/kg	ND	5.4	09/20/12 12:52	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	53.6	09/20/12 12:52	
Acetone	ug/kg	ND	107	09/20/12 12:52	
Benzene	ug/kg	ND	5.4	09/20/12 12:52	
Bromobenzene	ug/kg	ND	5.4	09/20/12 12:52	
Bromochloromethane	ug/kg	ND	5.4	09/20/12 12:52	
Bromodichloromethane	ug/kg	ND	5.4	09/20/12 12:52	
Bromoform	ug/kg	ND	5.4	09/20/12 12:52	
Bromomethane	ug/kg	ND	10.7	09/20/12 12:52	
Carbon tetrachloride	ug/kg	ND	5.4	09/20/12 12:52	
Chlorobenzene	ug/kg	ND	5.4	09/20/12 12:52	
Chloroethane	ug/kg	ND	10.7	09/20/12 12:52	
Chloroform	ug/kg	ND	5.4	09/20/12 12:52	
Chloromethane	ug/kg	ND	10.7	09/20/12 12:52	
cis-1,2-Dichloroethene	ug/kg	ND	5.4	09/20/12 12:52	
cis-1,3-Dichloropropene	ug/kg	ND	5.4	09/20/12 12:52	
Dibromochloromethane	ug/kg	ND	5.4	09/20/12 12:52	

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QUALITY CONTROL DATA

Project: DOT-MECKLENBURG WBS#50000.1

Pace Project No.: 92131883

METHOD BLANK: 837065

Matrix: Solid

Associated Lab Samples: 92131883011, 92131883012, 92131883013, 92131883014, 92131883015, 92131883016, 92131883017,
92131883019, 92131883020, 92131883021

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dibromomethane	ug/kg	ND	5.4	09/20/12 12:52	
Dichlorodifluoromethane	ug/kg	ND	10.7	09/20/12 12:52	
Diisopropyl ether	ug/kg	ND	5.4	09/20/12 12:52	
Ethylbenzene	ug/kg	ND	5.4	09/20/12 12:52	
Hexachloro-1,3-butadiene	ug/kg	ND	5.4	09/20/12 12:52	
Isopropylbenzene (Cumene)	ug/kg	ND	5.4	09/20/12 12:52	
m&p-Xylene	ug/kg	ND	10.7	09/20/12 12:52	
Methyl-tert-butyl ether	ug/kg	ND	5.4	09/20/12 12:52	
Methylene Chloride	ug/kg	ND	21.5	09/20/12 12:52	
n-Butylbenzene	ug/kg	ND	5.4	09/20/12 12:52	
n-Propylbenzene	ug/kg	ND	5.4	09/20/12 12:52	
Naphthalene	ug/kg	ND	5.4	09/20/12 12:52	
o-Xylene	ug/kg	ND	5.4	09/20/12 12:52	
p-Isopropyltoluene	ug/kg	ND	5.4	09/20/12 12:52	
sec-Butylbenzene	ug/kg	ND	5.4	09/20/12 12:52	
Styrene	ug/kg	ND	5.4	09/20/12 12:52	
tert-Butylbenzene	ug/kg	ND	5.4	09/20/12 12:52	
Tetrachloroethene	ug/kg	ND	5.4	09/20/12 12:52	
Toluene	ug/kg	ND	5.4	09/20/12 12:52	
trans-1,2-Dichloroethene	ug/kg	ND	5.4	09/20/12 12:52	
trans-1,3-Dichloropropene	ug/kg	ND	5.4	09/20/12 12:52	
Trichloroethene	ug/kg	ND	5.4	09/20/12 12:52	
Trichlorofluoromethane	ug/kg	ND	5.4	09/20/12 12:52	
Vinyl acetate	ug/kg	ND	53.6	09/20/12 12:52	
Vinyl chloride	ug/kg	ND	10.7	09/20/12 12:52	
Xylene (Total)	ug/kg	ND	10.7	09/20/12 12:52	
1,2-Dichloroethane-d4 (S)	%	99	70-132	09/20/12 12:52	
4-Bromofluorobenzene (S)	%	101	70-130	09/20/12 12:52	
Dibromofluoromethane (S)	%	103	70-130	09/20/12 12:52	
Toluene-d8 (S)	%	100	70-130	09/20/12 12:52	

LABORATORY CONTROL SAMPLE: 837066

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	58.3	60.2	103	70-131	
1,1,1-Trichloroethane	ug/kg	58.3	63.9	110	70-141	
1,1,2,2-Tetrachloroethane	ug/kg	58.3	63.1	108	70-130	
1,1,2-Trichloroethane	ug/kg	58.3	65.2	112	70-132	
1,1-Dichloroethane	ug/kg	58.3	62.4	107	70-143	
1,1-Dichloroethene	ug/kg	58.3	62.2	107	70-137	
1,1-Dichloropropene	ug/kg	58.3	57.7	99	70-135	
1,2,3-Trichlorobenzene	ug/kg	58.3	62.2	107	69-153	
1,2,3-Trichloropropane	ug/kg	58.3	64.7	111	70-130	
1,2,4-Trichlorobenzene	ug/kg	58.3	59.0	101	55-171	

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QUALITY CONTROL DATA

Project: DOT-MECKLENBURG WBS#50000.1

Pace Project No.: 92131883

LABORATORY CONTROL SAMPLE: 837066

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	58.3	60.9	104	70-149	
1,2-Dibromo-3-chloropropane	ug/kg	58.3	70.2	120	68-141	
1,2-Dibromoethane (EDB)	ug/kg	58.3	63.7	109	70-130	
1,2-Dichlorobenzene	ug/kg	58.3	62.4	107	70-140	
1,2-Dichloroethane	ug/kg	58.3	61.6	106	70-137	
1,2-Dichloropropane	ug/kg	58.3	59.5	102	70-133	
1,3,5-Trimethylbenzene	ug/kg	58.3	60.7	104	70-143	
1,3-Dichlorobenzene	ug/kg	58.3	59.0	101	70-144	
1,3-Dichloropropane	ug/kg	58.3	61.5	105	70-132	
1,4-Dichlorobenzene	ug/kg	58.3	59.9	103	70-142	
2,2-Dichloropropane	ug/kg	58.3	64.0	110	68-152	
2-Butanone (MEK)	ug/kg	117	141	121	70-149	
2-Chlorotoluene	ug/kg	58.3	60.5	104	70-141	
2-Hexanone	ug/kg	117	139	119	70-149	
4-Chlorotoluene	ug/kg	58.3	60.4	104	70-149	
4-Methyl-2-pentanone (MIBK)	ug/kg	117	140	120	70-153	
Acetone	ug/kg	117	133	114	70-157	
Benzene	ug/kg	58.3	59.4	102	70-130	
Bromobenzene	ug/kg	58.3	62.9	108	70-141	
Bromochloromethane	ug/kg	58.3	57.4	99	70-149	
Bromodichloromethane	ug/kg	58.3	60.0	103	70-130	
Bromoform	ug/kg	58.3	68.3	117	70-131	
Bromomethane	ug/kg	58.3	66.5	114	64-136	
Carbon tetrachloride	ug/kg	58.3	55.9	96	70-154	
Chlorobenzene	ug/kg	58.3	59.9	103	70-135	
Chloroethane	ug/kg	58.3	65.0	112	68-151	
Chloroform	ug/kg	58.3	58.6	101	70-130	
Chloromethane	ug/kg	58.3	51.6	89	70-132	
cis-1,2-Dichloroethene	ug/kg	58.3	63.2	108	70-140	
cis-1,3-Dichloropropene	ug/kg	58.3	61.9	106	70-137	
Dibromochloromethane	ug/kg	58.3	65.1	112	70-130	
Dibromomethane	ug/kg	58.3	57.3	98	70-136	
Dichlorodifluoromethane	ug/kg	58.3	54.2	93	36-148	
Diisopropyl ether	ug/kg	58.3	62.1	107	70-139	
Ethylbenzene	ug/kg	58.3	58.7	101	70-137	
Hexachloro-1,3-butadiene	ug/kg	58.3	62.3	107	70-145	
Isopropylbenzene (Cumene)	ug/kg	58.3	60.2	103	70-141	
m&p-Xylene	ug/kg	117	119	102	70-140	
Methyl-tert-butyl ether	ug/kg	58.3	70.4	121	45-150	
Methylene Chloride	ug/kg	58.3	64.9	111	70-133	
n-Butylbenzene	ug/kg	58.3	59.8	103	65-155	
n-Propylbenzene	ug/kg	58.3	60.2	103	70-148	
Naphthalene	ug/kg	58.3	64.4	111	70-148	
o-Xylene	ug/kg	58.3	59.8	103	70-141	
p-Isopropyltoluene	ug/kg	58.3	59.4	102	70-148	
sec-Butylbenzene	ug/kg	58.3	61.0	105	70-145	
Styrene	ug/kg	58.3	64.1	110	70-138	
tert-Butylbenzene	ug/kg	58.3	60.7	104	70-143	

