

# Preliminary Site Assessment

NCDOT Project U-5008

Charlotte - Sugar Creek Grade Separation

Parcel: AJP Mecklenburg LLC Property

Owner: AJP Mecklenburg LLC

325 and 331 E. Sugar Creek Road

Charlotte, Mecklenburg County, North Carolina

WBS Element: 41141.1.1

January 3, 2014

Terracon Project No. 71137774



**Prepared for:**

North Carolina Department of Transportation (NCDOT)

Geotechnical Engineering Unit

**Prepared by:**

Terracon Consultants, Inc.

Charlotte, North Carolina

Offices Nationwide  
Employee-Owned

Established in 1965  
terracon.com

# Terracon

Geotechnical ■ Environmental ■ Construction Materials ■ Facilities

# TABLE OF CONTENTS

	Page No.
<b>1.0 INTRODUCTION</b> .....	<b>1</b>
1.1 Site Description .....	1
1.2 Site History .....	1
1.3 Scope of Work .....	1
1.4 Standard of Care .....	1
1.5 Additional Scope Limitations .....	2
1.6 Reliance.....	2
<b>2.0 FIELD ACTIVITIES</b> .....	<b>2</b>
2.1 Geophysical Survey.....	2
2.2 Soil Sampling.....	3
2.3 Subsurface Conditions.....	3
<b>3.0 LABORATORY ANALYSIS</b> .....	<b>4</b>
<b>4.0 DATA EVALUATION</b> .....	<b>4</b>
<b>5.0 CONCLUSIONS</b> .....	<b>4</b>

## FIGURES

Exhibit 1 – USGS Topographic Map

Exhibit 2 – Site Diagram with Soil Boring Locations and Analytical Data

## TABLE

Table 1 – Soil Sampling Analytical Results Summary (VOCs and SVOCs)

## APPENDICES

Appendix A: Boring Logs

Appendix B: Photographs

Appendix C: Geophysical Survey Report

Appendix D: Laboratory Analytical Report and Chain of Custody

January 3, 2014



North Carolina Department of Transportation  
Geotechnical Engineering Unit  
GeoEnvironmental Section  
1589 Mail Service Center  
Raleigh, North Carolina 27699-1589

Attn: Mr. Craig Haden, Geotechnical Project Manager

Re: Preliminary Site Assessment (PSA)  
U-5008 – Sugar Creek Grade Separation  
Parcel: AJP Mecklenburg LLC Property  
325 and 331 E. Sugar Creek Road  
Charlotte, Mecklenburg County, North Carolina  
Terracon Project No. 71137774  
WBS Element: 41141.1.1

Dear Mr. Haden:

Terracon Consultants, Inc. (Terracon) is pleased to submit a Preliminary Site Assessment (PSA) report for the above referenced site. This assessment was performed in accordance with our Proposal for Preliminary Site Assessments (Terracon Proposal No. 71137E099 dated August 30, 2013). This report includes the findings of our investigation and provides our conclusions and recommendations.

Terracon appreciates the opportunity to provide these services to the NCDOT. If you have any questions concerning this report or need additional information, please contact us at 704-509-1777.

Sincerely,

**Terracon Consultants, Inc.**

A handwritten signature in black ink, appearing to read "Analee Farrell".

Analee Farrell, E.I.  
Staff Environmental Professional

A handwritten signature in black ink, appearing to read "M. Tom Eldeen" with a circled "for" next to it.

Christopher L. Corbitt, PG  
Senior Geologist

Terracon Consultants, Inc. 2020-E Starita Road Charlotte, NC 28206  
P [704] 509 1777 F [704] 509 1888 terracon.com

# PRELIMINARY SITE ASSESSMENT

**U-5008 – SUGAR CREEK GRADE SEPARATION  
PARCEL – AJP MECKLENBURG LLC PROPERTY  
325 AND 331 E. SUGAR CREEK ROAD  
CHARLOTTE, MECKLENBURG COUNTY, NORTH CAROLINA**

## 1.0 INTRODUCTION

### 1.1 Site Description

<b>Site Name</b>	AJP Mecklenburg LLC Property
<b>Site Location/Address</b>	325 and 331 E. Sugar Creek Road, Charlotte, Mecklenburg County, North Carolina
<b>General Site Description</b>	The site is comprised of two contiguous tax parcels (09105114 and 09105150) and is occupied by a large building that is a portion of an adjoining commercial retail strip center. Most of the site consists of asphalt-paved parking and drive areas. A chain-link fence/gate traverses the central portion of the site. Two groundwater monitoring wells are located on the property and one of the wells is located within the proposed right of way.

### 1.2 Site History

Currently, the AJP Mecklenburg LLC property is primarily an asphalt-paved parking lot and access drives associated with a commercial retail strip center that occupies the site and extends to the north of the property. According to discussions with the property owner, Compare Foods, the rear portion of the on-site retail building is used as a temporary storage area for food. There are two monitoring wells that plot within the proposed right of way on the parcel. Historically, the site has been developed as commercial/retail.

### 1.3 Scope of Work

At your request, Terracon is completing a scope of work in accordance with the NCDOT's Request for Technical and Cost Proposal dated August 7, 2013 and Terracon's Proposal for Preliminary Site Assessment (Proposal No.71137E099) dated August 30, 2013. The scope of work included a geophysical investigation, collection of twelve (12) soil samples for laboratory analysis, and preparation of a report documenting our soil investigation activities.

### 1.4 Standard of Care

Terracon's services were performed in a manner consistent with generally accepted practices of the profession undertaken in similar studies in the same geographical area during the same time period. Terracon makes no warranties, either expressed or implied, regarding the findings,

conclusions or recommendations. Please note that Terracon does not warrant the work of laboratories, regulatory agencies or other third parties supplying information used in the preparation of the report. These PSA services were performed in accordance with the scope of work authorized by you, our client, as reflected in our proposal and were not conducted in accordance with ASTM E1903-97.

### **1.5 Additional Scope Limitations**

Findings, conclusions and recommendations resulting from these services are based upon information derived from the on-site activities and other services performed under this scope of work; such information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, undetectable or not present during these services, as such, we cannot represent that the site is free of hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during this PSA. Subsurface conditions may vary from those encountered at specific borings or wells or during other surveys, tests, assessments, investigations or exploratory services; the data, interpretations, findings, and our recommendations are based solely upon data obtained at the time and within the scope of these services.

### **1.6 Reliance**

This report has been prepared for the exclusive use of our client, the North Carolina Department of Transportation (NCDOT). Authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the site) is prohibited without the expressed written consent of the client and Terracon.

## **2.0 FIELD ACTIVITIES**

The following PSA activities are presented in the order that they were conducted in the field on November 4 and 5, 2013 and November 18, 2013. Exhibit 1 presents the general boundaries and topography of the site on portions of the Charlotte East, North Carolina USGS topographic quadrangle map dated 1967 and the Derita, North Carolina USGS topographic quadrangle map dated 1993. Exhibit 2 is a site layout plan that depicts the approximate locations of the site features, soil boring locations and analytical data.

### **2.1 Geophysical Survey**

On November 4 and 5, 2013, Pyramid Environmental conducted a geophysical investigation at the site in an effort to determine if unknown, metallic underground storage tanks (USTs) were present beneath the proposed right-of-way (ROW) area. The geophysical investigation included an electromagnetic (EM) induction survey using a Geonics EM-61 MK1 metal detection instrument followed by a ground penetrating radar (GPR) survey using a GSSI SIR-2000 unit.

The geophysical investigation did not reveal the presence of probable metallic USTs in the area of investigation identified for this site; however, some areas of the site may contain buried debris. A copy of the geophysical report that includes a summary of the field findings is included in Appendix C.

## 2.2 Soil Sampling

Based on the findings of the geophysical investigation, Terracon directed the advancement of twelve (12) soil borings (B-1 through B-12) in the southern portion of the AJP Mecklenburg properties on November 18, 2013. The borings were completed by Probe Technology, Inc., a North Carolina licensed driller using a Geoprobe® direct-push rig. The drilling equipment was cleaned prior to beginning the project and before the advancement of each boring.

The soil borings were advanced in an asphalt-paved area within the proposed right of way that is planned as a connector between Greensboro Street and Raleigh Street. Soil samples were collected in 5-foot, disposable, acetate sleeves and were observed to document soil lithology, color, moisture content, and sensory evidence of impairment. Soil samples were placed in re-sealable plastic bags that were set aside for a sufficient amount of time to allow volatilization of organic compounds that may have been present in the soils. The soil samples were then screened using a field-portable *MiniRAE 3000* Photo-Ionization Detector (PID) by inserting the probe tip into the headspace of the bag. The PID readings and soil sample depths are included on individual Boring Logs in Appendix A and in Table 1.

The borings were advanced to depths of approximately 10 feet below ground surface (bgs). Based on our observations, soils obtained from the acetate sleeves were separated into approximately 5-foot intervals but discreet samples were collected throughout each interval. Groundwater was not encountered in any of the borings advanced at the site.

The soil samples were collected and placed in laboratory prepared glassware and placed on ice in a cooler which was secured with a custody seal. The sample cooler and completed chain-of-custody forms were relinquished to Pace Analytical Services (Pace) in Huntersville, North Carolina.

## 2.3 Subsurface Conditions

Borings B-1 through B-12 were advanced to a depth of approximately 10 feet bgs. The soils mostly consisted of brown to light brown, reddish brown and orange brown clayey silt. No petroleum odors were noted in any of the screened samples. Elevated PID readings were reported in borings B-6 through B-12 during the site investigation. Soil samples obtained from the boring interval with the highest PID readings were submitted for laboratory analysis. For borings with no elevated PID readings, soil samples were typically submitted from the deepest sampling interval in each boring.



Terracon opened the two groundwater monitoring wells located in the right of way of the property. One of the wells contained a well tag which indicated that the depth of the well was about 25 feet. Other information on the well tag was not legible. Terracon also reviewed the on-line Mecklenburg County Well Information System to determine the use of the wells; however, the wells were installed prior to Mecklenburg County implementing its well permitting program. The purpose of the two wells has not been determined but due to the estimated age of installation, the wells most likely have not been sampled for many years.

### **3.0 LABORATORY ANALYSIS**

The soil samples were submitted for laboratory analysis of volatile organic compounds (VOCs) by EPA Method 8260 and semi-volatile organic compounds (SVOCs) by EPA Method 8270. Samples were submitted to Pace in Huntersville, North Carolina. Please refer to Appendix D for the laboratory analytical report.

### **4.0 DATA EVALUATION**

#### **4.1 Soil Sample Analytical Results and Interpretation**

Based on the laboratory results, no volatile or semi-volatile organic compounds were detected above the laboratory reporting limits in the twelve soil samples obtained from the AJP property. A summary of the laboratory results is provided in Table 1.

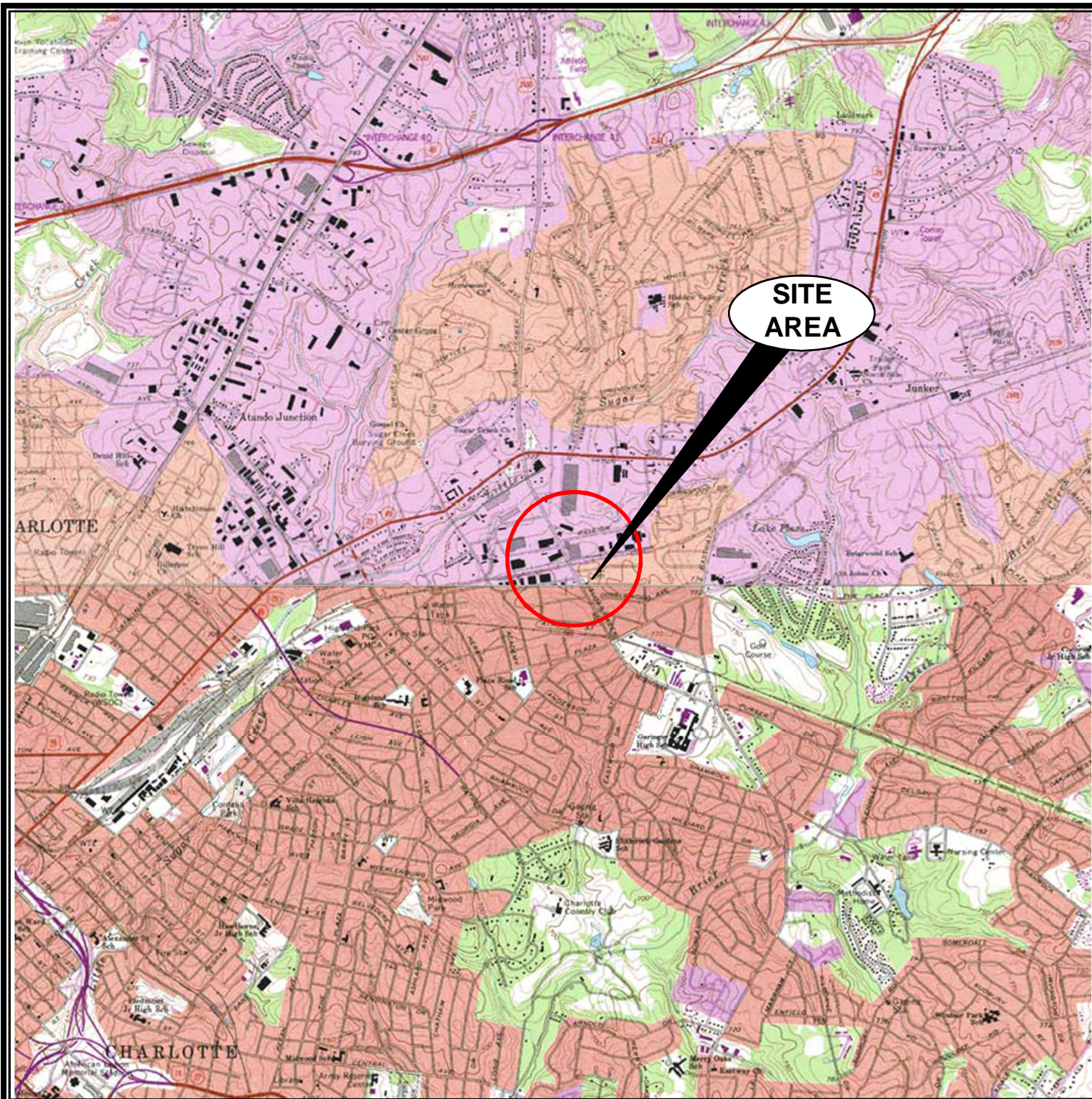
### **5.0 CONCLUSIONS**

The findings of this investigation are discussed below:

- The geophysical investigation did not identify probable metallic USTs in the area of investigation identified for this site; however, some areas of the site may contain buried debris.
- Twelve soil borings were advanced to depths of approximately 10 feet bgs.
- No volatile or semi-volatile organic compounds were detected above laboratory reporting limits in the twelve soil samples obtained from the AJP Mecklenburg property.
- Groundwater was not encountered in the soil borings advanced on the site.
- Based on the laboratory analytical results, no areas of contamination were identified in the soils within the project area.
- The purpose of the two groundwater monitoring wells located on the site has not been determined. Due to the apparent age of the wells and no documented release incidents on adjacent properties requiring assessment at this time, Terracon recommends proper abandonment of the wells.

**FIGURES**  
**EXHIBIT 1 - TOPOGRAPHIC MAP**  
**EXHIBIT 2 – SITE DIAGRAM WITH SOIL BORING LOCATIONS**  
**AND ANALYTICAL DATA**





**USGS TOPOGRAPHIC MAP**

**AJP MECKLENBURG LLC PROPERTY  
325 AND 331 E. SUGAR CREEK ROAD**

**CHARLOTTE, NORTH CAROLINA**

**Terracon**



**PROJECT NO.: 71137774**

**DATE: December 2013**

**DRAWN BY: ALF**














**SCALE: 1" = 2000'**

**EXHIBIT NO. 1**

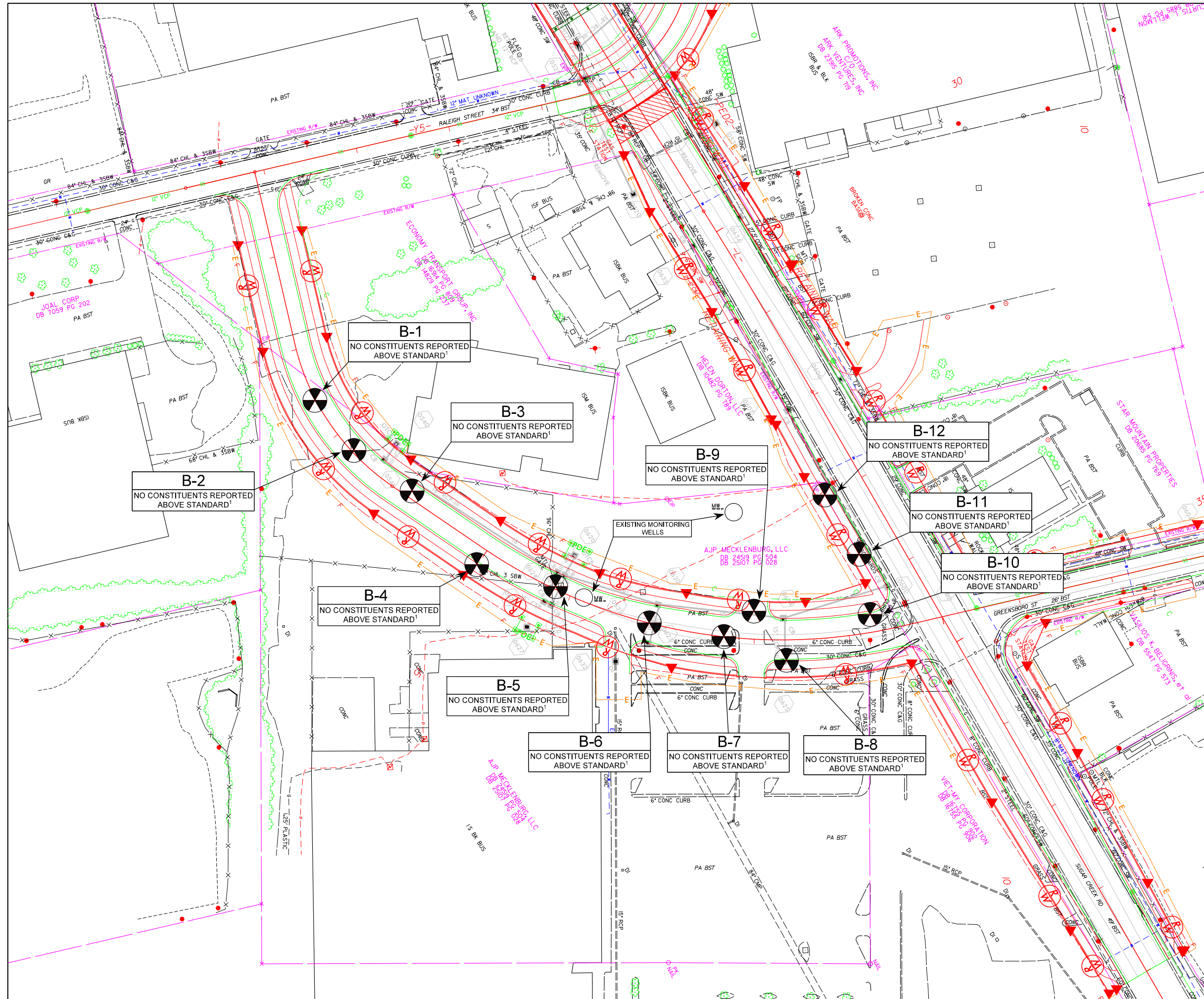
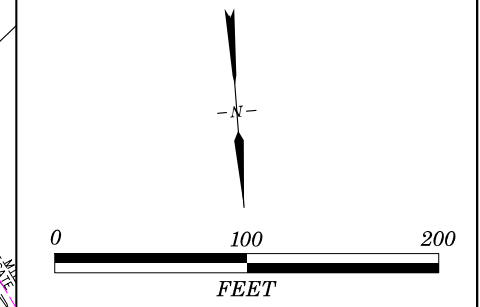
REFERENCE: USGS Topographic Map; Derita, North Carolina Quadrangle; dated 1993; Charlotte East, North Carolina Quadrangle; dated 1967, photorevised 1988.



**LEGEND**

-  PROPERTY LINE
-  EXISTING RIGHT OF WAY LINE
-  PROPOSED RIGHT OF WAY LINE WITH IRON PIN AND CAP MARKER
-  PROPOSED CONSTRUCTION EASEMENT
-  PROPOSED EDGE OF TRAVEL
-  PROPOSED CUT / FILL LINE
-  PROPOSED PERMANENT UTILITY EASEMENT
-  PROPOSED PERMANENT DRAINAGE EASEMENT
-  PROPOSED CATCH BASIN
-  PROPOSED DRAINAGE PIPING
-  ESTIMATED SOIL CONTAMINATION
-  SOIL AND/OR GROUNDWATER SAMPLE LOCATION
-  MONITORING WELL LOCATION

**NOTES:**  
 1. MAXIMUM SOIL CONTAMINANT CONCENTRATION LEVELS (MSCCs)



**TABLES**  
**TABLE 1 – SOIL SAMPLING ANALYTICAL RESULTS**  
**SUMMARY (VOCs AND SVOCs)**

**TABLE 1**  
**Soil Sampling Analytical Results Summary**  
**VOCs and SVOCs**

NCDOT Project U-5008 - Charlotte - Sugar Creek Grade Separation

Parcel: AJP Mecklenburg LLC Property

Analytical Method →				8260	8270
Sample ID#	PID (ppm)	Contaminant of Concern →		VOCs	SVOCs
		Date Collected (mm/dd/yy)	Sample Depth (ft BGS)		
B-1	0.0	11/18/13	5-10	ND	ND
B-2	0.0	11/18/13	5-10	ND	ND
B-3	0.0	11/18/13	5-10	ND	ND
B-4	0.0	11/18/13	5-10	ND	ND
B-5	1.8	11/18/13	5-10	ND	ND
B-6	24.7	11/18/13	5-10	ND	ND
B-7	60.7	11/18/13	5-10	ND	ND
B-8	64.8	11/18/13	5-10	ND	ND
B-9	33.6	11/18/13	0-5	ND	ND
B-10	390	11/18/13	5-10	ND	ND
B-11	387.6	11/18/13	5-10	ND	ND
B-12	399.8	11/18/13	5-10	ND	ND
<b>Soil-to-Water Maximum Contaminant Concentration (Soil mg/kg)</b>				N/A	N/A

- ND = Not Detected in concentrations above the reporting limit.
- ft. BGS = feet below ground surface
- Laboratory results reported in micrograms per kilogram (ug/kg).
- PID = Photo-Ionization Detector
- Boldface type and yellow shading indicate sample contaminant exceeds regulatory level

**APPENDIX A  
BORING LOGS**

**SOIL BORING LOG**

PROJECT NAME: AJP Mecklenburg LLC Property	SOIL BORING I.D.: B-1
PROJECT NO.: 71137774	DATE(S) DRILLED: November 18, 2013
PROJECT LOCATION: 325 and 331 E. Sugar Creek Road Charlotte, North Carolina	DRILLING CONTR.: Probe Technology
	DRILL METHOD: Direct Push
	BORING DIAMETER: 2 inches
CLIENT: North Carolina Department of Transportation	SAMPLING METHOD/INTERVAL: GP (5-Foot)
LOGGED BY: S. Alex Chinery	REMARKS: BGS = below grade surface

**DESCRIPTIVE LOG**

SAMPLE INTERVAL	SAMPLE REC. (IN.)	BLOWS PER 6"	PID/FID (ppm)	GRAPHIC COLUMN	DEPTH (FT)	DESCRIPTION OF SOIL
					0.0	asphalt pavement (approx. 4")
					0.5	brown/orange clayey silt
					1.0	
					1.5	
					2.0	
0 - 5.0		NA	0.0		2.5	
					3.0	dark brown/orange clayey silt
					3.5	
					4.0	
					4.5	
					5.0	
					5.5	
					6.0	
					6.5	
5.0-10.0		NA	0.0		7.5	
					8.0	
					8.5	BORING TERMINATED AT 10 FEET BGS
					9.0	
					9.5	
					10.0	
					10.5	
					11.0	
					11.5	
					12.0	
					15.5	
					13.0	
					13.5	
					14.0	
					14.5	
					15.0	
					15.5	
					16.0	

**DRILLING METHODS**  
 AR - AIR ROTARY  
 CFA - CONTINUOUS FLIGHT AUGER  
 DC - DRIVEN CASING  
 HA - HAND AUGER  
 HSA - HOLLOW STEM AUGER  
 MD - MUD DRILLING  
 RC - ROCK CORING  
 WR - WATER ROTARY

**SAMPLING METHODS**  
 SS - SPLIT SPOON  
 ST - SHELBY TUBE  
 GP - GEOPROBE

\* - Sample collected for analysis  
 ND = <1 ppm



### SOIL BORING LOG

PROJECT NAME: AJP Mecklenburg LLC Property	SOIL BORING I.D.: B-2
PROJECT NO.: 71137774	DATE(S) DRILLED: November 18, 2013
PROJECT LOCATION: 325 and 331 E. Sugar Creek Road Charlotte, North Carolina	DRILLING CONTR.: Probe Technology
	DRILL METHOD: Direct Push
	BORING DIAMETER: 2 inches
CLIENT: North Carolina Department of Transportation	SAMPLING METHOD/INTERVAL: GP (5-Foot)
LOGGED BY: S. Alex Chinery	REMARKS: BGS = below grade surface

#### DESCRIPTIVE LOG

SAMPLE INTERVAL	SAMPLE REC. (IN.)	BLOWS PER 6"	PID/FID (ppm)	GRAPHIC COLUMN	DEPTH (FT)	DESCRIPTION OF SOIL
					0.0	asphalt pavement (approx. 4")
					0.5	brown/orange clayey silt
					1.0	
					1.5	
					2.0	
0 - 5.0		NA	0.0		2.5	
					3.0	
					3.5	dark brown/orange clayey silt
					4.0	
					4.5	
					5.0	
					5.5	
					6.0	
					6.5	BORING TERMINATED AT 10 FEET BGS
5.0-10.0		NA	0.0		7.5	
					8.0	
					8.5	
					9.0	
					9.5	
					10.0	
					10.5	
					11.0	
					11.5	
					12.0	
					15.5	
					13.0	
					13.5	
					14.0	
					14.5	
					15.0	
					15.5	
					16.0	

**DRILLING METHODS**  
 AR - AIR ROTARY  
 CFA - CONTINUOUS FLIGHT AUGER  
 DC - DRIVEN CASING  
 HA - HAND AUGER  
 HSA - HOLLOW STEM AUGER  
 MD - MUD DRILLING  
 RC - ROCK CORING  
 WR - WATER ROTARY

**SAMPLING METHODS**  
 SS - SPLIT SPOON  
 ST - SHELBY TUBE  
 GP - GEOPROBE

\* - Sample collected for analysis  
 ND = <1 ppm





**SOIL BORING LOG**

PROJECT NAME: AJP Mecklenburg LLC Property	SOIL BORING I.D.: B-3
PROJECT NO.: 71137774	DATE(S) DRILLED: November 18, 2013
PROJECT LOCATION: 325 and 331 E. Sugar Creek Road Charlotte, North Carolina	DRILLING CONTR.: Probe Technology
	DRILL METHOD: Direct Push
	BORING DIAMETER: 2 inches
CLIENT: North Carolina Department of Transportation	SAMPLING METHOD/INTERVAL: GP (5-Foot)
LOGGED BY: S. Alex Chinery	REMARKS: BGS = below grade surface

**DESCRIPTIVE LOG**

SAMPLE INTERVAL	SAMPLE REC. (IN.)	BLOWS PER 6"	PID/FID (ppm)	GRAPHIC COLUMN	DEPTH (FT)	DESCRIPTION OF SOIL
					0.0	asphalt pavement (approx. 4")
					0.5	brown/orange clayey silt
					1.0	
					1.5	
					2.0	
0 - 5.0		NA	0.3		2.5	
					3.0	
					3.5	dark brown/orange clayey silt
					4.0	
					4.5	
					5.0	
					5.5	
					6.0	
					6.5	
					7.0	
5.0-10.0		NA	0.0		7.5	
					8.0	
					8.5	BORING TERMINATED AT 10 FEET BGS
					9.0	
					9.5	
					10.0	
					10.5	
					11.0	
					11.5	
					12.0	
					15.5	
					13.0	
					13.5	
					14.0	
					14.5	
					15.0	
					15.5	
					16.0	

**DRILLING METHODS**  
 AR - AIR ROTARY  
 CFA - CONTINUOUS FLIGHT AUGER  
 DC - DRIVEN CASING  
 HA - HAND AUGER  
 HSA - HOLLOW STEM AUGER  
 MD - MUD DRILLING  
 RC - ROCK CORING  
 WR - WATER ROTARY

**SAMPLING METHODS**  
 SS - SPLIT SPOON  
 ST - SHELBY TUBE  
 GP - GEOPROBE

\* - Sample collected for analysis  
 ND = <1 ppm



**SOIL BORING LOG**

PROJECT NAME: AJP Mecklenburg LLC Property	SOIL BORING I.D.: B-4
PROJECT NO.: 71137774	DATE(S) DRILLED: November 18, 2013
PROJECT LOCATION: 325 and 331 E. Sugar Creek Road Charlotte, North Carolina	DRILLING CONTR.: Probe Technology
	DRILL METHOD: Direct Push
	BORING DIAMETER: 2 inches
CLIENT: North Carolina Department of Transportation	SAMPLING METHOD/INTERVAL: GP (5-Foot)
LOGGED BY: S. Alex Chinery	REMARKS: BGS = below grade surface

**DESCRIPTIVE LOG**

SAMPLE INTERVAL	SAMPLE REC. (IN.)	BLOWS PER 6"	PID/FID (ppm)	GRAPHIC COLUMN	DEPTH (FT)	DESCRIPTION OF SOIL
					0.0	asphalt pavement (approx. 4")
					0.5	brown/orange clayey silt
					1.0	
					1.5	
					2.0	
0 - 5.0		NA	0.0		2.5	
					3.0	
					3.5	dark brown/orange clayey silt
					4.0	
					4.5	
					5.0	
					5.5	
					6.0	
					6.5	
					7.0	
5.0-10.0		NA	0.0		7.5	
					8.0	
					8.5	BORING TERMINATED AT 10 FEET BGS
					9.0	
					9.5	
					10.0	
					10.5	
					11.0	
					11.5	
					12.0	
					15.5	
					13.0	
					13.5	
					14.0	
					14.5	
					15.0	
					15.5	
					16.0	

**DRILLING METHODS**  
 AR - AIR ROTARY  
 CFA - CONTINUOUS FLIGHT AUGER  
 DC - DRIVEN CASING  
 HA - HAND AUGER  
 HSA - HOLLOW STEM AUGER  
 MD - MUD DRILLING  
 RC - ROCK CORING  
 WR - WATER ROTARY

**SAMPLING METHODS**  
 SS - SPLIT SPOON  
 ST - SHELBY TUBE  
 GP - GEOPROBE

\* - Sample collected for analysis  
 ND = <1 ppm



**SOIL BORING LOG**

PROJECT NAME: AJP Mecklenburg LLC Property	SOIL BORING I.D.: B-5
PROJECT NO.: 71137774	DATE(S) DRILLED: November 18, 2013
PROJECT LOCATION: 325 and 331 E. Sugar Creek Road Charlotte, North Carolina	DRILLING CONTR.: Probe Technology
	DRILL METHOD: Direct Push
	BORING DIAMETER: 2 inches
CLIENT: North Carolina Department of Transportation	SAMPLING METHOD/INTERVAL: GP (5-Foot)
LOGGED BY: S. Alex Chinery	REMARKS: BGS = below grade surface

**DESCRIPTIVE LOG**

SAMPLE INTERVAL	SAMPLE REC. (IN.)	BLOWS PER 6"	PID/FID (ppm)	GRAPHIC COLUMN	DEPTH (FT)	DESCRIPTION OF SOIL
					0.0	asphalt pavement (approx. 4")
					0.5	light brown/orange clayey silt
					1.0	
					1.5	
					2.0	
0 - 5.0		NA	0.8		2.5	
					3.0	
					3.5	brown/red/orange clayey silt
					4.0	
					4.5	
					5.0	
					5.5	
					6.0	
					6.5	
					7.0	
5.0-10.0		NA	1.8		7.5	
					8.0	
					8.5	BORING TERMINATED AT 10 FEET BGS
					9.0	
					9.5	
					10.0	
					10.5	
					11.0	
					11.5	
					12.0	
					15.5	
					13.0	
					13.5	
					14.0	
					14.5	
					15.0	
					15.5	
					16.0	

**DRILLING METHODS**  
 AR - AIR ROTARY  
 CFA - CONTINUOUS FLIGHT AUGER  
 DC - DRIVEN CASING  
 HA - HAND AUGER  
 HSA - HOLLOW STEM AUGER  
 MD - MUD DRILLING  
 RC - ROCK CORING  
 WR - WATER ROTARY

**SAMPLING METHODS**  
 SS - SPLIT SPOON  
 ST - SHELBY TUBE  
 GP - GEOPROBE

\* - Sample collected for analysis  
 ND = <1 ppm



**SOIL BORING LOG**

PROJECT NAME: AJP Mecklenburg LLC Property	SOIL BORING I.D.: B-6
PROJECT NO.: 71137774	DATE(S) DRILLED: November 18, 2013
PROJECT LOCATION: 325 and 331 E. Sugar Creek Road Charlotte, North Carolina	DRILLING CONTR.: Probe Technology
	DRILL METHOD: Direct Push
	BORING DIAMETER: 2 inches
CLIENT: North Carolina Department of Transportation	SAMPLING METHOD/INTERVAL: GP (5-Foot)
LOGGED BY: S. Alex Chinery	REMARKS: BGS = below grade surface

**DESCRIPTIVE LOG**

SAMPLE INTERVAL	SAMPLE REC. (IN.)	BLOWS PER 6"	PID/FID (ppm)	GRAPHIC COLUMN	DEPTH (FT)	DESCRIPTION OF SOIL
					0.0	asphalt pavement (approx. 4")
					0.5	brown/red/orange clayey silt
					1.0	
					1.5	
					2.0	
0 - 5.0		NA	8.2		2.5	
					3.0	
					3.5	dark brown/orange clayey silt
					4.0	
					4.5	
					5.0	
					5.5	
					6.0	
					6.5	
					7.0	
5.0-10.0		NA	24.7		7.5	
					8.0	
					8.5	BORING TERMINATED AT 10 FEET BGS
					9.0	
					9.5	
					10.0	
					10.5	
					11.0	
					11.5	
					12.0	
					15.5	
					13.0	
					13.5	
					14.0	
					14.5	
					15.0	
					15.5	
					16.0	

**DRILLING METHODS**  
 AR - AIR ROTARY  
 CFA - CONTINUOUS FLIGHT AUGER  
 DC - DRIVEN CASING  
 HA - HAND AUGER  
 HSA - HOLLOW STEM AUGER  
 MD - MUD DRILLING  
 RC - ROCK CORING  
 WR - WATER ROTARY

**SAMPLING METHODS**  
 SS - SPLIT SPOON  
 ST - SHELBY TUBE  
 GP - GEOPROBE

\* - Sample collected for analysis  
 ND = <1 ppm



**SOIL BORING LOG**

PROJECT NAME: AJP Mecklenburg LLC Property	SOIL BORING I.D.: B-7
PROJECT NO.: 71137774	DATE(S) DRILLED: November 18, 2013
PROJECT LOCATION: 325 and 331 E. Sugar Creek Road Charlotte, North Carolina	DRILLING CONTR.: Probe Technology
	DRILL METHOD: Direct Push
	BORING DIAMETER: 2 inches
CLIENT: North Carolina Department of Transportation	SAMPLING METHOD/INTERVAL: GP (5-Foot)
LOGGED BY: S. Alex Chinery	REMARKS: BGS = below grade surface