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QUALITY CONTROL DATA

Project: DOT-MECKLENBURG WBS#50000.1

Pace Project No.: 92131883

LABORATORY CONTROL SAMPLE: 837066

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Tetrachloroethene	ug/kg	58.3	61.3	105	70-140	
Toluene	ug/kg	58.3	59.1	101	70-130	
trans-1,2-Dichloroethene	ug/kg	58.3	62.6	107	70-136	
trans-1,3-Dichloropropene	ug/kg	58.3	65.8	113	70-138	
Trichloroethene	ug/kg	58.3	58.2	100	70-132	
Trichlorofluoromethane	ug/kg	58.3	55.7	96	69-134	
Vinyl acetate	ug/kg	117	124	106	24-161	
Vinyl chloride	ug/kg	58.3	55.2	95	55-140	
Xylene (Total)	ug/kg	175	179	102	70-141	
1,2-Dichloroethane-d4 (S)	%			100	70-132	
4-Bromofluorobenzene (S)	%			101	70-130	
Dibromofluoromethane (S)	%			100	70-130	
Toluene-d8 (S)	%			100	70-130	

MATRIX SPIKE SAMPLE: 838069

Parameter	Units	92131883013 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/kg	ND	52.3	42.5	81	49-180	
Benzene	ug/kg	ND	52.3	56.1	107	50-166	
Chlorobenzene	ug/kg	ND	52.3	58.9	113	43-169	
Toluene	ug/kg	ND	52.3	56.4	108	52-163	
Trichloroethene	ug/kg	ND	52.3	59.2	113	49-167	
1,2-Dichloroethane-d4 (S)	%				64	70-132	S0
4-Bromofluorobenzene (S)	%				98	70-130	
Dibromofluoromethane (S)	%				73	70-130	
Toluene-d8 (S)	%				97	70-130	

SAMPLE DUPLICATE: 838068

Parameter	Units	92131883012 Result	Dup Result	RPD	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	ND		
1,1,1-Trichloroethane	ug/kg	ND	ND		
1,1,2,2-Tetrachloroethane	ug/kg	ND	ND		
1,1,2-Trichloroethane	ug/kg	ND	ND		
1,1-Dichloroethane	ug/kg	ND	ND		
1,1-Dichloroethene	ug/kg	ND	ND		
1,1-Dichloropropene	ug/kg	ND	ND		
1,2,3-Trichlorobenzene	ug/kg	ND	ND		
1,2,3-Trichloropropane	ug/kg	ND	ND		
1,2,4-Trichlorobenzene	ug/kg	ND	ND		
1,2,4-Trimethylbenzene	ug/kg	ND	ND		
1,2-Dibromo-3-chloropropane	ug/kg	ND	ND		
1,2-Dibromoethane (EDB)	ug/kg	ND	ND		
1,2-Dichlorobenzene	ug/kg	ND	ND		
1,2-Dichloroethane	ug/kg	ND	ND		

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QUALITY CONTROL DATA

Project: DOT-MECKLENBURG WBS#50000.1

Pace Project No.: 92131883

SAMPLE DUPLICATE: 838068

Parameter	Units	Result	Dup Result	RPD	Qualifiers
1,2-Dichloropropane	ug/kg	ND	ND		
1,3,5-Trimethylbenzene	ug/kg	ND	ND		
1,3-Dichlorobenzene	ug/kg	ND	ND		
1,3-Dichloropropane	ug/kg	ND	ND		
1,4-Dichlorobenzene	ug/kg	ND	ND		
2,2-Dichloropropane	ug/kg	ND	ND		
2-Butanone (MEK)	ug/kg	ND	ND		
2-Chlorotoluene	ug/kg	ND	ND		
2-Hexanone	ug/kg	ND	ND		
4-Chlorotoluene	ug/kg	ND	ND		
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	ND		
Acetone	ug/kg	ND	11.1J		
Benzene	ug/kg	ND	ND		
Bromobenzene	ug/kg	ND	ND		
Bromochloromethane	ug/kg	ND	ND		
Bromodichloromethane	ug/kg	ND	ND		
Bromoform	ug/kg	ND	ND		
Bromomethane	ug/kg	ND	ND		
Carbon tetrachloride	ug/kg	ND	ND		
Chlorobenzene	ug/kg	ND	ND		
Chloroethane	ug/kg	ND	ND		
Chloroform	ug/kg	ND	ND		
Chloromethane	ug/kg	ND	ND		
cis-1,2-Dichloroethene	ug/kg	ND	ND		
cis-1,3-Dichloropropene	ug/kg	ND	ND		
Dibromochloromethane	ug/kg	ND	ND		
Dibromomethane	ug/kg	ND	ND		
Dichlorodifluoromethane	ug/kg	ND	ND		
Diisopropyl ether	ug/kg	ND	ND		
Ethylbenzene	ug/kg	ND	ND		
Hexachloro-1,3-butadiene	ug/kg	ND	ND		
Isopropylbenzene (Cumene)	ug/kg	ND	ND		
m&p-Xylene	ug/kg	ND	ND		
Methyl-tert-butyl ether	ug/kg	ND	ND		
Methylene Chloride	ug/kg	ND	ND		
n-Butylbenzene	ug/kg	ND	ND		
n-Propylbenzene	ug/kg	ND	ND		
Naphthalene	ug/kg	ND	ND		
o-Xylene	ug/kg	ND	ND		
p-Isopropyltoluene	ug/kg	ND	ND		
sec-Butylbenzene	ug/kg	ND	ND		
Styrene	ug/kg	ND	ND		
tert-Butylbenzene	ug/kg	ND	ND		
Tetrachloroethene	ug/kg	ND	ND		
Toluene	ug/kg	ND	ND		
trans-1,2-Dichloroethene	ug/kg	ND	ND		
trans-1,3-Dichloropropene	ug/kg	ND	ND		
Trichloroethene	ug/kg	ND	ND		

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QUALITY CONTROL DATA

Project: DOT-MECKLENBURG WBS#50000.1

Pace Project No.: 92131883

SAMPLE DUPLICATE: 838068

Parameter	Units	Result	Dup Result	RPD	Qualifiers
Trichlorofluoromethane	ug/kg	ND	ND		
Vinyl acetate	ug/kg	ND	ND		
Vinyl chloride	ug/kg	ND	ND		
Xylene (Total)	ug/kg	ND	ND		
1,2-Dichloroethane-d4 (S)	%	94	88	1	
4-Bromofluorobenzene (S)	%	97	99	10	
Dibromofluoromethane (S)	%	97	92	3	
Toluene-d8 (S)	%	98	97	7	

QUALITY CONTROL DATA

Project: DOT-MECKLENBURG WBS#50000.1

Pace Project No.: 92131883

QC Batch:	MSV/20464	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV 5035A Volatile Organics
Associated Lab Samples:	92131883018, 92131883022, 92131883023		

METHOD BLANK: 838159 Matrix: Solid

Associated Lab Samples: 92131883018, 92131883022, 92131883023

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	5.2	09/21/12 11:00	
1,1,1-Trichloroethane	ug/kg	ND	5.2	09/21/12 11:00	
1,1,2,2-Tetrachloroethane	ug/kg	ND	5.2	09/21/12 11:00	
1,1,2-Trichloroethane	ug/kg	ND	5.2	09/21/12 11:00	
1,1-Dichloroethane	ug/kg	ND	5.2	09/21/12 11:00	
1,1-Dichloroethene	ug/kg	ND	5.2	09/21/12 11:00	
1,1-Dichloropropene	ug/kg	ND	5.2	09/21/12 11:00	
1,2,3-Trichlorobenzene	ug/kg	ND	5.2	09/21/12 11:00	
1,2,3-Trichloropropane	ug/kg	ND	5.2	09/21/12 11:00	
1,2,4-Trichlorobenzene	ug/kg	ND	5.2	09/21/12 11:00	
1,2,4-Trimethylbenzene	ug/kg	ND	5.2	09/21/12 11:00	
1,2-Dibromo-3-chloropropane	ug/kg	ND	5.2	09/21/12 11:00	
1,2-Dibromoethane (EDB)	ug/kg	ND	5.2	09/21/12 11:00	
1,2-Dichlorobenzene	ug/kg	ND	5.2	09/21/12 11:00	
1,2-Dichloroethane	ug/kg	ND	5.2	09/21/12 11:00	
1,2-Dichloropropane	ug/kg	ND	5.2	09/21/12 11:00	
1,3,5-Trimethylbenzene	ug/kg	ND	5.2	09/21/12 11:00	
1,3-Dichlorobenzene	ug/kg	ND	5.2	09/21/12 11:00	
1,3-Dichloropropane	ug/kg	ND	5.2	09/21/12 11:00	
1,4-Dichlorobenzene	ug/kg	ND	5.2	09/21/12 11:00	
2,2-Dichloropropane	ug/kg	ND	5.2	09/21/12 11:00	
2-Butanone (MEK)	ug/kg	ND	104	09/21/12 11:00	
2-Chlorotoluene	ug/kg	ND	5.2	09/21/12 11:00	
2-Hexanone	ug/kg	ND	51.9	09/21/12 11:00	
4-Chlorotoluene	ug/kg	ND	5.2	09/21/12 11:00	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	51.9	09/21/12 11:00	
Acetone	ug/kg	ND	104	09/21/12 11:00	
Benzene	ug/kg	ND	5.2	09/21/12 11:00	
Bromobenzene	ug/kg	ND	5.2	09/21/12 11:00	
Bromochloromethane	ug/kg	ND	5.2	09/21/12 11:00	
Bromodichloromethane	ug/kg	ND	5.2	09/21/12 11:00	
Bromoform	ug/kg	ND	5.2	09/21/12 11:00	
Bromomethane	ug/kg	ND	10.4	09/21/12 11:00	
Carbon tetrachloride	ug/kg	ND	5.2	09/21/12 11:00	
Chlorobenzene	ug/kg	ND	5.2	09/21/12 11:00	
Chloroethane	ug/kg	ND	10.4	09/21/12 11:00	
Chloroform	ug/kg	ND	5.2	09/21/12 11:00	
Chloromethane	ug/kg	ND	10.4	09/21/12 11:00	
cis-1,2-Dichloroethene	ug/kg	ND	5.2	09/21/12 11:00	
cis-1,3-Dichloropropene	ug/kg	ND	5.2	09/21/12 11:00	
Dibromochloromethane	ug/kg	ND	5.2	09/21/12 11:00	
Dibromomethane	ug/kg	ND	5.2	09/21/12 11:00	
Dichlorodifluoromethane	ug/kg	ND	10.4	09/21/12 11:00	

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QUALITY CONTROL DATA

Project: DOT-MECKLENBURG WBS#50000.1

Pace Project No.: 92131883

METHOD BLANK: 838159

Matrix: Solid

Associated Lab Samples: 92131883018, 92131883022, 92131883023

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diisopropyl ether	ug/kg	ND	5.2	09/21/12 11:00	
Ethylbenzene	ug/kg	ND	5.2	09/21/12 11:00	
Hexachloro-1,3-butadiene	ug/kg	ND	5.2	09/21/12 11:00	
Isopropylbenzene (Cumene)	ug/kg	ND	5.2	09/21/12 11:00	
m&p-Xylene	ug/kg	ND	10.4	09/21/12 11:00	
Methyl-tert-butyl ether	ug/kg	ND	5.2	09/21/12 11:00	
Methylene Chloride	ug/kg	ND	20.7	09/21/12 11:00	
n-Butylbenzene	ug/kg	ND	5.2	09/21/12 11:00	
n-Propylbenzene	ug/kg	ND	5.2	09/21/12 11:00	
Naphthalene	ug/kg	ND	5.2	09/21/12 11:00	
o-Xylene	ug/kg	ND	5.2	09/21/12 11:00	
p-Isopropyltoluene	ug/kg	ND	5.2	09/21/12 11:00	
sec-Butylbenzene	ug/kg	ND	5.2	09/21/12 11:00	
Styrene	ug/kg	ND	5.2	09/21/12 11:00	
tert-Butylbenzene	ug/kg	ND	5.2	09/21/12 11:00	
Tetrachloroethene	ug/kg	ND	5.2	09/21/12 11:00	
Toluene	ug/kg	ND	5.2	09/21/12 11:00	
trans-1,2-Dichloroethene	ug/kg	ND	5.2	09/21/12 11:00	
trans-1,3-Dichloropropene	ug/kg	ND	5.2	09/21/12 11:00	
Trichloroethene	ug/kg	ND	5.2	09/21/12 11:00	
Trichlorofluoromethane	ug/kg	ND	5.2	09/21/12 11:00	
Vinyl acetate	ug/kg	ND	51.9	09/21/12 11:00	
Vinyl chloride	ug/kg	ND	10.4	09/21/12 11:00	
Xylene (Total)	ug/kg	ND	10.4	09/21/12 11:00	
1,2-Dichloroethane-d4 (S)	%	94	70-132	09/21/12 11:00	
4-Bromofluorobenzene (S)	%	100	70-130	09/21/12 11:00	
Dibromofluoromethane (S)	%	95	70-130	09/21/12 11:00	
Toluene-d8 (S)	%	98	70-130	09/21/12 11:00	