**DESCRIPTIVE LOG**

SAMPLE INTERVAL	SAMPLE REC. (IN.)	BLOWS PER 6"	PID/FID (ppm)	GRAPHIC COLUMN	DEPTH (FT)	DESCRIPTION OF SOIL
					0.0	asphalt pavement (approx. 4")
					0.5	dark brown/orange clayey silt
					1.0	
					1.5	
					2.0	
0 - 5.0		NA	51.1		2.5	
					3.0	
					3.5	
					4.0	
					4.5	
					5.0	
					5.5	brown/orange clayey silt
					6.0	
					6.5	
					7.0	
5.0-10.0		NA	60.7		7.5	
					8.0	
					8.5	
					9.0	
					9.5	
					10.0	
					10.5	
					11.0	
					11.5	
					12.0	
					15.5	
					13.0	
					13.5	
					14.0	
					14.5	
					15.0	
					15.5	
					16.0	

**DRILLING METHODS**  
 AR - AIR ROTARY  
 CFA - CONTINUOUS FLIGHT AUGER  
 DC - DRIVEN CASING  
 HA - HAND AUGER  
 HSA - HOLLOW STEM AUGER  
 MD - MUD DRILLING  
 RC - ROCK CORING  
 WR - WATER ROTARY

**SAMPLING METHODS**  
 SS - SPLIT SPOON  
 ST - SHELBY TUBE  
 GP - GEOPROBE

\* - Sample collected for analysis  
 ND = <1 ppm



**SOIL BORING LOG**

PROJECT NAME: AJP Mecklenburg LLC Property	SOIL BORING I.D.: B-8
PROJECT NO.: 71137774	DATE(S) DRILLED: November 18, 2013
PROJECT LOCATION: 325 and 331 E. Sugar Creek Road Charlotte, North Carolina	DRILLING CONTR.: Probe Technology
	DRILL METHOD: Direct Push
	BORING DIAMETER: 2 inches
CLIENT: North Carolina Department of Transportation	SAMPLING METHOD/INTERVAL: GP (5-Foot)
LOGGED BY: S. Alex Chinery	REMARKS: BGS = below grade surface

**DESCRIPTIVE LOG**

SAMPLE INTERVAL	SAMPLE REC. (IN.)	BLOWS PER 6"	PID/FID (ppm)	GRAPHIC COLUMN	DEPTH (FT)	DESCRIPTION OF SOIL
					0.0	asphalt pavement (approx. 4")
					0.5	brown/red/orange clayey silt
					1.0	
					1.5	
					2.0	
0 - 5.0		NA	16.6		2.5	
					3.0	
					3.5	brown/tan/orange clayey silt
					4.0	
					4.5	
					5.0	
					5.5	
					6.0	
					6.5	
					7.0	
5.0-10.0		NA	64.8		7.5	
					8.0	
					8.5	BORING TERMINATED AT 10 FEET BGS
					9.0	
					9.5	
					10.0	
					10.5	
					11.0	
					11.5	
					12.0	
					15.5	
					13.0	
					13.5	
					14.0	
					14.5	
					15.0	
					15.5	
					16.0	

**DRILLING METHODS**  
 AR - AIR ROTARY  
 CFA - CONTINUOUS FLIGHT AUGER  
 DC - DRIVEN CASING  
 HA - HAND AUGER  
 HSA - HOLLOW STEM AUGER  
 MD - MUD DRILLING  
 RC - ROCK CORING  
 WR - WATER ROTARY

**SAMPLING METHODS**  
 SS - SPLIT SPOON  
 ST - SHELBY TUBE  
 GP - GEOPROBE

\* - Sample collected for analysis  
 ND = <1 ppm



**SOIL BORING LOG**

PROJECT NAME: AJP Mecklenburg LLC Property	SOIL BORING I.D.: B-9
PROJECT NO.: 71137774	DATE(S) DRILLED: November 18, 2013
PROJECT LOCATION: 325 and 331 E. Sugar Creek Road Charlotte, North Carolina	DRILLING CONTR.: Probe Technology
	DRILL METHOD: Direct Push
	BORING DIAMETER: 2 inches
CLIENT: North Carolina Department of Transportation	SAMPLING METHOD/INTERVAL: GP (5-Foot)
LOGGED BY: S. Alex Chinery	REMARKS: BGS = below grade surface

**DESCRIPTIVE LOG**

SAMPLE INTERVAL	SAMPLE REC. (IN.)	BLOWS PER 6"	PID/FID (ppm)	GRAPHIC COLUMN	DEPTH (FT)	DESCRIPTION OF SOIL
					0.0	asphalt pavement (approx. 4")
					0.5	brown/red/orange clayey silt
					1.0	
					1.5	
					2.0	
0 - 5.0		NA	33.6		2.5	
					3.0	
					3.5	brown/tan/orange clayey silt
					4.0	
					4.5	
					5.0	
					5.5	
					6.0	
					6.5	
					7.0	
5.0-10.0		NA	12.1		7.5	
					8.0	
					8.5	BORING TERMINATED AT 10 FEET BGS
					9.0	
					9.5	
					10.0	
					10.5	
					11.0	
					11.5	
					12.0	
					15.5	
					13.0	
					13.5	
					14.0	
					14.5	
					15.0	
					15.5	
					16.0	

**DRILLING METHODS**  
 AR - AIR ROTARY  
 CFA - CONTINUOUS FLIGHT AUGER  
 DC - DRIVEN CASING  
 HA - HAND AUGER  
 HSA - HOLLOW STEM AUGER  
 MD - MUD DRILLING  
 RC - ROCK CORING  
 WR - WATER ROTARY

**SAMPLING METHODS**  
 SS - SPLIT SPOON  
 ST - SHELBY TUBE  
 GP - GEOPROBE

\* - Sample collected for analysis  
 ND = <1 ppm





**SOIL BORING LOG**

PROJECT NAME: AJP Mecklenburg LLC Property	SOIL BORING I.D.: B-10
PROJECT NO.: 71137774	DATE(S) DRILLED: November 18, 2013
PROJECT LOCATION: 325 and 331 E. Sugar Creek Road Charlotte, North Carolina	DRILLING CONTR.: Probe Technology
	DRILL METHOD: Direct Push
	BORING DIAMETER: 2 inches
CLIENT: North Carolina Department of Transportation	SAMPLING METHOD/INTERVAL: GP (5-Foot)
LOGGED BY: S. Alex Chinery	REMARKS: BGS = below grade surface

**DESCRIPTIVE LOG**

SAMPLE INTERVAL	SAMPLE REC. (IN.)	BLOWS PER 6"	PID/FID (ppm)	GRAPHIC COLUMN	DEPTH (FT)	DESCRIPTION OF SOIL
					0.0	asphalt pavement (approx. 4")
					0.5	brown/red/orange clayey silt
					1.0	
					1.5	
					2.0	
0 - 5.0		NA	239.5		2.5	
					3.0	
					3.5	brown/tan/orange clayey silt
					4.0	
					4.5	
					5.0	
					5.5	
					6.0	
					6.5	
					7.0	
5.0-10.0		NA	390		7.5	
					8.0	
					8.5	BORING TERMINATED AT 10 FEET BGS
					9.0	
					9.5	
					10.0	
					10.5	
					11.0	
					11.5	
					12.0	
					15.5	
					13.0	
					13.5	
					14.0	
					14.5	
					15.0	
					15.5	
					16.0	

**DRILLING METHODS**  
 AR - AIR ROTARY  
 CFA - CONTINUOUS FLIGHT AUGER  
 DC - DRIVEN CASING  
 HA - HAND AUGER  
 HSA - HOLLOW STEM AUGER  
 MD - MUD DRILLING  
 RC - ROCK CORING  
 WR - WATER ROTARY

**SAMPLING METHODS**  
 SS - SPLIT SPOON  
 ST - SHELBY TUBE  
 GP - GEOPROBE

\* - Sample collected for analysis  
 ND = <1 ppm



**SOIL BORING LOG**

PROJECT NAME: AJP Mecklenburg LLC Property	SOIL BORING I.D.: B-11
PROJECT NO.: 71137774	DATE(S) DRILLED: November 18, 2013
PROJECT LOCATION: 325 and 331 E. Sugar Creek Road Charlotte, North Carolina	DRILLING CONTR.: Probe Technology
	DRILL METHOD: Direct Push
	BORING DIAMETER: 2 inches
CLIENT: North Carolina Department of Transportation	SAMPLING METHOD/INTERVAL: GP (5-Foot)
LOGGED BY: S. Alex Chinery	REMARKS: BGS = below grade surface

**DESCRIPTIVE LOG**

SAMPLE INTERVAL	SAMPLE REC. (IN.)	BLOWS PER 6"	PID/FID (ppm)	GRAPHIC COLUMN	DEPTH (FT)	DESCRIPTION OF SOIL
					0.0	asphalt pavement (approx. 4")
					0.5	orange/tan clayey silt
					1.0	
					1.5	
					2.0	
0 - 5.0		NA	224.7		2.5	
					3.0	brown/orange clayey silt
					3.5	
					4.0	
					4.5	
					5.0	
					5.5	
					6.0	
					6.5	
5.0-10.0		NA	387.6		7.5	
					8.0	
					8.5	BORING TERMINATED AT 10 FEET BGS
					9.0	
					9.5	
					10.0	
					10.5	
					11.0	
					11.5	
					12.0	
					15.5	
					13.0	
					13.5	
					14.0	
					14.5	
					15.0	
					15.5	
					16.0	

**DRILLING METHODS**  
 AR - AIR ROTARY  
 CFA - CONTINUOUS FLIGHT AUGER  
 DC - DRIVEN CASING  
 HA - HAND AUGER  
 HSA - HOLLOW STEM AUGER  
 MD - MUD DRILLING  
 RC - ROCK CORING  
 WR - WATER ROTARY

**SAMPLING METHODS**  
 SS - SPLIT SPOON  
 ST - SHELBY TUBE  
 GP - GEOPROBE

\* - Sample collected for analysis  
 ND = <1 ppm



**SOIL BORING LOG**

PROJECT NAME: AJP Mecklenburg LLC Property	SOIL BORING I.D.: B-12
PROJECT NO.: 71137774	DATE(S) DRILLED: November 18, 2013

PROJECT LOCATION: 325 and 331 E. Sugar Creek Road Charlotte, North Carolina	DRILLING CONTR.: Probe Technology
	DRILL METHOD: Direct Push
	BORING DIAMETER: 2 inches

CLIENT: North Carolina Department of Transportation	SAMPLING METHOD/INTERVAL: GP (5-Foot)
LOGGED BY: S. Alex Chinery	REMARKS: BGS = below grade surface

**DESCRIPTIVE LOG**

SAMPLE INTERVAL	SAMPLE REC. (IN.)	BLOWS PER 6"	PID/FID (ppm)	GRAPHIC COLUMN	DEPTH (FT)	DESCRIPTION OF SOIL
					0.0	asphalt pavement (approx. 4") light brown/orange clayey silt
					0.5	
					1.0	
					1.5	
					2.0	
0 - 5.0		NA	391.2		2.5	
					3.0	
					3.5	
					4.0	
					4.5	
					5.0	
					5.5	
					6.0	brown/red/orange clayey silt
					6.5	
					7.0	
5.0-10.0		NA	399.8		7.5	
					8.0	
					8.5	
					9.0	
					9.5	
					10.0	
					10.0	BORING TERMINATED AT 10 FEET BGS
					10.5	
					11.0	
					11.5	
					12.0	
					15.5	
					13.0	
					13.5	
					14.0	
					14.5	
					15.0	
					15.5	
					16.0	

<p><b>DRILLING METHODS</b></p> <p>AR - AIR ROTARY CFA - CONTINUOUS FLIGHT AUGER DC - DRIVEN CASING HA - HAND AUGER HSA - HOLLOW STEM AUGER MD - MUD DRILLING RC - ROCK CORING WR - WATER ROTARY</p>	<p><b>SAMPLING METHODS</b></p> <p>SS - SPLIT SPOON ST - SHELBY TUBE GP - GEOPROBE</p> <p>* - Sample collected for analysis ND = &lt;1 ppm</p>
---	---



**APPENDIX B  
PHOTOGRAPHS**



**Photo 1** View of easternmost portion of site, looking southeast.



**Photo 2** View of western portion of site, looking west towards Sugar Creek Road.



**Photo 3** View of on-site groundwater monitoring well.

**APPENDIX C**  
**GEOPHYSICAL SURVEY REPORT**





PYRAMID ENVIRONMENTAL & ENGINEERING  
(PROJECT 2013-259)

# GEOPHYSICAL SURVEY

---

AJP MECKLENBURG LLC PROPERTY –  
325 & 331 E. SUGAR CREEK ROAD  
NCDOT PROJECT U-5008

CHARLOTTE, MECKLENBURG COUNTY, NC

OCTOBER 15, 2013

Report prepared for: Christopher L. Corbitt, PG  
Terracon Consultants, Inc.  
2020 Starita Rd., Suite E  
Charlotte, North Carolina 28206

Prepared by: \_\_\_\_\_

Eric C. Cross, P.G.  
NC License #2181

Reviewed by: \_\_\_\_\_

Douglas A. Canavello, P.G.  
NC License #1066

503 INDUSTRIAL AVENUE, GREENSBORO, NC 27406

P: 336.335.3174 F: 336.691.0648

C257: GEOLOGY C1251: ENGINEERING

**GEOPHYSICAL INVESTIGATION REPORT**  
325 & 331 E. Sugar Creek Road  
Charlotte, Mecklenburg County, North Carolina

## **Table of Contents**

Executive Summary .....	1
Introduction.....	2
Field Methodology.....	2
Discussion of Results.....	3
Summary and Conclusions .....	5
Limitations .....	6

## **Figures**

- Figure 1 – AJP Mecklenburg Property - Geophysical Survey Boundaries and Site Photographs
- Figure 2 – AJP Mecklenburg Property –EM61 Bottom Coil & Differential Results Contour Maps
- Figure 3 – AJP Mecklenburg Property – Supplemental West Grid Area - EM61 Bottom Coil & Differential Results Contour Maps

## EXECUTIVE SUMMARY

---

**Project Description:** Pyramid Environmental conducted a geophysical investigation for Terracon at the AJP Mecklenburg LLC property, located at 325 & 331 E. Sugar Creek Road, Charlotte, Mecklenburg County, NC. The survey was part of a North Carolina Department of Transportation (NCDOT) Right-of-Way (ROW) investigation (NCDOT Project U-5008). Terracon directed Pyramid as to the geophysical survey boundaries at the project site, which were designed to include all proposed ROW and easement areas depicted in the NCDOT engineering plans. The geophysical investigation consisted of electromagnetic (EM) induction-metal detection and ground penetrating radar (GPR) surveys.

**Geophysical Results:** All of the EM61 anomalies detected could be attributed to visible objects at the ground surface such as signs and vehicles, or were minor and attributed to buried debris. The extreme northwest portion of the property was not surveyed by the EM61 due to high vehicle traffic. Reconnaissance GPR scans across this area did not record any significant features that would be indicative of USTs. The geophysical investigation did not record any evidence of metallic USTs within the directed survey area.

## INTRODUCTION

---

Pyramid Environmental conducted a geophysical investigation for Terracon at the AJP Mecklenburg property, located at 325 & 331 E. Sugar Creek Road, Charlotte, Mecklenburg County, NC. The survey was part of a North Carolina Department of Transportation (NCDOT) Right-of-Way (ROW) investigation (NCDOT Project U-5008). Terracon directed Pyramid as to the geophysical survey boundaries at the project site, which were designed to include all proposed ROW and easement areas depicted in the NCDOT engineering plans. The survey area was divided into two separate survey grids due to the irregular angles associated with the property. The main survey grid spanned approximately 650 feet from west to east and approximately 350 feet from north to south. The supplemental west grid spanned approximately 40 feet from west to east from Sugar Creek Road into the property, and extended approximately 100 feet from north to south parallel to Sugar Creek Road. Conducted on November 4 and 5, 2013, the geophysical investigation was performed to determine if unknown, metallic underground storage tanks (USTs) were present beneath the survey area.

The site was relatively open, and consisted primarily of an asphalt parking lot with some open grassy areas at the eastern portion of the survey area. It should be noted that the extreme northwest portion of the proposed ROW area was not surveyed with the EM61 equipment due to its location in a high traffic intersection. However, this area was surveyed in a reconnaissance fashion using the ground penetrating radar (GPR) equipment (discussed in a later section). Aerial photographs showing the survey area boundaries and ground-level photographs are shown in **Figure 1**.

## FIELD METHODOLOGY

---

Prior to conducting the geophysical investigation, a 20-foot by 10-foot survey grid was established across the geophysical survey areas using measuring tapes and water-based marking paint. These grid marks were used as X-Y coordinates for location control when collecting the geophysical data and establishing base maps for the geophysical results.

The geophysical investigation consisted of electromagnetic (EM) induction-metal detection and ground penetrating radar (GPR) surveys. The EM survey was performed on November 4, 2013, using a Geonics EM61 metal detection instrument. According to the instrument specifications, the EM61 can detect a metal drum down to a maximum depth of approximately 8 feet. Smaller objects (1-foot or less in size) can be detected to a maximum depth of 4 to 5 feet. The EM61 data were digitally collected at approximately 0.8 foot intervals along north-south trending or east-west trending, parallel survey lines spaced five feet apart. The data were downloaded to a computer and reviewed in the field and office using the Geonics DAT61 and Surfer for Windows Version 11.0 software programs.

GPR data were acquired in reconnaissance fashion across the northwest portion of the property on November 5, 2013, using a Geophysical Survey Systems, Inc. (GSSI) SIR-2000 unit equipped with a 400 MHz antenna. Data were collected generally from east to west and north to south across the northwest portion of the property. The GPR data were viewed in real time using a vertical scan of 512 samples, at a rate of 48 scans per second. GPR data were viewed down to a maximum depth of approximately 8 feet, based on an estimated two-way travel time of 8 nanoseconds per foot.

## **DISCUSSION OF RESULTS**

---

Contour plots of the EM61 bottom coil and differential results obtained across the main survey area and the supplemental west grid area at the property are presented in **Figures 2 and 3**, respectively. The bottom coil results represent the most sensitive component of the EM61 instrument and detect metal objects regardless of size. The bottom coil response can be used to delineate metal conduits or utility lines; small, isolated metal objects, and areas containing insignificant metal debris. The differential results are obtained from the difference between the top and bottom coils of the EM61 instrument. The differential results focus on the larger metal objects such as drum and UST-size objects and ignore the smaller insignificant metal objects.

**Main Survey Grid - Discussion of EM Anomalies:** The EM anomaly at X=105, Y=90 was the result of a metal billboard sign. The EM anomaly at X=230, Y=20 was the result of a drop inlet. The EM anomaly at X=370, Y=75 was the result of a storm drain, and the feature extending away

from the drain to the northwest and to the east was associated with a storm sewer pipe that was visible through the storm drain. The EM anomaly at X=400, Y=110 was the result of a monitor well cover. The line of EM anomalies between X=450 and X=520 at Y=125 were associated with cut off metal poles flush with the ground surface. The EM anomaly at X=510, Y=180 was suspected to be the result of isolated metallic debris. The EM anomaly at X= 740, Y=275 was the result of a metal chain link fence. Congruently, the EM feature extending from north to south at X=430 and then to the east and southeast along the south edge of the survey area was the result of a chain link fence extending across the property at this location. The remaining EM anomalies were minor, and were suspected to likely be the result of isolated buried metallic debris.

**Supplemental West Survey Grid - Discussion of EM Anomalies:** The EM anomaly at X=30, Y=25 was the result of a metal sign. The EM anomalies at X=25, Y=85 and at X=25, Y=120 were the result of metal poles. Lastly, the north/south feature extending along the west survey boundary was suspected to be the result of a subsurface utility and/or reinforcement in the sidewalk.

#### **Discussion of GPR Survey**

All EM anomalies recorded by the EM61 survey were directly attributable to visible features at the ground surface, subsurface utilities, or were too minor to be suspected metallic objects such as USTs. As discussed earlier, the extreme northwest portion of the property was not surveyed by the EM61 due to its location within a high traffic intersection. For this reason, the GPR unit was utilized to scan this area in reconnaissance fashion to investigate any large subsurface objects. No significant features were observed in the northwest portion of the survey area during the GPR reconnaissance survey.

The geophysical investigation did not record any evidence of metallic USTs within the proposed ROW and easement areas at the property.

## SUMMARY & CONCLUSIONS

---

Our evaluation of the EM61 and GPR data collected across the property at 325 & 331 E. Sugar Creek Road in Charlotte, North Carolina, provides the following summary and conclusions:

- The EM61 and GPR surveys provided reliable results for the detection of metallic USTs within the accessible portions of the geophysical survey area.
- All of the EM61 anomalies detected could be attributed to visible objects at the ground surface such as signs and vehicles, or were minor and attributed to buried debris.
- The extreme northwest portion of the property was not surveyed by the EM61 due to high vehicle traffic. Reconnaissance GPR scans across this area did not record any significant features that would be indicative of USTs.
- The geophysical investigation did not record any evidence of metallic USTs within the directed survey area.

## LIMITATIONS

---

Geophysical surveys have been performed and this report prepared for Terracon in accordance with generally accepted guidelines for EM61 and GPR surveys. It is generally recognized that the results of the EM61 and GPR surveys are non-unique and may not represent actual subsurface conditions. The EM61 and GPR results obtained for this project have not conclusively determined that no metallic UST lie within the survey area of the Mecklenburg County property, but that no evidence of metallic USTs was detected. Additionally, it should be understood that areas containing extensive vegetation or other restrictions to the accessibility of the geophysical instruments could not be investigated.





Reonnaissance GPR Area



Approximate Boundaries of the Geophysical Survey Area



View of West Portion of Survey Area  
(Facing Approximately West)



View of East Portion of Survey Area  
(Facing Approximately East)

TITLE AJP MECKLENBURG LLC PROPERTY:  
GEOPHYSICAL SURVEY BOUNDARIES  
AND SITE PHOTOGRAPHS

PROJECT SUGAR CREEK ROAD  
NCDOT ROW IMPROVEMENT PROJECT  
CHARLOTTE, MECKLENBURG COUNTY, NC



503 INDUSTRIAL AVENUE  
GREENSBORO, NC 27460  
(336) 335-3174 (p) (336) 691-0648 (f)  
License # C1251 Eng. / License # C257 Geology

DATE 11/6/2013

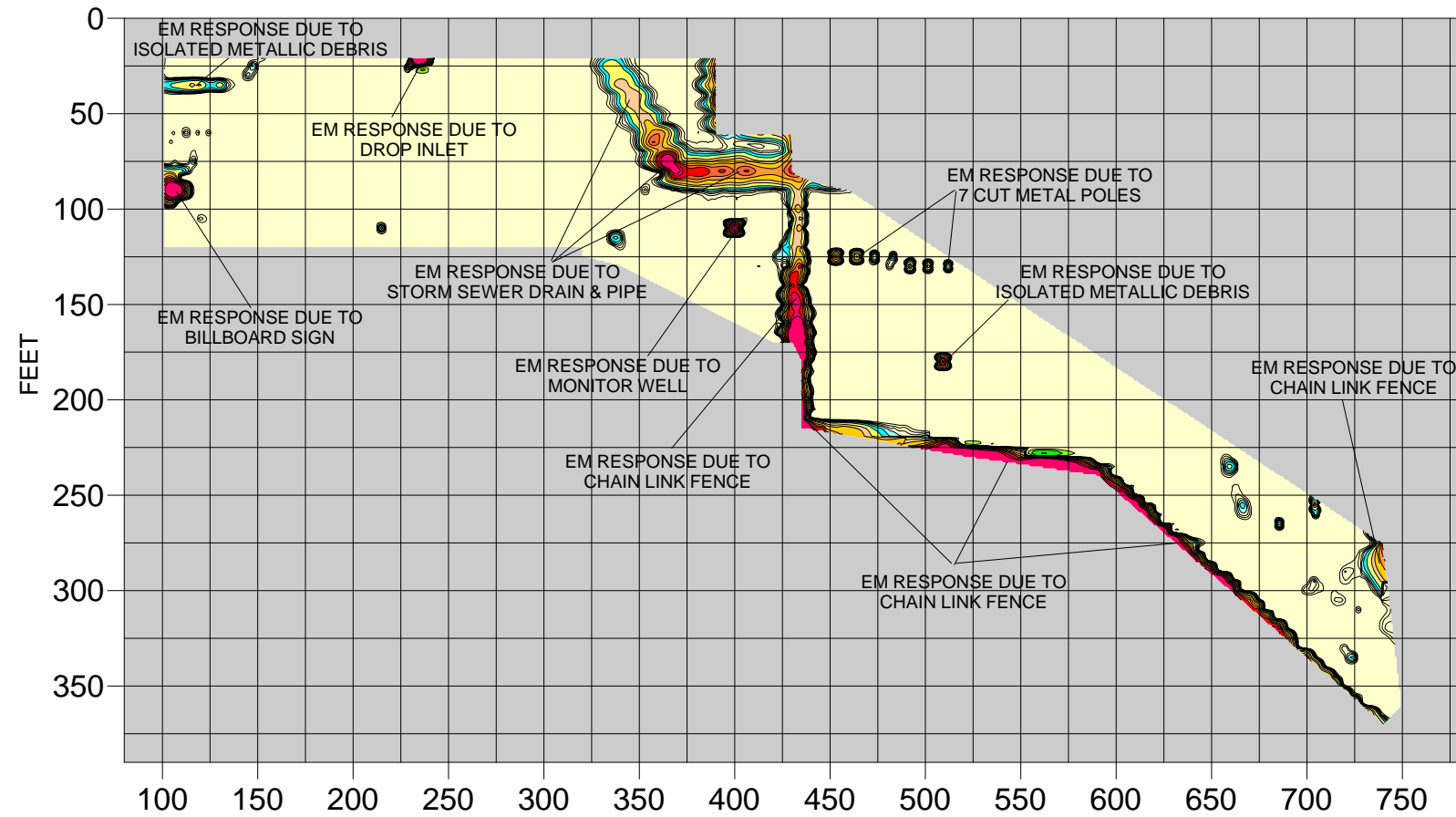
CLIENT TERRACON

PYRAMID PROJECT #: 2013-259

FIGURE 1



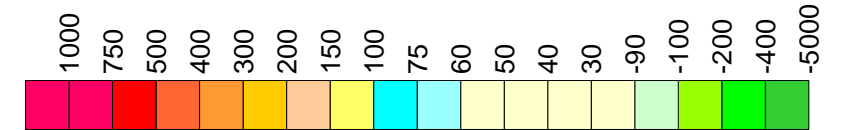
### EM61 Bottom Coil Results



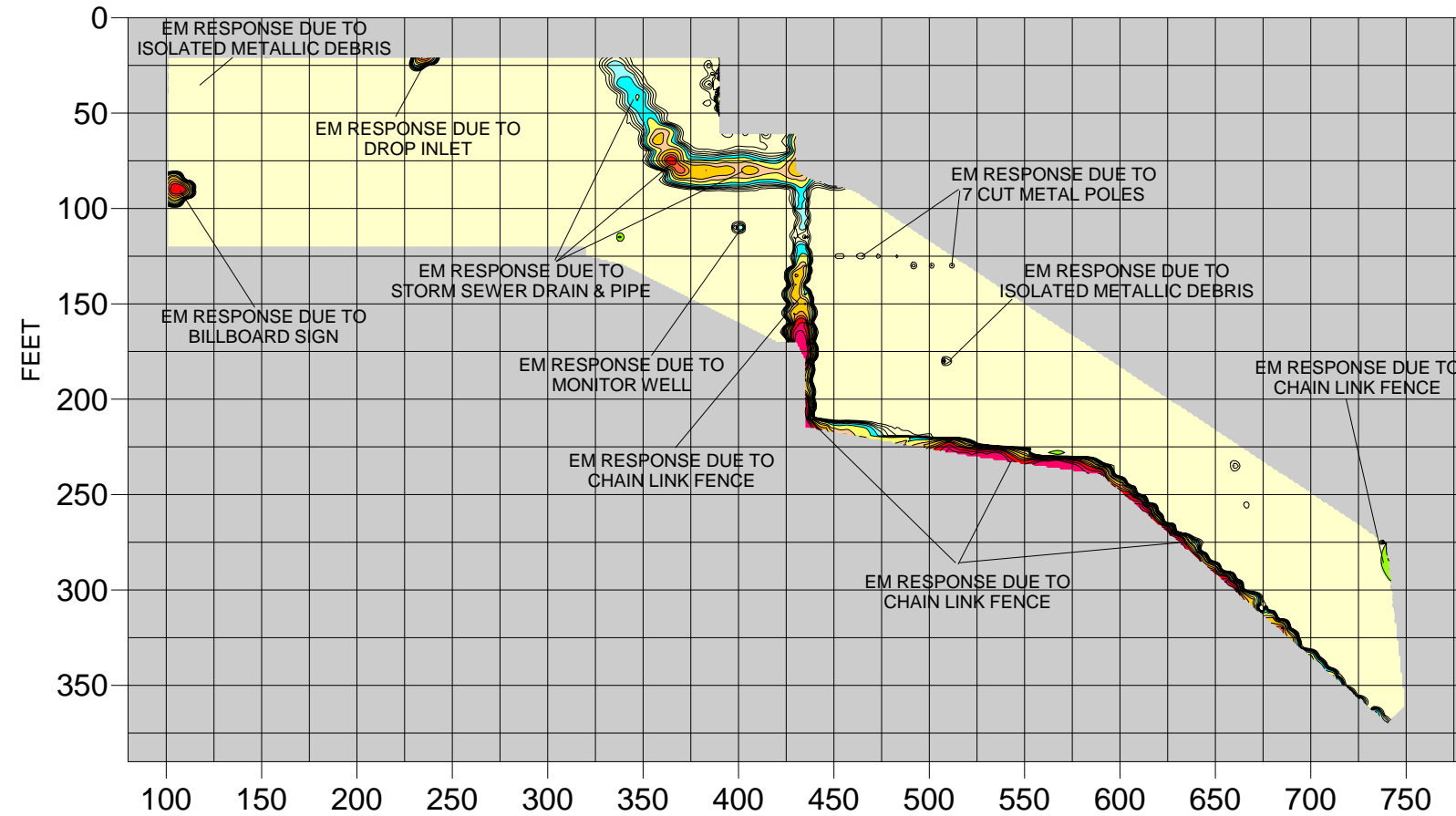
### NO EVIDENCE OF METALLIC USTs OBSERVED


The contour plots show the bottom coil (most sensitive) and differential results of the EM61 instrument in millivolts (mV). The bottom coil response shows buried metallic objects regardless of size. The differential response focuses on larger, buried metallic objects such as drums and USTs and ignores smaller miscellaneous buried, metal debris. The EM61 data were collected on November 4, 2013 using a Geonics EM61 instrument. Ground penetrating radar (GPR) data were collected on November 5, 2013, using a GSSI SIR 2000 unit coupled to a 400 MHz antennae.

### EM61 Metal Detection Response (millivolts)



### EM61 Differential Results

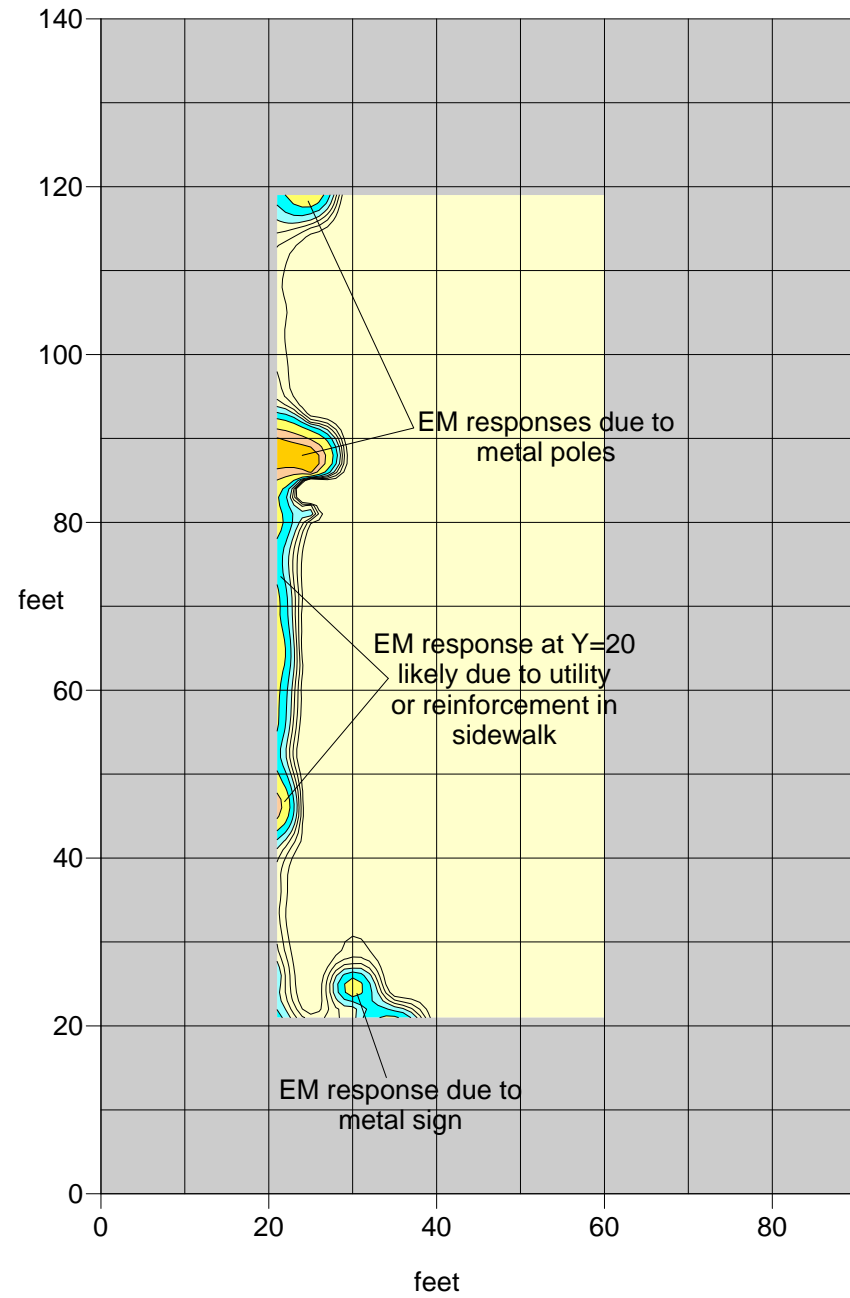


TITLE		AJP MECKLENBURG LLC PROPERTY: EM61 BOTTOM COIL & DIFFERENTIAL RESULTS CONTOUR MAPS	
PROJECT		SUGAR CREEK ROAD NCDOT ROW IMPROVEMENT PROJECT CHARLOTTE, MECKLENBURG COUNTY, NC	
		503 INDUSTRIAL AVENUE GREENSBORO, NC 27460 (336) 335-3174 (p) (336) 691-0648 (f) License # C1251 Eng. / License # C257 Geology	
DATE	11/6/2013	CLIENT	TERRACON
PYRAMID PROJECT #:	2013-259	<b>FIGURE 2</b>	

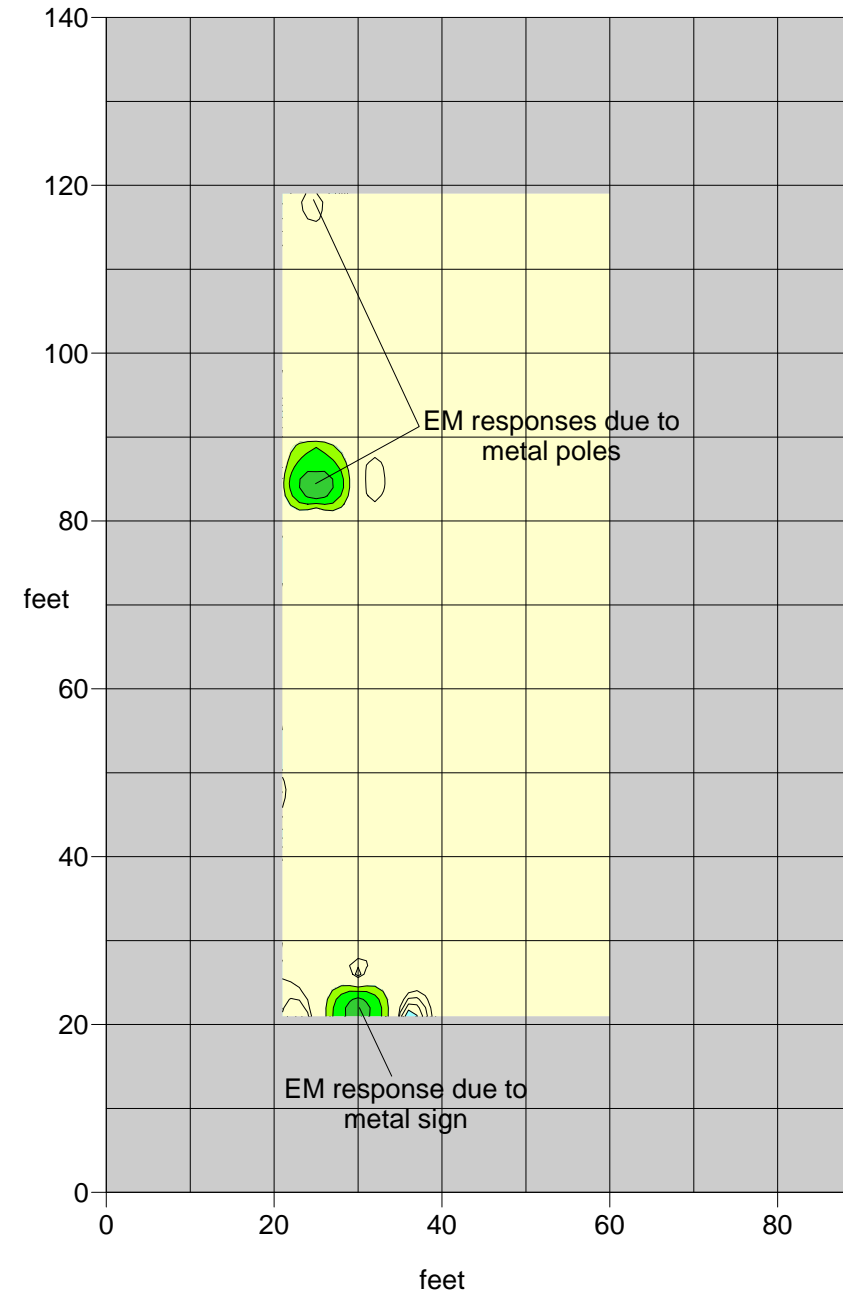
## NO EVIDENCE OF METALLIC USTs OBSERVED

The contour plots show the bottom coil (most sensitive) and differential results of the EM61 instrument in millivolts (mV). The bottom coil response shows buried metallic objects regardless of size. The differential response focuses on larger, buried metallic objects such as drums and USTs and ignores smaller miscellaneous buried, metal debris. The EM61 data were collected on November 4, 2013 using a Geonics EM61 instrument. Ground penetrating radar (GPR) data were collected on November 5, 2013, using a GSSI SIR 2000 unit coupled to a 400 MHz antennae.