LABORATORY CONTROL SAMPLE: 838160

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	54.9	56.2	102	70-131	
1,1,1-Trichloroethane	ug/kg	54.9	62.3	113	70-141	
1,1,2,2-Tetrachloroethane	ug/kg	54.9	58.3	106	70-130	
1,1,2-Trichloroethane	ug/kg	54.9	59.7	109	70-132	
1,1-Dichloroethane	ug/kg	54.9	60.2	110	70-143	
1,1-Dichloroethene	ug/kg	54.9	58.5	106	70-137	
1,1-Dichloropropene	ug/kg	54.9	54.9	100	70-135	
1,2,3-Trichlorobenzene	ug/kg	54.9	62.5	114	69-153	
1,2,3-Trichloropropane	ug/kg	54.9	58.6	107	70-130	
1,2,4-Trichlorobenzene	ug/kg	54.9	63.3	115	55-171	
1,2,4-Trimethylbenzene	ug/kg	54.9	60.4	110	70-149	
1,2-Dibromo-3-chloropropane	ug/kg	54.9	62.8	114	68-141	
1,2-Dibromoethane (EDB)	ug/kg	54.9	60.6	110	70-130	

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QUALITY CONTROL DATA

Project: DOT-MECKLENBURG WBS#50000.1

Pace Project No.: 92131883

LABORATORY CONTROL SAMPLE: 838160

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichlorobenzene	ug/kg	54.9	59.9	109	70-140	
1,2-Dichloroethane	ug/kg	54.9	58.8	107	70-137	
1,2-Dichloropropane	ug/kg	54.9	56.8	103	70-133	
1,3,5-Trimethylbenzene	ug/kg	54.9	60.0	109	70-143	
1,3-Dichlorobenzene	ug/kg	54.9	59.9	109	70-144	
1,3-Dichloropropane	ug/kg	54.9	57.3	104	70-132	
1,4-Dichlorobenzene	ug/kg	54.9	59.9	109	70-142	
2,2-Dichloropropane	ug/kg	54.9	63.7	116	68-152	
2-Butanone (MEK)	ug/kg	110	129	117	70-149	
2-Chlorotoluene	ug/kg	54.9	59.1	108	70-141	
2-Hexanone	ug/kg	110	123	112	70-149	
4-Chlorotoluene	ug/kg	54.9	61.9	113	70-149	
4-Methyl-2-pentanone (MIBK)	ug/kg	110	125	114	70-153	
Acetone	ug/kg	110	128	117	70-157	
Benzene	ug/kg	54.9	58.5	106	70-130	
Bromobenzene	ug/kg	54.9	59.9	109	70-141	
Bromochloromethane	ug/kg	54.9	55.4	101	70-149	
Bromodichloromethane	ug/kg	54.9	56.1	102	70-130	
Bromoform	ug/kg	54.9	62.9	115	70-131	
Bromomethane	ug/kg	54.9	59.7	109	64-136	
Carbon tetrachloride	ug/kg	54.9	54.5	99	70-154	
Chlorobenzene	ug/kg	54.9	59.0	107	70-135	
Chloroethane	ug/kg	54.9	64.8	118	68-151	
Chloroform	ug/kg	54.9	56.8	103	70-130	
Chloromethane	ug/kg	54.9	54.4	99	70-132	
cis-1,2-Dichloroethene	ug/kg	54.9	60.4	110	70-140	
cis-1,3-Dichloropropene	ug/kg	54.9	58.4	106	70-137	
Dibromochloromethane	ug/kg	54.9	58.6	107	70-130	
Dibromomethane	ug/kg	54.9	54.7	100	70-136	
Dichlorodifluoromethane	ug/kg	54.9	66.6	121	36-148	
Diisopropyl ether	ug/kg	54.9	56.7	103	70-139	
Ethylbenzene	ug/kg	54.9	58.5	106	70-137	
Hexachloro-1,3-butadiene	ug/kg	54.9	63.8	116	70-145	
Isopropylbenzene (Cumene)	ug/kg	54.9	59.8	109	70-141	
m&p-Xylene	ug/kg	110	119	108	70-140	
Methyl-tert-butyl ether	ug/kg	54.9	64.8	118	45-150	
Methylene Chloride	ug/kg	54.9	61.3	112	70-133	
n-Butylbenzene	ug/kg	54.9	62.6	114	65-155	
n-Propylbenzene	ug/kg	54.9	60.6	110	70-148	
Naphthalene	ug/kg	54.9	62.3	113	70-148	
o-Xylene	ug/kg	54.9	57.2	104	70-141	
p-Isopropyltoluene	ug/kg	54.9	61.6	112	70-148	
sec-Butylbenzene	ug/kg	54.9	61.6	112	70-145	
Styrene	ug/kg	54.9	60.4	110	70-138	
tert-Butylbenzene	ug/kg	54.9	59.3	108	70-143	
Tetrachloroethene	ug/kg	54.9	62.5	114	70-140	
Toluene	ug/kg	54.9	58.1	106	70-130	
trans-1,2-Dichloroethene	ug/kg	54.9	61.3	112	70-136	

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QUALITY CONTROL DATA

Project: DOT-MECKLENBURG WBS#50000.1
Pace Project No.: 92131883

LABORATORY CONTROL SAMPLE: 838160

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
trans-1,3-Dichloropropene	ug/kg	54.9	60.7	110	70-138	
Trichloroethene	ug/kg	54.9	57.4	104	70-132	
Trichlorofluoromethane	ug/kg	54.9	53.9	98	69-134	
Vinyl acetate	ug/kg	110	172	157	24-161	
Vinyl chloride	ug/kg	54.9	55.6	101	55-140	
Xylene (Total)	ug/kg	165	176	107	70-141	
1,2-Dichloroethane-d4 (S)	%			97	70-132	
4-Bromofluorobenzene (S)	%			100	70-130	
Dibromofluoromethane (S)	%			102	70-130	
Toluene-d8 (S)	%			100	70-130	

MATRIX SPIKE SAMPLE: 839168

Parameter	Units	92132153019 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/kg	ND	52.9	46.7	88	49-180	
Benzene	ug/kg	ND	52.9	45.9	87	50-166	
Chlorobenzene	ug/kg	ND	52.9	53.1	100	43-169	
Toluene	ug/kg	ND	52.9	49.7	94	52-163	
Trichloroethene	ug/kg	ND	52.9	52.0	98	49-167	
1,2-Dichloroethane-d4 (S)	%				104	70-132	
4-Bromofluorobenzene (S)	%				90	70-130	
Dibromofluoromethane (S)	%				120	70-130	
Toluene-d8 (S)	%				96	70-130	

SAMPLE DUPLICATE: 839167

Parameter	Units	92131565003 Result	Dup Result	RPD	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	ND		
1,1,1-Trichloroethane	ug/kg	ND	ND		
1,1,2,2-Tetrachloroethane	ug/kg	ND	ND		
1,1,2-Trichloroethane	ug/kg	ND	ND		
1,1-Dichloroethane	ug/kg	ND	ND		
1,1-Dichloroethene	ug/kg	ND	ND		
1,1-Dichloropropene	ug/kg	ND	ND		
1,2,3-Trichlorobenzene	ug/kg	ND	ND		
1,2,3-Trichloropropane	ug/kg	ND	ND		
1,2,4-Trichlorobenzene	ug/kg	ND	ND		
1,2,4-Trimethylbenzene	ug/kg	ND	ND		
1,2-Dibromo-3-chloropropane	ug/kg	ND	ND		
1,2-Dibromoethane (EDB)	ug/kg	ND	ND		
1,2-Dichlorobenzene	ug/kg	ND	1.9J		
1,2-Dichloroethane	ug/kg	ND	ND		
1,2-Dichloropropane	ug/kg	ND	ND		
1,3,5-Trimethylbenzene	ug/kg	ND	ND		
1,3-Dichlorobenzene	ug/kg	ND	ND		

QUALITY CONTROL DATA

Project: DOT-MECKLENBURG WBS#50000.1

Pace Project No.: 92131883

SAMPLE DUPLICATE: 839167

Parameter	Units	92131565003	Dup Result	RPD	Qualifiers
1,3-Dichloropropane	ug/kg	ND	ND		
1,4-Dichlorobenzene	ug/kg	ND	ND		
2,2-Dichloropropane	ug/kg	ND	ND		
2-Butanone (MEK)	ug/kg	ND	ND		
2-Chlorotoluene	ug/kg	ND	ND		
2-Hexanone	ug/kg	ND	ND		
4-Chlorotoluene	ug/kg	ND	ND		
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	ND		
Acetone	ug/kg	385	145	90 R1	
Benzene	ug/kg	ND	ND		
Bromobenzene	ug/kg	ND	ND		
Bromochloromethane	ug/kg	ND	ND		
Bromodichloromethane	ug/kg	ND	ND		
Bromoform	ug/kg	ND	ND		
Bromomethane	ug/kg	ND	ND		
Carbon tetrachloride	ug/kg	ND	ND		
Chlorobenzene	ug/kg	ND	ND		
Chloroethane	ug/kg	ND	ND		
Chloroform	ug/kg	ND	ND		
Chloromethane	ug/kg	ND	ND		
cis-1,2-Dichloroethene	ug/kg	ND	ND		
cis-1,3-Dichloropropene	ug/kg	ND	ND		
Dibromochloromethane	ug/kg	ND	ND		
Dibromomethane	ug/kg	ND	ND		
Dichlorodifluoromethane	ug/kg	ND	ND		
Diisopropyl ether	ug/kg	ND	ND		
Ethylbenzene	ug/kg	ND	ND		
Hexachloro-1,3-butadiene	ug/kg	ND	ND		
Isopropylbenzene (Cumene)	ug/kg	ND	ND		
m&p-Xylene	ug/kg	ND	ND		
Methyl-tert-butyl ether	ug/kg	ND	ND		
Methylene Chloride	ug/kg	ND	ND		
n-Butylbenzene	ug/kg	ND	ND		
n-Propylbenzene	ug/kg	ND	ND		
Naphthalene	ug/kg	ND	ND		
o-Xylene	ug/kg	ND	ND		
p-Isopropyltoluene	ug/kg	ND	ND		
sec-Butylbenzene	ug/kg	ND	ND		
Styrene	ug/kg	ND	ND		
tert-Butylbenzene	ug/kg	ND	ND		
Tetrachloroethene	ug/kg	ND	ND		
Toluene	ug/kg	ND	ND		
trans-1,2-Dichloroethene	ug/kg	ND	ND		
trans-1,3-Dichloropropene	ug/kg	ND	ND		
Trichloroethene	ug/kg	ND	ND		
Trichlorofluoromethane	ug/kg	ND	ND		
Vinyl acetate	ug/kg	ND	ND		
Vinyl chloride	ug/kg	ND	ND		

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QUALITY CONTROL DATA

Project: DOT-MECKLENBURG WBS#50000.1

Pace Project No.: 92131883

SAMPLE DUPLICATE: 839167

Parameter	Units	92131565003	Dup Result	RPD	Qualifiers
Xylene (Total)	ug/kg	ND	ND		
1,2-Dichloroethane-d4 (S)	%	90	89	47	
4-Bromofluorobenzene (S)	%	94	95	45	
Dibromofluoromethane (S)	%	93	96	42	
Toluene-d8 (S)	%	98	98	45	

QUALITY CONTROL DATA

Project: DOT-MECKLENBURG WBS#50000.1

Pace Project No.: 92131883

QC Batch:	OEXT/18962	Analysis Method:	EPA 8015 Modified
QC Batch Method:	EPA 3546	Analysis Description:	8015 Solid GCSV
Associated Lab Samples:	92131883001, 92131883002, 92131883003, 92131883004, 92131883005, 92131883006, 92131883007, 92131883011, 92131883012, 92131883013, 92131883014, 92131883015, 92131883016, 92131883017, 92131883018, 92131883019, 92131883020, 92131883021, 92131883022, 92131883023		

METHOD BLANK: 835937 Matrix: Solid

Associated Lab Samples: 92131883001, 92131883002, 92131883003, 92131883004, 92131883005, 92131883006, 92131883007, 92131883011, 92131883012, 92131883013, 92131883014, 92131883015, 92131883016, 92131883017, 92131883018, 92131883019, 92131883020, 92131883021, 92131883022, 92131883023

Parameter	Units	Blank	Reporting	Analyzed	Qualifiers
		Result	Limit		
Diesel Components	mg/kg	ND	5.0	09/20/12 17:08	
n-Pentacosane (S)	%	61	41-119	09/20/12 17:08	

LABORATORY CONTROL SAMPLE: 835938

Parameter	Units	Spike	LCS	LCS	% Rec	Qualifiers
		Conc.	Result	% Rec	Limits	
Diesel Components	mg/kg	66.7	36.5	55	49-113	
n-Pentacosane (S)	%			58	41-119	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 835939 835940

Parameter	Units	MS	MSD	MS	MSD	% Rec	MSD	% Rec	% Rec	RPD	Qual
		92131883006	Spike	Spike	Result	Result	Result	% Rec	Limits	RPD	Qual
Diesel Components	mg/kg	ND	80.9	80.9	35.2	40.7	42	49	10-146	14	
n-Pentacosane (S)	%						45	52	41-119		

QUALITY CONTROL DATA

Project: DOT-MECKLENBURG WBS#50000.1

Pace Project No.: 92131883

QC Batch: PMST/4994 Analysis Method: ASTM D2974-87

QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture

Associated Lab Samples: 92131883001, 92131883002, 92131883003, 92131883004, 92131883005, 92131883006, 92131883007, 92131883011, 92131883012, 92131883013, 92131883014, 92131883015, 92131883016, 92131883017, 92131883018, 92131883019, 92131883020, 92131883021