### EM61 Bottom Coil Results




### EM61 Differential Results



### EM61 Metal Detection Response (millivolts)



TITLE	MECKLENBURG PROPERTY: SUPPLEMENTAL WEST GRID AREA - EM61 BOTTOM COIL & DIFFERENTIAL RESULTS CONTOUR MAPS	
PROJECT	SUGAR CREEK ROAD NCDOT ROW IMPROVEMENT PROJECT CHARLOTTE, MECKLENBURG COUNTY, NC	
	 503 INDUSTRIAL AVENUE GREENSBORO, NC 27460 (336) 335-3174 (p) (336) 691-0648 (f) License # C1251 Eng. / License # C257 Geology	
DATE	11/6/2013	CLIENT TERRACON
PYRAMID PROJECT #:	2013-259	<b>FIGURE 3</b>

**APPENDIX D**  
**LABORATORY ANALYTICAL REPORT AND CHAIN OF**  
**CUSTODY**



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 Kinsey Ave. Suite 100  
Huntersville, NC 28078  
(704)875-9092

December 05, 2013

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

RE: Project: NCDOT SUGAR CREEK 41141.1.1  
Pace Project No.: 92180233

Dear Chemical Engineer:

Enclosed are the analytical results for sample(s) received by the laboratory on November 20, 2013. 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 Herring

kevin.herring@pacelabs.com  
Project Manager

Enclosures



### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



**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 Kinsey Ave. Suite 100  
Huntersville, NC 28078  
(704)875-9092

## CERTIFICATIONS

Project: NCDOT SUGAR CREEK 41141.1.1  
Pace Project No.: 92180233

---

### Charlotte Certification IDs

9800 Kinsey 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

---

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



**SAMPLE ANALYTE COUNT**

Project: NCDOT SUGAR CREEK 41141.1.1  
 Pace Project No.: 92180233

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92180233001	B10	EPA 8270	BPJ	74	PASI-C
		EPA 8260	DLK	70	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
92180233002	B11	EPA 8270	BPJ	74	PASI-C
		EPA 8260	DLK	70	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
92180233003	B12	EPA 8270	BPJ	74	PASI-C
		EPA 8260	DLK	70	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
92180233004	B13	EPA 8270	BPJ	74	PASI-C
		EPA 8260	DLK	70	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
92180233005	B14	EPA 8270	BPJ	74	PASI-C
		EPA 8260	DLK	70	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
92180233006	B15	EPA 8270	BPJ	74	PASI-C
		EPA 8260	DLK	70	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
92180233007	B16	EPA 8270	BPJ	74	PASI-C
		EPA 8260	DLK	70	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
92180233008	B17	EPA 8270	BPJ	74	PASI-C
		EPA 8260	DLK	70	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
92180233009	B18	EPA 8270	BPJ	74	PASI-C
		EPA 8260	DLK	70	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
92180233010	B19	EPA 8270	BPJ	74	PASI-C
		EPA 8260	DLK	70	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
92180233011	B9	EPA 8270	BPJ	74	PASI-C
		EPA 8260	DLK	70	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
92180233012	B8	EPA 8270	BPJ	74	PASI-C
		EPA 8260	DLK	70	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
92180233013	B7	EPA 8270	BPJ	74	PASI-C

**REPORT OF LABORATORY ANALYSIS**

This report shall not be reproduced, except in full,  
 without the written consent of Pace Analytical Services, Inc..



**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 Kinsey Ave. Suite 100  
 Huntersville, NC 28078  
 (704)875-9092

### SAMPLE ANALYTE COUNT

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92180233014	B6	EPA 8260	DLK	70	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
		EPA 8270	BPJ	74	PASI-C
		EPA 8260	DLK	70	PASI-C
92180233015	B5	ASTM D2974-87	TNM	1	PASI-C
		EPA 8270	BPJ	74	PASI-C
		EPA 8260	DLK	70	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
92180233016	B4	EPA 8270	BPJ	74	PASI-C
		EPA 8260	DLK	70	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
		EPA 8270	BPJ	74	PASI-C
92180233017	B3	EPA 8260	DLK	70	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
		EPA 8270	BPJ	74	PASI-C
		EPA 8260	DLK	70	PASI-C
92180233018	B2	ASTM D2974-87	TNM	1	PASI-C
		EPA 8270	BPJ	74	PASI-C
		EPA 8260	DLK	70	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
92180233019	B1	EPA 8270	BPJ	74	PASI-C
		EPA 8260	DLK	70	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
		EPA 8270	BPJ	74	PASI-C

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
 without the written consent of Pace Analytical Services, Inc..

### SUMMARY OF DETECTION

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92180233001</b>	<b>B10</b>					
ASTM D2974-87	Percent Moisture	29.3 %		0.10	12/04/13 08:13	
<b>92180233002</b>	<b>B11</b>					
ASTM D2974-87	Percent Moisture	25.6 %		0.10	12/04/13 08:13	
<b>92180233003</b>	<b>B12</b>					
ASTM D2974-87	Percent Moisture	12.6 %		0.10	12/04/13 08:20	
<b>92180233004</b>	<b>B13</b>					
ASTM D2974-87	Percent Moisture	12.0 %		0.10	12/04/13 08:20	
<b>92180233005</b>	<b>B14</b>					
ASTM D2974-87	Percent Moisture	13.8 %		0.10	12/04/13 08:20	
<b>92180233006</b>	<b>B15</b>					
ASTM D2974-87	Percent Moisture	18.5 %		0.10	12/04/13 08:20	
<b>92180233007</b>	<b>B16</b>					
ASTM D2974-87	Percent Moisture	13.0 %		0.10	12/04/13 08:20	
<b>92180233008</b>	<b>B17</b>					
ASTM D2974-87	Percent Moisture	22.5 %		0.10	12/04/13 08:21	
<b>92180233009</b>	<b>B18</b>					
EPA 8260	Acetone	148 ug/kg		82.5	11/26/13 03:03	A+
ASTM D2974-87	Percent Moisture	22.9 %		0.10	12/04/13 08:21	
<b>92180233010</b>	<b>B19</b>					
ASTM D2974-87	Percent Moisture	16.8 %		0.10	12/04/13 08:21	
<b>92180233011</b>	<b>B9</b>					
ASTM D2974-87	Percent Moisture	21.2 %		0.10	12/04/13 08:21	
<b>92180233012</b>	<b>B8</b>					
ASTM D2974-87	Percent Moisture	28.3 %		0.10	12/04/13 08:21	
<b>92180233013</b>	<b>B7</b>					
ASTM D2974-87	Percent Moisture	22.9 %		0.10	12/04/13 08:22	
<b>92180233014</b>	<b>B6</b>					
ASTM D2974-87	Percent Moisture	22.7 %		0.10	12/04/13 08:22	
<b>92180233015</b>	<b>B5</b>					
ASTM D2974-87	Percent Moisture	22.9 %		0.10	12/04/13 08:22	
<b>92180233016</b>	<b>B4</b>					
ASTM D2974-87	Percent Moisture	21.7 %		0.10	12/04/13 08:23	
<b>92180233017</b>	<b>B3</b>					
ASTM D2974-87	Percent Moisture	9.4 %		0.10	12/04/13 08:23	
<b>92180233018</b>	<b>B2</b>					
ASTM D2974-87	Percent Moisture	16.0 %		0.10	12/04/13 08:24	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..





**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 Kinsey Ave. Suite 100  
 Huntersville, NC 28078  
 (704)875-9092

### SUMMARY OF DETECTION

Project: NCDOT SUGAR CREEK 41141.1.1  
 Pace Project No.: 92180233

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92180233019</b>	<b>B1</b>					
ASTM D2974-87	Percent Moisture	20.8 %		0.10	12/04/13 08:24	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
 without the written consent of Pace Analytical Services, Inc..

## PROJECT NARRATIVE

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

---

**Method:** EPA 8270

**Description:** 8270 MSSV Microwave

**Client:** NCDOT West Central

**Date:** December 05, 2013

**General Information:**

19 samples were analyzed for EPA 8270. All samples were received in acceptable condition with any exceptions noted below.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 3546 with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: OEXT/24843

L3: Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

- LCS (Lab ID: 1091252)
- 2,4-Dinitrophenol

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: OEXT/24843

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92180233003

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

- MSD (Lab ID: 1091254)
- 1,2-Dichlorobenzene

R1: RPD value was outside control limits.

- MSD (Lab ID: 1091254)
- Phenol

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



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 Kinsey Ave. Suite 100  
Huntersville, NC 28078  
(704)875-9092

## PROJECT NARRATIVE

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

---

**Method:** EPA 8270

**Description:** 8270 MSSV Microwave

**Client:** NCDOT West Central

**Date:** December 05, 2013

### Additional Comments:

Analyte Comments:

QC Batch: OEXT/24843

1g: This flag applies to all compounds with RPD greater than 30%.

- MSD (Lab ID: 1091254)
- Phenol

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



## PROJECT NARRATIVE

Project: NCDOT SUGAR CREEK 41141.1.1  
Pace Project No.: 92180233

---

**Method:** EPA 8260  
**Description:** 8260/5035A Volatile Organics  
**Client:** NCDOT West Central  
**Date:** December 05, 2013

**General Information:**

19 samples were analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

This data package has been reviewed for quality and completeness and is approved for release.

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B10**      **Lab ID: 92180233001**      Collected: 11/18/13 09:45      Received: 11/20/13 14:15      Matrix: Solid

*Results reported on a "dry-weight" basis*

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Microwave</b>		Analytical Method: EPA 8270    Preparation Method: EPA 3546						
Acenaphthene	ND	ug/kg	467	1	11/21/13 10:55	12/02/13 13:12	83-32-9	
Acenaphthylene	ND	ug/kg	467	1	11/21/13 10:55	12/02/13 13:12	208-96-8	
Aniline	ND	ug/kg	467	1	11/21/13 10:55	12/02/13 13:12	62-53-3	
Anthracene	ND	ug/kg	467	1	11/21/13 10:55	12/02/13 13:12	120-12-7	
Benzo(a)anthracene	ND	ug/kg	467	1	11/21/13 10:55	12/02/13 13:12	56-55-3	
Benzo(a)pyrene	ND	ug/kg	467	1	11/21/13 10:55	12/02/13 13:12	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	467	1	11/21/13 10:55	12/02/13 13:12	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	467	1	11/21/13 10:55	12/02/13 13:12	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	467	1	11/21/13 10:55	12/02/13 13:12	207-08-9	
Benzoic Acid	ND	ug/kg	2330	1	11/21/13 10:55	12/02/13 13:12	65-85-0	
Benzyl alcohol	ND	ug/kg	934	1	11/21/13 10:55	12/02/13 13:12	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	467	1	11/21/13 10:55	12/02/13 13:12	101-55-3	
Butylbenzylphthalate	ND	ug/kg	467	1	11/21/13 10:55	12/02/13 13:12	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	934	1	11/21/13 10:55	12/02/13 13:12	59-50-7	
4-Chloroaniline	ND	ug/kg	2330	1	11/21/13 10:55	12/02/13 13:12	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	467	1	11/21/13 10:55	12/02/13 13:12	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	467	1	11/21/13 10:55	12/02/13 13:12	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	467	1	11/21/13 10:55	12/02/13 13:12	108-60-1	
2-Chloronaphthalene	ND	ug/kg	467	1	11/21/13 10:55	12/02/13 13:12	91-58-7	
2-Chlorophenol	ND	ug/kg	467	1	11/21/13 10:55	12/02/13 13:12	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	467	1	11/21/13 10:55	12/02/13 13:12	7005-72-3	
Chrysene	ND	ug/kg	467	1	11/21/13 10:55	12/02/13 13:12	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	467	1	11/21/13 10:55	12/02/13 13:12	53-70-3	
Dibenzofuran	ND	ug/kg	467	1	11/21/13 10:55	12/02/13 13:12	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	467	1	11/21/13 10:55	12/02/13 13:12	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	467	1	11/21/13 10:55	12/02/13 13:12	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	467	1	11/21/13 10:55	12/02/13 13:12	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	2330	1	11/21/13 10:55	12/02/13 13:12	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	467	1	11/21/13 10:55	12/02/13 13:12	120-83-2	
Diethylphthalate	ND	ug/kg	467	1	11/21/13 10:55	12/02/13 13:12	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	467	1	11/21/13 10:55	12/02/13 13:12	105-67-9	
Dimethylphthalate	ND	ug/kg	467	1	11/21/13 10:55	12/02/13 13:12	131-11-3	
Di-n-butylphthalate	ND	ug/kg	467	1	11/21/13 10:55	12/02/13 13:12	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	934	1	11/21/13 10:55	12/02/13 13:12	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	2330	1	11/21/13 10:55	12/02/13 13:12	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	467	1	11/21/13 10:55	12/02/13 13:12	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	467	1	11/21/13 10:55	12/02/13 13:12	606-20-2	
Di-n-octylphthalate	ND	ug/kg	467	1	11/21/13 10:55	12/02/13 13:12	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	467	1	11/21/13 10:55	12/02/13 13:12	117-81-7	
Fluoranthene	ND	ug/kg	467	1	11/21/13 10:55	12/02/13 13:12	206-44-0	
Fluorene	ND	ug/kg	467	1	11/21/13 10:55	12/02/13 13:12	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	467	1	11/21/13 10:55	12/02/13 13:12	87-68-3	
Hexachlorobenzene	ND	ug/kg	467	1	11/21/13 10:55	12/02/13 13:12	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	467	1	11/21/13 10:55	12/02/13 13:12	77-47-4	
Hexachloroethane	ND	ug/kg	467	1	11/21/13 10:55	12/02/13 13:12	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	467	1	11/21/13 10:55	12/02/13 13:12	193-39-5	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B10**      **Lab ID: 92180233001**      Collected: 11/18/13 09:45      Received: 11/20/13 14:15      Matrix: Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Microwave</b> Analytical Method: EPA 8270      Preparation Method: EPA 3546								
Isophorone	ND	ug/kg	467	1	11/21/13 10:55	12/02/13 13:12	78-59-1	
1-Methylnaphthalene	ND	ug/kg	467	1	11/21/13 10:55	12/02/13 13:12	90-12-0	
2-Methylnaphthalene	ND	ug/kg	467	1	11/21/13 10:55	12/02/13 13:12	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	467	1	11/21/13 10:55	12/02/13 13:12	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	467	1	11/21/13 10:55	12/02/13 13:12		
Naphthalene	ND	ug/kg	467	1	11/21/13 10:55	12/02/13 13:12	91-20-3	
2-Nitroaniline	ND	ug/kg	2330	1	11/21/13 10:55	12/02/13 13:12	88-74-4	
3-Nitroaniline	ND	ug/kg	2330	1	11/21/13 10:55	12/02/13 13:12	99-09-2	
4-Nitroaniline	ND	ug/kg	934	1	11/21/13 10:55	12/02/13 13:12	100-01-6	
Nitrobenzene	ND	ug/kg	467	1	11/21/13 10:55	12/02/13 13:12	98-95-3	
2-Nitrophenol	ND	ug/kg	467	1	11/21/13 10:55	12/02/13 13:12	88-75-5	
4-Nitrophenol	ND	ug/kg	2330	1	11/21/13 10:55	12/02/13 13:12	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	467	1	11/21/13 10:55	12/02/13 13:12	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	467	1	11/21/13 10:55	12/02/13 13:12	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	467	1	11/21/13 10:55	12/02/13 13:12	86-30-6	
Pentachlorophenol	ND	ug/kg	2330	1	11/21/13 10:55	12/02/13 13:12	87-86-5	
Phenanthrene	ND	ug/kg	467	1	11/21/13 10:55	12/02/13 13:12	85-01-8	
Phenol	ND	ug/kg	467	1	11/21/13 10:55	12/02/13 13:12	108-95-2	
Pyrene	ND	ug/kg	467	1	11/21/13 10:55	12/02/13 13:12	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/kg	467	1	11/21/13 10:55	12/02/13 13:12	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	467	1	11/21/13 10:55	12/02/13 13:12	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	467	1	11/21/13 10:55	12/02/13 13:12	88-06-2	
<b>Surrogates</b>								
Nitrobenzene-d5 (S)	39 %		23-110	1	11/21/13 10:55	12/02/13 13:12	4165-60-0	
2-Fluorobiphenyl (S)	40 %		30-110	1	11/21/13 10:55	12/02/13 13:12	321-60-8	
Terphenyl-d14 (S)	57 %		28-110	1	11/21/13 10:55	12/02/13 13:12	1718-51-0	
Phenol-d6 (S)	25 %		22-110	1	11/21/13 10:55	12/02/13 13:12	13127-88-3	
2-Fluorophenol (S)	22 %		13-110	1	11/21/13 10:55	12/02/13 13:12	367-12-4	
2,4,6-Tribromophenol (S)	50 %		27-110	1	11/21/13 10:55	12/02/13 13:12	118-79-6	
<b>8260/5035A Volatile Organics</b> Analytical Method: EPA 8260								
Acetone	ND	ug/kg	115	1		11/26/13 00:26	67-64-1	
Benzene	ND	ug/kg	5.8	1		11/26/13 00:26	71-43-2	
Bromobenzene	ND	ug/kg	5.8	1		11/26/13 00:26	108-86-1	
Bromochloromethane	ND	ug/kg	5.8	1		11/26/13 00:26	74-97-5	
Bromodichloromethane	ND	ug/kg	5.8	1		11/26/13 00:26	75-27-4	
Bromoform	ND	ug/kg	5.8	1		11/26/13 00:26	75-25-2	
Bromomethane	ND	ug/kg	11.5	1		11/26/13 00:26	74-83-9	
2-Butanone (MEK)	ND	ug/kg	115	1		11/26/13 00:26	78-93-3	
n-Butylbenzene	ND	ug/kg	5.8	1		11/26/13 00:26	104-51-8	
sec-Butylbenzene	ND	ug/kg	5.8	1		11/26/13 00:26	135-98-8	
tert-Butylbenzene	ND	ug/kg	5.8	1		11/26/13 00:26	98-06-6	
Carbon tetrachloride	ND	ug/kg	5.8	1		11/26/13 00:26	56-23-5	
Chlorobenzene	ND	ug/kg	5.8	1		11/26/13 00:26	108-90-7	
Chloroethane	ND	ug/kg	11.5	1		11/26/13 00:26	75-00-3	
Chloroform	ND	ug/kg	5.8	1		11/26/13 00:26	67-66-3	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B10**      **Lab ID: 92180233001**      Collected: 11/18/13 09:45      Received: 11/20/13 14:15      Matrix: Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260/5035A Volatile Organics</b>		Analytical Method: EPA 8260						
Chloromethane	ND	ug/kg	11.5	1		11/26/13 00:26	74-87-3	
2-Chlorotoluene	ND	ug/kg	5.8	1		11/26/13 00:26	95-49-8	
4-Chlorotoluene	ND	ug/kg	5.8	1		11/26/13 00:26	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	5.8	1		11/26/13 00:26	96-12-8	
Dibromochloromethane	ND	ug/kg	5.8	1		11/26/13 00:26	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	5.8	1		11/26/13 00:26	106-93-4	
Dibromomethane	ND	ug/kg	5.8	1		11/26/13 00:26	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	5.8	1		11/26/13 00:26	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	5.8	1		11/26/13 00:26	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	5.8	1		11/26/13 00:26	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	11.5	1		11/26/13 00:26	75-71-8	
1,1-Dichloroethane	ND	ug/kg	5.8	1		11/26/13 00:26	75-34-3	
1,2-Dichloroethane	ND	ug/kg	5.8	1		11/26/13 00:26	107-06-2	
1,1-Dichloroethene	ND	ug/kg	5.8	1		11/26/13 00:26	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	5.8	1		11/26/13 00:26	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	5.8	1		11/26/13 00:26	156-60-5	
1,2-Dichloropropane	ND	ug/kg	5.8	1		11/26/13 00:26	78-87-5	
1,3-Dichloropropane	ND	ug/kg	5.8	1		11/26/13 00:26	142-28-9	
2,2-Dichloropropane	ND	ug/kg	5.8	1		11/26/13 00:26	594-20-7	
1,1-Dichloropropene	ND	ug/kg	5.8	1		11/26/13 00:26	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	5.8	1		11/26/13 00:26	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	5.8	1		11/26/13 00:26	10061-02-6	
Diisopropyl ether	ND	ug/kg	5.8	1		11/26/13 00:26	108-20-3	
Ethylbenzene	ND	ug/kg	5.8	1		11/26/13 00:26	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	5.8	1		11/26/13 00:26	87-68-3	
2-Hexanone	ND	ug/kg	57.5	1		11/26/13 00:26	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	5.8	1		11/26/13 00:26	98-82-8	
p-Isopropyltoluene	ND	ug/kg	5.8	1		11/26/13 00:26	99-87-6	
Methylene Chloride	ND	ug/kg	23.0	1		11/26/13 00:26	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	57.5	1		11/26/13 00:26	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	5.8	1		11/26/13 00:26	1634-04-4	
Naphthalene	ND	ug/kg	5.8	1		11/26/13 00:26	91-20-3	
n-Propylbenzene	ND	ug/kg	5.8	1		11/26/13 00:26	103-65-1	
Styrene	ND	ug/kg	5.8	1		11/26/13 00:26	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	5.8	1		11/26/13 00:26	630-20-6	
1,1,1,2,2-Tetrachloroethane	ND	ug/kg	5.8	1		11/26/13 00:26	79-34-5	
Tetrachloroethene	ND	ug/kg	5.8	1		11/26/13 00:26	127-18-4	
Toluene	ND	ug/kg	5.8	1		11/26/13 00:26	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	5.8	1		11/26/13 00:26	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	5.8	1		11/26/13 00:26	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	5.8	1		11/26/13 00:26	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	5.8	1		11/26/13 00:26	79-00-5	
Trichloroethene	ND	ug/kg	5.8	1		11/26/13 00:26	79-01-6	
Trichlorofluoromethane	ND	ug/kg	5.8	1		11/26/13 00:26	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	5.8	1		11/26/13 00:26	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	5.8	1		11/26/13 00:26	95-63-6	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



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 Kinsey Ave. Suite 100  
 Huntersville, NC 28078  
 (704)875-9092

### ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

Sample: B10 Lab ID: 92180233001 Collected: 11/18/13 09:45 Received: 11/20/13 14:15 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260/5035A Volatile Organics</b>		Analytical Method: EPA 8260						
1,3,5-Trimethylbenzene	ND	ug/kg	5.8	1		11/26/13 00:26	108-67-8	
Vinyl acetate	ND	ug/kg	57.5	1		11/26/13 00:26	108-05-4	
Vinyl chloride	ND	ug/kg	11.5	1		11/26/13 00:26	75-01-4	
Xylene (Total)	ND	ug/kg	11.5	1		11/26/13 00:26	1330-20-7	
m&p-Xylene	ND	ug/kg	11.5	1		11/26/13 00:26	179601-23-1	
o-Xylene	ND	ug/kg	5.8	1		11/26/13 00:26	95-47-6	
<b>Surrogates</b>								
Toluene-d8 (S)	99 %		70-130	1		11/26/13 00:26	2037-26-5	
4-Bromofluorobenzene (S)	99 %		70-130	1		11/26/13 00:26	460-00-4	
1,2-Dichloroethane-d4 (S)	102 %		70-132	1		11/26/13 00:26	17060-07-0	
<b>Percent Moisture</b>		Analytical Method: ASTM D2974-87						
Percent Moisture	29.3 %		0.10	1		12/04/13 08:13		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
 without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B11**      **Lab ID: 92180233002**      Collected: 11/18/13 10:00      Received: 11/20/13 14:15      Matrix: Solid

*Results reported on a "dry-weight" basis*

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Microwave</b>		Analytical Method: EPA 8270    Preparation Method: EPA 3546						
Acenaphthene	ND	ug/kg	444	1	11/21/13 10:55	12/02/13 13:43	83-32-9	
Acenaphthylene	ND	ug/kg	444	1	11/21/13 10:55	12/02/13 13:43	208-96-8	
Aniline	ND	ug/kg	444	1	11/21/13 10:55	12/02/13 13:43	62-53-3	
Anthracene	ND	ug/kg	444	1	11/21/13 10:55	12/02/13 13:43	120-12-7	
Benzo(a)anthracene	ND	ug/kg	444	1	11/21/13 10:55	12/02/13 13:43	56-55-3	
Benzo(a)pyrene	ND	ug/kg	444	1	11/21/13 10:55	12/02/13 13:43	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	444	1	11/21/13 10:55	12/02/13 13:43	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	444	1	11/21/13 10:55	12/02/13 13:43	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	444	1	11/21/13 10:55	12/02/13 13:43	207-08-9	
Benzoic Acid	ND	ug/kg	2220	1	11/21/13 10:55	12/02/13 13:43	65-85-0	
Benzyl alcohol	ND	ug/kg	888	1	11/21/13 10:55	12/02/13 13:43	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	444	1	11/21/13 10:55	12/02/13 13:43	101-55-3	
Butylbenzylphthalate	ND	ug/kg	444	1	11/21/13 10:55	12/02/13 13:43	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	888	1	11/21/13 10:55	12/02/13 13:43	59-50-7	
4-Chloroaniline	ND	ug/kg	2220	1	11/21/13 10:55	12/02/13 13:43	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	444	1	11/21/13 10:55	12/02/13 13:43	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	444	1	11/21/13 10:55	12/02/13 13:43	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	444	1	11/21/13 10:55	12/02/13 13:43	108-60-1	
2-Chloronaphthalene	ND	ug/kg	444	1	11/21/13 10:55	12/02/13 13:43	91-58-7	
2-Chlorophenol	ND	ug/kg	444	1	11/21/13 10:55	12/02/13 13:43	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	444	1	11/21/13 10:55	12/02/13 13:43	7005-72-3	
Chrysene	ND	ug/kg	444	1	11/21/13 10:55	12/02/13 13:43	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	444	1	11/21/13 10:55	12/02/13 13:43	53-70-3	
Dibenzofuran	ND	ug/kg	444	1	11/21/13 10:55	12/02/13 13:43	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	444	1	11/21/13 10:55	12/02/13 13:43	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	444	1	11/21/13 10:55	12/02/13 13:43	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	444	1	11/21/13 10:55	12/02/13 13:43	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	2220	1	11/21/13 10:55	12/02/13 13:43	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	444	1	11/21/13 10:55	12/02/13 13:43	120-83-2	
Diethylphthalate	ND	ug/kg	444	1	11/21/13 10:55	12/02/13 13:43	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	444	1	11/21/13 10:55	12/02/13 13:43	105-67-9	
Dimethylphthalate	ND	ug/kg	444	1	11/21/13 10:55	12/02/13 13:43	131-11-3	
Di-n-butylphthalate	ND	ug/kg	444	1	11/21/13 10:55	12/02/13 13:43	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	888	1	11/21/13 10:55	12/02/13 13:43	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	2220	1	11/21/13 10:55	12/02/13 13:43	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	444	1	11/21/13 10:55	12/02/13 13:43	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	444	1	11/21/13 10:55	12/02/13 13:43	606-20-2	
Di-n-octylphthalate	ND	ug/kg	444	1	11/21/13 10:55	12/02/13 13:43	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	444	1	11/21/13 10:55	12/02/13 13:43	117-81-7	
Fluoranthene	ND	ug/kg	444	1	11/21/13 10:55	12/02/13 13:43	206-44-0	
Fluorene	ND	ug/kg	444	1	11/21/13 10:55	12/02/13 13:43	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	444	1	11/21/13 10:55	12/02/13 13:43	87-68-3	
Hexachlorobenzene	ND	ug/kg	444	1	11/21/13 10:55	12/02/13 13:43	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	444	1	11/21/13 10:55	12/02/13 13:43	77-47-4	
Hexachloroethane	ND	ug/kg	444	1	11/21/13 10:55	12/02/13 13:43	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	444	1	11/21/13 10:55	12/02/13 13:43	193-39-5	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B11**      **Lab ID: 92180233002**      Collected: 11/18/13 10:00      Received: 11/20/13 14:15      Matrix: Solid

*Results reported on a "dry-weight" basis*

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Microwave</b>		Analytical Method: EPA 8270    Preparation Method: EPA 3546						
Isophorone	ND	ug/kg	444	1	11/21/13 10:55	12/02/13 13:43	78-59-1	
1-Methylnaphthalene	ND	ug/kg	444	1	11/21/13 10:55	12/02/13 13:43	90-12-0	
2-Methylnaphthalene	ND	ug/kg	444	1	11/21/13 10:55	12/02/13 13:43	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	444	1	11/21/13 10:55	12/02/13 13:43	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	444	1	11/21/13 10:55	12/02/13 13:43		
Naphthalene	ND	ug/kg	444	1	11/21/13 10:55	12/02/13 13:43	91-20-3	
2-Nitroaniline	ND	ug/kg	2220	1	11/21/13 10:55	12/02/13 13:43	88-74-4	
3-Nitroaniline	ND	ug/kg	2220	1	11/21/13 10:55	12/02/13 13:43	99-09-2	
4-Nitroaniline	ND	ug/kg	888	1	11/21/13 10:55	12/02/13 13:43	100-01-6	
Nitrobenzene	ND	ug/kg	444	1	11/21/13 10:55	12/02/13 13:43	98-95-3	
2-Nitrophenol	ND	ug/kg	444	1	11/21/13 10:55	12/02/13 13:43	88-75-5	
4-Nitrophenol	ND	ug/kg	2220	1	11/21/13 10:55	12/02/13 13:43	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	444	1	11/21/13 10:55	12/02/13 13:43	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	444	1	11/21/13 10:55	12/02/13 13:43	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	444	1	11/21/13 10:55	12/02/13 13:43	86-30-6	
Pentachlorophenol	ND	ug/kg	2220	1	11/21/13 10:55	12/02/13 13:43	87-86-5	
Phenanthrene	ND	ug/kg	444	1	11/21/13 10:55	12/02/13 13:43	85-01-8	
Phenol	ND	ug/kg	444	1	11/21/13 10:55	12/02/13 13:43	108-95-2	
Pyrene	ND	ug/kg	444	1	11/21/13 10:55	12/02/13 13:43	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/kg	444	1	11/21/13 10:55	12/02/13 13:43	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	444	1	11/21/13 10:55	12/02/13 13:43	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	444	1	11/21/13 10:55	12/02/13 13:43	88-06-2	
<b>Surrogates</b>								
Nitrobenzene-d5 (S)	47 %		23-110	1	11/21/13 10:55	12/02/13 13:43	4165-60-0	
2-Fluorobiphenyl (S)	50 %		30-110	1	11/21/13 10:55	12/02/13 13:43	321-60-8	
Terphenyl-d14 (S)	57 %		28-110	1	11/21/13 10:55	12/02/13 13:43	1718-51-0	
Phenol-d6 (S)	32 %		22-110	1	11/21/13 10:55	12/02/13 13:43	13127-88-3	
2-Fluorophenol (S)	29 %		13-110	1	11/21/13 10:55	12/02/13 13:43	367-12-4	
2,4,6-Tribromophenol (S)	44 %		27-110	1	11/21/13 10:55	12/02/13 13:43	118-79-6	
<b>8260/5035A Volatile Organics</b>		Analytical Method: EPA 8260						
Acetone	ND	ug/kg	109	1		11/26/13 00:46	67-64-1	
Benzene	ND	ug/kg	5.4	1		11/26/13 00:46	71-43-2	
Bromobenzene	ND	ug/kg	5.4	1		11/26/13 00:46	108-86-1	
Bromochloromethane	ND	ug/kg	5.4	1		11/26/13 00:46	74-97-5	
Bromodichloromethane	ND	ug/kg	5.4	1		11/26/13 00:46	75-27-4	
Bromoform	ND	ug/kg	5.4	1		11/26/13 00:46	75-25-2	
Bromomethane	ND	ug/kg	10.9	1		11/26/13 00:46	74-83-9	
2-Butanone (MEK)	ND	ug/kg	109	1		11/26/13 00:46	78-93-3	
n-Butylbenzene	ND	ug/kg	5.4	1		11/26/13 00:46	104-51-8	
sec-Butylbenzene	ND	ug/kg	5.4	1		11/26/13 00:46	135-98-8	
tert-Butylbenzene	ND	ug/kg	5.4	1		11/26/13 00:46	98-06-6	
Carbon tetrachloride	ND	ug/kg	5.4	1		11/26/13 00:46	56-23-5	
Chlorobenzene	ND	ug/kg	5.4	1		11/26/13 00:46	108-90-7	
Chloroethane	ND	ug/kg	10.9	1		11/26/13 00:46	75-00-3	
Chloroform	ND	ug/kg	5.4	1		11/26/13 00:46	67-66-3	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B11**      **Lab ID: 92180233002**      Collected: 11/18/13 10:00      Received: 11/20/13 14:15      Matrix: Solid