SAMPLE DUPLICATE: 835927

Parameter	Units	92131813004 Result	Dup Result	RPD	Qualifiers
Percent Moisture	%		11.5		

SAMPLE DUPLICATE: 835928

Parameter	Units	92131883021 Result	Dup Result	RPD	Qualifiers
Percent Moisture	%	18.7	19.1	2	

QUALITY CONTROL DATA

Project: DOT-MECKLENBURG WBS#50000.1

Pace Project No.: 92131883

QC Batch:	PMST/4999	Analysis Method:	ASTM D2974-87
QC Batch Method:	ASTM D2974-87	Analysis Description:	Dry Weight/Percent Moisture
Associated Lab Samples: 92131883022, 92131883023			

SAMPLE DUPLICATE: 837913

Parameter	Units	Result	Dup Result	RPD	Qualifiers
Percent Moisture	%	15.6	14.7	5	

SAMPLE DUPLICATE: 837914

Parameter	Units	Result	Dup Result	RPD	Qualifiers
Percent Moisture	%	17.5	18.2	4	

QUALITY CONTROL DATA

Project: DOT-MECKLENBURG WBS#50000.1

Pace Project No.: 92131883

QC Batch:	PMST/5005	Analysis Method:	ASTM D2974-87
QC Batch Method:	ASTM D2974-87	Analysis Description:	Dry Weight/Percent Moisture
Associated Lab Samples: 92131883008, 92131883009, 92131883010			

SAMPLE DUPLICATE: 839582

Parameter	Units	Result	Dup Result	RPD	Qualifiers
Percent Moisture	%	0.58	0.52	12	

SAMPLE DUPLICATE: 839583

Parameter	Units	Result	Dup Result	RPD	Qualifiers
Percent Moisture	%	9.6	9.2	4	

QUALIFIERS

Project: DOT-MECKLENBURG WBS#50000.1
Pace Project No.: 92131883

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.

PRL - Pace Reporting Limit.

RL - Reporting 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.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Acid preservation may not be appropriate for 2-Chloroethylvinyl ether, Styrene, and Vinyl chloride.

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

TNI - The NELAC Institute.

LABORATORIES

PASI-A Pace Analytical Services - Asheville

PASI-C Pace Analytical Services - Charlotte

ANALYTE QUALIFIERS

D3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

D6 The relative percent difference (RPD) between the sample and sample duplicate exceeded laboratory control limits.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

R1 RPD value was outside control limits.

S0 Surrogate recovery outside laboratory control limits.

S3 Surrogate recovery exceeded laboratory control limits. Analyte presence below reporting limits in associated samples.
Results unaffected by high bias.

S5 Surrogate recovery outside control limits due to matrix interferences (not confirmed by re-analysis).

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: DOT-MECKLENBURG WBS#50000.1
Pace Project No.: 92131883

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92131883001	4H-1(2-4)	EPA 3546	OEXT/18962	EPA 8015 Modified	GCSV/12904
92131883002	4H-2(2-4)	EPA 3546	OEXT/18962	EPA 8015 Modified	GCSV/12904
92131883003	4H-3(2-4)	EPA 3546	OEXT/18962	EPA 8015 Modified	GCSV/12904
92131883004	4H-4(2-4)	EPA 3546	OEXT/18962	EPA 8015 Modified	GCSV/12904
92131883005	4H-5(2-4)	EPA 3546	OEXT/18962	EPA 8015 Modified	GCSV/12904
92131883006	4H-6(2-4)	EPA 3546	OEXT/18962	EPA 8015 Modified	GCSV/12904
92131883007	4H-7(2-4)	EPA 3546	OEXT/18962	EPA 8015 Modified	GCSV/12904
92131883011	5H-1(0-2)	EPA 3546	OEXT/18962	EPA 8015 Modified	GCSV/12904
92131883012	5H-2(0-2)	EPA 3546	OEXT/18962	EPA 8015 Modified	GCSV/12904
92131883013	5H-3(0-2)	EPA 3546	OEXT/18962	EPA 8015 Modified	GCSV/12904
92131883014	5H-4(0-2)	EPA 3546	OEXT/18962	EPA 8015 Modified	GCSV/12904
92131883015	5H-5(1-2)	EPA 3546	OEXT/18962	EPA 8015 Modified	GCSV/12904
92131883016	5H-6(1-2)	EPA 3546	OEXT/18962	EPA 8015 Modified	GCSV/12904
92131883017	5H-7(10-12)	EPA 3546	OEXT/18962	EPA 8015 Modified	GCSV/12904
92131883018	5H-8(8-10)	EPA 3546	OEXT/18962	EPA 8015 Modified	GCSV/12904
92131883019	5H-9(2-4)	EPA 3546	OEXT/18962	EPA 8015 Modified	GCSV/12904
92131883020	5H-10(2-4)	EPA 3546	OEXT/18962	EPA 8015 Modified	GCSV/12904
92131883021	5H-11(2-4)	EPA 3546	OEXT/18962	EPA 8015 Modified	GCSV/12904
92131883022	5H-12(2-4)	EPA 3546	OEXT/18962	EPA 8015 Modified	GCSV/12904
92131883023	5H-13(2-4)	EPA 3546	OEXT/18962	EPA 8015 Modified	GCSV/12904
92131883001	4H-1(2-4)	EPA 5035A/5030B	GCV/6273	EPA 8015 Modified	GCV/6274
92131883002	4H-2(2-4)	EPA 5035A/5030B	GCV/6273	EPA 8015 Modified	GCV/6274
92131883003	4H-3(2-4)	EPA 5035A/5030B	GCV/6273	EPA 8015 Modified	GCV/6274
92131883004	4H-4(2-4)	EPA 5035A/5030B	GCV/6273	EPA 8015 Modified	GCV/6274
92131883005	4H-5(2-4)	EPA 5035A/5030B	GCV/6273	EPA 8015 Modified	GCV/6274
92131883006	4H-6(2-4)	EPA 5035A/5030B	GCV/6273	EPA 8015 Modified	GCV/6274
92131883007	4H-7(2-4)	EPA 5035A/5030B	GCV/6273	EPA 8015 Modified	GCV/6274
92131883011	5H-1(0-2)	EPA 5035A/5030B	GCV/6273	EPA 8015 Modified	GCV/6274
92131883012	5H-2(0-2)	EPA 5035A/5030B	GCV/6273	EPA 8015 Modified	GCV/6274
92131883013	5H-3(0-2)	EPA 5035A/5030B	GCV/6273	EPA 8015 Modified	GCV/6274
92131883014	5H-4(0-2)	EPA 5035A/5030B	GCV/6273	EPA 8015 Modified	GCV/6274
92131883015	5H-5(1-2)	EPA 5035A/5030B	GCV/6273	EPA 8015 Modified	GCV/6274
92131883016	5H-6(1-2)	EPA 5035A/5030B	GCV/6273	EPA 8015 Modified	GCV/6274
92131883017	5H-7(10-12)	EPA 5035A/5030B	GCV/6273	EPA 8015 Modified	GCV/6274
92131883018	5H-8(8-10)	EPA 5035A/5030B	GCV/6273	EPA 8015 Modified	GCV/6274
92131883019	5H-9(2-4)	EPA 5035A/5030B	GCV/6275	EPA 8015 Modified	GCV/6276
92131883020	5H-10(2-4)	EPA 5035A/5030B	GCV/6275	EPA 8015 Modified	GCV/6276
92131883021	5H-11(2-4)	EPA 5035A/5030B	GCV/6275	EPA 8015 Modified	GCV/6276
92131883022	5H-12(2-4)	EPA 5035A/5030B	GCV/6275	EPA 8015 Modified	GCV/6276
92131883023	5H-13(2-4)	EPA 5035A/5030B	GCV/6275	EPA 8015 Modified	GCV/6276
92131883008	SAND-1	EPA 3050	MPRP/11526	EPA 6010	ICP/10557
92131883009	SAND-2	EPA 3050	MPRP/11526	EPA 6010	ICP/10557
92131883010	SAND-3	EPA 3050	MPRP/11526	EPA 6010	ICP/10557
92131883011	5H-1(0-2)	EPA 3050	MPRP/11526	EPA 6010	ICP/10557
92131883012	5H-2(0-2)	EPA 3050	MPRP/11526	EPA 6010	ICP/10557
92131883013	5H-3(0-2)	EPA 3050	MPRP/11526	EPA 6010	ICP/10557
92131883014	5H-4(0-2)	EPA 3050	MPRP/11526	EPA 6010	ICP/10557

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: DOT-MECKLENBURG WBS#50000.1
Pace Project No.: 92131883

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92131883015	5H-5(1-2)	EPA 3050	MPRP/11527	EPA 6010	ICP/10558
92131883016	5H-6(1-2)	EPA 3050	MPRP/11527	EPA 6010	ICP/10558
92131883017	5H-7(10-12)	EPA 3050	MPRP/11527	EPA 6010	ICP/10558
92131883018	5H-8(8-10)	EPA 3050	MPRP/11527	EPA 6010	ICP/10558
92131883019	5H-9(2-4)	EPA 3050	MPRP/11527	EPA 6010	ICP/10558
92131883020	5H-10(2-4)	EPA 3050	MPRP/11527	EPA 6010	ICP/10558
92131883021	5H-11(2-4)	EPA 3050	MPRP/11527	EPA 6010	ICP/10558
92131883022	5H-12(2-4)	EPA 3050	MPRP/11527	EPA 6010	ICP/10558
92131883023	5H-13(2-4)	EPA 3050	MPRP/11527	EPA 6010	ICP/10558
92131883008	SAND-1	EPA 7471	MERP/4524	EPA 7471	MERC/4437
92131883009	SAND-2	EPA 7471	MERP/4524	EPA 7471	MERC/4437
92131883010	SAND-3	EPA 7471	MERP/4524	EPA 7471	MERC/4437
92131883011	5H-1(0-2)	EPA 7471	MERP/4524	EPA 7471	MERC/4437
92131883012	5H-2(0-2)	EPA 7471	MERP/4524	EPA 7471	MERC/4437
92131883013	5H-3(0-2)	EPA 7471	MERP/4524	EPA 7471	MERC/4437
92131883014	5H-4(0-2)	EPA 7471	MERP/4524	EPA 7471	MERC/4437
92131883015	5H-5(1-2)	EPA 7471	MERP/4524	EPA 7471	MERC/4437
92131883016	5H-6(1-2)	EPA 7471	MERP/4524	EPA 7471	MERC/4437
92131883017	5H-7(10-12)	EPA 7471	MERP/4524	EPA 7471	MERC/4437
92131883018	5H-8(8-10)	EPA 7471	MERP/4524	EPA 7471	MERC/4437
92131883019	5H-9(2-4)	EPA 7471	MERP/4524	EPA 7471	MERC/4437
92131883020	5H-10(2-4)	EPA 7471	MERP/4524	EPA 7471	MERC/4437
92131883021	5H-11(2-4)	EPA 7471	MERP/4524	EPA 7471	MERC/4437
92131883022	5H-12(2-4)	EPA 7471	MERP/4524	EPA 7471	MERC/4437
92131883023	5H-13(2-4)	EPA 7471	MERP/4526	EPA 7471	MERC/4438
92131883011	5H-1(0-2)	EPA 8260	MSV/20444		
92131883012	5H-2(0-2)	EPA 8260	MSV/20444		
92131883013	5H-3(0-2)	EPA 8260	MSV/20444		
92131883014	5H-4(0-2)	EPA 8260	MSV/20444		
92131883015	5H-5(1-2)	EPA 8260	MSV/20444		
92131883016	5H-6(1-2)	EPA 8260	MSV/20444		
92131883017	5H-7(10-12)	EPA 8260	MSV/20444		
92131883018	5H-8(8-10)	EPA 8260	MSV/20464		
92131883019	5H-9(2-4)	EPA 8260	MSV/20444		
92131883020	5H-10(2-4)	EPA 8260	MSV/20444		
92131883021	5H-11(2-4)	EPA 8260	MSV/20444		
92131883022	5H-12(2-4)	EPA 8260	MSV/20464		
92131883023	5H-13(2-4)	EPA 8260	MSV/20464		
92131883001	4H-1(2-4)	ASTM D2974-87	PMST/4994		
92131883002	4H-2(2-4)	ASTM D2974-87	PMST/4994		
92131883003	4H-3(2-4)	ASTM D2974-87	PMST/4994		
92131883004	4H-4(2-4)	ASTM D2974-87	PMST/4994		
92131883005	4H-5(2-4)	ASTM D2974-87	PMST/4994		
92131883006	4H-6(2-4)	ASTM D2974-87	PMST/4994		
92131883007	4H-7(2-4)	ASTM D2974-87	PMST/4994		

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: DOT-MECKLENBURG WBS#50000.1
 Pace Project No.: 92131883

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92131883008	SAND-1	ASTM D2974-87	PMST/5005		
92131883009	SAND-2	ASTM D2974-87	PMST/5005		
92131883010	SAND-3	ASTM D2974-87	PMST/5005		
92131883011	5H-1(0-2)	ASTM D2974-87	PMST/4994		
92131883012	5H-2(0-2)	ASTM D2974-87	PMST/4994		
92131883013	5H-3(0-2)	ASTM D2974-87	PMST/4994		
92131883014	5H-4(0-2)	ASTM D2974-87	PMST/4994		
92131883015	5H-5(1-2)	ASTM D2974-87	PMST/4994		
92131883016	5H-6(1-2)	ASTM D2974-87	PMST/4994		
92131883017	5H-7(10-12)	ASTM D2974-87	PMST/4994		
92131883018	5H-8(8-10)	ASTM D2974-87	PMST/4994		
92131883019	5H-9(2-4)	ASTM D2974-87	PMST/4994		
92131883020	5H-10(2-4)	ASTM D2974-87	PMST/4994		
92131883021	5H-11(2-4)	ASTM D2974-87	PMST/4994		
92131883022	5H-12(2-4)	ASTM D2974-87	PMST/4999		
92131883023	5H-13(2-4)	ASTM D2974-87	PMST/4999		