*Results reported on a "dry-weight" basis*

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260/5035A Volatile Organics</b>		Analytical Method: EPA 8260						
Chloromethane	ND	ug/kg	10.9	1		11/26/13 00:46	74-87-3	
2-Chlorotoluene	ND	ug/kg	5.4	1		11/26/13 00:46	95-49-8	
4-Chlorotoluene	ND	ug/kg	5.4	1		11/26/13 00:46	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	5.4	1		11/26/13 00:46	96-12-8	
Dibromochloromethane	ND	ug/kg	5.4	1		11/26/13 00:46	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	5.4	1		11/26/13 00:46	106-93-4	
Dibromomethane	ND	ug/kg	5.4	1		11/26/13 00:46	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	5.4	1		11/26/13 00:46	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	5.4	1		11/26/13 00:46	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	5.4	1		11/26/13 00:46	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	10.9	1		11/26/13 00:46	75-71-8	
1,1-Dichloroethane	ND	ug/kg	5.4	1		11/26/13 00:46	75-34-3	
1,2-Dichloroethane	ND	ug/kg	5.4	1		11/26/13 00:46	107-06-2	
1,1-Dichloroethene	ND	ug/kg	5.4	1		11/26/13 00:46	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	5.4	1		11/26/13 00:46	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	5.4	1		11/26/13 00:46	156-60-5	
1,2-Dichloropropane	ND	ug/kg	5.4	1		11/26/13 00:46	78-87-5	
1,3-Dichloropropane	ND	ug/kg	5.4	1		11/26/13 00:46	142-28-9	
2,2-Dichloropropane	ND	ug/kg	5.4	1		11/26/13 00:46	594-20-7	
1,1-Dichloropropene	ND	ug/kg	5.4	1		11/26/13 00:46	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	5.4	1		11/26/13 00:46	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	5.4	1		11/26/13 00:46	10061-02-6	
Diisopropyl ether	ND	ug/kg	5.4	1		11/26/13 00:46	108-20-3	
Ethylbenzene	ND	ug/kg	5.4	1		11/26/13 00:46	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	5.4	1		11/26/13 00:46	87-68-3	
2-Hexanone	ND	ug/kg	54.3	1		11/26/13 00:46	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	5.4	1		11/26/13 00:46	98-82-8	
p-Isopropyltoluene	ND	ug/kg	5.4	1		11/26/13 00:46	99-87-6	
Methylene Chloride	ND	ug/kg	21.7	1		11/26/13 00:46	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	54.3	1		11/26/13 00:46	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	5.4	1		11/26/13 00:46	1634-04-4	
Naphthalene	ND	ug/kg	5.4	1		11/26/13 00:46	91-20-3	
n-Propylbenzene	ND	ug/kg	5.4	1		11/26/13 00:46	103-65-1	
Styrene	ND	ug/kg	5.4	1		11/26/13 00:46	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	5.4	1		11/26/13 00:46	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	5.4	1		11/26/13 00:46	79-34-5	
Tetrachloroethene	ND	ug/kg	5.4	1		11/26/13 00:46	127-18-4	
Toluene	ND	ug/kg	5.4	1		11/26/13 00:46	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	5.4	1		11/26/13 00:46	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	5.4	1		11/26/13 00:46	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	5.4	1		11/26/13 00:46	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	5.4	1		11/26/13 00:46	79-00-5	
Trichloroethene	ND	ug/kg	5.4	1		11/26/13 00:46	79-01-6	
Trichlorofluoromethane	ND	ug/kg	5.4	1		11/26/13 00:46	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	5.4	1		11/26/13 00:46	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	5.4	1		11/26/13 00:46	95-63-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1  
 Pace Project No.: 92180233

Sample: B11 Lab ID: 92180233002 Collected: 11/18/13 10:00 Received: 11/20/13 14:15 Matrix: Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260/5035A Volatile Organics</b>		Analytical Method: EPA 8260						
1,3,5-Trimethylbenzene	ND	ug/kg	5.4	1		11/26/13 00:46	108-67-8	
Vinyl acetate	ND	ug/kg	54.3	1		11/26/13 00:46	108-05-4	
Vinyl chloride	ND	ug/kg	10.9	1		11/26/13 00:46	75-01-4	
Xylene (Total)	ND	ug/kg	10.9	1		11/26/13 00:46	1330-20-7	
m&p-Xylene	ND	ug/kg	10.9	1		11/26/13 00:46	179601-23-1	
o-Xylene	ND	ug/kg	5.4	1		11/26/13 00:46	95-47-6	
<b>Surrogates</b>								
Toluene-d8 (S)	99 %		70-130	1		11/26/13 00:46	2037-26-5	
4-Bromofluorobenzene (S)	101 %		70-130	1		11/26/13 00:46	460-00-4	
1,2-Dichloroethane-d4 (S)	94 %		70-132	1		11/26/13 00:46	17060-07-0	
<b>Percent Moisture</b>		Analytical Method: ASTM D2974-87						
Percent Moisture	25.6 %		0.10	1		12/04/13 08:13		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
 without the written consent of Pace Analytical Services, Inc..



## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B12**      **Lab ID: 92180233003**      Collected: 11/18/13 10:15      Received: 11/20/13 14:15      Matrix: Solid

*Results reported on a "dry-weight" basis*

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Microwave</b>		Analytical Method: EPA 8270    Preparation Method: EPA 3546						
Acenaphthene	ND	ug/kg	378	1	11/21/13 10:55	12/02/13 14:16	83-32-9	
Acenaphthylene	ND	ug/kg	378	1	11/21/13 10:55	12/02/13 14:16	208-96-8	
Aniline	ND	ug/kg	378	1	11/21/13 10:55	12/02/13 14:16	62-53-3	
Anthracene	ND	ug/kg	378	1	11/21/13 10:55	12/02/13 14:16	120-12-7	
Benzo(a)anthracene	ND	ug/kg	378	1	11/21/13 10:55	12/02/13 14:16	56-55-3	
Benzo(a)pyrene	ND	ug/kg	378	1	11/21/13 10:55	12/02/13 14:16	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	378	1	11/21/13 10:55	12/02/13 14:16	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	378	1	11/21/13 10:55	12/02/13 14:16	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	378	1	11/21/13 10:55	12/02/13 14:16	207-08-9	
Benzoic Acid	ND	ug/kg	1890	1	11/21/13 10:55	12/02/13 14:16	65-85-0	
Benzyl alcohol	ND	ug/kg	756	1	11/21/13 10:55	12/02/13 14:16	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	378	1	11/21/13 10:55	12/02/13 14:16	101-55-3	
Butylbenzylphthalate	ND	ug/kg	378	1	11/21/13 10:55	12/02/13 14:16	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	756	1	11/21/13 10:55	12/02/13 14:16	59-50-7	
4-Chloroaniline	ND	ug/kg	1890	1	11/21/13 10:55	12/02/13 14:16	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	378	1	11/21/13 10:55	12/02/13 14:16	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	378	1	11/21/13 10:55	12/02/13 14:16	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	378	1	11/21/13 10:55	12/02/13 14:16	108-60-1	
2-Chloronaphthalene	ND	ug/kg	378	1	11/21/13 10:55	12/02/13 14:16	91-58-7	
2-Chlorophenol	ND	ug/kg	378	1	11/21/13 10:55	12/02/13 14:16	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	378	1	11/21/13 10:55	12/02/13 14:16	7005-72-3	
Chrysene	ND	ug/kg	378	1	11/21/13 10:55	12/02/13 14:16	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	378	1	11/21/13 10:55	12/02/13 14:16	53-70-3	
Dibenzofuran	ND	ug/kg	378	1	11/21/13 10:55	12/02/13 14:16	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	378	1	11/21/13 10:55	12/02/13 14:16	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	378	1	11/21/13 10:55	12/02/13 14:16	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	378	1	11/21/13 10:55	12/02/13 14:16	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	1890	1	11/21/13 10:55	12/02/13 14:16	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	378	1	11/21/13 10:55	12/02/13 14:16	120-83-2	
Diethylphthalate	ND	ug/kg	378	1	11/21/13 10:55	12/02/13 14:16	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	378	1	11/21/13 10:55	12/02/13 14:16	105-67-9	
Dimethylphthalate	ND	ug/kg	378	1	11/21/13 10:55	12/02/13 14:16	131-11-3	
Di-n-butylphthalate	ND	ug/kg	378	1	11/21/13 10:55	12/02/13 14:16	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	756	1	11/21/13 10:55	12/02/13 14:16	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	1890	1	11/21/13 10:55	12/02/13 14:16	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	378	1	11/21/13 10:55	12/02/13 14:16	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	378	1	11/21/13 10:55	12/02/13 14:16	606-20-2	
Di-n-octylphthalate	ND	ug/kg	378	1	11/21/13 10:55	12/02/13 14:16	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	378	1	11/21/13 10:55	12/02/13 14:16	117-81-7	
Fluoranthene	ND	ug/kg	378	1	11/21/13 10:55	12/02/13 14:16	206-44-0	
Fluorene	ND	ug/kg	378	1	11/21/13 10:55	12/02/13 14:16	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	378	1	11/21/13 10:55	12/02/13 14:16	87-68-3	
Hexachlorobenzene	ND	ug/kg	378	1	11/21/13 10:55	12/02/13 14:16	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	378	1	11/21/13 10:55	12/02/13 14:16	77-47-4	
Hexachloroethane	ND	ug/kg	378	1	11/21/13 10:55	12/02/13 14:16	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	378	1	11/21/13 10:55	12/02/13 14:16	193-39-5	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B12**      **Lab ID: 92180233003**      Collected: 11/18/13 10:15      Received: 11/20/13 14:15      Matrix: Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Microwave</b>		Analytical Method: EPA 8270    Preparation Method: EPA 3546						
Isophorone	ND	ug/kg	378	1	11/21/13 10:55	12/02/13 14:16	78-59-1	
1-Methylnaphthalene	ND	ug/kg	378	1	11/21/13 10:55	12/02/13 14:16	90-12-0	
2-Methylnaphthalene	ND	ug/kg	378	1	11/21/13 10:55	12/02/13 14:16	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	378	1	11/21/13 10:55	12/02/13 14:16	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	378	1	11/21/13 10:55	12/02/13 14:16		
Naphthalene	ND	ug/kg	378	1	11/21/13 10:55	12/02/13 14:16	91-20-3	
2-Nitroaniline	ND	ug/kg	1890	1	11/21/13 10:55	12/02/13 14:16	88-74-4	
3-Nitroaniline	ND	ug/kg	1890	1	11/21/13 10:55	12/02/13 14:16	99-09-2	
4-Nitroaniline	ND	ug/kg	756	1	11/21/13 10:55	12/02/13 14:16	100-01-6	
Nitrobenzene	ND	ug/kg	378	1	11/21/13 10:55	12/02/13 14:16	98-95-3	
2-Nitrophenol	ND	ug/kg	378	1	11/21/13 10:55	12/02/13 14:16	88-75-5	
4-Nitrophenol	ND	ug/kg	1890	1	11/21/13 10:55	12/02/13 14:16	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	378	1	11/21/13 10:55	12/02/13 14:16	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	378	1	11/21/13 10:55	12/02/13 14:16	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	378	1	11/21/13 10:55	12/02/13 14:16	86-30-6	
Pentachlorophenol	ND	ug/kg	1890	1	11/21/13 10:55	12/02/13 14:16	87-86-5	
Phenanthrene	ND	ug/kg	378	1	11/21/13 10:55	12/02/13 14:16	85-01-8	
Phenol	ND	ug/kg	378	1	11/21/13 10:55	12/02/13 14:16	108-95-2	
Pyrene	ND	ug/kg	378	1	11/21/13 10:55	12/02/13 14:16	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/kg	378	1	11/21/13 10:55	12/02/13 14:16	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	378	1	11/21/13 10:55	12/02/13 14:16	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	378	1	11/21/13 10:55	12/02/13 14:16	88-06-2	
<b>Surrogates</b>								
Nitrobenzene-d5 (S)	42 %		23-110	1	11/21/13 10:55	12/02/13 14:16	4165-60-0	
2-Fluorobiphenyl (S)	47 %		30-110	1	11/21/13 10:55	12/02/13 14:16	321-60-8	
Terphenyl-d14 (S)	52 %		28-110	1	11/21/13 10:55	12/02/13 14:16	1718-51-0	
Phenol-d6 (S)	43 %		22-110	1	11/21/13 10:55	12/02/13 14:16	13127-88-3	
2-Fluorophenol (S)	40 %		13-110	1	11/21/13 10:55	12/02/13 14:16	367-12-4	
2,4,6-Tribromophenol (S)	52 %		27-110	1	11/21/13 10:55	12/02/13 14:16	118-79-6	
<b>8260/5035A Volatile Organics</b>		Analytical Method: EPA 8260						
Acetone	ND	ug/kg	81.0	1		11/26/13 01:05	67-64-1	
Benzene	ND	ug/kg	4.0	1		11/26/13 01:05	71-43-2	
Bromobenzene	ND	ug/kg	4.0	1		11/26/13 01:05	108-86-1	
Bromochloromethane	ND	ug/kg	4.0	1		11/26/13 01:05	74-97-5	
Bromodichloromethane	ND	ug/kg	4.0	1		11/26/13 01:05	75-27-4	
Bromoform	ND	ug/kg	4.0	1		11/26/13 01:05	75-25-2	
Bromomethane	ND	ug/kg	8.1	1		11/26/13 01:05	74-83-9	
2-Butanone (MEK)	ND	ug/kg	81.0	1		11/26/13 01:05	78-93-3	
n-Butylbenzene	ND	ug/kg	4.0	1		11/26/13 01:05	104-51-8	
sec-Butylbenzene	ND	ug/kg	4.0	1		11/26/13 01:05	135-98-8	
tert-Butylbenzene	ND	ug/kg	4.0	1		11/26/13 01:05	98-06-6	
Carbon tetrachloride	ND	ug/kg	4.0	1		11/26/13 01:05	56-23-5	
Chlorobenzene	ND	ug/kg	4.0	1		11/26/13 01:05	108-90-7	
Chloroethane	ND	ug/kg	8.1	1		11/26/13 01:05	75-00-3	
Chloroform	ND	ug/kg	4.0	1		11/26/13 01:05	67-66-3	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B12**      **Lab ID: 92180233003**      Collected: 11/18/13 10:15      Received: 11/20/13 14:15      Matrix: Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260/5035A Volatile Organics</b>		Analytical Method: EPA 8260						
Chloromethane	ND	ug/kg	8.1	1		11/26/13 01:05	74-87-3	
2-Chlorotoluene	ND	ug/kg	4.0	1		11/26/13 01:05	95-49-8	
4-Chlorotoluene	ND	ug/kg	4.0	1		11/26/13 01:05	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	4.0	1		11/26/13 01:05	96-12-8	
Dibromochloromethane	ND	ug/kg	4.0	1		11/26/13 01:05	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	4.0	1		11/26/13 01:05	106-93-4	
Dibromomethane	ND	ug/kg	4.0	1		11/26/13 01:05	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	4.0	1		11/26/13 01:05	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	4.0	1		11/26/13 01:05	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	4.0	1		11/26/13 01:05	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	8.1	1		11/26/13 01:05	75-71-8	
1,1-Dichloroethane	ND	ug/kg	4.0	1		11/26/13 01:05	75-34-3	
1,2-Dichloroethane	ND	ug/kg	4.0	1		11/26/13 01:05	107-06-2	
1,1-Dichloroethene	ND	ug/kg	4.0	1		11/26/13 01:05	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	4.0	1		11/26/13 01:05	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	4.0	1		11/26/13 01:05	156-60-5	
1,2-Dichloropropane	ND	ug/kg	4.0	1		11/26/13 01:05	78-87-5	
1,3-Dichloropropane	ND	ug/kg	4.0	1		11/26/13 01:05	142-28-9	
2,2-Dichloropropane	ND	ug/kg	4.0	1		11/26/13 01:05	594-20-7	
1,1-Dichloropropene	ND	ug/kg	4.0	1		11/26/13 01:05	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	4.0	1		11/26/13 01:05	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	4.0	1		11/26/13 01:05	10061-02-6	
Diisopropyl ether	ND	ug/kg	4.0	1		11/26/13 01:05	108-20-3	
Ethylbenzene	ND	ug/kg	4.0	1		11/26/13 01:05	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	4.0	1		11/26/13 01:05	87-68-3	
2-Hexanone	ND	ug/kg	40.5	1		11/26/13 01:05	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	4.0	1		11/26/13 01:05	98-82-8	
p-Isopropyltoluene	ND	ug/kg	4.0	1		11/26/13 01:05	99-87-6	
Methylene Chloride	ND	ug/kg	16.2	1		11/26/13 01:05	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	40.5	1		11/26/13 01:05	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	4.0	1		11/26/13 01:05	1634-04-4	
Naphthalene	ND	ug/kg	4.0	1		11/26/13 01:05	91-20-3	
n-Propylbenzene	ND	ug/kg	4.0	1		11/26/13 01:05	103-65-1	
Styrene	ND	ug/kg	4.0	1		11/26/13 01:05	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	4.0	1		11/26/13 01:05	630-20-6	
1,1,1,2,2-Tetrachloroethane	ND	ug/kg	4.0	1		11/26/13 01:05	79-34-5	
Tetrachloroethene	ND	ug/kg	4.0	1		11/26/13 01:05	127-18-4	
Toluene	ND	ug/kg	4.0	1		11/26/13 01:05	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	4.0	1		11/26/13 01:05	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	4.0	1		11/26/13 01:05	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	4.0	1		11/26/13 01:05	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	4.0	1		11/26/13 01:05	79-00-5	
Trichloroethene	ND	ug/kg	4.0	1		11/26/13 01:05	79-01-6	
Trichlorofluoromethane	ND	ug/kg	4.0	1		11/26/13 01:05	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	4.0	1		11/26/13 01:05	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	4.0	1		11/26/13 01:05	95-63-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



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 Kinsey Ave. Suite 100  
 Huntersville, NC 28078  
 (704)875-9092

### ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1  
 Pace Project No.: 92180233

Sample: B12 Lab ID: 92180233003 Collected: 11/18/13 10:15 Received: 11/20/13 14:15 Matrix: Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260/5035A Volatile Organics</b>		Analytical Method: EPA 8260						
1,3,5-Trimethylbenzene	ND	ug/kg	4.0	1		11/26/13 01:05	108-67-8	
Vinyl acetate	ND	ug/kg	40.5	1		11/26/13 01:05	108-05-4	
Vinyl chloride	ND	ug/kg	8.1	1		11/26/13 01:05	75-01-4	
Xylene (Total)	ND	ug/kg	8.1	1		11/26/13 01:05	1330-20-7	
m&p-Xylene	ND	ug/kg	8.1	1		11/26/13 01:05	179601-23-1	
o-Xylene	ND	ug/kg	4.0	1		11/26/13 01:05	95-47-6	
<b>Surrogates</b>								
Toluene-d8 (S)	98	%	70-130	1		11/26/13 01:05	2037-26-5	
4-Bromofluorobenzene (S)	104	%	70-130	1		11/26/13 01:05	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	70-132	1		11/26/13 01:05	17060-07-0	
<b>Percent Moisture</b>		Analytical Method: ASTM D2974-87						
Percent Moisture	12.6	%	0.10	1		12/04/13 08:20		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
 without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B13**      **Lab ID: 92180233004**      Collected: 11/18/13 10:30      Received: 11/20/13 14:15      Matrix: Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Microwave</b>		Analytical Method: EPA 8270    Preparation Method: EPA 3546						
Acenaphthene	ND	ug/kg	375	1	11/21/13 10:55	12/02/13 15:52	83-32-9	
Acenaphthylene	ND	ug/kg	375	1	11/21/13 10:55	12/02/13 15:52	208-96-8	
Aniline	ND	ug/kg	375	1	11/21/13 10:55	12/02/13 15:52	62-53-3	
Anthracene	ND	ug/kg	375	1	11/21/13 10:55	12/02/13 15:52	120-12-7	
Benzo(a)anthracene	ND	ug/kg	375	1	11/21/13 10:55	12/02/13 15:52	56-55-3	
Benzo(a)pyrene	ND	ug/kg	375	1	11/21/13 10:55	12/02/13 15:52	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	375	1	11/21/13 10:55	12/02/13 15:52	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	375	1	11/21/13 10:55	12/02/13 15:52	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	375	1	11/21/13 10:55	12/02/13 15:52	207-08-9	
Benzoic Acid	ND	ug/kg	1880	1	11/21/13 10:55	12/02/13 15:52	65-85-0	
Benzyl alcohol	ND	ug/kg	750	1	11/21/13 10:55	12/02/13 15:52	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	375	1	11/21/13 10:55	12/02/13 15:52	101-55-3	
Butylbenzylphthalate	ND	ug/kg	375	1	11/21/13 10:55	12/02/13 15:52	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	750	1	11/21/13 10:55	12/02/13 15:52	59-50-7	
4-Chloroaniline	ND	ug/kg	1880	1	11/21/13 10:55	12/02/13 15:52	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	375	1	11/21/13 10:55	12/02/13 15:52	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	375	1	11/21/13 10:55	12/02/13 15:52	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	375	1	11/21/13 10:55	12/02/13 15:52	108-60-1	
2-Chloronaphthalene	ND	ug/kg	375	1	11/21/13 10:55	12/02/13 15:52	91-58-7	
2-Chlorophenol	ND	ug/kg	375	1	11/21/13 10:55	12/02/13 15:52	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	375	1	11/21/13 10:55	12/02/13 15:52	7005-72-3	
Chrysene	ND	ug/kg	375	1	11/21/13 10:55	12/02/13 15:52	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	375	1	11/21/13 10:55	12/02/13 15:52	53-70-3	
Dibenzofuran	ND	ug/kg	375	1	11/21/13 10:55	12/02/13 15:52	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	375	1	11/21/13 10:55	12/02/13 15:52	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	375	1	11/21/13 10:55	12/02/13 15:52	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	375	1	11/21/13 10:55	12/02/13 15:52	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	1880	1	11/21/13 10:55	12/02/13 15:52	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	375	1	11/21/13 10:55	12/02/13 15:52	120-83-2	
Diethylphthalate	ND	ug/kg	375	1	11/21/13 10:55	12/02/13 15:52	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	375	1	11/21/13 10:55	12/02/13 15:52	105-67-9	
Dimethylphthalate	ND	ug/kg	375	1	11/21/13 10:55	12/02/13 15:52	131-11-3	
Di-n-butylphthalate	ND	ug/kg	375	1	11/21/13 10:55	12/02/13 15:52	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	750	1	11/21/13 10:55	12/02/13 15:52	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	1880	1	11/21/13 10:55	12/02/13 15:52	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	375	1	11/21/13 10:55	12/02/13 15:52	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	375	1	11/21/13 10:55	12/02/13 15:52	606-20-2	
Di-n-octylphthalate	ND	ug/kg	375	1	11/21/13 10:55	12/02/13 15:52	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	375	1	11/21/13 10:55	12/02/13 15:52	117-81-7	
Fluoranthene	ND	ug/kg	375	1	11/21/13 10:55	12/02/13 15:52	206-44-0	
Fluorene	ND	ug/kg	375	1	11/21/13 10:55	12/02/13 15:52	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	375	1	11/21/13 10:55	12/02/13 15:52	87-68-3	
Hexachlorobenzene	ND	ug/kg	375	1	11/21/13 10:55	12/02/13 15:52	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	375	1	11/21/13 10:55	12/02/13 15:52	77-47-4	
Hexachloroethane	ND	ug/kg	375	1	11/21/13 10:55	12/02/13 15:52	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	375	1	11/21/13 10:55	12/02/13 15:52	193-39-5	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B13**      **Lab ID: 92180233004**      Collected: 11/18/13 10:30      Received: 11/20/13 14:15      Matrix: Solid

*Results reported on a "dry-weight" basis*

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Microwave</b>		Analytical Method: EPA 8270    Preparation Method: EPA 3546						
Isophorone	ND	ug/kg	375	1	11/21/13 10:55	12/02/13 15:52	78-59-1	
1-Methylnaphthalene	ND	ug/kg	375	1	11/21/13 10:55	12/02/13 15:52	90-12-0	
2-Methylnaphthalene	ND	ug/kg	375	1	11/21/13 10:55	12/02/13 15:52	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	375	1	11/21/13 10:55	12/02/13 15:52	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	375	1	11/21/13 10:55	12/02/13 15:52		
Naphthalene	ND	ug/kg	375	1	11/21/13 10:55	12/02/13 15:52	91-20-3	
2-Nitroaniline	ND	ug/kg	1880	1	11/21/13 10:55	12/02/13 15:52	88-74-4	
3-Nitroaniline	ND	ug/kg	1880	1	11/21/13 10:55	12/02/13 15:52	99-09-2	
4-Nitroaniline	ND	ug/kg	750	1	11/21/13 10:55	12/02/13 15:52	100-01-6	
Nitrobenzene	ND	ug/kg	375	1	11/21/13 10:55	12/02/13 15:52	98-95-3	
2-Nitrophenol	ND	ug/kg	375	1	11/21/13 10:55	12/02/13 15:52	88-75-5	
4-Nitrophenol	ND	ug/kg	1880	1	11/21/13 10:55	12/02/13 15:52	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	375	1	11/21/13 10:55	12/02/13 15:52	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	375	1	11/21/13 10:55	12/02/13 15:52	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	375	1	11/21/13 10:55	12/02/13 15:52	86-30-6	
Pentachlorophenol	ND	ug/kg	1880	1	11/21/13 10:55	12/02/13 15:52	87-86-5	
Phenanthrene	ND	ug/kg	375	1	11/21/13 10:55	12/02/13 15:52	85-01-8	
Phenol	ND	ug/kg	375	1	11/21/13 10:55	12/02/13 15:52	108-95-2	
Pyrene	ND	ug/kg	375	1	11/21/13 10:55	12/02/13 15:52	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/kg	375	1	11/21/13 10:55	12/02/13 15:52	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	375	1	11/21/13 10:55	12/02/13 15:52	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	375	1	11/21/13 10:55	12/02/13 15:52	88-06-2	
<b>Surrogates</b>								
Nitrobenzene-d5 (S)	45 %		23-110	1	11/21/13 10:55	12/02/13 15:52	4165-60-0	
2-Fluorobiphenyl (S)	49 %		30-110	1	11/21/13 10:55	12/02/13 15:52	321-60-8	
Terphenyl-d14 (S)	54 %		28-110	1	11/21/13 10:55	12/02/13 15:52	1718-51-0	
Phenol-d6 (S)	45 %		22-110	1	11/21/13 10:55	12/02/13 15:52	13127-88-3	
2-Fluorophenol (S)	43 %		13-110	1	11/21/13 10:55	12/02/13 15:52	367-12-4	
2,4,6-Tribromophenol (S)	57 %		27-110	1	11/21/13 10:55	12/02/13 15:52	118-79-6	
<b>8260/5035A Volatile Organics</b>		Analytical Method: EPA 8260						
Acetone	ND	ug/kg	74.4	1		11/26/13 01:25	67-64-1	
Benzene	ND	ug/kg	3.7	1		11/26/13 01:25	71-43-2	
Bromobenzene	ND	ug/kg	3.7	1		11/26/13 01:25	108-86-1	
Bromochloromethane	ND	ug/kg	3.7	1		11/26/13 01:25	74-97-5	
Bromodichloromethane	ND	ug/kg	3.7	1		11/26/13 01:25	75-27-4	
Bromoform	ND	ug/kg	3.7	1		11/26/13 01:25	75-25-2	
Bromomethane	ND	ug/kg	7.4	1		11/26/13 01:25	74-83-9	
2-Butanone (MEK)	ND	ug/kg	74.4	1		11/26/13 01:25	78-93-3	
n-Butylbenzene	ND	ug/kg	3.7	1		11/26/13 01:25	104-51-8	
sec-Butylbenzene	ND	ug/kg	3.7	1		11/26/13 01:25	135-98-8	
tert-Butylbenzene	ND	ug/kg	3.7	1		11/26/13 01:25	98-06-6	
Carbon tetrachloride	ND	ug/kg	3.7	1		11/26/13 01:25	56-23-5	
Chlorobenzene	ND	ug/kg	3.7	1		11/26/13 01:25	108-90-7	
Chloroethane	ND	ug/kg	7.4	1		11/26/13 01:25	75-00-3	
Chloroform	ND	ug/kg	3.7	1		11/26/13 01:25	67-66-3	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B13**      **Lab ID: 92180233004**      Collected: 11/18/13 10:30      Received: 11/20/13 14:15      Matrix: Solid

*Results reported on a "dry-weight" basis*

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260/5035A Volatile Organics</b>		Analytical Method: EPA 8260						
Chloromethane	ND	ug/kg	7.4	1		11/26/13 01:25	74-87-3	
2-Chlorotoluene	ND	ug/kg	3.7	1		11/26/13 01:25	95-49-8	
4-Chlorotoluene	ND	ug/kg	3.7	1		11/26/13 01:25	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	3.7	1		11/26/13 01:25	96-12-8	
Dibromochloromethane	ND	ug/kg	3.7	1		11/26/13 01:25	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	3.7	1		11/26/13 01:25	106-93-4	
Dibromomethane	ND	ug/kg	3.7	1		11/26/13 01:25	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	3.7	1		11/26/13 01:25	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	3.7	1		11/26/13 01:25	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	3.7	1		11/26/13 01:25	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	7.4	1		11/26/13 01:25	75-71-8	
1,1-Dichloroethane	ND	ug/kg	3.7	1		11/26/13 01:25	75-34-3	
1,2-Dichloroethane	ND	ug/kg	3.7	1		11/26/13 01:25	107-06-2	
1,1-Dichloroethene	ND	ug/kg	3.7	1		11/26/13 01:25	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	3.7	1		11/26/13 01:25	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	3.7	1		11/26/13 01:25	156-60-5	
1,2-Dichloropropane	ND	ug/kg	3.7	1		11/26/13 01:25	78-87-5	
1,3-Dichloropropane	ND	ug/kg	3.7	1		11/26/13 01:25	142-28-9	
2,2-Dichloropropane	ND	ug/kg	3.7	1		11/26/13 01:25	594-20-7	
1,1-Dichloropropene	ND	ug/kg	3.7	1		11/26/13 01:25	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	3.7	1		11/26/13 01:25	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	3.7	1		11/26/13 01:25	10061-02-6	
Diisopropyl ether	ND	ug/kg	3.7	1		11/26/13 01:25	108-20-3	
Ethylbenzene	ND	ug/kg	3.7	1		11/26/13 01:25	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	3.7	1		11/26/13 01:25	87-68-3	
2-Hexanone	ND	ug/kg	37.2	1		11/26/13 01:25	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	3.7	1		11/26/13 01:25	98-82-8	
p-Isopropyltoluene	ND	ug/kg	3.7	1		11/26/13 01:25	99-87-6	
Methylene Chloride	ND	ug/kg	14.9	1		11/26/13 01:25	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	37.2	1		11/26/13 01:25	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	3.7	1		11/26/13 01:25	1634-04-4	
Naphthalene	ND	ug/kg	3.7	1		11/26/13 01:25	91-20-3	
n-Propylbenzene	ND	ug/kg	3.7	1		11/26/13 01:25	103-65-1	
Styrene	ND	ug/kg	3.7	1		11/26/13 01:25	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	3.7	1		11/26/13 01:25	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	3.7	1		11/26/13 01:25	79-34-5	
Tetrachloroethene	ND	ug/kg	3.7	1		11/26/13 01:25	127-18-4	
Toluene	ND	ug/kg	3.7	1		11/26/13 01:25	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	3.7	1		11/26/13 01:25	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	3.7	1		11/26/13 01:25	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	3.7	1		11/26/13 01:25	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	3.7	1		11/26/13 01:25	79-00-5	
Trichloroethene	ND	ug/kg	3.7	1		11/26/13 01:25	79-01-6	
Trichlorofluoromethane	ND	ug/kg	3.7	1		11/26/13 01:25	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	3.7	1		11/26/13 01:25	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	3.7	1		11/26/13 01:25	95-63-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..





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 Kinsey Ave. Suite 100  
 Huntersville, NC 28078  
 (704)875-9092

### ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B13**      **Lab ID: 92180233004**      Collected: 11/18/13 10:30      Received: 11/20/13 14:15      Matrix: Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260/5035A Volatile Organics</b>		Analytical Method: EPA 8260						
1,3,5-Trimethylbenzene	ND	ug/kg	3.7	1		11/26/13 01:25	108-67-8	
Vinyl acetate	ND	ug/kg	37.2	1		11/26/13 01:25	108-05-4	
Vinyl chloride	ND	ug/kg	7.4	1		11/26/13 01:25	75-01-4	
Xylene (Total)	ND	ug/kg	7.4	1		11/26/13 01:25	1330-20-7	
m&p-Xylene	ND	ug/kg	7.4	1		11/26/13 01:25	179601-23-1	
o-Xylene	ND	ug/kg	3.7	1		11/26/13 01:25	95-47-6	
<b>Surrogates</b>								
Toluene-d8 (S)	98	%	70-130	1		11/26/13 01:25	2037-26-5	
4-Bromofluorobenzene (S)	102	%	70-130	1		11/26/13 01:25	460-00-4	
1,2-Dichloroethane-d4 (S)	109	%	70-132	1		11/26/13 01:25	17060-07-0	
<b>Percent Moisture</b>		Analytical Method: ASTM D2974-87						
Percent Moisture	<b>12.0</b>	%	0.10	1		12/04/13 08:20		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
 without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B14**      **Lab ID: 92180233005**      Collected: 11/18/13 10:35      Received: 11/20/13 14:15      Matrix: Solid

*Results reported on a "dry-weight" basis*

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Microwave</b>		Analytical Method: EPA 8270    Preparation Method: EPA 3546						
Acenaphthene	ND	ug/kg	383	1	11/21/13 10:55	12/02/13 16:24	83-32-9	
Acenaphthylene	ND	ug/kg	383	1	11/21/13 10:55	12/02/13 16:24	208-96-8	
Aniline	ND	ug/kg	383	1	11/21/13 10:55	12/02/13 16:24	62-53-3	
Anthracene	ND	ug/kg	383	1	11/21/13 10:55	12/02/13 16:24	120-12-7	
Benzo(a)anthracene	ND	ug/kg	383	1	11/21/13 10:55	12/02/13 16:24	56-55-3	
Benzo(a)pyrene	ND	ug/kg	383	1	11/21/13 10:55	12/02/13 16:24	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	383	1	11/21/13 10:55	12/02/13 16:24	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	383	1	11/21/13 10:55	12/02/13 16:24	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	383	1	11/21/13 10:55	12/02/13 16:24	207-08-9	
Benzoic Acid	ND	ug/kg	1920	1	11/21/13 10:55	12/02/13 16:24	65-85-0	
Benzyl alcohol	ND	ug/kg	766	1	11/21/13 10:55	12/02/13 16:24	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	383	1	11/21/13 10:55	12/02/13 16:24	101-55-3	
Butylbenzylphthalate	ND	ug/kg	383	1	11/21/13 10:55	12/02/13 16:24	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	766	1	11/21/13 10:55	12/02/13 16:24	59-50-7	
4-Chloroaniline	ND	ug/kg	1920	1	11/21/13 10:55	12/02/13 16:24	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	383	1	11/21/13 10:55	12/02/13 16:24	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	383	1	11/21/13 10:55	12/02/13 16:24	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	383	1	11/21/13 10:55	12/02/13 16:24	108-60-1	
2-Chloronaphthalene	ND	ug/kg	383	1	11/21/13 10:55	12/02/13 16:24	91-58-7	
2-Chlorophenol	ND	ug/kg	383	1	11/21/13 10:55	12/02/13 16:24	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	383	1	11/21/13 10:55	12/02/13 16:24	7005-72-3	
Chrysene	ND	ug/kg	383	1	11/21/13 10:55	12/02/13 16:24	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	383	1	11/21/13 10:55	12/02/13 16:24	53-70-3	
Dibenzofuran	ND	ug/kg	383	1	11/21/13 10:55	12/02/13 16:24	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	383	1	11/21/13 10:55	12/02/13 16:24	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	383	1	11/21/13 10:55	12/02/13 16:24	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	383	1	11/21/13 10:55	12/02/13 16:24	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	1920	1	11/21/13 10:55	12/02/13 16:24	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	383	1	11/21/13 10:55	12/02/13 16:24	120-83-2	
Diethylphthalate	ND	ug/kg	383	1	11/21/13 10:55	12/02/13 16:24	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	383	1	11/21/13 10:55	12/02/13 16:24	105-67-9	
Dimethylphthalate	ND	ug/kg	383	1	11/21/13 10:55	12/02/13 16:24	131-11-3	
Di-n-butylphthalate	ND	ug/kg	383	1	11/21/13 10:55	12/02/13 16:24	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	766	1	11/21/13 10:55	12/02/13 16:24	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	1920	1	11/21/13 10:55	12/02/13 16:24	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	383	1	11/21/13 10:55	12/02/13 16:24	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	383	1	11/21/13 10:55	12/02/13 16:24	606-20-2	
Di-n-octylphthalate	ND	ug/kg	383	1	11/21/13 10:55	12/02/13 16:24	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	383	1	11/21/13 10:55	12/02/13 16:24	117-81-7	
Fluoranthene	ND	ug/kg	383	1	11/21/13 10:55	12/02/13 16:24	206-44-0	
Fluorene	ND	ug/kg	383	1	11/21/13 10:55	12/02/13 16:24	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	383	1	11/21/13 10:55	12/02/13 16:24	87-68-3	
Hexachlorobenzene	ND	ug/kg	383	1	11/21/13 10:55	12/02/13 16:24	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	383	1	11/21/13 10:55	12/02/13 16:24	77-47-4	
Hexachloroethane	ND	ug/kg	383	1	11/21/13 10:55	12/02/13 16:24	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	383	1	11/21/13 10:55	12/02/13 16:24	193-39-5	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B14**      **Lab ID: 92180233005**      Collected: 11/18/13 10:35      Received: 11/20/13 14:15      Matrix: Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Microwave</b>		Analytical Method: EPA 8270    Preparation Method: EPA 3546						
Isophorone	ND	ug/kg	383	1	11/21/13 10:55	12/02/13 16:24	78-59-1	
1-Methylnaphthalene	ND	ug/kg	383	1	11/21/13 10:55	12/02/13 16:24	90-12-0	
2-Methylnaphthalene	ND	ug/kg	383	1	11/21/13 10:55	12/02/13 16:24	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	383	1	11/21/13 10:55	12/02/13 16:24	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	383	1	11/21/13 10:55	12/02/13 16:24		
Naphthalene	ND	ug/kg	383	1	11/21/13 10:55	12/02/13 16:24	91-20-3	
2-Nitroaniline	ND	ug/kg	1920	1	11/21/13 10:55	12/02/13 16:24	88-74-4	
3-Nitroaniline	ND	ug/kg	1920	1	11/21/13 10:55	12/02/13 16:24	99-09-2	
4-Nitroaniline	ND	ug/kg	766	1	11/21/13 10:55	12/02/13 16:24	100-01-6	
Nitrobenzene	ND	ug/kg	383	1	11/21/13 10:55	12/02/13 16:24	98-95-3	
2-Nitrophenol	ND	ug/kg	383	1	11/21/13 10:55	12/02/13 16:24	88-75-5	
4-Nitrophenol	ND	ug/kg	1920	1	11/21/13 10:55	12/02/13 16:24	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	383	1	11/21/13 10:55	12/02/13 16:24	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	383	1	11/21/13 10:55	12/02/13 16:24	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	383	1	11/21/13 10:55	12/02/13 16:24	86-30-6	
Pentachlorophenol	ND	ug/kg	1920	1	11/21/13 10:55	12/02/13 16:24	87-86-5	
Phenanthrene	ND	ug/kg	383	1	11/21/13 10:55	12/02/13 16:24	85-01-8	
Phenol	ND	ug/kg	383	1	11/21/13 10:55	12/02/13 16:24	108-95-2	
Pyrene	ND	ug/kg	383	1	11/21/13 10:55	12/02/13 16:24	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/kg	383	1	11/21/13 10:55	12/02/13 16:24	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	383	1	11/21/13 10:55	12/02/13 16:24	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	383	1	11/21/13 10:55	12/02/13 16:24	88-06-2	
<b>Surrogates</b>								
Nitrobenzene-d5 (S)	46 %		23-110	1	11/21/13 10:55	12/02/13 16:24	4165-60-0	
2-Fluorobiphenyl (S)	50 %		30-110	1	11/21/13 10:55	12/02/13 16:24	321-60-8	
Terphenyl-d14 (S)	60 %		28-110	1	11/21/13 10:55	12/02/13 16:24	1718-51-0	
Phenol-d6 (S)	48 %		22-110	1	11/21/13 10:55	12/02/13 16:24	13127-88-3	
2-Fluorophenol (S)	46 %		13-110	1	11/21/13 10:55	12/02/13 16:24	367-12-4	
2,4,6-Tribromophenol (S)	62 %		27-110	1	11/21/13 10:55	12/02/13 16:24	118-79-6	
<b>8260/5035A Volatile Organics</b>		Analytical Method: EPA 8260						
Acetone	ND	ug/kg	80.6	1		11/26/13 01:45	67-64-1	
Benzene	ND	ug/kg	4.0	1		11/26/13 01:45	71-43-2	
Bromobenzene	ND	ug/kg	4.0	1		11/26/13 01:45	108-86-1	
Bromochloromethane	ND	ug/kg	4.0	1		11/26/13 01:45	74-97-5	
Bromodichloromethane	ND	ug/kg	4.0	1		11/26/13 01:45	75-27-4	
Bromoform	ND	ug/kg	4.0	1		11/26/13 01:45	75-25-2	
Bromomethane	ND	ug/kg	8.1	1		11/26/13 01:45	74-83-9	
2-Butanone (MEK)	ND	ug/kg	80.6	1		11/26/13 01:45	78-93-3	
n-Butylbenzene	ND	ug/kg	4.0	1		11/26/13 01:45	104-51-8	
sec-Butylbenzene	ND	ug/kg	4.0	1		11/26/13 01:45	135-98-8	
tert-Butylbenzene	ND	ug/kg	4.0	1		11/26/13 01:45	98-06-6	
Carbon tetrachloride	ND	ug/kg	4.0	1		11/26/13 01:45	56-23-5	
Chlorobenzene	ND	ug/kg	4.0	1		11/26/13 01:45	108-90-7	
Chloroethane	ND	ug/kg	8.1	1		11/26/13 01:45	75-00-3	
Chloroform	ND	ug/kg	4.0	1		11/26/13 01:45	67-66-3	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B14**      **Lab ID: 92180233005**      Collected: 11/18/13 10:35      Received: 11/20/13 14:15      Matrix: Solid

*Results reported on a "dry-weight" basis*

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260/5035A Volatile Organics</b>		Analytical Method: EPA 8260						
Chloromethane	ND	ug/kg	8.1	1		11/26/13 01:45	74-87-3	
2-Chlorotoluene	ND	ug/kg	4.0	1		11/26/13 01:45	95-49-8	
4-Chlorotoluene	ND	ug/kg	4.0	1		11/26/13 01:45	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	4.0	1		11/26/13 01:45	96-12-8	
Dibromochloromethane	ND	ug/kg	4.0	1		11/26/13 01:45	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	4.0	1		11/26/13 01:45	106-93-4	
Dibromomethane	ND	ug/kg	4.0	1		11/26/13 01:45	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	4.0	1		11/26/13 01:45	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	4.0	1		11/26/13 01:45	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	4.0	1		11/26/13 01:45	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	8.1	1		11/26/13 01:45	75-71-8	
1,1-Dichloroethane	ND	ug/kg	4.0	1		11/26/13 01:45	75-34-3	
1,2-Dichloroethane	ND	ug/kg	4.0	1		11/26/13 01:45	107-06-2	
1,1-Dichloroethene	ND	ug/kg	4.0	1		11/26/13 01:45	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	4.0	1		11/26/13 01:45	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	4.0	1		11/26/13 01:45	156-60-5	
1,2-Dichloropropane	ND	ug/kg	4.0	1		11/26/13 01:45	78-87-5	
1,3-Dichloropropane	ND	ug/kg	4.0	1		11/26/13 01:45	142-28-9	
2,2-Dichloropropane	ND	ug/kg	4.0	1		11/26/13 01:45	594-20-7	
1,1-Dichloropropene	ND	ug/kg	4.0	1		11/26/13 01:45	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	4.0	1		11/26/13 01:45	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	4.0	1		11/26/13 01:45	10061-02-6	
Diisopropyl ether	ND	ug/kg	4.0	1		11/26/13 01:45	108-20-3	
Ethylbenzene	ND	ug/kg	4.0	1		11/26/13 01:45	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	4.0	1		11/26/13 01:45	87-68-3	
2-Hexanone	ND	ug/kg	40.3	1		11/26/13 01:45	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	4.0	1		11/26/13 01:45	98-82-8	
p-Isopropyltoluene	ND	ug/kg	4.0	1		11/26/13 01:45	99-87-6	
Methylene Chloride	ND	ug/kg	16.1	1		11/26/13 01:45	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	40.3	1		11/26/13 01:45	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	4.0	1		11/26/13 01:45	1634-04-4	
Naphthalene	ND	ug/kg	4.0	1		11/26/13 01:45	91-20-3	
n-Propylbenzene	ND	ug/kg	4.0	1		11/26/13 01:45	103-65-1	
Styrene	ND	ug/kg	4.0	1		11/26/13 01:45	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	4.0	1		11/26/13 01:45	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	4.0	1		11/26/13 01:45	79-34-5	
Tetrachloroethene	ND	ug/kg	4.0	1		11/26/13 01:45	127-18-4	
Toluene	ND	ug/kg	4.0	1		11/26/13 01:45	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	4.0	1		11/26/13 01:45	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	4.0	1		11/26/13 01:45	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	4.0	1		11/26/13 01:45	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	4.0	1		11/26/13 01:45	79-00-5	
Trichloroethene	ND	ug/kg	4.0	1		11/26/13 01:45	79-01-6	
Trichlorofluoromethane	ND	ug/kg	4.0	1		11/26/13 01:45	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	4.0	1		11/26/13 01:45	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	4.0	1		11/26/13 01:45	95-63-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



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 Kinsey Ave. Suite 100  
 Huntersville, NC 28078  
 (704)875-9092

### ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1  
 Pace Project No.: 92180233

Sample: B14 Lab ID: 92180233005 Collected: 11/18/13 10:35 Received: 11/20/13 14:15 Matrix: Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260/5035A Volatile Organics</b>		Analytical Method: EPA 8260						
1,3,5-Trimethylbenzene	ND	ug/kg	4.0	1		11/26/13 01:45	108-67-8	
Vinyl acetate	ND	ug/kg	40.3	1		11/26/13 01:45	108-05-4	
Vinyl chloride	ND	ug/kg	8.1	1		11/26/13 01:45	75-01-4	
Xylene (Total)	ND	ug/kg	8.1	1		11/26/13 01:45	1330-20-7	
m&p-Xylene	ND	ug/kg	8.1	1		11/26/13 01:45	179601-23-1	
o-Xylene	ND	ug/kg	4.0	1		11/26/13 01:45	95-47-6	
<b>Surrogates</b>								
Toluene-d8 (S)	100	%	70-130	1		11/26/13 01:45	2037-26-5	
4-Bromofluorobenzene (S)	102	%	70-130	1		11/26/13 01:45	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	70-132	1		11/26/13 01:45	17060-07-0	
<b>Percent Moisture</b>		Analytical Method: ASTM D2974-87						
Percent Moisture	13.8	%	0.10	1		12/04/13 08:20		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
 without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B15**      **Lab ID: 92180233006**      Collected: 11/18/13 10:40      Received: 11/20/13 14:15      Matrix: Solid

*Results reported on a "dry-weight" basis*

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Microwave</b>		Analytical Method: EPA 8270    Preparation Method: EPA 3546						
Acenaphthene	ND	ug/kg	405	1	11/21/13 10:55	12/03/13 14:15	83-32-9	
Acenaphthylene	ND	ug/kg	405	1	11/21/13 10:55	12/03/13 14:15	208-96-8	
Aniline	ND	ug/kg	405	1	11/21/13 10:55	12/03/13 14:15	62-53-3	
Anthracene	ND	ug/kg	405	1	11/21/13 10:55	12/03/13 14:15	120-12-7	
Benzo(a)anthracene	ND	ug/kg	405	1	11/21/13 10:55	12/03/13 14:15	56-55-3	
Benzo(a)pyrene	ND	ug/kg	405	1	11/21/13 10:55	12/03/13 14:15	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	405	1	11/21/13 10:55	12/03/13 14:15	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	405	1	11/21/13 10:55	12/03/13 14:15	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	405	1	11/21/13 10:55	12/03/13 14:15	207-08-9	
Benzoic Acid	ND	ug/kg	2020	1	11/21/13 10:55	12/03/13 14:15	65-85-0	
Benzyl alcohol	ND	ug/kg	810	1	11/21/13 10:55	12/03/13 14:15	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	405	1	11/21/13 10:55	12/03/13 14:15	101-55-3	
Butylbenzylphthalate	ND	ug/kg	405	1	11/21/13 10:55	12/03/13 14:15	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	810	1	11/21/13 10:55	12/03/13 14:15	59-50-7	
4-Chloroaniline	ND	ug/kg	2020	1	11/21/13 10:55	12/03/13 14:15	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	405	1	11/21/13 10:55	12/03/13 14:15	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	405	1	11/21/13 10:55	12/03/13 14:15	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	405	1	11/21/13 10:55	12/03/13 14:15	108-60-1	
2-Chloronaphthalene	ND	ug/kg	405	1	11/21/13 10:55	12/03/13 14:15	91-58-7	
2-Chlorophenol	ND	ug/kg	405	1	11/21/13 10:55	12/03/13 14:15	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	405	1	11/21/13 10:55	12/03/13 14:15	7005-72-3	
Chrysene	ND	ug/kg	405	1	11/21/13 10:55	12/03/13 14:15	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	405	1	11/21/13 10:55	12/03/13 14:15	53-70-3	
Dibenzofuran	ND	ug/kg	405	1	11/21/13 10:55	12/03/13 14:15	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	405	1	11/21/13 10:55	12/03/13 14:15	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	405	1	11/21/13 10:55	12/03/13 14:15	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	405	1	11/21/13 10:55	12/03/13 14:15	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	2020	1	11/21/13 10:55	12/03/13 14:15	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	405	1	11/21/13 10:55	12/03/13 14:15	120-83-2	
Diethylphthalate	ND	ug/kg	405	1	11/21/13 10:55	12/03/13 14:15	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	405	1	11/21/13 10:55	12/03/13 14:15	105-67-9	
Dimethylphthalate	ND	ug/kg	405	1	11/21/13 10:55	12/03/13 14:15	131-11-3	
Di-n-butylphthalate	ND	ug/kg	405	1	11/21/13 10:55	12/03/13 14:15	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	810	1	11/21/13 10:55	12/03/13 14:15	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	2020	1	11/21/13 10:55	12/03/13 14:15	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	405	1	11/21/13 10:55	12/03/13 14:15	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	405	1	11/21/13 10:55	12/03/13 14:15	606-20-2	
Di-n-octylphthalate	ND	ug/kg	405	1	11/21/13 10:55	12/03/13 14:15	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	405	1	11/21/13 10:55	12/03/13 14:15	117-81-7	
Fluoranthene	ND	ug/kg	405	1	11/21/13 10:55	12/03/13 14:15	206-44-0	
Fluorene	ND	ug/kg	405	1	11/21/13 10:55	12/03/13 14:15	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	405	1	11/21/13 10:55	12/03/13 14:15	87-68-3	
Hexachlorobenzene	ND	ug/kg	405	1	11/21/13 10:55	12/03/13 14:15	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	405	1	11/21/13 10:55	12/03/13 14:15	77-47-4	
Hexachloroethane	ND	ug/kg	405	1	11/21/13 10:55	12/03/13 14:15	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	405	1	11/21/13 10:55	12/03/13 14:15	193-39-5	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B15**      **Lab ID: 92180233006**      Collected: 11/18/13 10:40      Received: 11/20/13 14:15      Matrix: Solid

*Results reported on a "dry-weight" basis*

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Microwave</b>		Analytical Method: EPA 8270    Preparation Method: EPA 3546						
Isophorone	ND	ug/kg	405	1	11/21/13 10:55	12/03/13 14:15	78-59-1	
1-Methylnaphthalene	ND	ug/kg	405	1	11/21/13 10:55	12/03/13 14:15	90-12-0	
2-Methylnaphthalene	ND	ug/kg	405	1	11/21/13 10:55	12/03/13 14:15	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	405	1	11/21/13 10:55	12/03/13 14:15	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	405	1	11/21/13 10:55	12/03/13 14:15		
Naphthalene	ND	ug/kg	405	1	11/21/13 10:55	12/03/13 14:15	91-20-3	
2-Nitroaniline	ND	ug/kg	2020	1	11/21/13 10:55	12/03/13 14:15	88-74-4	
3-Nitroaniline	ND	ug/kg	2020	1	11/21/13 10:55	12/03/13 14:15	99-09-2	
4-Nitroaniline	ND	ug/kg	810	1	11/21/13 10:55	12/03/13 14:15	100-01-6	
Nitrobenzene	ND	ug/kg	405	1	11/21/13 10:55	12/03/13 14:15	98-95-3	
2-Nitrophenol	ND	ug/kg	405	1	11/21/13 10:55	12/03/13 14:15	88-75-5	
4-Nitrophenol	ND	ug/kg	2020	1	11/21/13 10:55	12/03/13 14:15	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	405	1	11/21/13 10:55	12/03/13 14:15	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	405	1	11/21/13 10:55	12/03/13 14:15	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	405	1	11/21/13 10:55	12/03/13 14:15	86-30-6	
Pentachlorophenol	ND	ug/kg	2020	1	11/21/13 10:55	12/03/13 14:15	87-86-5	
Phenanthrene	ND	ug/kg	405	1	11/21/13 10:55	12/03/13 14:15	85-01-8	
Phenol	ND	ug/kg	405	1	11/21/13 10:55	12/03/13 14:15	108-95-2	
Pyrene	ND	ug/kg	405	1	11/21/13 10:55	12/03/13 14:15	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/kg	405	1	11/21/13 10:55	12/03/13 14:15	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	405	1	11/21/13 10:55	12/03/13 14:15	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	405	1	11/21/13 10:55	12/03/13 14:15	88-06-2	
<b>Surrogates</b>								
Nitrobenzene-d5 (S)	50 %		23-110	1	11/21/13 10:55	12/03/13 14:15	4165-60-0	
2-Fluorobiphenyl (S)	50 %		30-110	1	11/21/13 10:55	12/03/13 14:15	321-60-8	
Terphenyl-d14 (S)	62 %		28-110	1	11/21/13 10:55	12/03/13 14:15	1718-51-0	
Phenol-d6 (S)	57 %		22-110	1	11/21/13 10:55	12/03/13 14:15	13127-88-3	
2-Fluorophenol (S)	58 %		13-110	1	11/21/13 10:55	12/03/13 14:15	367-12-4	
2,4,6-Tribromophenol (S)	55 %		27-110	1	11/21/13 10:55	12/03/13 14:15	118-79-6	
<b>8260/5035A Volatile Organics</b>		Analytical Method: EPA 8260						
Acetone	ND	ug/kg	89.1	1		11/26/13 02:04	67-64-1	
Benzene	ND	ug/kg	4.5	1		11/26/13 02:04	71-43-2	
Bromobenzene	ND	ug/kg	4.5	1		11/26/13 02:04	108-86-1	
Bromochloromethane	ND	ug/kg	4.5	1		11/26/13 02:04	74-97-5	
Bromodichloromethane	ND	ug/kg	4.5	1		11/26/13 02:04	75-27-4	
Bromoform	ND	ug/kg	4.5	1		11/26/13 02:04	75-25-2	
Bromomethane	ND	ug/kg	8.9	1		11/26/13 02:04	74-83-9	
2-Butanone (MEK)	ND	ug/kg	89.1	1		11/26/13 02:04	78-93-3	
n-Butylbenzene	ND	ug/kg	4.5	1		11/26/13 02:04	104-51-8	
sec-Butylbenzene	ND	ug/kg	4.5	1		11/26/13 02:04	135-98-8	
tert-Butylbenzene	ND	ug/kg	4.5	1		11/26/13 02:04	98-06-6	
Carbon tetrachloride	ND	ug/kg	4.5	1		11/26/13 02:04	56-23-5	
Chlorobenzene	ND	ug/kg	4.5	1		11/26/13 02:04	108-90-7	
Chloroethane	ND	ug/kg	8.9	1		11/26/13 02:04	75-00-3	
Chloroform	ND	ug/kg	4.5	1		11/26/13 02:04	67-66-3	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B15**      **Lab ID: 92180233006**      Collected: 11/18/13 10:40      Received: 11/20/13 14:15      Matrix: Solid

*Results reported on a "dry-weight" basis*

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260/5035A Volatile Organics</b>		Analytical Method: EPA 8260						
Chloromethane	ND	ug/kg	8.9	1		11/26/13 02:04	74-87-3	
2-Chlorotoluene	ND	ug/kg	4.5	1		11/26/13 02:04	95-49-8	
4-Chlorotoluene	ND	ug/kg	4.5	1		11/26/13 02:04	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	4.5	1		11/26/13 02:04	96-12-8	
Dibromochloromethane	ND	ug/kg	4.5	1		11/26/13 02:04	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	4.5	1		11/26/13 02:04	106-93-4	
Dibromomethane	ND	ug/kg	4.5	1		11/26/13 02:04	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	4.5	1		11/26/13 02:04	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	4.5	1		11/26/13 02:04	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	4.5	1		11/26/13 02:04	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	8.9	1		11/26/13 02:04	75-71-8	
1,1-Dichloroethane	ND	ug/kg	4.5	1		11/26/13 02:04	75-34-3	
1,2-Dichloroethane	ND	ug/kg	4.5	1		11/26/13 02:04	107-06-2	
1,1-Dichloroethene	ND	ug/kg	4.5	1		11/26/13 02:04	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	4.5	1		11/26/13 02:04	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	4.5	1		11/26/13 02:04	156-60-5	
1,2-Dichloropropane	ND	ug/kg	4.5	1		11/26/13 02:04	78-87-5	
1,3-Dichloropropane	ND	ug/kg	4.5	1		11/26/13 02:04	142-28-9	
2,2-Dichloropropane	ND	ug/kg	4.5	1		11/26/13 02:04	594-20-7	
1,1-Dichloropropene	ND	ug/kg	4.5	1		11/26/13 02:04	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	4.5	1		11/26/13 02:04	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	4.5	1		11/26/13 02:04	10061-02-6	
Diisopropyl ether	ND	ug/kg	4.5	1		11/26/13 02:04	108-20-3	
Ethylbenzene	ND	ug/kg	4.5	1		11/26/13 02:04	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	4.5	1		11/26/13 02:04	87-68-3	
2-Hexanone	ND	ug/kg	44.5	1		11/26/13 02:04	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	4.5	1		11/26/13 02:04	98-82-8	
p-Isopropyltoluene	ND	ug/kg	4.5	1		11/26/13 02:04	99-87-6	
Methylene Chloride	ND	ug/kg	17.8	1		11/26/13 02:04	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	44.5	1		11/26/13 02:04	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	4.5	1		11/26/13 02:04	1634-04-4	
Naphthalene	ND	ug/kg	4.5	1		11/26/13 02:04	91-20-3	
n-Propylbenzene	ND	ug/kg	4.5	1		11/26/13 02:04	103-65-1	
Styrene	ND	ug/kg	4.5	1		11/26/13 02:04	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	4.5	1		11/26/13 02:04	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	4.5	1		11/26/13 02:04	79-34-5	
Tetrachloroethene	ND	ug/kg	4.5	1		11/26/13 02:04	127-18-4	
Toluene	ND	ug/kg	4.5	1		11/26/13 02:04	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	4.5	1		11/26/13 02:04	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	4.5	1		11/26/13 02:04	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	4.5	1		11/26/13 02:04	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	4.5	1		11/26/13 02:04	79-00-5	
Trichloroethene	ND	ug/kg	4.5	1		11/26/13 02:04	79-01-6	
Trichlorofluoromethane	ND	ug/kg	4.5	1		11/26/13 02:04	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	4.5	1		11/26/13 02:04	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	4.5	1		11/26/13 02:04	95-63-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B15**      **Lab ID: 92180233006**      Collected: 11/18/13 10:40      Received: 11/20/13 14:15      Matrix: Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260/5035A Volatile Organics</b>		Analytical Method: EPA 8260						
1,3,5-Trimethylbenzene	ND	ug/kg	4.5	1		11/26/13 02:04	108-67-8	
Vinyl acetate	ND	ug/kg	44.5	1		11/26/13 02:04	108-05-4	
Vinyl chloride	ND	ug/kg	8.9	1		11/26/13 02:04	75-01-4	
Xylene (Total)	ND	ug/kg	8.9	1		11/26/13 02:04	1330-20-7	
m&p-Xylene	ND	ug/kg	8.9	1		11/26/13 02:04	179601-23-1	
o-Xylene	ND	ug/kg	4.5	1		11/26/13 02:04	95-47-6	
<b>Surrogates</b>								
Toluene-d8 (S)	99 %		70-130	1		11/26/13 02:04	2037-26-5	
4-Bromofluorobenzene (S)	102 %		70-130	1		11/26/13 02:04	460-00-4	
1,2-Dichloroethane-d4 (S)	97 %		70-132	1		11/26/13 02:04	17060-07-0	
<b>Percent Moisture</b>		Analytical Method: ASTM D2974-87						
Percent Moisture	<b>18.5 %</b>		0.10	1		12/04/13 08:20		

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B16**      **Lab ID: 92180233007**      Collected: 11/18/13 11:35      Received: 11/20/13 14:15      Matrix: Solid

*Results reported on a "dry-weight" basis*

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Microwave</b>		Analytical Method: EPA 8270    Preparation Method: EPA 3546						
Acenaphthene	ND	ug/kg	379	1	11/21/13 10:55	12/02/13 17:28	83-32-9	
Acenaphthylene	ND	ug/kg	379	1	11/21/13 10:55	12/02/13 17:28	208-96-8	
Aniline	ND	ug/kg	379	1	11/21/13 10:55	12/02/13 17:28	62-53-3	
Anthracene	ND	ug/kg	379	1	11/21/13 10:55	12/02/13 17:28	120-12-7	
Benzo(a)anthracene	ND	ug/kg	379	1	11/21/13 10:55	12/02/13 17:28	56-55-3	
Benzo(a)pyrene	ND	ug/kg	379	1	11/21/13 10:55	12/02/13 17:28	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	379	1	11/21/13 10:55	12/02/13 17:28	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	379	1	11/21/13 10:55	12/02/13 17:28	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	379	1	11/21/13 10:55	12/02/13 17:28	207-08-9	
Benzoic Acid	ND	ug/kg	1900	1	11/21/13 10:55	12/02/13 17:28	65-85-0	
Benzyl alcohol	ND	ug/kg	759	1	11/21/13 10:55	12/02/13 17:28	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	379	1	11/21/13 10:55	12/02/13 17:28	101-55-3	
Butylbenzylphthalate	ND	ug/kg	379	1	11/21/13 10:55	12/02/13 17:28	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	759	1	11/21/13 10:55	12/02/13 17:28	59-50-7	
4-Chloroaniline	ND	ug/kg	1900	1	11/21/13 10:55	12/02/13 17:28	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	379	1	11/21/13 10:55	12/02/13 17:28	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	379	1	11/21/13 10:55	12/02/13 17:28	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	379	1	11/21/13 10:55	12/02/13 17:28	108-60-1	
2-Chloronaphthalene	ND	ug/kg	379	1	11/21/13 10:55	12/02/13 17:28	91-58-7	
2-Chlorophenol	ND	ug/kg	379	1	11/21/13 10:55	12/02/13 17:28	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	379	1	11/21/13 10:55	12/02/13 17:28	7005-72-3	
Chrysene	ND	ug/kg	379	1	11/21/13 10:55	12/02/13 17:28	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	379	1	11/21/13 10:55	12/02/13 17:28	53-70-3	
Dibenzofuran	ND	ug/kg	379	1	11/21/13 10:55	12/02/13 17:28	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	379	1	11/21/13 10:55	12/02/13 17:28	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	379	1	11/21/13 10:55	12/02/13 17:28	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	379	1	11/21/13 10:55	12/02/13 17:28	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	1900	1	11/21/13 10:55	12/02/13 17:28	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	379	1	11/21/13 10:55	12/02/13 17:28	120-83-2	
Diethylphthalate	ND	ug/kg	379	1	11/21/13 10:55	12/02/13 17:28	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	379	1	11/21/13 10:55	12/02/13 17:28	105-67-9	
Dimethylphthalate	ND	ug/kg	379	1	11/21/13 10:55	12/02/13 17:28	131-11-3	
Di-n-butylphthalate	ND	ug/kg	379	1	11/21/13 10:55	12/02/13 17:28	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	759	1	11/21/13 10:55	12/02/13 17:28	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	1900	1	11/21/13 10:55	12/02/13 17:28	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	379	1	11/21/13 10:55	12/02/13 17:28	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	379	1	11/21/13 10:55	12/02/13 17:28	606-20-2	
Di-n-octylphthalate	ND	ug/kg	379	1	11/21/13 10:55	12/02/13 17:28	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	379	1	11/21/13 10:55	12/02/13 17:28	117-81-7	
Fluoranthene	ND	ug/kg	379	1	11/21/13 10:55	12/02/13 17:28	206-44-0	
Fluorene	ND	ug/kg	379	1	11/21/13 10:55	12/02/13 17:28	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	379	1	11/21/13 10:55	12/02/13 17:28	87-68-3	
Hexachlorobenzene	ND	ug/kg	379	1	11/21/13 10:55	12/02/13 17:28	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	379	1	11/21/13 10:55	12/02/13 17:28	77-47-4	
Hexachloroethane	ND	ug/kg	379	1	11/21/13 10:55	12/02/13 17:28	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	379	1	11/21/13 10:55	12/02/13 17:28	193-39-5	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B16**      **Lab ID: 92180233007**      Collected: 11/18/13 11:35      Received: 11/20/13 14:15      Matrix: Solid

*Results reported on a "dry-weight" basis*

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Microwave</b>		Analytical Method: EPA 8270    Preparation Method: EPA 3546						
Isophorone	ND	ug/kg	379	1	11/21/13 10:55	12/02/13 17:28	78-59-1	
1-Methylnaphthalene	ND	ug/kg	379	1	11/21/13 10:55	12/02/13 17:28	90-12-0	
2-Methylnaphthalene	ND	ug/kg	379	1	11/21/13 10:55	12/02/13 17:28	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	379	1	11/21/13 10:55	12/02/13 17:28	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	379	1	11/21/13 10:55	12/02/13 17:28		
Naphthalene	ND	ug/kg	379	1	11/21/13 10:55	12/02/13 17:28	91-20-3	
2-Nitroaniline	ND	ug/kg	1900	1	11/21/13 10:55	12/02/13 17:28	88-74-4	
3-Nitroaniline	ND	ug/kg	1900	1	11/21/13 10:55	12/02/13 17:28	99-09-2	
4-Nitroaniline	ND	ug/kg	759	1	11/21/13 10:55	12/02/13 17:28	100-01-6	
Nitrobenzene	ND	ug/kg	379	1	11/21/13 10:55	12/02/13 17:28	98-95-3	
2-Nitrophenol	ND	ug/kg	379	1	11/21/13 10:55	12/02/13 17:28	88-75-5	
4-Nitrophenol	ND	ug/kg	1900	1	11/21/13 10:55	12/02/13 17:28	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	379	1	11/21/13 10:55	12/02/13 17:28	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	379	1	11/21/13 10:55	12/02/13 17:28	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	379	1	11/21/13 10:55	12/02/13 17:28	86-30-6	
Pentachlorophenol	ND	ug/kg	1900	1	11/21/13 10:55	12/02/13 17:28	87-86-5	
Phenanthrene	ND	ug/kg	379	1	11/21/13 10:55	12/02/13 17:28	85-01-8	
Phenol	ND	ug/kg	379	1	11/21/13 10:55	12/02/13 17:28	108-95-2	
Pyrene	ND	ug/kg	379	1	11/21/13 10:55	12/02/13 17:28	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/kg	379	1	11/21/13 10:55	12/02/13 17:28	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	379	1	11/21/13 10:55	12/02/13 17:28	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	379	1	11/21/13 10:55	12/02/13 17:28	88-06-2	
<b>Surrogates</b>								
Nitrobenzene-d5 (S)	59 %		23-110	1	11/21/13 10:55	12/02/13 17:28	4165-60-0	
2-Fluorobiphenyl (S)	61 %		30-110	1	11/21/13 10:55	12/02/13 17:28	321-60-8	
Terphenyl-d14 (S)	57 %		28-110	1	11/21/13 10:55	12/02/13 17:28	1718-51-0	
Phenol-d6 (S)	59 %		22-110	1	11/21/13 10:55	12/02/13 17:28	13127-88-3	
2-Fluorophenol (S)	57 %		13-110	1	11/21/13 10:55	12/02/13 17:28	367-12-4	
2,4,6-Tribromophenol (S)	72 %		27-110	1	11/21/13 10:55	12/02/13 17:28	118-79-6	
<b>8260/5035A Volatile Organics</b>		Analytical Method: EPA 8260						
Acetone	ND	ug/kg	82.4	1		11/26/13 02:24	67-64-1	
Benzene	ND	ug/kg	4.1	1		11/26/13 02:24	71-43-2	
Bromobenzene	ND	ug/kg	4.1	1		11/26/13 02:24	108-86-1	
Bromochloromethane	ND	ug/kg	4.1	1		11/26/13 02:24	74-97-5	
Bromodichloromethane	ND	ug/kg	4.1	1		11/26/13 02:24	75-27-4	
Bromoform	ND	ug/kg	4.1	1		11/26/13 02:24	75-25-2	
Bromomethane	ND	ug/kg	8.2	1		11/26/13 02:24	74-83-9	
2-Butanone (MEK)	ND	ug/kg	82.4	1		11/26/13 02:24	78-93-3	
n-Butylbenzene	ND	ug/kg	4.1	1		11/26/13 02:24	104-51-8	
sec-Butylbenzene	ND	ug/kg	4.1	1		11/26/13 02:24	135-98-8	
tert-Butylbenzene	ND	ug/kg	4.1	1		11/26/13 02:24	98-06-6	
Carbon tetrachloride	ND	ug/kg	4.1	1		11/26/13 02:24	56-23-5	
Chlorobenzene	ND	ug/kg	4.1	1		11/26/13 02:24	108-90-7	
Chloroethane	ND	ug/kg	8.2	1		11/26/13 02:24	75-00-3	
Chloroform	ND	ug/kg	4.1	1		11/26/13 02:24	67-66-3	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B16**      **Lab ID: 92180233007**      Collected: 11/18/13 11:35      Received: 11/20/13 14:15      Matrix: Solid

*Results reported on a "dry-weight" basis*

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260/5035A Volatile Organics</b>		Analytical Method: EPA 8260						
Chloromethane	ND	ug/kg	8.2	1		11/26/13 02:24	74-87-3	
2-Chlorotoluene	ND	ug/kg	4.1	1		11/26/13 02:24	95-49-8	
4-Chlorotoluene	ND	ug/kg	4.1	1		11/26/13 02:24	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	4.1	1		11/26/13 02:24	96-12-8	
Dibromochloromethane	ND	ug/kg	4.1	1		11/26/13 02:24	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	4.1	1		11/26/13 02:24	106-93-4	
Dibromomethane	ND	ug/kg	4.1	1		11/26/13 02:24	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	4.1	1		11/26/13 02:24	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	4.1	1		11/26/13 02:24	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	4.1	1		11/26/13 02:24	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	8.2	1		11/26/13 02:24	75-71-8	
1,1-Dichloroethane	ND	ug/kg	4.1	1		11/26/13 02:24	75-34-3	
1,2-Dichloroethane	ND	ug/kg	4.1	1		11/26/13 02:24	107-06-2	
1,1-Dichloroethene	ND	ug/kg	4.1	1		11/26/13 02:24	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	4.1	1		11/26/13 02:24	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	4.1	1		11/26/13 02:24	156-60-5	
1,2-Dichloropropane	ND	ug/kg	4.1	1		11/26/13 02:24	78-87-5	
1,3-Dichloropropane	ND	ug/kg	4.1	1		11/26/13 02:24	142-28-9	
2,2-Dichloropropane	ND	ug/kg	4.1	1		11/26/13 02:24	594-20-7	
1,1-Dichloropropene	ND	ug/kg	4.1	1		11/26/13 02:24	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	4.1	1		11/26/13 02:24	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	4.1	1		11/26/13 02:24	10061-02-6	
Diisopropyl ether	ND	ug/kg	4.1	1		11/26/13 02:24	108-20-3	
Ethylbenzene	ND	ug/kg	4.1	1		11/26/13 02:24	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	4.1	1		11/26/13 02:24	87-68-3	
2-Hexanone	ND	ug/kg	41.2	1		11/26/13 02:24	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	4.1	1		11/26/13 02:24	98-82-8	
p-Isopropyltoluene	ND	ug/kg	4.1	1		11/26/13 02:24	99-87-6	
Methylene Chloride	ND	ug/kg	16.5	1		11/26/13 02:24	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	41.2	1		11/26/13 02:24	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	4.1	1		11/26/13 02:24	1634-04-4	
Naphthalene	ND	ug/kg	4.1	1		11/26/13 02:24	91-20-3	
n-Propylbenzene	ND	ug/kg	4.1	1		11/26/13 02:24	103-65-1	
Styrene	ND	ug/kg	4.1	1		11/26/13 02:24	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	4.1	1		11/26/13 02:24	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	4.1	1		11/26/13 02:24	79-34-5	
Tetrachloroethene	ND	ug/kg	4.1	1		11/26/13 02:24	127-18-4	
Toluene	ND	ug/kg	4.1	1		11/26/13 02:24	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	4.1	1		11/26/13 02:24	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	4.1	1		11/26/13 02:24	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	4.1	1		11/26/13 02:24	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	4.1	1		11/26/13 02:24	79-00-5	
Trichloroethene	ND	ug/kg	4.1	1		11/26/13 02:24	79-01-6	
Trichlorofluoromethane	ND	ug/kg	4.1	1		11/26/13 02:24	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	4.1	1		11/26/13 02:24	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	4.1	1		11/26/13 02:24	95-63-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



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 Kinsey Ave. Suite 100  
 Huntersville, NC 28078  
 (704)875-9092

### ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1  
 Pace Project No.: 92180233

Sample: B16 Lab ID: 92180233007 Collected: 11/18/13 11:35 Received: 11/20/13 14:15 Matrix: Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260/5035A Volatile Organics</b>		Analytical Method: EPA 8260						
1,3,5-Trimethylbenzene	ND	ug/kg	4.1	1		11/26/13 02:24	108-67-8	
Vinyl acetate	ND	ug/kg	41.2	1		11/26/13 02:24	108-05-4	
Vinyl chloride	ND	ug/kg	8.2	1		11/26/13 02:24	75-01-4	
Xylene (Total)	ND	ug/kg	8.2	1		11/26/13 02:24	1330-20-7	
m&p-Xylene	ND	ug/kg	8.2	1		11/26/13 02:24	179601-23-1	
o-Xylene	ND	ug/kg	4.1	1		11/26/13 02:24	95-47-6	
<b>Surrogates</b>								
Toluene-d8 (S)	99 %		70-130	1		11/26/13 02:24	2037-26-5	
4-Bromofluorobenzene (S)	101 %		70-130	1		11/26/13 02:24	460-00-4	
1,2-Dichloroethane-d4 (S)	100 %		70-132	1		11/26/13 02:24	17060-07-0	
<b>Percent Moisture</b>		Analytical Method: ASTM D2974-87						
Percent Moisture	13.0 %		0.10	1		12/04/13 08:20		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
 without the written consent of Pace Analytical Services, Inc..



## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B17**      **Lab ID: 92180233008**      Collected: 11/18/13 11:40      Received: 11/20/13 14:15      Matrix: Solid

*Results reported on a "dry-weight" basis*

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Microwave</b>		Analytical Method: EPA 8270    Preparation Method: EPA 3546						
Acenaphthene	ND	ug/kg	426	1	11/21/13 10:55	12/02/13 18:00	83-32-9	
Acenaphthylene	ND	ug/kg	426	1	11/21/13 10:55	12/02/13 18:00	208-96-8	
Aniline	ND	ug/kg	426	1	11/21/13 10:55	12/02/13 18:00	62-53-3	
Anthracene	ND	ug/kg	426	1	11/21/13 10:55	12/02/13 18:00	120-12-7	
Benzo(a)anthracene	ND	ug/kg	426	1	11/21/13 10:55	12/02/13 18:00	56-55-3	
Benzo(a)pyrene	ND	ug/kg	426	1	11/21/13 10:55	12/02/13 18:00	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	426	1	11/21/13 10:55	12/02/13 18:00	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	426	1	11/21/13 10:55	12/02/13 18:00	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	426	1	11/21/13 10:55	12/02/13 18:00	207-08-9	
Benzoic Acid	ND	ug/kg	2130	1	11/21/13 10:55	12/02/13 18:00	65-85-0	
Benzyl alcohol	ND	ug/kg	852	1	11/21/13 10:55	12/02/13 18:00	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	426	1	11/21/13 10:55	12/02/13 18:00	101-55-3	
Butylbenzylphthalate	ND	ug/kg	426	1	11/21/13 10:55	12/02/13 18:00	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	852	1	11/21/13 10:55	12/02/13 18:00	59-50-7	
4-Chloroaniline	ND	ug/kg	2130	1	11/21/13 10:55	12/02/13 18:00	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	426	1	11/21/13 10:55	12/02/13 18:00	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	426	1	11/21/13 10:55	12/02/13 18:00	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	426	1	11/21/13 10:55	12/02/13 18:00	108-60-1	
2-Chloronaphthalene	ND	ug/kg	426	1	11/21/13 10:55	12/02/13 18:00	91-58-7	
2-Chlorophenol	ND	ug/kg	426	1	11/21/13 10:55	12/02/13 18:00	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	426	1	11/21/13 10:55	12/02/13 18:00	7005-72-3	
Chrysene	ND	ug/kg	426	1	11/21/13 10:55	12/02/13 18:00	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	426	1	11/21/13 10:55	12/02/13 18:00	53-70-3	
Dibenzofuran	ND	ug/kg	426	1	11/21/13 10:55	12/02/13 18:00	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	426	1	11/21/13 10:55	12/02/13 18:00	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	426	1	11/21/13 10:55	12/02/13 18:00	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	426	1	11/21/13 10:55	12/02/13 18:00	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	2130	1	11/21/13 10:55	12/02/13 18:00	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	426	1	11/21/13 10:55	12/02/13 18:00	120-83-2	
Diethylphthalate	ND	ug/kg	426	1	11/21/13 10:55	12/02/13 18:00	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	426	1	11/21/13 10:55	12/02/13 18:00	105-67-9	
Dimethylphthalate	ND	ug/kg	426	1	11/21/13 10:55	12/02/13 18:00	131-11-3	
Di-n-butylphthalate	ND	ug/kg	426	1	11/21/13 10:55	12/02/13 18:00	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	852	1	11/21/13 10:55	12/02/13 18:00	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	2130	1	11/21/13 10:55	12/02/13 18:00	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	426	1	11/21/13 10:55	12/02/13 18:00	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	426	1	11/21/13 10:55	12/02/13 18:00	606-20-2	
Di-n-octylphthalate	ND	ug/kg	426	1	11/21/13 10:55	12/02/13 18:00	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	426	1	11/21/13 10:55	12/02/13 18:00	117-81-7	
Fluoranthene	ND	ug/kg	426	1	11/21/13 10:55	12/02/13 18:00	206-44-0	
Fluorene	ND	ug/kg	426	1	11/21/13 10:55	12/02/13 18:00	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	426	1	11/21/13 10:55	12/02/13 18:00	87-68-3	
Hexachlorobenzene	ND	ug/kg	426	1	11/21/13 10:55	12/02/13 18:00	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	426	1	11/21/13 10:55	12/02/13 18:00	77-47-4	
Hexachloroethane	ND	ug/kg	426	1	11/21/13 10:55	12/02/13 18:00	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	426	1	11/21/13 10:55	12/02/13 18:00	193-39-5	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B17**      **Lab ID: 92180233008**      Collected: 11/18/13 11:40      Received: 11/20/13 14:15      Matrix: Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Microwave</b>		Analytical Method: EPA 8270    Preparation Method: EPA 3546						
Isophorone	ND	ug/kg	426	1	11/21/13 10:55	12/02/13 18:00	78-59-1	
1-Methylnaphthalene	ND	ug/kg	426	1	11/21/13 10:55	12/02/13 18:00	90-12-0	
2-Methylnaphthalene	ND	ug/kg	426	1	11/21/13 10:55	12/02/13 18:00	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	426	1	11/21/13 10:55	12/02/13 18:00	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	426	1	11/21/13 10:55	12/02/13 18:00		
Naphthalene	ND	ug/kg	426	1	11/21/13 10:55	12/02/13 18:00	91-20-3	
2-Nitroaniline	ND	ug/kg	2130	1	11/21/13 10:55	12/02/13 18:00	88-74-4	
3-Nitroaniline	ND	ug/kg	2130	1	11/21/13 10:55	12/02/13 18:00	99-09-2	
4-Nitroaniline	ND	ug/kg	852	1	11/21/13 10:55	12/02/13 18:00	100-01-6	
Nitrobenzene	ND	ug/kg	426	1	11/21/13 10:55	12/02/13 18:00	98-95-3	
2-Nitrophenol	ND	ug/kg	426	1	11/21/13 10:55	12/02/13 18:00	88-75-5	
4-Nitrophenol	ND	ug/kg	2130	1	11/21/13 10:55	12/02/13 18:00	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	426	1	11/21/13 10:55	12/02/13 18:00	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	426	1	11/21/13 10:55	12/02/13 18:00	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	426	1	11/21/13 10:55	12/02/13 18:00	86-30-6	
Pentachlorophenol	ND	ug/kg	2130	1	11/21/13 10:55	12/02/13 18:00	87-86-5	
Phenanthrene	ND	ug/kg	426	1	11/21/13 10:55	12/02/13 18:00	85-01-8	
Phenol	ND	ug/kg	426	1	11/21/13 10:55	12/02/13 18:00	108-95-2	
Pyrene	ND	ug/kg	426	1	11/21/13 10:55	12/02/13 18:00	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/kg	426	1	11/21/13 10:55	12/02/13 18:00	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	426	1	11/21/13 10:55	12/02/13 18:00	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	426	1	11/21/13 10:55	12/02/13 18:00	88-06-2	
<b>Surrogates</b>								
Nitrobenzene-d5 (S)	47 %		23-110	1	11/21/13 10:55	12/02/13 18:00	4165-60-0	
2-Fluorobiphenyl (S)	45 %		30-110	1	11/21/13 10:55	12/02/13 18:00	321-60-8	
Terphenyl-d14 (S)	39 %		28-110	1	11/21/13 10:55	12/02/13 18:00	1718-51-0	
Phenol-d6 (S)	48 %		22-110	1	11/21/13 10:55	12/02/13 18:00	13127-88-3	
2-Fluorophenol (S)	46 %		13-110	1	11/21/13 10:55	12/02/13 18:00	367-12-4	
2,4,6-Tribromophenol (S)	46 %		27-110	1	11/21/13 10:55	12/02/13 18:00	118-79-6	
<b>8260/5035A Volatile Organics</b>		Analytical Method: EPA 8260						
Acetone	ND	ug/kg	86.2	1		11/26/13 02:44	67-64-1	
Benzene	ND	ug/kg	4.3	1		11/26/13 02:44	71-43-2	
Bromobenzene	ND	ug/kg	4.3	1		11/26/13 02:44	108-86-1	
Bromochloromethane	ND	ug/kg	4.3	1		11/26/13 02:44	74-97-5	
Bromodichloromethane	ND	ug/kg	4.3	1		11/26/13 02:44	75-27-4	
Bromoform	ND	ug/kg	4.3	1		11/26/13 02:44	75-25-2	
Bromomethane	ND	ug/kg	8.6	1		11/26/13 02:44	74-83-9	
2-Butanone (MEK)	ND	ug/kg	86.2	1		11/26/13 02:44	78-93-3	
n-Butylbenzene	ND	ug/kg	4.3	1		11/26/13 02:44	104-51-8	
sec-Butylbenzene	ND	ug/kg	4.3	1		11/26/13 02:44	135-98-8	
tert-Butylbenzene	ND	ug/kg	4.3	1		11/26/13 02:44	98-06-6	
Carbon tetrachloride	ND	ug/kg	4.3	1		11/26/13 02:44	56-23-5	
Chlorobenzene	ND	ug/kg	4.3	1		11/26/13 02:44	108-90-7	
Chloroethane	ND	ug/kg	8.6	1		11/26/13 02:44	75-00-3	
Chloroform	ND	ug/kg	4.3	1		11/26/13 02:44	67-66-3	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B17**      **Lab ID: 92180233008**      Collected: 11/18/13 11:40      Received: 11/20/13 14:15      Matrix: Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260/5035A Volatile Organics</b>		Analytical Method: EPA 8260						
Chloromethane	ND	ug/kg	8.6	1		11/26/13 02:44	74-87-3	
2-Chlorotoluene	ND	ug/kg	4.3	1		11/26/13 02:44	95-49-8	
4-Chlorotoluene	ND	ug/kg	4.3	1		11/26/13 02:44	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	4.3	1		11/26/13 02:44	96-12-8	
Dibromochloromethane	ND	ug/kg	4.3	1		11/26/13 02:44	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	4.3	1		11/26/13 02:44	106-93-4	
Dibromomethane	ND	ug/kg	4.3	1		11/26/13 02:44	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	4.3	1		11/26/13 02:44	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	4.3	1		11/26/13 02:44	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	4.3	1		11/26/13 02:44	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	8.6	1		11/26/13 02:44	75-71-8	
1,1-Dichloroethane	ND	ug/kg	4.3	1		11/26/13 02:44	75-34-3	
1,2-Dichloroethane	ND	ug/kg	4.3	1		11/26/13 02:44	107-06-2	
1,1-Dichloroethene	ND	ug/kg	4.3	1		11/26/13 02:44	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	4.3	1		11/26/13 02:44	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	4.3	1		11/26/13 02:44	156-60-5	
1,2-Dichloropropane	ND	ug/kg	4.3	1		11/26/13 02:44	78-87-5	
1,3-Dichloropropane	ND	ug/kg	4.3	1		11/26/13 02:44	142-28-9	
2,2-Dichloropropane	ND	ug/kg	4.3	1		11/26/13 02:44	594-20-7	
1,1-Dichloropropene	ND	ug/kg	4.3	1		11/26/13 02:44	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	4.3	1		11/26/13 02:44	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	4.3	1		11/26/13 02:44	10061-02-6	
Diisopropyl ether	ND	ug/kg	4.3	1		11/26/13 02:44	108-20-3	
Ethylbenzene	ND	ug/kg	4.3	1		11/26/13 02:44	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	4.3	1		11/26/13 02:44	87-68-3	
2-Hexanone	ND	ug/kg	43.1	1		11/26/13 02:44	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	4.3	1		11/26/13 02:44	98-82-8	
p-Isopropyltoluene	ND	ug/kg	4.3	1		11/26/13 02:44	99-87-6	
Methylene Chloride	ND	ug/kg	17.2	1		11/26/13 02:44	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	43.1	1		11/26/13 02:44	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	4.3	1		11/26/13 02:44	1634-04-4	
Naphthalene	ND	ug/kg	4.3	1		11/26/13 02:44	91-20-3	
n-Propylbenzene	ND	ug/kg	4.3	1		11/26/13 02:44	103-65-1	
Styrene	ND	ug/kg	4.3	1		11/26/13 02:44	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	4.3	1		11/26/13 02:44	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	4.3	1		11/26/13 02:44	79-34-5	
Tetrachloroethene	ND	ug/kg	4.3	1		11/26/13 02:44	127-18-4	
Toluene	ND	ug/kg	4.3	1		11/26/13 02:44	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	4.3	1		11/26/13 02:44	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	4.3	1		11/26/13 02:44	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	4.3	1		11/26/13 02:44	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	4.3	1		11/26/13 02:44	79-00-5	
Trichloroethene	ND	ug/kg	4.3	1		11/26/13 02:44	79-01-6	
Trichlorofluoromethane	ND	ug/kg	4.3	1		11/26/13 02:44	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	4.3	1		11/26/13 02:44	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	4.3	1		11/26/13 02:44	95-63-6	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



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 Kinsey Ave. Suite 100  
 Huntersville, NC 28078  
 (704)875-9092

### ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1  
 Pace Project No.: 92180233

Sample: B17 Lab ID: 92180233008 Collected: 11/18/13 11:40 Received: 11/20/13 14:15 Matrix: Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260/5035A Volatile Organics</b>		Analytical Method: EPA 8260						
1,3,5-Trimethylbenzene	ND	ug/kg	4.3	1		11/26/13 02:44	108-67-8	
Vinyl acetate	ND	ug/kg	43.1	1		11/26/13 02:44	108-05-4	
Vinyl chloride	ND	ug/kg	8.6	1		11/26/13 02:44	75-01-4	
Xylene (Total)	ND	ug/kg	8.6	1		11/26/13 02:44	1330-20-7	
m&p-Xylene	ND	ug/kg	8.6	1		11/26/13 02:44	179601-23-1	
o-Xylene	ND	ug/kg	4.3	1		11/26/13 02:44	95-47-6	
<b>Surrogates</b>								
Toluene-d8 (S)	98	%	70-130	1		11/26/13 02:44	2037-26-5	
4-Bromofluorobenzene (S)	103	%	70-130	1		11/26/13 02:44	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	70-132	1		11/26/13 02:44	17060-07-0	
<b>Percent Moisture</b>		Analytical Method: ASTM D2974-87						
Percent Moisture	22.5	%	0.10	1		12/04/13 08:21		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
 without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B18**      **Lab ID: 92180233009**      Collected: 11/18/13 11:45      Received: 11/20/13 14:15      Matrix: Solid

*Results reported on a "dry-weight" basis*

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Microwave</b>		Analytical Method: EPA 8270    Preparation Method: EPA 3546						
Acenaphthene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 18:32	83-32-9	
Acenaphthylene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 18:32	208-96-8	
Aniline	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 18:32	62-53-3	
Anthracene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 18:32	120-12-7	
Benzo(a)anthracene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 18:32	56-55-3	
Benzo(a)pyrene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 18:32	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 18:32	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 18:32	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 18:32	207-08-9	
Benzoic Acid	ND	ug/kg	2140	1	11/21/13 10:55	12/02/13 18:32	65-85-0	
Benzyl alcohol	ND	ug/kg	856	1	11/21/13 10:55	12/02/13 18:32	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 18:32	101-55-3	
Butylbenzylphthalate	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 18:32	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	856	1	11/21/13 10:55	12/02/13 18:32	59-50-7	
4-Chloroaniline	ND	ug/kg	2140	1	11/21/13 10:55	12/02/13 18:32	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 18:32	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 18:32	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 18:32	108-60-1	
2-Chloronaphthalene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 18:32	91-58-7	
2-Chlorophenol	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 18:32	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 18:32	7005-72-3	
Chrysene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 18:32	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 18:32	53-70-3	
Dibenzofuran	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 18:32	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 18:32	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 18:32	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 18:32	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	2140	1	11/21/13 10:55	12/02/13 18:32	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 18:32	120-83-2	
Diethylphthalate	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 18:32	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 18:32	105-67-9	
Dimethylphthalate	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 18:32	131-11-3	
Di-n-butylphthalate	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 18:32	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	856	1	11/21/13 10:55	12/02/13 18:32	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	2140	1	11/21/13 10:55	12/02/13 18:32	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 18:32	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 18:32	606-20-2	
Di-n-octylphthalate	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 18:32	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 18:32	117-81-7	
Fluoranthene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 18:32	206-44-0	
Fluorene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 18:32	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 18:32	87-68-3	
Hexachlorobenzene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 18:32	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 18:32	77-47-4	
Hexachloroethane	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 18:32	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 18:32	193-39-5	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B18**      **Lab ID: 92180233009**      Collected: 11/18/13 11:45      Received: 11/20/13 14:15      Matrix: Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Microwave</b>		Analytical Method: EPA 8270    Preparation Method: EPA 3546						
Isophorone	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 18:32	78-59-1	
1-Methylnaphthalene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 18:32	90-12-0	
2-Methylnaphthalene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 18:32	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 18:32	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 18:32		
Naphthalene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 18:32	91-20-3	
2-Nitroaniline	ND	ug/kg	2140	1	11/21/13 10:55	12/02/13 18:32	88-74-4	
3-Nitroaniline	ND	ug/kg	2140	1	11/21/13 10:55	12/02/13 18:32	99-09-2	
4-Nitroaniline	ND	ug/kg	856	1	11/21/13 10:55	12/02/13 18:32	100-01-6	
Nitrobenzene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 18:32	98-95-3	
2-Nitrophenol	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 18:32	88-75-5	
4-Nitrophenol	ND	ug/kg	2140	1	11/21/13 10:55	12/02/13 18:32	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 18:32	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 18:32	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 18:32	86-30-6	
Pentachlorophenol	ND	ug/kg	2140	1	11/21/13 10:55	12/02/13 18:32	87-86-5	
Phenanthrene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 18:32	85-01-8	
Phenol	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 18:32	108-95-2	
Pyrene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 18:32	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 18:32	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 18:32	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 18:32	88-06-2	
<b>Surrogates</b>								
Nitrobenzene-d5 (S)	49 %		23-110	1	11/21/13 10:55	12/02/13 18:32	4165-60-0	
2-Fluorobiphenyl (S)	51 %		30-110	1	11/21/13 10:55	12/02/13 18:32	321-60-8	
Terphenyl-d14 (S)	64 %		28-110	1	11/21/13 10:55	12/02/13 18:32	1718-51-0	
Phenol-d6 (S)	49 %		22-110	1	11/21/13 10:55	12/02/13 18:32	13127-88-3	
2-Fluorophenol (S)	47 %		13-110	1	11/21/13 10:55	12/02/13 18:32	367-12-4	
2,4,6-Tribromophenol (S)	65 %		27-110	1	11/21/13 10:55	12/02/13 18:32	118-79-6	
<b>8260/5035A Volatile Organics</b>		Analytical Method: EPA 8260						
Acetone	<b>148</b>	ug/kg	82.5	1		11/26/13 03:03	67-64-1	A+
Benzene	ND	ug/kg	4.1	1		11/26/13 03:03	71-43-2	
Bromobenzene	ND	ug/kg	4.1	1		11/26/13 03:03	108-86-1	
Bromochloromethane	ND	ug/kg	4.1	1		11/26/13 03:03	74-97-5	
Bromodichloromethane	ND	ug/kg	4.1	1		11/26/13 03:03	75-27-4	
Bromoform	ND	ug/kg	4.1	1		11/26/13 03:03	75-25-2	
Bromomethane	ND	ug/kg	8.2	1		11/26/13 03:03	74-83-9	
2-Butanone (MEK)	ND	ug/kg	82.5	1		11/26/13 03:03	78-93-3	
n-Butylbenzene	ND	ug/kg	4.1	1		11/26/13 03:03	104-51-8	
sec-Butylbenzene	ND	ug/kg	4.1	1		11/26/13 03:03	135-98-8	
tert-Butylbenzene	ND	ug/kg	4.1	1		11/26/13 03:03	98-06-6	
Carbon tetrachloride	ND	ug/kg	4.1	1		11/26/13 03:03	56-23-5	
Chlorobenzene	ND	ug/kg	4.1	1		11/26/13 03:03	108-90-7	
Chloroethane	ND	ug/kg	8.2	1		11/26/13 03:03	75-00-3	
Chloroform	ND	ug/kg	4.1	1		11/26/13 03:03	67-66-3	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B18**      **Lab ID: 92180233009**      Collected: 11/18/13 11:45      Received: 11/20/13 14:15      Matrix: Solid

*Results reported on a "dry-weight" basis*

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260/5035A Volatile Organics</b>		Analytical Method: EPA 8260						
Chloromethane	ND	ug/kg	8.2	1		11/26/13 03:03	74-87-3	
2-Chlorotoluene	ND	ug/kg	4.1	1		11/26/13 03:03	95-49-8	
4-Chlorotoluene	ND	ug/kg	4.1	1		11/26/13 03:03	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	4.1	1		11/26/13 03:03	96-12-8	
Dibromochloromethane	ND	ug/kg	4.1	1		11/26/13 03:03	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	4.1	1		11/26/13 03:03	106-93-4	
Dibromomethane	ND	ug/kg	4.1	1		11/26/13 03:03	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	4.1	1		11/26/13 03:03	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	4.1	1		11/26/13 03:03	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	4.1	1		11/26/13 03:03	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	8.2	1		11/26/13 03:03	75-71-8	
1,1-Dichloroethane	ND	ug/kg	4.1	1		11/26/13 03:03	75-34-3	
1,2-Dichloroethane	ND	ug/kg	4.1	1		11/26/13 03:03	107-06-2	
1,1-Dichloroethene	ND	ug/kg	4.1	1		11/26/13 03:03	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	4.1	1		11/26/13 03:03	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	4.1	1		11/26/13 03:03	156-60-5	
1,2-Dichloropropane	ND	ug/kg	4.1	1		11/26/13 03:03	78-87-5	
1,3-Dichloropropane	ND	ug/kg	4.1	1		11/26/13 03:03	142-28-9	
2,2-Dichloropropane	ND	ug/kg	4.1	1		11/26/13 03:03	594-20-7	
1,1-Dichloropropene	ND	ug/kg	4.1	1		11/26/13 03:03	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	4.1	1		11/26/13 03:03	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	4.1	1		11/26/13 03:03	10061-02-6	
Diisopropyl ether	ND	ug/kg	4.1	1		11/26/13 03:03	108-20-3	
Ethylbenzene	ND	ug/kg	4.1	1		11/26/13 03:03	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	4.1	1		11/26/13 03:03	87-68-3	
2-Hexanone	ND	ug/kg	41.2	1		11/26/13 03:03	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	4.1	1		11/26/13 03:03	98-82-8	
p-Isopropyltoluene	ND	ug/kg	4.1	1		11/26/13 03:03	99-87-6	
Methylene Chloride	ND	ug/kg	16.5	1		11/26/13 03:03	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	41.2	1		11/26/13 03:03	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	4.1	1		11/26/13 03:03	1634-04-4	
Naphthalene	ND	ug/kg	4.1	1		11/26/13 03:03	91-20-3	
n-Propylbenzene	ND	ug/kg	4.1	1		11/26/13 03:03	103-65-1	
Styrene	ND	ug/kg	4.1	1		11/26/13 03:03	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	4.1	1		11/26/13 03:03	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	4.1	1		11/26/13 03:03	79-34-5	
Tetrachloroethene	ND	ug/kg	4.1	1		11/26/13 03:03	127-18-4	
Toluene	ND	ug/kg	4.1	1		11/26/13 03:03	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	4.1	1		11/26/13 03:03	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	4.1	1		11/26/13 03:03	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	4.1	1		11/26/13 03:03	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	4.1	1		11/26/13 03:03	79-00-5	
Trichloroethene	ND	ug/kg	4.1	1		11/26/13 03:03	79-01-6	
Trichlorofluoromethane	ND	ug/kg	4.1	1		11/26/13 03:03	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	4.1	1		11/26/13 03:03	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	4.1	1		11/26/13 03:03	95-63-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..





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 Kinsey Ave. Suite 100  
 Huntersville, NC 28078  
 (704)875-9092

### ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

Sample: B18 Lab ID: 92180233009 Collected: 11/18/13 11:45 Received: 11/20/13 14:15 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260/5035A Volatile Organics</b>		Analytical Method: EPA 8260						
1,3,5-Trimethylbenzene	ND	ug/kg	4.1	1		11/26/13 03:03	108-67-8	
Vinyl acetate	ND	ug/kg	41.2	1		11/26/13 03:03	108-05-4	
Vinyl chloride	ND	ug/kg	8.2	1		11/26/13 03:03	75-01-4	
Xylene (Total)	ND	ug/kg	8.2	1		11/26/13 03:03	1330-20-7	
m&p-Xylene	ND	ug/kg	8.2	1		11/26/13 03:03	179601-23-1	
o-Xylene	ND	ug/kg	4.1	1		11/26/13 03:03	95-47-6	
<b>Surrogates</b>								
Toluene-d8 (S)	100	%	70-130	1		11/26/13 03:03	2037-26-5	
4-Bromofluorobenzene (S)	101	%	70-130	1		11/26/13 03:03	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	70-132	1		11/26/13 03:03	17060-07-0	
<b>Percent Moisture</b>		Analytical Method: ASTM D2974-87						
Percent Moisture	22.9	%	0.10	1		12/04/13 08:21		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
 without the written consent of Pace Analytical Services, Inc..



## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B19**      **Lab ID: 92180233010**      Collected: 11/18/13 11:50      Received: 11/20/13 14:15      Matrix: Solid

*Results reported on a "dry-weight" basis*

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Microwave</b>		Analytical Method: EPA 8270    Preparation Method: EPA 3546						
Acenaphthene	ND	ug/kg	397	1	11/21/13 10:55	12/02/13 19:04	83-32-9	
Acenaphthylene	ND	ug/kg	397	1	11/21/13 10:55	12/02/13 19:04	208-96-8	
Aniline	ND	ug/kg	397	1	11/21/13 10:55	12/02/13 19:04	62-53-3	
Anthracene	ND	ug/kg	397	1	11/21/13 10:55	12/02/13 19:04	120-12-7	
Benzo(a)anthracene	ND	ug/kg	397	1	11/21/13 10:55	12/02/13 19:04	56-55-3	
Benzo(a)pyrene	ND	ug/kg	397	1	11/21/13 10:55	12/02/13 19:04	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	397	1	11/21/13 10:55	12/02/13 19:04	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	397	1	11/21/13 10:55	12/02/13 19:04	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	397	1	11/21/13 10:55	12/02/13 19:04	207-08-9	
Benzoic Acid	ND	ug/kg	1980	1	11/21/13 10:55	12/02/13 19:04	65-85-0	
Benzyl alcohol	ND	ug/kg	794	1	11/21/13 10:55	12/02/13 19:04	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	397	1	11/21/13 10:55	12/02/13 19:04	101-55-3	
Butylbenzylphthalate	ND	ug/kg	397	1	11/21/13 10:55	12/02/13 19:04	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	794	1	11/21/13 10:55	12/02/13 19:04	59-50-7	
4-Chloroaniline	ND	ug/kg	1980	1	11/21/13 10:55	12/02/13 19:04	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	397	1	11/21/13 10:55	12/02/13 19:04	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	397	1	11/21/13 10:55	12/02/13 19:04	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	397	1	11/21/13 10:55	12/02/13 19:04	108-60-1	
2-Chloronaphthalene	ND	ug/kg	397	1	11/21/13 10:55	12/02/13 19:04	91-58-7	
2-Chlorophenol	ND	ug/kg	397	1	11/21/13 10:55	12/02/13 19:04	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	397	1	11/21/13 10:55	12/02/13 19:04	7005-72-3	
Chrysene	ND	ug/kg	397	1	11/21/13 10:55	12/02/13 19:04	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	397	1	11/21/13 10:55	12/02/13 19:04	53-70-3	
Dibenzofuran	ND	ug/kg	397	1	11/21/13 10:55	12/02/13 19:04	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	397	1	11/21/13 10:55	12/02/13 19:04	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	397	1	11/21/13 10:55	12/02/13 19:04	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	397	1	11/21/13 10:55	12/02/13 19:04	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	1980	1	11/21/13 10:55	12/02/13 19:04	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	397	1	11/21/13 10:55	12/02/13 19:04	120-83-2	
Diethylphthalate	ND	ug/kg	397	1	11/21/13 10:55	12/02/13 19:04	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	397	1	11/21/13 10:55	12/02/13 19:04	105-67-9	
Dimethylphthalate	ND	ug/kg	397	1	11/21/13 10:55	12/02/13 19:04	131-11-3	
Di-n-butylphthalate	ND	ug/kg	397	1	11/21/13 10:55	12/02/13 19:04	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	794	1	11/21/13 10:55	12/02/13 19:04	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	1980	1	11/21/13 10:55	12/02/13 19:04	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	397	1	11/21/13 10:55	12/02/13 19:04	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	397	1	11/21/13 10:55	12/02/13 19:04	606-20-2	
Di-n-octylphthalate	ND	ug/kg	397	1	11/21/13 10:55	12/02/13 19:04	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	397	1	11/21/13 10:55	12/02/13 19:04	117-81-7	
Fluoranthene	ND	ug/kg	397	1	11/21/13 10:55	12/02/13 19:04	206-44-0	
Fluorene	ND	ug/kg	397	1	11/21/13 10:55	12/02/13 19:04	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	397	1	11/21/13 10:55	12/02/13 19:04	87-68-3	
Hexachlorobenzene	ND	ug/kg	397	1	11/21/13 10:55	12/02/13 19:04	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	397	1	11/21/13 10:55	12/02/13 19:04	77-47-4	
Hexachloroethane	ND	ug/kg	397	1	11/21/13 10:55	12/02/13 19:04	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	397	1	11/21/13 10:55	12/02/13 19:04	193-39-5	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B19**      **Lab ID: 92180233010**      Collected: 11/18/13 11:50      Received: 11/20/13 14:15      Matrix: Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Microwave</b>		Analytical Method: EPA 8270    Preparation Method: EPA 3546						
Isophorone	ND	ug/kg	397	1	11/21/13 10:55	12/02/13 19:04	78-59-1	
1-Methylnaphthalene	ND	ug/kg	397	1	11/21/13 10:55	12/02/13 19:04	90-12-0	
2-Methylnaphthalene	ND	ug/kg	397	1	11/21/13 10:55	12/02/13 19:04	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	397	1	11/21/13 10:55	12/02/13 19:04	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	397	1	11/21/13 10:55	12/02/13 19:04		
Naphthalene	ND	ug/kg	397	1	11/21/13 10:55	12/02/13 19:04	91-20-3	
2-Nitroaniline	ND	ug/kg	1980	1	11/21/13 10:55	12/02/13 19:04	88-74-4	
3-Nitroaniline	ND	ug/kg	1980	1	11/21/13 10:55	12/02/13 19:04	99-09-2	
4-Nitroaniline	ND	ug/kg	794	1	11/21/13 10:55	12/02/13 19:04	100-01-6	
Nitrobenzene	ND	ug/kg	397	1	11/21/13 10:55	12/02/13 19:04	98-95-3	
2-Nitrophenol	ND	ug/kg	397	1	11/21/13 10:55	12/02/13 19:04	88-75-5	
4-Nitrophenol	ND	ug/kg	1980	1	11/21/13 10:55	12/02/13 19:04	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	397	1	11/21/13 10:55	12/02/13 19:04	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	397	1	11/21/13 10:55	12/02/13 19:04	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	397	1	11/21/13 10:55	12/02/13 19:04	86-30-6	
Pentachlorophenol	ND	ug/kg	1980	1	11/21/13 10:55	12/02/13 19:04	87-86-5	
Phenanthrene	ND	ug/kg	397	1	11/21/13 10:55	12/02/13 19:04	85-01-8	
Phenol	ND	ug/kg	397	1	11/21/13 10:55	12/02/13 19:04	108-95-2	
Pyrene	ND	ug/kg	397	1	11/21/13 10:55	12/02/13 19:04	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/kg	397	1	11/21/13 10:55	12/02/13 19:04	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	397	1	11/21/13 10:55	12/02/13 19:04	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	397	1	11/21/13 10:55	12/02/13 19:04	88-06-2	
<b>Surrogates</b>								
Nitrobenzene-d5 (S)	44 %		23-110	1	11/21/13 10:55	12/02/13 19:04	4165-60-0	
2-Fluorobiphenyl (S)	47 %		30-110	1	11/21/13 10:55	12/02/13 19:04	321-60-8	
Terphenyl-d14 (S)	54 %		28-110	1	11/21/13 10:55	12/02/13 19:04	1718-51-0	
Phenol-d6 (S)	48 %		22-110	1	11/21/13 10:55	12/02/13 19:04	13127-88-3	
2-Fluorophenol (S)	48 %		13-110	1	11/21/13 10:55	12/02/13 19:04	367-12-4	
2,4,6-Tribromophenol (S)	54 %		27-110	1	11/21/13 10:55	12/02/13 19:04	118-79-6	
<b>8260/5035A Volatile Organics</b>		Analytical Method: EPA 8260						
Acetone	ND	ug/kg	85.2	1		11/27/13 02:17	67-64-1	
Benzene	ND	ug/kg	4.3	1		11/27/13 02:17	71-43-2	
Bromobenzene	ND	ug/kg	4.3	1		11/27/13 02:17	108-86-1	
Bromochloromethane	ND	ug/kg	4.3	1		11/27/13 02:17	74-97-5	
Bromodichloromethane	ND	ug/kg	4.3	1		11/27/13 02:17	75-27-4	
Bromoform	ND	ug/kg	4.3	1		11/27/13 02:17	75-25-2	
Bromomethane	ND	ug/kg	8.5	1		11/27/13 02:17	74-83-9	
2-Butanone (MEK)	ND	ug/kg	85.2	1		11/27/13 02:17	78-93-3	
n-Butylbenzene	ND	ug/kg	4.3	1		11/27/13 02:17	104-51-8	
sec-Butylbenzene	ND	ug/kg	4.3	1		11/27/13 02:17	135-98-8	
tert-Butylbenzene	ND	ug/kg	4.3	1		11/27/13 02:17	98-06-6	
Carbon tetrachloride	ND	ug/kg	4.3	1		11/27/13 02:17	56-23-5	
Chlorobenzene	ND	ug/kg	4.3	1		11/27/13 02:17	108-90-7	
Chloroethane	ND	ug/kg	8.5	1		11/27/13 02:17	75-00-3	
Chloroform	ND	ug/kg	4.3	1		11/27/13 02:17	67-66-3	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B19**      **Lab ID: 92180233010**      Collected: 11/18/13 11:50      Received: 11/20/13 14:15      Matrix: Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260/5035A Volatile Organics</b>		Analytical Method: EPA 8260						
Chloromethane	ND	ug/kg	8.5	1		11/27/13 02:17	74-87-3	
2-Chlorotoluene	ND	ug/kg	4.3	1		11/27/13 02:17	95-49-8	
4-Chlorotoluene	ND	ug/kg	4.3	1		11/27/13 02:17	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	4.3	1		11/27/13 02:17	96-12-8	
Dibromochloromethane	ND	ug/kg	4.3	1		11/27/13 02:17	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	4.3	1		11/27/13 02:17	106-93-4	
Dibromomethane	ND	ug/kg	4.3	1		11/27/13 02:17	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	4.3	1		11/27/13 02:17	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	4.3	1		11/27/13 02:17	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	4.3	1		11/27/13 02:17	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	8.5	1		11/27/13 02:17	75-71-8	
1,1-Dichloroethane	ND	ug/kg	4.3	1		11/27/13 02:17	75-34-3	
1,2-Dichloroethane	ND	ug/kg	4.3	1		11/27/13 02:17	107-06-2	
1,1-Dichloroethene	ND	ug/kg	4.3	1		11/27/13 02:17	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	4.3	1		11/27/13 02:17	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	4.3	1		11/27/13 02:17	156-60-5	
1,2-Dichloropropane	ND	ug/kg	4.3	1		11/27/13 02:17	78-87-5	
1,3-Dichloropropane	ND	ug/kg	4.3	1		11/27/13 02:17	142-28-9	
2,2-Dichloropropane	ND	ug/kg	4.3	1		11/27/13 02:17	594-20-7	
1,1-Dichloropropene	ND	ug/kg	4.3	1		11/27/13 02:17	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	4.3	1		11/27/13 02:17	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	4.3	1		11/27/13 02:17	10061-02-6	
Diisopropyl ether	ND	ug/kg	4.3	1		11/27/13 02:17	108-20-3	
Ethylbenzene	ND	ug/kg	4.3	1		11/27/13 02:17	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	4.3	1		11/27/13 02:17	87-68-3	
2-Hexanone	ND	ug/kg	42.6	1		11/27/13 02:17	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	4.3	1		11/27/13 02:17	98-82-8	
p-Isopropyltoluene	ND	ug/kg	4.3	1		11/27/13 02:17	99-87-6	
Methylene Chloride	ND	ug/kg	17.0	1		11/27/13 02:17	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	42.6	1		11/27/13 02:17	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	4.3	1		11/27/13 02:17	1634-04-4	
Naphthalene	ND	ug/kg	4.3	1		11/27/13 02:17	91-20-3	
n-Propylbenzene	ND	ug/kg	4.3	1		11/27/13 02:17	103-65-1	
Styrene	ND	ug/kg	4.3	1		11/27/13 02:17	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	4.3	1		11/27/13 02:17	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	4.3	1		11/27/13 02:17	79-34-5	
Tetrachloroethene	ND	ug/kg	4.3	1		11/27/13 02:17	127-18-4	
Toluene	ND	ug/kg	4.3	1		11/27/13 02:17	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	4.3	1		11/27/13 02:17	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	4.3	1		11/27/13 02:17	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	4.3	1		11/27/13 02:17	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	4.3	1		11/27/13 02:17	79-00-5	
Trichloroethene	ND	ug/kg	4.3	1		11/27/13 02:17	79-01-6	
Trichlorofluoromethane	ND	ug/kg	4.3	1		11/27/13 02:17	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	4.3	1		11/27/13 02:17	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	4.3	1		11/27/13 02:17	95-63-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



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 Kinsey Ave. Suite 100  
 Huntersville, NC 28078  
 (704)875-9092

### ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1  
 Pace Project No.: 92180233

Sample: B19 Lab ID: 92180233010 Collected: 11/18/13 11:50 Received: 11/20/13 14:15 Matrix: Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260/5035A Volatile Organics</b>		Analytical Method: EPA 8260						
1,3,5-Trimethylbenzene	ND	ug/kg	4.3	1		11/27/13 02:17	108-67-8	
Vinyl acetate	ND	ug/kg	42.6	1		11/27/13 02:17	108-05-4	
Vinyl chloride	ND	ug/kg	8.5	1		11/27/13 02:17	75-01-4	
Xylene (Total)	ND	ug/kg	8.5	1		11/27/13 02:17	1330-20-7	
m&p-Xylene	ND	ug/kg	8.5	1		11/27/13 02:17	179601-23-1	
o-Xylene	ND	ug/kg	4.3	1		11/27/13 02:17	95-47-6	
<b>Surrogates</b>								
Toluene-d8 (S)	100	%	70-130	1		11/27/13 02:17	2037-26-5	
4-Bromofluorobenzene (S)	107	%	70-130	1		11/27/13 02:17	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%	70-132	1		11/27/13 02:17	17060-07-0	
<b>Percent Moisture</b>		Analytical Method: ASTM D2974-87						
Percent Moisture	16.8	%	0.10	1		12/04/13 08:21		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
 without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B9**      **Lab ID: 92180233011**      Collected: 11/18/13 13:45      Received: 11/20/13 14:15      Matrix: Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Microwave</b>		Analytical Method: EPA 8270    Preparation Method: EPA 3546						
Acenaphthene	ND	ug/kg	419	1	11/21/13 10:55	12/02/13 19:37	83-32-9	
Acenaphthylene	ND	ug/kg	419	1	11/21/13 10:55	12/02/13 19:37	208-96-8	
Aniline	ND	ug/kg	419	1	11/21/13 10:55	12/02/13 19:37	62-53-3	
Anthracene	ND	ug/kg	419	1	11/21/13 10:55	12/02/13 19:37	120-12-7	
Benzo(a)anthracene	ND	ug/kg	419	1	11/21/13 10:55	12/02/13 19:37	56-55-3	
Benzo(a)pyrene	ND	ug/kg	419	1	11/21/13 10:55	12/02/13 19:37	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	419	1	11/21/13 10:55	12/02/13 19:37	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	419	1	11/21/13 10:55	12/02/13 19:37	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	419	1	11/21/13 10:55	12/02/13 19:37	207-08-9	
Benzoic Acid	ND	ug/kg	2090	1	11/21/13 10:55	12/02/13 19:37	65-85-0	
Benzyl alcohol	ND	ug/kg	838	1	11/21/13 10:55	12/02/13 19:37	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	419	1	11/21/13 10:55	12/02/13 19:37	101-55-3	
Butylbenzylphthalate	ND	ug/kg	419	1	11/21/13 10:55	12/02/13 19:37	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	838	1	11/21/13 10:55	12/02/13 19:37	59-50-7	
4-Chloroaniline	ND	ug/kg	2090	1	11/21/13 10:55	12/02/13 19:37	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	419	1	11/21/13 10:55	12/02/13 19:37	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	419	1	11/21/13 10:55	12/02/13 19:37	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	419	1	11/21/13 10:55	12/02/13 19:37	108-60-1	
2-Chloronaphthalene	ND	ug/kg	419	1	11/21/13 10:55	12/02/13 19:37	91-58-7	
2-Chlorophenol	ND	ug/kg	419	1	11/21/13 10:55	12/02/13 19:37	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	419	1	11/21/13 10:55	12/02/13 19:37	7005-72-3	
Chrysene	ND	ug/kg	419	1	11/21/13 10:55	12/02/13 19:37	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	419	1	11/21/13 10:55	12/02/13 19:37	53-70-3	
Dibenzofuran	ND	ug/kg	419	1	11/21/13 10:55	12/02/13 19:37	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	419	1	11/21/13 10:55	12/02/13 19:37	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	419	1	11/21/13 10:55	12/02/13 19:37	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	419	1	11/21/13 10:55	12/02/13 19:37	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	2090	1	11/21/13 10:55	12/02/13 19:37	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	419	1	11/21/13 10:55	12/02/13 19:37	120-83-2	
Diethylphthalate	ND	ug/kg	419	1	11/21/13 10:55	12/02/13 19:37	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	419	1	11/21/13 10:55	12/02/13 19:37	105-67-9	
Dimethylphthalate	ND	ug/kg	419	1	11/21/13 10:55	12/02/13 19:37	131-11-3	
Di-n-butylphthalate	ND	ug/kg	419	1	11/21/13 10:55	12/02/13 19:37	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	838	1	11/21/13 10:55	12/02/13 19:37	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	2090	1	11/21/13 10:55	12/02/13 19:37	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	419	1	11/21/13 10:55	12/02/13 19:37	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	419	1	11/21/13 10:55	12/02/13 19:37	606-20-2	
Di-n-octylphthalate	ND	ug/kg	419	1	11/21/13 10:55	12/02/13 19:37	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	419	1	11/21/13 10:55	12/02/13 19:37	117-81-7	
Fluoranthene	ND	ug/kg	419	1	11/21/13 10:55	12/02/13 19:37	206-44-0	
Fluorene	ND	ug/kg	419	1	11/21/13 10:55	12/02/13 19:37	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	419	1	11/21/13 10:55	12/02/13 19:37	87-68-3	
Hexachlorobenzene	ND	ug/kg	419	1	11/21/13 10:55	12/02/13 19:37	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	419	1	11/21/13 10:55	12/02/13 19:37	77-47-4	
Hexachloroethane	ND	ug/kg	419	1	11/21/13 10:55	12/02/13 19:37	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	419	1	11/21/13 10:55	12/02/13 19:37	193-39-5	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B9**      **Lab ID: 92180233011**      Collected: 11/18/13 13:45      Received: 11/20/13 14:15      Matrix: Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
------------	---------	-------	--------------	----	----------	----------	---------	------

**8270 MSSV Microwave**

Analytical Method: EPA 8270      Preparation Method: EPA 3546

Isophorone	ND ug/kg		419	1	11/21/13 10:55	12/02/13 19:37	78-59-1	
1-Methylnaphthalene	ND ug/kg		419	1	11/21/13 10:55	12/02/13 19:37	90-12-0	
2-Methylnaphthalene	ND ug/kg		419	1	11/21/13 10:55	12/02/13 19:37	91-57-6	
2-Methylphenol(o-Cresol)	ND ug/kg		419	1	11/21/13 10:55	12/02/13 19:37	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND ug/kg		419	1	11/21/13 10:55	12/02/13 19:37		
Naphthalene	ND ug/kg		419	1	11/21/13 10:55	12/02/13 19:37	91-20-3	
2-Nitroaniline	ND ug/kg		2090	1	11/21/13 10:55	12/02/13 19:37	88-74-4	
3-Nitroaniline	ND ug/kg		2090	1	11/21/13 10:55	12/02/13 19:37	99-09-2	
4-Nitroaniline	ND ug/kg		838	1	11/21/13 10:55	12/02/13 19:37	100-01-6	
Nitrobenzene	ND ug/kg		419	1	11/21/13 10:55	12/02/13 19:37	98-95-3	
2-Nitrophenol	ND ug/kg		419	1	11/21/13 10:55	12/02/13 19:37	88-75-5	
4-Nitrophenol	ND ug/kg		2090	1	11/21/13 10:55	12/02/13 19:37	100-02-7	
N-Nitrosodimethylamine	ND ug/kg		419	1	11/21/13 10:55	12/02/13 19:37	62-75-9	
N-Nitroso-di-n-propylamine	ND ug/kg		419	1	11/21/13 10:55	12/02/13 19:37	621-64-7	
N-Nitrosodiphenylamine	ND ug/kg		419	1	11/21/13 10:55	12/02/13 19:37	86-30-6	
Pentachlorophenol	ND ug/kg		2090	1	11/21/13 10:55	12/02/13 19:37	87-86-5	
Phenanthrene	ND ug/kg		419	1	11/21/13 10:55	12/02/13 19:37	85-01-8	
Phenol	ND ug/kg		419	1	11/21/13 10:55	12/02/13 19:37	108-95-2	
Pyrene	ND ug/kg		419	1	11/21/13 10:55	12/02/13 19:37	129-00-0	
1,2,4-Trichlorobenzene	ND ug/kg		419	1	11/21/13 10:55	12/02/13 19:37	120-82-1	
2,4,5-Trichlorophenol	ND ug/kg		419	1	11/21/13 10:55	12/02/13 19:37	95-95-4	
2,4,6-Trichlorophenol	ND ug/kg		419	1	11/21/13 10:55	12/02/13 19:37	88-06-2	

**Surrogates**

Nitrobenzene-d5 (S)	37 %		23-110	1	11/21/13 10:55	12/02/13 19:37	4165-60-0	
2-Fluorobiphenyl (S)	39 %		30-110	1	11/21/13 10:55	12/02/13 19:37	321-60-8	
Terphenyl-d14 (S)	65 %		28-110	1	11/21/13 10:55	12/02/13 19:37	1718-51-0	
Phenol-d6 (S)	38 %		22-110	1	11/21/13 10:55	12/02/13 19:37	13127-88-3	
2-Fluorophenol (S)	38 %		13-110	1	11/21/13 10:55	12/02/13 19:37	367-12-4	
2,4,6-Tribromophenol (S)	71 %		27-110	1	11/21/13 10:55	12/02/13 19:37	118-79-6	

**8260/5035A Volatile Organics**

Analytical Method: EPA 8260

Acetone	ND ug/kg		93.2	1		11/27/13 02:37	67-64-1	
Benzene	ND ug/kg		4.7	1		11/27/13 02:37	71-43-2	
Bromobenzene	ND ug/kg		4.7	1		11/27/13 02:37	108-86-1	
Bromochloromethane	ND ug/kg		4.7	1		11/27/13 02:37	74-97-5	
Bromodichloromethane	ND ug/kg		4.7	1		11/27/13 02:37	75-27-4	
Bromoform	ND ug/kg		4.7	1		11/27/13 02:37	75-25-2	
Bromomethane	ND ug/kg		9.3	1		11/27/13 02:37	74-83-9	
2-Butanone (MEK)	ND ug/kg		93.2	1		11/27/13 02:37	78-93-3	
n-Butylbenzene	ND ug/kg		4.7	1		11/27/13 02:37	104-51-8	
sec-Butylbenzene	ND ug/kg		4.7	1		11/27/13 02:37	135-98-8	
tert-Butylbenzene	ND ug/kg		4.7	1		11/27/13 02:37	98-06-6	
Carbon tetrachloride	ND ug/kg		4.7	1		11/27/13 02:37	56-23-5	
Chlorobenzene	ND ug/kg		4.7	1		11/27/13 02:37	108-90-7	
Chloroethane	ND ug/kg		9.3	1		11/27/13 02:37	75-00-3	
Chloroform	ND ug/kg		4.7	1		11/27/13 02:37	67-66-3	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B9**      **Lab ID: 92180233011**      Collected: 11/18/13 13:45      Received: 11/20/13 14:15      Matrix: Solid

*Results reported on a "dry-weight" basis*

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260/5035A Volatile Organics</b>		Analytical Method: EPA 8260						
Chloromethane	ND	ug/kg	9.3	1		11/27/13 02:37	74-87-3	
2-Chlorotoluene	ND	ug/kg	4.7	1		11/27/13 02:37	95-49-8	
4-Chlorotoluene	ND	ug/kg	4.7	1		11/27/13 02:37	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	4.7	1		11/27/13 02:37	96-12-8	
Dibromochloromethane	ND	ug/kg	4.7	1		11/27/13 02:37	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	4.7	1		11/27/13 02:37	106-93-4	
Dibromomethane	ND	ug/kg	4.7	1		11/27/13 02:37	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	4.7	1		11/27/13 02:37	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	4.7	1		11/27/13 02:37	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	4.7	1		11/27/13 02:37	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	9.3	1		11/27/13 02:37	75-71-8	
1,1-Dichloroethane	ND	ug/kg	4.7	1		11/27/13 02:37	75-34-3	
1,2-Dichloroethane	ND	ug/kg	4.7	1		11/27/13 02:37	107-06-2	
1,1-Dichloroethene	ND	ug/kg	4.7	1		11/27/13 02:37	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	4.7	1		11/27/13 02:37	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	4.7	1		11/27/13 02:37	156-60-5	
1,2-Dichloropropane	ND	ug/kg	4.7	1		11/27/13 02:37	78-87-5	
1,3-Dichloropropane	ND	ug/kg	4.7	1		11/27/13 02:37	142-28-9	
2,2-Dichloropropane	ND	ug/kg	4.7	1		11/27/13 02:37	594-20-7	
1,1-Dichloropropene	ND	ug/kg	4.7	1		11/27/13 02:37	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	4.7	1		11/27/13 02:37	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	4.7	1		11/27/13 02:37	10061-02-6	
Diisopropyl ether	ND	ug/kg	4.7	1		11/27/13 02:37	108-20-3	
Ethylbenzene	ND	ug/kg	4.7	1		11/27/13 02:37	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	4.7	1		11/27/13 02:37	87-68-3	
2-Hexanone	ND	ug/kg	46.6	1		11/27/13 02:37	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	4.7	1		11/27/13 02:37	98-82-8	
p-Isopropyltoluene	ND	ug/kg	4.7	1		11/27/13 02:37	99-87-6	
Methylene Chloride	ND	ug/kg	18.6	1		11/27/13 02:37	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	46.6	1		11/27/13 02:37	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	4.7	1		11/27/13 02:37	1634-04-4	
Naphthalene	ND	ug/kg	4.7	1		11/27/13 02:37	91-20-3	
n-Propylbenzene	ND	ug/kg	4.7	1		11/27/13 02:37	103-65-1	
Styrene	ND	ug/kg	4.7	1		11/27/13 02:37	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	4.7	1		11/27/13 02:37	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	4.7	1		11/27/13 02:37	79-34-5	
Tetrachloroethene	ND	ug/kg	4.7	1		11/27/13 02:37	127-18-4	
Toluene	ND	ug/kg	4.7	1		11/27/13 02:37	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	4.7	1		11/27/13 02:37	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	4.7	1		11/27/13 02:37	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	4.7	1		11/27/13 02:37	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	4.7	1		11/27/13 02:37	79-00-5	
Trichloroethene	ND	ug/kg	4.7	1		11/27/13 02:37	79-01-6	
Trichlorofluoromethane	ND	ug/kg	4.7	1		11/27/13 02:37	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	4.7	1		11/27/13 02:37	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	4.7	1		11/27/13 02:37	95-63-6	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



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 Kinsey Ave. Suite 100  
 Huntersville, NC 28078  
 (704)875-9092

### ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

Sample: B9 Lab ID: 92180233011 Collected: 11/18/13 13:45 Received: 11/20/13 14:15 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260/5035A Volatile Organics</b>		Analytical Method: EPA 8260						
1,3,5-Trimethylbenzene	ND	ug/kg	4.7	1		11/27/13 02:37	108-67-8	
Vinyl acetate	ND	ug/kg	46.6	1		11/27/13 02:37	108-05-4	
Vinyl chloride	ND	ug/kg	9.3	1		11/27/13 02:37	75-01-4	
Xylene (Total)	ND	ug/kg	9.3	1		11/27/13 02:37	1330-20-7	
m&p-Xylene	ND	ug/kg	9.3	1		11/27/13 02:37	179601-23-1	
o-Xylene	ND	ug/kg	4.7	1		11/27/13 02:37	95-47-6	
<b>Surrogates</b>								
Toluene-d8 (S)	101	%	70-130	1		11/27/13 02:37	2037-26-5	
4-Bromofluorobenzene (S)	102	%	70-130	1		11/27/13 02:37	460-00-4	
1,2-Dichloroethane-d4 (S)	91	%	70-132	1		11/27/13 02:37	17060-07-0	
<b>Percent Moisture</b>		Analytical Method: ASTM D2974-87						
Percent Moisture	21.2	%	0.10	1		12/04/13 08:21		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
 without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B8**      **Lab ID: 92180233012**      Collected: 11/18/13 13:50      Received: 11/20/13 14:15      Matrix: Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Microwave</b>		Analytical Method: EPA 8270    Preparation Method: EPA 3546						
Acenaphthene	ND	ug/kg	460	1	11/21/13 10:55	12/02/13 20:10	83-32-9	
Acenaphthylene	ND	ug/kg	460	1	11/21/13 10:55	12/02/13 20:10	208-96-8	
Aniline	ND	ug/kg	460	1	11/21/13 10:55	12/02/13 20:10	62-53-3	
Anthracene	ND	ug/kg	460	1	11/21/13 10:55	12/02/13 20:10	120-12-7	
Benzo(a)anthracene	ND	ug/kg	460	1	11/21/13 10:55	12/02/13 20:10	56-55-3	
Benzo(a)pyrene	ND	ug/kg	460	1	11/21/13 10:55	12/02/13 20:10	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	460	1	11/21/13 10:55	12/02/13 20:10	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	460	1	11/21/13 10:55	12/02/13 20:10	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	460	1	11/21/13 10:55	12/02/13 20:10	207-08-9	
Benzoic Acid	ND	ug/kg	2300	1	11/21/13 10:55	12/02/13 20:10	65-85-0	
Benzyl alcohol	ND	ug/kg	921	1	11/21/13 10:55	12/02/13 20:10	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	460	1	11/21/13 10:55	12/02/13 20:10	101-55-3	
Butylbenzylphthalate	ND	ug/kg	460	1	11/21/13 10:55	12/02/13 20:10	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	921	1	11/21/13 10:55	12/02/13 20:10	59-50-7	
4-Chloroaniline	ND	ug/kg	2300	1	11/21/13 10:55	12/02/13 20:10	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	460	1	11/21/13 10:55	12/02/13 20:10	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	460	1	11/21/13 10:55	12/02/13 20:10	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	460	1	11/21/13 10:55	12/02/13 20:10	108-60-1	
2-Chloronaphthalene	ND	ug/kg	460	1	11/21/13 10:55	12/02/13 20:10	91-58-7	
2-Chlorophenol	ND	ug/kg	460	1	11/21/13 10:55	12/02/13 20:10	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	460	1	11/21/13 10:55	12/02/13 20:10	7005-72-3	
Chrysene	ND	ug/kg	460	1	11/21/13 10:55	12/02/13 20:10	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	460	1	11/21/13 10:55	12/02/13 20:10	53-70-3	
Dibenzofuran	ND	ug/kg	460	1	11/21/13 10:55	12/02/13 20:10	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	460	1	11/21/13 10:55	12/02/13 20:10	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	460	1	11/21/13 10:55	12/02/13 20:10	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	460	1	11/21/13 10:55	12/02/13 20:10	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	2300	1	11/21/13 10:55	12/02/13 20:10	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	460	1	11/21/13 10:55	12/02/13 20:10	120-83-2	
Diethylphthalate	ND	ug/kg	460	1	11/21/13 10:55	12/02/13 20:10	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	460	1	11/21/13 10:55	12/02/13 20:10	105-67-9	
Dimethylphthalate	ND	ug/kg	460	1	11/21/13 10:55	12/02/13 20:10	131-11-3	
Di-n-butylphthalate	ND	ug/kg	460	1	11/21/13 10:55	12/02/13 20:10	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	921	1	11/21/13 10:55	12/02/13 20:10	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	2300	1	11/21/13 10:55	12/02/13 20:10	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	460	1	11/21/13 10:55	12/02/13 20:10	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	460	1	11/21/13 10:55	12/02/13 20:10	606-20-2	
Di-n-octylphthalate	ND	ug/kg	460	1	11/21/13 10:55	12/02/13 20:10	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	460	1	11/21/13 10:55	12/02/13 20:10	117-81-7	
Fluoranthene	ND	ug/kg	460	1	11/21/13 10:55	12/02/13 20:10	206-44-0	
Fluorene	ND	ug/kg	460	1	11/21/13 10:55	12/02/13 20:10	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	460	1	11/21/13 10:55	12/02/13 20:10	87-68-3	
Hexachlorobenzene	ND	ug/kg	460	1	11/21/13 10:55	12/02/13 20:10	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	460	1	11/21/13 10:55	12/02/13 20:10	77-47-4	
Hexachloroethane	ND	ug/kg	460	1	11/21/13 10:55	12/02/13 20:10	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	460	1	11/21/13 10:55	12/02/13 20:10	193-39-5	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B8**      **Lab ID: 92180233012**      Collected: 11/18/13 13:50      Received: 11/20/13 14:15      Matrix: Solid

*Results reported on a "dry-weight" basis*

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Microwave</b>		Analytical Method: EPA 8270    Preparation Method: EPA 3546						
Isophorone	ND	ug/kg	460	1	11/21/13 10:55	12/02/13 20:10	78-59-1	
1-Methylnaphthalene	ND	ug/kg	460	1	11/21/13 10:55	12/02/13 20:10	90-12-0	
2-Methylnaphthalene	ND	ug/kg	460	1	11/21/13 10:55	12/02/13 20:10	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	460	1	11/21/13 10:55	12/02/13 20:10	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	460	1	11/21/13 10:55	12/02/13 20:10		
Naphthalene	ND	ug/kg	460	1	11/21/13 10:55	12/02/13 20:10	91-20-3	
2-Nitroaniline	ND	ug/kg	2300	1	11/21/13 10:55	12/02/13 20:10	88-74-4	
3-Nitroaniline	ND	ug/kg	2300	1	11/21/13 10:55	12/02/13 20:10	99-09-2	
4-Nitroaniline	ND	ug/kg	921	1	11/21/13 10:55	12/02/13 20:10	100-01-6	
Nitrobenzene	ND	ug/kg	460	1	11/21/13 10:55	12/02/13 20:10	98-95-3	
2-Nitrophenol	ND	ug/kg	460	1	11/21/13 10:55	12/02/13 20:10	88-75-5	
4-Nitrophenol	ND	ug/kg	2300	1	11/21/13 10:55	12/02/13 20:10	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	460	1	11/21/13 10:55	12/02/13 20:10	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	460	1	11/21/13 10:55	12/02/13 20:10	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	460	1	11/21/13 10:55	12/02/13 20:10	86-30-6	
Pentachlorophenol	ND	ug/kg	2300	1	11/21/13 10:55	12/02/13 20:10	87-86-5	
Phenanthrene	ND	ug/kg	460	1	11/21/13 10:55	12/02/13 20:10	85-01-8	
Phenol	ND	ug/kg	460	1	11/21/13 10:55	12/02/13 20:10	108-95-2	
Pyrene	ND	ug/kg	460	1	11/21/13 10:55	12/02/13 20:10	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/kg	460	1	11/21/13 10:55	12/02/13 20:10	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	460	1	11/21/13 10:55	12/02/13 20:10	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	460	1	11/21/13 10:55	12/02/13 20:10	88-06-2	
<b>Surrogates</b>								
Nitrobenzene-d5 (S)	59 %		23-110	1	11/21/13 10:55	12/02/13 20:10	4165-60-0	
2-Fluorobiphenyl (S)	61 %		30-110	1	11/21/13 10:55	12/02/13 20:10	321-60-8	
Terphenyl-d14 (S)	63 %		28-110	1	11/21/13 10:55	12/02/13 20:10	1718-51-0	
Phenol-d6 (S)	40 %		22-110	1	11/21/13 10:55	12/02/13 20:10	13127-88-3	
2-Fluorophenol (S)	40 %		13-110	1	11/21/13 10:55	12/02/13 20:10	367-12-4	
2,4,6-Tribromophenol (S)	58 %		27-110	1	11/21/13 10:55	12/02/13 20:10	118-79-6	
<b>8260/5035A Volatile Organics</b>		Analytical Method: EPA 8260						
Acetone	ND	ug/kg	104	1		11/27/13 02:57	67-64-1	
Benzene	ND	ug/kg	5.2	1		11/27/13 02:57	71-43-2	
Bromobenzene	ND	ug/kg	5.2	1		11/27/13 02:57	108-86-1	
Bromochloromethane	ND	ug/kg	5.2	1		11/27/13 02:57	74-97-5	
Bromodichloromethane	ND	ug/kg	5.2	1		11/27/13 02:57	75-27-4	
Bromoform	ND	ug/kg	5.2	1		11/27/13 02:57	75-25-2	
Bromomethane	ND	ug/kg	10.4	1		11/27/13 02:57	74-83-9	
2-Butanone (MEK)	ND	ug/kg	104	1		11/27/13 02:57	78-93-3	
n-Butylbenzene	ND	ug/kg	5.2	1		11/27/13 02:57	104-51-8	
sec-Butylbenzene	ND	ug/kg	5.2	1		11/27/13 02:57	135-98-8	
tert-Butylbenzene	ND	ug/kg	5.2	1		11/27/13 02:57	98-06-6	
Carbon tetrachloride	ND	ug/kg	5.2	1		11/27/13 02:57	56-23-5	
Chlorobenzene	ND	ug/kg	5.2	1		11/27/13 02:57	108-90-7	
Chloroethane	ND	ug/kg	10.4	1		11/27/13 02:57	75-00-3	
Chloroform	ND	ug/kg	5.2	1		11/27/13 02:57	67-66-3	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B8**      **Lab ID: 92180233012**      Collected: 11/18/13 13:50      Received: 11/20/13 14:15      Matrix: Solid

*Results reported on a "dry-weight" basis*

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260/5035A Volatile Organics</b>		Analytical Method: EPA 8260						
Chloromethane	ND	ug/kg	10.4	1		11/27/13 02:57	74-87-3	
2-Chlorotoluene	ND	ug/kg	5.2	1		11/27/13 02:57	95-49-8	
4-Chlorotoluene	ND	ug/kg	5.2	1		11/27/13 02:57	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	5.2	1		11/27/13 02:57	96-12-8	
Dibromochloromethane	ND	ug/kg	5.2	1		11/27/13 02:57	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	5.2	1		11/27/13 02:57	106-93-4	
Dibromomethane	ND	ug/kg	5.2	1		11/27/13 02:57	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	5.2	1		11/27/13 02:57	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	5.2	1		11/27/13 02:57	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	5.2	1		11/27/13 02:57	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	10.4	1		11/27/13 02:57	75-71-8	
1,1-Dichloroethane	ND	ug/kg	5.2	1		11/27/13 02:57	75-34-3	
1,2-Dichloroethane	ND	ug/kg	5.2	1		11/27/13 02:57	107-06-2	
1,1-Dichloroethene	ND	ug/kg	5.2	1		11/27/13 02:57	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	5.2	1		11/27/13 02:57	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	5.2	1		11/27/13 02:57	156-60-5	
1,2-Dichloropropane	ND	ug/kg	5.2	1		11/27/13 02:57	78-87-5	
1,3-Dichloropropane	ND	ug/kg	5.2	1		11/27/13 02:57	142-28-9	
2,2-Dichloropropane	ND	ug/kg	5.2	1		11/27/13 02:57	594-20-7	
1,1-Dichloropropene	ND	ug/kg	5.2	1		11/27/13 02:57	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	5.2	1		11/27/13 02:57	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	5.2	1		11/27/13 02:57	10061-02-6	
Diisopropyl ether	ND	ug/kg	5.2	1		11/27/13 02:57	108-20-3	
Ethylbenzene	ND	ug/kg	5.2	1		11/27/13 02:57	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	5.2	1		11/27/13 02:57	87-68-3	
2-Hexanone	ND	ug/kg	52.2	1		11/27/13 02:57	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	5.2	1		11/27/13 02:57	98-82-8	
p-Isopropyltoluene	ND	ug/kg	5.2	1		11/27/13 02:57	99-87-6	
Methylene Chloride	ND	ug/kg	20.9	1		11/27/13 02:57	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	52.2	1		11/27/13 02:57	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	5.2	1		11/27/13 02:57	1634-04-4	
Naphthalene	ND	ug/kg	5.2	1		11/27/13 02:57	91-20-3	
n-Propylbenzene	ND	ug/kg	5.2	1		11/27/13 02:57	103-65-1	
Styrene	ND	ug/kg	5.2	1		11/27/13 02:57	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	5.2	1		11/27/13 02:57	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	5.2	1		11/27/13 02:57	79-34-5	
Tetrachloroethene	ND	ug/kg	5.2	1		11/27/13 02:57	127-18-4	
Toluene	ND	ug/kg	5.2	1		11/27/13 02:57	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	5.2	1		11/27/13 02:57	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	5.2	1		11/27/13 02:57	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	5.2	1		11/27/13 02:57	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	5.2	1		11/27/13 02:57	79-00-5	
Trichloroethene	ND	ug/kg	5.2	1		11/27/13 02:57	79-01-6	
Trichlorofluoromethane	ND	ug/kg	5.2	1		11/27/13 02:57	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	5.2	1		11/27/13 02:57	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	5.2	1		11/27/13 02:57	95-63-6	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



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 Kinsey Ave. Suite 100  
 Huntersville, NC 28078  
 (704)875-9092

### ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B8**      **Lab ID: 92180233012**      Collected: 11/18/13 13:50      Received: 11/20/13 14:15      Matrix: Solid

*Results reported on a "dry-weight" basis*

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260/5035A Volatile Organics</b>		Analytical Method: EPA 8260						
1,3,5-Trimethylbenzene	ND	ug/kg	5.2	1		11/27/13 02:57	108-67-8	
Vinyl acetate	ND	ug/kg	52.2	1		11/27/13 02:57	108-05-4	
Vinyl chloride	ND	ug/kg	10.4	1		11/27/13 02:57	75-01-4	
Xylene (Total)	ND	ug/kg	10.4	1		11/27/13 02:57	1330-20-7	
m&p-Xylene	ND	ug/kg	10.4	1		11/27/13 02:57	179601-23-1	
o-Xylene	ND	ug/kg	5.2	1		11/27/13 02:57	95-47-6	
<b>Surrogates</b>								
Toluene-d8 (S)	100	%	70-130	1		11/27/13 02:57	2037-26-5	
4-Bromofluorobenzene (S)	104	%	70-130	1		11/27/13 02:57	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	70-132	1		11/27/13 02:57	17060-07-0	
<b>Percent Moisture</b>		Analytical Method: ASTM D2974-87						
Percent Moisture	<b>28.3</b>	%	0.10	1		12/04/13 08:21		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
 without the written consent of Pace Analytical Services, Inc..



## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B7**      **Lab ID: 92180233013**      Collected: 11/18/13 13:55      Received: 11/20/13 14:15      Matrix: Solid

*Results reported on a "dry-weight" basis*

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Microwave</b>		Analytical Method: EPA 8270    Preparation Method: EPA 3546						
Acenaphthene	ND	ug/kg	428	1	11/21/13 10:55	12/03/13 14:47	83-32-9	
Acenaphthylene	ND	ug/kg	428	1	11/21/13 10:55	12/03/13 14:47	208-96-8	
Aniline	ND	ug/kg	428	1	11/21/13 10:55	12/03/13 14:47	62-53-3	
Anthracene	ND	ug/kg	428	1	11/21/13 10:55	12/03/13 14:47	120-12-7	
Benzo(a)anthracene	ND	ug/kg	428	1	11/21/13 10:55	12/03/13 14:47	56-55-3	
Benzo(a)pyrene	ND	ug/kg	428	1	11/21/13 10:55	12/03/13 14:47	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	428	1	11/21/13 10:55	12/03/13 14:47	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	428	1	11/21/13 10:55	12/03/13 14:47	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	428	1	11/21/13 10:55	12/03/13 14:47	207-08-9	
Benzoic Acid	ND	ug/kg	2140	1	11/21/13 10:55	12/03/13 14:47	65-85-0	
Benzyl alcohol	ND	ug/kg	856	1	11/21/13 10:55	12/03/13 14:47	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	428	1	11/21/13 10:55	12/03/13 14:47	101-55-3	
Butylbenzylphthalate	ND	ug/kg	428	1	11/21/13 10:55	12/03/13 14:47	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	856	1	11/21/13 10:55	12/03/13 14:47	59-50-7	
4-Chloroaniline	ND	ug/kg	2140	1	11/21/13 10:55	12/03/13 14:47	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	428	1	11/21/13 10:55	12/03/13 14:47	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	428	1	11/21/13 10:55	12/03/13 14:47	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	428	1	11/21/13 10:55	12/03/13 14:47	108-60-1	
2-Chloronaphthalene	ND	ug/kg	428	1	11/21/13 10:55	12/03/13 14:47	91-58-7	
2-Chlorophenol	ND	ug/kg	428	1	11/21/13 10:55	12/03/13 14:47	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	428	1	11/21/13 10:55	12/03/13 14:47	7005-72-3	
Chrysene	ND	ug/kg	428	1	11/21/13 10:55	12/03/13 14:47	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	428	1	11/21/13 10:55	12/03/13 14:47	53-70-3	
Dibenzofuran	ND	ug/kg	428	1	11/21/13 10:55	12/03/13 14:47	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	428	1	11/21/13 10:55	12/03/13 14:47	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	428	1	11/21/13 10:55	12/03/13 14:47	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	428	1	11/21/13 10:55	12/03/13 14:47	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	2140	1	11/21/13 10:55	12/03/13 14:47	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	428	1	11/21/13 10:55	12/03/13 14:47	120-83-2	
Diethylphthalate	ND	ug/kg	428	1	11/21/13 10:55	12/03/13 14:47	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	428	1	11/21/13 10:55	12/03/13 14:47	105-67-9	
Dimethylphthalate	ND	ug/kg	428	1	11/21/13 10:55	12/03/13 14:47	131-11-3	
Di-n-butylphthalate	ND	ug/kg	428	1	11/21/13 10:55	12/03/13 14:47	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	856	1	11/21/13 10:55	12/03/13 14:47	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	2140	1	11/21/13 10:55	12/03/13 14:47	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	428	1	11/21/13 10:55	12/03/13 14:47	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	428	1	11/21/13 10:55	12/03/13 14:47	606-20-2	
Di-n-octylphthalate	ND	ug/kg	428	1	11/21/13 10:55	12/03/13 14:47	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	428	1	11/21/13 10:55	12/03/13 14:47	117-81-7	
Fluoranthene	ND	ug/kg	428	1	11/21/13 10:55	12/03/13 14:47	206-44-0	
Fluorene	ND	ug/kg	428	1	11/21/13 10:55	12/03/13 14:47	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	428	1	11/21/13 10:55	12/03/13 14:47	87-68-3	
Hexachlorobenzene	ND	ug/kg	428	1	11/21/13 10:55	12/03/13 14:47	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	428	1	11/21/13 10:55	12/03/13 14:47	77-47-4	
Hexachloroethane	ND	ug/kg	428	1	11/21/13 10:55	12/03/13 14:47	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	428	1	11/21/13 10:55	12/03/13 14:47	193-39-5	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B7**      **Lab ID: 92180233013**      Collected: 11/18/13 13:55      Received: 11/20/13 14:15      Matrix: Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Microwave</b>		Analytical Method: EPA 8270    Preparation Method: EPA 3546						
Isophorone	ND	ug/kg	428	1	11/21/13 10:55	12/03/13 14:47	78-59-1	
1-Methylnaphthalene	ND	ug/kg	428	1	11/21/13 10:55	12/03/13 14:47	90-12-0	
2-Methylnaphthalene	ND	ug/kg	428	1	11/21/13 10:55	12/03/13 14:47	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	428	1	11/21/13 10:55	12/03/13 14:47	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	428	1	11/21/13 10:55	12/03/13 14:47		
Naphthalene	ND	ug/kg	428	1	11/21/13 10:55	12/03/13 14:47	91-20-3	
2-Nitroaniline	ND	ug/kg	2140	1	11/21/13 10:55	12/03/13 14:47	88-74-4	
3-Nitroaniline	ND	ug/kg	2140	1	11/21/13 10:55	12/03/13 14:47	99-09-2	
4-Nitroaniline	ND	ug/kg	856	1	11/21/13 10:55	12/03/13 14:47	100-01-6	
Nitrobenzene	ND	ug/kg	428	1	11/21/13 10:55	12/03/13 14:47	98-95-3	
2-Nitrophenol	ND	ug/kg	428	1	11/21/13 10:55	12/03/13 14:47	88-75-5	
4-Nitrophenol	ND	ug/kg	2140	1	11/21/13 10:55	12/03/13 14:47	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	428	1	11/21/13 10:55	12/03/13 14:47	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	428	1	11/21/13 10:55	12/03/13 14:47	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	428	1	11/21/13 10:55	12/03/13 14:47	86-30-6	
Pentachlorophenol	ND	ug/kg	2140	1	11/21/13 10:55	12/03/13 14:47	87-86-5	
Phenanthrene	ND	ug/kg	428	1	11/21/13 10:55	12/03/13 14:47	85-01-8	
Phenol	ND	ug/kg	428	1	11/21/13 10:55	12/03/13 14:47	108-95-2	
Pyrene	ND	ug/kg	428	1	11/21/13 10:55	12/03/13 14:47	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/kg	428	1	11/21/13 10:55	12/03/13 14:47	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	428	1	11/21/13 10:55	12/03/13 14:47	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	428	1	11/21/13 10:55	12/03/13 14:47	88-06-2	
<b>Surrogates</b>								
Nitrobenzene-d5 (S)	36 %		23-110	1	11/21/13 10:55	12/03/13 14:47	4165-60-0	
2-Fluorobiphenyl (S)	38 %		30-110	1	11/21/13 10:55	12/03/13 14:47	321-60-8	
Terphenyl-d14 (S)	44 %		28-110	1	11/21/13 10:55	12/03/13 14:47	1718-51-0	
Phenol-d6 (S)	43 %		22-110	1	11/21/13 10:55	12/03/13 14:47	13127-88-3	
2-Fluorophenol (S)	44 %		13-110	1	11/21/13 10:55	12/03/13 14:47	367-12-4	
2,4,6-Tribromophenol (S)	42 %		27-110	1	11/21/13 10:55	12/03/13 14:47	118-79-6	
<b>8260/5035A Volatile Organics</b>		Analytical Method: EPA 8260						
Acetone	ND	ug/kg	88.3	1		11/27/13 03:16	67-64-1	
Benzene	ND	ug/kg	4.4	1		11/27/13 03:16	71-43-2	
Bromobenzene	ND	ug/kg	4.4	1		11/27/13 03:16	108-86-1	
Bromochloromethane	ND	ug/kg	4.4	1		11/27/13 03:16	74-97-5	
Bromodichloromethane	ND	ug/kg	4.4	1		11/27/13 03:16	75-27-4	
Bromoform	ND	ug/kg	4.4	1		11/27/13 03:16	75-25-2	
Bromomethane	ND	ug/kg	8.8	1		11/27/13 03:16	74-83-9	
2-Butanone (MEK)	ND	ug/kg	88.3	1		11/27/13 03:16	78-93-3	
n-Butylbenzene	ND	ug/kg	4.4	1		11/27/13 03:16	104-51-8	
sec-Butylbenzene	ND	ug/kg	4.4	1		11/27/13 03:16	135-98-8	
tert-Butylbenzene	ND	ug/kg	4.4	1		11/27/13 03:16	98-06-6	
Carbon tetrachloride	ND	ug/kg	4.4	1		11/27/13 03:16	56-23-5	
Chlorobenzene	ND	ug/kg	4.4	1		11/27/13 03:16	108-90-7	
Chloroethane	ND	ug/kg	8.8	1		11/27/13 03:16	75-00-3	
Chloroform	ND	ug/kg	4.4	1		11/27/13 03:16	67-66-3	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B7**      **Lab ID: 92180233013**      Collected: 11/18/13 13:55      Received: 11/20/13 14:15      Matrix: Solid

*Results reported on a "dry-weight" basis*

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260/5035A Volatile Organics</b>		Analytical Method: EPA 8260						
Chloromethane	ND	ug/kg	8.8	1		11/27/13 03:16	74-87-3	
2-Chlorotoluene	ND	ug/kg	4.4	1		11/27/13 03:16	95-49-8	
4-Chlorotoluene	ND	ug/kg	4.4	1		11/27/13 03:16	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	4.4	1		11/27/13 03:16	96-12-8	
Dibromochloromethane	ND	ug/kg	4.4	1		11/27/13 03:16	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	4.4	1		11/27/13 03:16	106-93-4	
Dibromomethane	ND	ug/kg	4.4	1		11/27/13 03:16	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	4.4	1		11/27/13 03:16	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	4.4	1		11/27/13 03:16	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	4.4	1		11/27/13 03:16	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	8.8	1		11/27/13 03:16	75-71-8	
1,1-Dichloroethane	ND	ug/kg	4.4	1		11/27/13 03:16	75-34-3	
1,2-Dichloroethane	ND	ug/kg	4.4	1		11/27/13 03:16	107-06-2	
1,1-Dichloroethene	ND	ug/kg	4.4	1		11/27/13 03:16	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	4.4	1		11/27/13 03:16	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	4.4	1		11/27/13 03:16	156-60-5	
1,2-Dichloropropane	ND	ug/kg	4.4	1		11/27/13 03:16	78-87-5	
1,3-Dichloropropane	ND	ug/kg	4.4	1		11/27/13 03:16	142-28-9	
2,2-Dichloropropane	ND	ug/kg	4.4	1		11/27/13 03:16	594-20-7	
1,1-Dichloropropene	ND	ug/kg	4.4	1		11/27/13 03:16	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	4.4	1		11/27/13 03:16	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	4.4	1		11/27/13 03:16	10061-02-6	
Diisopropyl ether	ND	ug/kg	4.4	1		11/27/13 03:16	108-20-3	
Ethylbenzene	ND	ug/kg	4.4	1		11/27/13 03:16	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	4.4	1		11/27/13 03:16	87-68-3	
2-Hexanone	ND	ug/kg	44.2	1		11/27/13 03:16	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	4.4	1		11/27/13 03:16	98-82-8	
p-Isopropyltoluene	ND	ug/kg	4.4	1		11/27/13 03:16	99-87-6	
Methylene Chloride	ND	ug/kg	17.7	1		11/27/13 03:16	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	44.2	1		11/27/13 03:16	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	4.4	1		11/27/13 03:16	1634-04-4	
Naphthalene	ND	ug/kg	4.4	1		11/27/13 03:16	91-20-3	
n-Propylbenzene	ND	ug/kg	4.4	1		11/27/13 03:16	103-65-1	
Styrene	ND	ug/kg	4.4	1		11/27/13 03:16	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	4.4	1		11/27/13 03:16	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	4.4	1		11/27/13 03:16	79-34-5	
Tetrachloroethene	ND	ug/kg	4.4	1		11/27/13 03:16	127-18-4	
Toluene	ND	ug/kg	4.4	1		11/27/13 03:16	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	4.4	1		11/27/13 03:16	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	4.4	1		11/27/13 03:16	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	4.4	1		11/27/13 03:16	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	4.4	1		11/27/13 03:16	79-00-5	
Trichloroethene	ND	ug/kg	4.4	1		11/27/13 03:16	79-01-6	
Trichlorofluoromethane	ND	ug/kg	4.4	1		11/27/13 03:16	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	4.4	1		11/27/13 03:16	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	4.4	1		11/27/13 03:16	95-63-6	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



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 Kinsey Ave. Suite 100  
 Huntersville, NC 28078  
 (704)875-9092

### ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1  
 Pace Project No.: 92180233

**Sample: B7**      **Lab ID: 92180233013**      Collected: 11/18/13 13:55      Received: 11/20/13 14:15      Matrix: Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260/5035A Volatile Organics</b>		Analytical Method: EPA 8260						
1,3,5-Trimethylbenzene	ND	ug/kg	4.4	1		11/27/13 03:16	108-67-8	
Vinyl acetate	ND	ug/kg	44.2	1		11/27/13 03:16	108-05-4	
Vinyl chloride	ND	ug/kg	8.8	1		11/27/13 03:16	75-01-4	
Xylene (Total)	ND	ug/kg	8.8	1		11/27/13 03:16	1330-20-7	
m&p-Xylene	ND	ug/kg	8.8	1		11/27/13 03:16	179601-23-1	
o-Xylene	ND	ug/kg	4.4	1		11/27/13 03:16	95-47-6	
<b>Surrogates</b>								
Toluene-d8 (S)	97	%	70-130	1		11/27/13 03:16	2037-26-5	
4-Bromofluorobenzene (S)	107	%	70-130	1		11/27/13 03:16	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	70-132	1		11/27/13 03:16	17060-07-0	
<b>Percent Moisture</b>		Analytical Method: ASTM D2974-87						
Percent Moisture	<b>22.9</b>	%	0.10	1		12/04/13 08:22		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
 without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B6**      **Lab ID: 92180233014**      Collected: 11/18/13 14:00      Received: 11/20/13 14:15      Matrix: Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Microwave</b>		Analytical Method: EPA 8270    Preparation Method: EPA 3546						
Acenaphthene	ND	ug/kg	427	1	11/21/13 10:55	12/02/13 21:15	83-32-9	
Acenaphthylene	ND	ug/kg	427	1	11/21/13 10:55	12/02/13 21:15	208-96-8	
Aniline	ND	ug/kg	427	1	11/21/13 10:55	12/02/13 21:15	62-53-3	
Anthracene	ND	ug/kg	427	1	11/21/13 10:55	12/02/13 21:15	120-12-7	
Benzo(a)anthracene	ND	ug/kg	427	1	11/21/13 10:55	12/02/13 21:15	56-55-3	
Benzo(a)pyrene	ND	ug/kg	427	1	11/21/13 10:55	12/02/13 21:15	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	427	1	11/21/13 10:55	12/02/13 21:15	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	427	1	11/21/13 10:55	12/02/13 21:15	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	427	1	11/21/13 10:55	12/02/13 21:15	207-08-9	
Benzoic Acid	ND	ug/kg	2130	1	11/21/13 10:55	12/02/13 21:15	65-85-0	
Benzyl alcohol	ND	ug/kg	854	1	11/21/13 10:55	12/02/13 21:15	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	427	1	11/21/13 10:55	12/02/13 21:15	101-55-3	
Butylbenzylphthalate	ND	ug/kg	427	1	11/21/13 10:55	12/02/13 21:15	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	854	1	11/21/13 10:55	12/02/13 21:15	59-50-7	
4-Chloroaniline	ND	ug/kg	2130	1	11/21/13 10:55	12/02/13 21:15	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	427	1	11/21/13 10:55	12/02/13 21:15	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	427	1	11/21/13 10:55	12/02/13 21:15	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	427	1	11/21/13 10:55	12/02/13 21:15	108-60-1	
2-Chloronaphthalene	ND	ug/kg	427	1	11/21/13 10:55	12/02/13 21:15	91-58-7	
2-Chlorophenol	ND	ug/kg	427	1	11/21/13 10:55	12/02/13 21:15	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	427	1	11/21/13 10:55	12/02/13 21:15	7005-72-3	
Chrysene	ND	ug/kg	427	1	11/21/13 10:55	12/02/13 21:15	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	427	1	11/21/13 10:55	12/02/13 21:15	53-70-3	
Dibenzofuran	ND	ug/kg	427	1	11/21/13 10:55	12/02/13 21:15	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	427	1	11/21/13 10:55	12/02/13 21:15	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	427	1	11/21/13 10:55	12/02/13 21:15	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	427	1	11/21/13 10:55	12/02/13 21:15	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	2130	1	11/21/13 10:55	12/02/13 21:15	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	427	1	11/21/13 10:55	12/02/13 21:15	120-83-2	
Diethylphthalate	ND	ug/kg	427	1	11/21/13 10:55	12/02/13 21:15	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	427	1	11/21/13 10:55	12/02/13 21:15	105-67-9	
Dimethylphthalate	ND	ug/kg	427	1	11/21/13 10:55	12/02/13 21:15	131-11-3	
Di-n-butylphthalate	ND	ug/kg	427	1	11/21/13 10:55	12/02/13 21:15	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	854	1	11/21/13 10:55	12/02/13 21:15	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	2130	1	11/21/13 10:55	12/02/13 21:15	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	427	1	11/21/13 10:55	12/02/13 21:15	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	427	1	11/21/13 10:55	12/02/13 21:15	606-20-2	
Di-n-octylphthalate	ND	ug/kg	427	1	11/21/13 10:55	12/02/13 21:15	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	427	1	11/21/13 10:55	12/02/13 21:15	117-81-7	
Fluoranthene	ND	ug/kg	427	1	11/21/13 10:55	12/02/13 21:15	206-44-0	
Fluorene	ND	ug/kg	427	1	11/21/13 10:55	12/02/13 21:15	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	427	1	11/21/13 10:55	12/02/13 21:15	87-68-3	
Hexachlorobenzene	ND	ug/kg	427	1	11/21/13 10:55	12/02/13 21:15	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	427	1	11/21/13 10:55	12/02/13 21:15	77-47-4	
Hexachloroethane	ND	ug/kg	427	1	11/21/13 10:55	12/02/13 21:15	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	427	1	11/21/13 10:55	12/02/13 21:15	193-39-5	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B6**      **Lab ID: 92180233014**      Collected: 11/18/13 14:00      Received: 11/20/13 14:15      Matrix: Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Microwave</b> Analytical Method: EPA 8270      Preparation Method: EPA 3546								
Isophorone	ND	ug/kg	427	1	11/21/13 10:55	12/02/13 21:15	78-59-1	
1-Methylnaphthalene	ND	ug/kg	427	1	11/21/13 10:55	12/02/13 21:15	90-12-0	
2-Methylnaphthalene	ND	ug/kg	427	1	11/21/13 10:55	12/02/13 21:15	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	427	1	11/21/13 10:55	12/02/13 21:15	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	427	1	11/21/13 10:55	12/02/13 21:15		
Naphthalene	ND	ug/kg	427	1	11/21/13 10:55	12/02/13 21:15	91-20-3	
2-Nitroaniline	ND	ug/kg	2130	1	11/21/13 10:55	12/02/13 21:15	88-74-4	
3-Nitroaniline	ND	ug/kg	2130	1	11/21/13 10:55	12/02/13 21:15	99-09-2	
4-Nitroaniline	ND	ug/kg	854	1	11/21/13 10:55	12/02/13 21:15	100-01-6	
Nitrobenzene	ND	ug/kg	427	1	11/21/13 10:55	12/02/13 21:15	98-95-3	
2-Nitrophenol	ND	ug/kg	427	1	11/21/13 10:55	12/02/13 21:15	88-75-5	
4-Nitrophenol	ND	ug/kg	2130	1	11/21/13 10:55	12/02/13 21:15	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	427	1	11/21/13 10:55	12/02/13 21:15	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	427	1	11/21/13 10:55	12/02/13 21:15	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	427	1	11/21/13 10:55	12/02/13 21:15	86-30-6	
Pentachlorophenol	ND	ug/kg	2130	1	11/21/13 10:55	12/02/13 21:15	87-86-5	
Phenanthrene	ND	ug/kg	427	1	11/21/13 10:55	12/02/13 21:15	85-01-8	
Phenol	ND	ug/kg	427	1	11/21/13 10:55	12/02/13 21:15	108-95-2	
Pyrene	ND	ug/kg	427	1	11/21/13 10:55	12/02/13 21:15	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/kg	427	1	11/21/13 10:55	12/02/13 21:15	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	427	1	11/21/13 10:55	12/02/13 21:15	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	427	1	11/21/13 10:55	12/02/13 21:15	88-06-2	
<b>Surrogates</b>								
Nitrobenzene-d5 (S)	37 %		23-110	1	11/21/13 10:55	12/02/13 21:15	4165-60-0	
2-Fluorobiphenyl (S)	41 %		30-110	1	11/21/13 10:55	12/02/13 21:15	321-60-8	
Terphenyl-d14 (S)	40 %		28-110	1	11/21/13 10:55	12/02/13 21:15	1718-51-0	
Phenol-d6 (S)	41 %		22-110	1	11/21/13 10:55	12/02/13 21:15	13127-88-3	
2-Fluorophenol (S)	42 %		13-110	1	11/21/13 10:55	12/02/13 21:15	367-12-4	
2,4,6-Tribromophenol (S)	41 %		27-110	1	11/21/13 10:55	12/02/13 21:15	118-79-6	
<b>8260/5035A Volatile Organics</b> Analytical Method: EPA 8260								
Acetone	ND	ug/kg	91.4	1		11/27/13 03:36	67-64-1	
Benzene	ND	ug/kg	4.6	1		11/27/13 03:36	71-43-2	
Bromobenzene	ND	ug/kg	4.6	1		11/27/13 03:36	108-86-1	
Bromochloromethane	ND	ug/kg	4.6	1		11/27/13 03:36	74-97-5	
Bromodichloromethane	ND	ug/kg	4.6	1		11/27/13 03:36	75-27-4	
Bromoform	ND	ug/kg	4.6	1		11/27/13 03:36	75-25-2	
Bromomethane	ND	ug/kg	9.1	1		11/27/13 03:36	74-83-9	
2-Butanone (MEK)	ND	ug/kg	91.4	1		11/27/13 03:36	78-93-3	
n-Butylbenzene	ND	ug/kg	4.6	1		11/27/13 03:36	104-51-8	
sec-Butylbenzene	ND	ug/kg	4.6	1		11/27/13 03:36	135-98-8	
tert-Butylbenzene	ND	ug/kg	4.6	1		11/27/13 03:36	98-06-6	
Carbon tetrachloride	ND	ug/kg	4.6	1		11/27/13 03:36	56-23-5	
Chlorobenzene	ND	ug/kg	4.6	1		11/27/13 03:36	108-90-7	
Chloroethane	ND	ug/kg	9.1	1		11/27/13 03:36	75-00-3	
Chloroform	ND	ug/kg	4.6	1		11/27/13 03:36	67-66-3	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B6**      **Lab ID: 92180233014**      Collected: 11/18/13 14:00      Received: 11/20/13 14:15      Matrix: Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260/5035A Volatile Organics</b>		Analytical Method: EPA 8260						
Chloromethane	ND	ug/kg	9.1	1		11/27/13 03:36	74-87-3	
2-Chlorotoluene	ND	ug/kg	4.6	1		11/27/13 03:36	95-49-8	
4-Chlorotoluene	ND	ug/kg	4.6	1		11/27/13 03:36	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	4.6	1		11/27/13 03:36	96-12-8	
Dibromochloromethane	ND	ug/kg	4.6	1		11/27/13 03:36	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	4.6	1		11/27/13 03:36	106-93-4	
Dibromomethane	ND	ug/kg	4.6	1		11/27/13 03:36	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	4.6	1		11/27/13 03:36	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	4.6	1		11/27/13 03:36	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	4.6	1		11/27/13 03:36	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	9.1	1		11/27/13 03:36	75-71-8	
1,1-Dichloroethane	ND	ug/kg	4.6	1		11/27/13 03:36	75-34-3	
1,2-Dichloroethane	ND	ug/kg	4.6	1		11/27/13 03:36	107-06-2	
1,1-Dichloroethene	ND	ug/kg	4.6	1		11/27/13 03:36	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	4.6	1		11/27/13 03:36	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	4.6	1		11/27/13 03:36	156-60-5	
1,2-Dichloropropane	ND	ug/kg	4.6	1		11/27/13 03:36	78-87-5	
1,3-Dichloropropane	ND	ug/kg	4.6	1		11/27/13 03:36	142-28-9	
2,2-Dichloropropane	ND	ug/kg	4.6	1		11/27/13 03:36	594-20-7	
1,1-Dichloropropene	ND	ug/kg	4.6	1		11/27/13 03:36	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	4.6	1		11/27/13 03:36	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	4.6	1		11/27/13 03:36	10061-02-6	
Diisopropyl ether	ND	ug/kg	4.6	1		11/27/13 03:36	108-20-3	
Ethylbenzene	ND	ug/kg	4.6	1		11/27/13 03:36	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	4.6	1		11/27/13 03:36	87-68-3	
2-Hexanone	ND	ug/kg	45.7	1		11/27/13 03:36	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	4.6	1		11/27/13 03:36	98-82-8	
p-Isopropyltoluene	ND	ug/kg	4.6	1		11/27/13 03:36	99-87-6	
Methylene Chloride	ND	ug/kg	18.3	1		11/27/13 03:36	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	45.7	1		11/27/13 03:36	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	4.6	1		11/27/13 03:36	1634-04-4	
Naphthalene	ND	ug/kg	4.6	1		11/27/13 03:36	91-20-3	
n-Propylbenzene	ND	ug/kg	4.6	1		11/27/13 03:36	103-65-1	
Styrene	ND	ug/kg	4.6	1		11/27/13 03:36	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	4.6	1		11/27/13 03:36	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	4.6	1		11/27/13 03:36	79-34-5	
Tetrachloroethene	ND	ug/kg	4.6	1		11/27/13 03:36	127-18-4	
Toluene	ND	ug/kg	4.6	1		11/27/13 03:36	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	4.6	1		11/27/13 03:36	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	4.6	1		11/27/13 03:36	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	4.6	1		11/27/13 03:36	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	4.6	1		11/27/13 03:36	79-00-5	
Trichloroethene	ND	ug/kg	4.6	1		11/27/13 03:36	79-01-6	
Trichlorofluoromethane	ND	ug/kg	4.6	1		11/27/13 03:36	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	4.6	1		11/27/13 03:36	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	4.6	1		11/27/13 03:36	95-63-6	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



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 Kinsey Ave. Suite 100  
 Huntersville, NC 28078  
 (704)875-9092

### ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1  
 Pace Project No.: 92180233

Sample: B6 Lab ID: 92180233014 Collected: 11/18/13 14:00 Received: 11/20/13 14:15 Matrix: Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260/5035A Volatile Organics</b>		Analytical Method: EPA 8260						
1,3,5-Trimethylbenzene	ND	ug/kg	4.6	1		11/27/13 03:36	108-67-8	
Vinyl acetate	ND	ug/kg	45.7	1		11/27/13 03:36	108-05-4	
Vinyl chloride	ND	ug/kg	9.1	1		11/27/13 03:36	75-01-4	
Xylene (Total)	ND	ug/kg	9.1	1		11/27/13 03:36	1330-20-7	
m&p-Xylene	ND	ug/kg	9.1	1		11/27/13 03:36	179601-23-1	
o-Xylene	ND	ug/kg	4.6	1		11/27/13 03:36	95-47-6	
<b>Surrogates</b>								
Toluene-d8 (S)	98	%	70-130	1		11/27/13 03:36	2037-26-5	
4-Bromofluorobenzene (S)	105	%	70-130	1		11/27/13 03:36	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	70-132	1		11/27/13 03:36	17060-07-0	
<b>Percent Moisture</b>		Analytical Method: ASTM D2974-87						
Percent Moisture	22.7	%	0.10	1		12/04/13 08:22		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
 without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B5**      **Lab ID: 92180233015**      Collected: 11/18/13 15:15      Received: 11/20/13 14:15      Matrix: Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Microwave</b>		Analytical Method: EPA 8270    Preparation Method: EPA 3546						
Acenaphthene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 21:48	83-32-9	
Acenaphthylene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 21:48	208-96-8	
Aniline	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 21:48	62-53-3	
Anthracene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 21:48	120-12-7	
Benzo(a)anthracene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 21:48	56-55-3	
Benzo(a)pyrene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 21:48	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 21:48	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 21:48	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 21:48	207-08-9	
Benzoic Acid	ND	ug/kg	2140	1	11/21/13 10:55	12/02/13 21:48	65-85-0	
Benzyl alcohol	ND	ug/kg	856	1	11/21/13 10:55	12/02/13 21:48	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 21:48	101-55-3	
Butylbenzylphthalate	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 21:48	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	856	1	11/21/13 10:55	12/02/13 21:48	59-50-7	
4-Chloroaniline	ND	ug/kg	2140	1	11/21/13 10:55	12/02/13 21:48	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 21:48	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 21:48	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 21:48	108-60-1	
2-Chloronaphthalene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 21:48	91-58-7	
2-Chlorophenol	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 21:48	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 21:48	7005-72-3	
Chrysene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 21:48	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 21:48	53-70-3	
Dibenzofuran	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 21:48	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 21:48	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 21:48	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 21:48	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	2140	1	11/21/13 10:55	12/02/13 21:48	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 21:48	120-83-2	
Diethylphthalate	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 21:48	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 21:48	105-67-9	
Dimethylphthalate	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 21:48	131-11-3	
Di-n-butylphthalate	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 21:48	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	856	1	11/21/13 10:55	12/02/13 21:48	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	2140	1	11/21/13 10:55	12/02/13 21:48	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 21:48	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 21:48	606-20-2	
Di-n-octylphthalate	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 21:48	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 21:48	117-81-7	
Fluoranthene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 21:48	206-44-0	
Fluorene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 21:48	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 21:48	87-68-3	
Hexachlorobenzene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 21:48	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 21:48	77-47-4	
Hexachloroethane	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 21:48	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 21:48	193-39-5	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B5**      **Lab ID: 92180233015**      Collected: 11/18/13 15:15      Received: 11/20/13 14:15      Matrix: Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Microwave</b>		Analytical Method: EPA 8270    Preparation Method: EPA 3546						
Isophorone	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 21:48	78-59-1	
1-Methylnaphthalene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 21:48	90-12-0	
2-Methylnaphthalene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 21:48	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 21:48	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 21:48		
Naphthalene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 21:48	91-20-3	
2-Nitroaniline	ND	ug/kg	2140	1	11/21/13 10:55	12/02/13 21:48	88-74-4	
3-Nitroaniline	ND	ug/kg	2140	1	11/21/13 10:55	12/02/13 21:48	99-09-2	
4-Nitroaniline	ND	ug/kg	856	1	11/21/13 10:55	12/02/13 21:48	100-01-6	
Nitrobenzene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 21:48	98-95-3	
2-Nitrophenol	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 21:48	88-75-5	
4-Nitrophenol	ND	ug/kg	2140	1	11/21/13 10:55	12/02/13 21:48	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 21:48	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 21:48	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 21:48	86-30-6	
Pentachlorophenol	ND	ug/kg	2140	1	11/21/13 10:55	12/02/13 21:48	87-86-5	
Phenanthrene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 21:48	85-01-8	
Phenol	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 21:48	108-95-2	
Pyrene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 21:48	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 21:48	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 21:48	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	428	1	11/21/13 10:55	12/02/13 21:48	88-06-2	
<b>Surrogates</b>								
Nitrobenzene-d5 (S)	52 %		23-110	1	11/21/13 10:55	12/02/13 21:48	4165-60-0	
2-Fluorobiphenyl (S)	56 %		30-110	1	11/21/13 10:55	12/02/13 21:48	321-60-8	
Terphenyl-d14 (S)	60 %		28-110	1	11/21/13 10:55	12/02/13 21:48	1718-51-0	
Phenol-d6 (S)	55 %		22-110	1	11/21/13 10:55	12/02/13 21:48	13127-88-3	
2-Fluorophenol (S)	55 %		13-110	1	11/21/13 10:55	12/02/13 21:48	367-12-4	
2,4,6-Tribromophenol (S)	72 %		27-110	1	11/21/13 10:55	12/02/13 21:48	118-79-6	
<b>8260/5035A Volatile Organics</b>		Analytical Method