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page:	1	of	2
1653469			
REGULATORY AGENCY			
<input type="checkbox"/> NPDES	<input type="checkbox"/> GROUND WATER	<input type="checkbox"/> DRINKING WATER	
<input type="checkbox"/> UST	<input type="checkbox"/> RCRA	<input type="checkbox"/> OTHER	
Site Location:	NC	STATE:	

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company: Hart + Hickman	Report To: David Graham	Attention: NC DOT ↗			
Address: 29123 S. Tryon St. #100	Copy To:	Company Name: NBS 50000.1STR13TB			
Charlotte NC 28203		Address:			
Email To:		Pace Quote Reference:			
Phone: 704-586-0007	Fax: 704-586-0007	Pace Project Manager:			
Requested Due Date/TAT:	Standard	Project Number:	ROW-407	Pace Profile #:	

ITEM #	SAMPLE ID (A-Z, 0-9 / -) Sample IDs MUST BE UNIQUE	Matrix Codes MATRIX / CODE		COLLECTED				# OF CONTAINERS	Preservatives	Requested Analysis Filtered (Y/N)		Residual Chlorine (Y/N)	Pace Project No./Lab I.D.
		MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COMPOSITE START		COMPOSITE END/GRAB				Y/N	Analysis Test 1		
				DATE	TIME	DATE	TIME			SAMPLE TEMP AT COLLECTION	RCRA Metals		
1	4H-1 (2-4)	SL	G	09/17/12	1100	09/17/12	1125	4	2	Unpreserved	H ₂ SO ₄	X	001
2	4H-2 (2-4)							1		HNO ₃		X	002
3	4H-3 (2-4)									HCl		X	003
4	4H-4 (2-4)									NaOH		X	004
5	4H-5 (2-4)									Na ₂ S ₂ O ₃		X	005
6	4H-6 (2-4)									Methanol		X	006
7	4H-7 (2-4)									Other		X	007
8	5H-1 (0-2)											XX	011
9	5H-2 (0-2)											XX	012
10	SAND-1	C										X	008
11	SAND-2	C										X	009
12	SAND-3	C										X	010
ADDITIONAL COMMENTS		RELINQUISHED BY / AFFILIATION		DATE	TIME	ACCEPTED BY / AFFILIATION		DATE	TIME	SAMPLE CONDITIONS			
		<i>Trinh</i>		9/18/12	1652	<i>Linlyn</i>		9/18/12	1652	41	Y	W	Y

ORIGINAL		SAMPLER NAME AND SIGNATURE	
		PRINT Name of SAMPLER: <i>Trinh Dang</i>	
		SIGNATURE of SAMPLER: <i>Trinh Dang</i>	DATE Signed (MM/DD/YY): <i>9/18/12</i>

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

CHAIN-OF-CUSTODY / Analytical Request Document

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

Section A
Required Client Information:

Company: Hart + Hickman
Address: 2923 S. Tryon #100
Charlotte NC28203
Email To:
Phone: 704-586-0007 Fax:
Requested Due Date/TAT: Standard

Section B
Required Project Information:

Report To: David Graham
Copy To:
Purchase Order No.:
Project Name: DOT - Mecklenburg County
Project Number: Row-407

Section C
Invoice Information:

Attention: WBS-50000-i-STR13T1B
Company Name: NC DOT
Address:
Pace Quote Reference:
Pace Project Manager:
Pace Profile #:

Page: 2 of 2

1653470

REGULATORY AGENCY

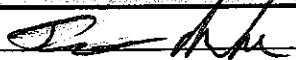
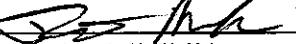
NPDES GROUND WATER DRINKING WATER
 UST RCRA OTHER

Site Location

NC

STATE:

Requested Analysis Filtered (Y/N)

ITEM #	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	MATRIX CODE (see valid codes to left) S=GRAB C=COMP	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives	Analysis Test Y/N	Residual Chlorine (Y/N)										
					COMPOSITE START		COMPOSITE END/GRAB																
					DATE	TIME	DATE	TIME															
1	SH-3 (0-2)	SL G			09/17/12	1600	09/17/12	1600	9 4	2 3	Unpreserved H ₂ SO ₄ HNO ₃ HCl NaOH Na ₂ S ₂ O ₃ Methanol Other	X X X TPH (GRO, DRO) VOCs \$2.60											
2	SH-4 (0-2)				09/17/12	1620								013									
3	SH-5 (1-2)				09/18/12	900								014									
4	SH-6 (1-2)					1050								015									
5	SH-7 (10-12)					0950								016									
6	SH-8 (8-10)					1025								017									
7	SH-9 (2-4)					1120								018									
8	SH-10 (2-4)					1135								019									
9	SH-11 (2-4)					1145								020									
10	SH-12 (2-4)					1340								021									
11	SH-13 (2-4)	↓↓				1410	↓↓			↓↓		X X X		022									
12														023									
ADDITIONAL COMMENTS:		RELINQUISHED BY / AFFILIATION			DATE	TIME	ACCEPTED BY / AFFILIATION			DATE	TIME	SAMPLE CONDITIONS											
					9/18/12	1652	Lin Ing			9/18/12	1652	S11ein (6:17:41) Y a 4											
SAMPLER NAME AND SIGNATURE																							
PRINT Name of SAMPLER: Trish DeSe																							
SIGNATURE of SAMPLER: 																							
DATE Signed (MM/DD/YY): 9/18/12																							
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.

	Document Name: Sample Condition Upon Receipt (SCUR)	Document Revised: May 7, 2012 Page 1 of 2
	Document Number: F-CHR-CS-03-rev.07	Issuing Authority: Pace Huntersville Quality Office

Client Name: Hart & Hickman **Project #:** 92131883

Where Received: Huntersville Asheville Eden

Courier: FedEx UPS USPS Client Commercial Pace Other _____

Custody Seal on Cooler/Box Present: yes no **Seals intact:** yes no

Optional	PO#	Due Date
PO#	Name	

Packing Material: Bubble Wrap Bubble Bags None Other _____

Thermometer Used: IR Gun T1101 T1102 **Type of Ice:** Wet Blue None Samples on ice, cooling process has begun

Temp Correction Factor T1101: No Correction T1102: No Correction

Corrected Cooler Temp.: 4.1 C **Biological Tissue is Frozen:** Yes No N/A **Date and Initials of person examining contents:** RP 9-18-12

Temp should be above freezing to 6°C

Comments:

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	11.
Sample Labels match COC:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	12. 1.5-H-6-8860 - NO TIME on sample - COC-10-50 2.5H-3 (o-2) missing VPH Kit. (3 vials) 3. Extra Kit - no Date-TIME of sample ID 13.4. Received ZipLog Soil-SH-7-(4-6) Not on COC. SH-7-C6-8)
-Includes date/time/ID/Analysis Matrix:		
All containers needing preservation have been checked.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	<input type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	14.
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	15.
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	16.
Trip Blank-Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted: David Graham Date/Time: 9/18/12

Comments/ Resolution: David informed extra VPH Kit was for SH-3(o-2). He also instructed to dispose of Ziplock bags K6.

SCURF Review: /S/ **Date:** 9/18/12 **SRF Review:** CAW **Date:** 9/18/12

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers).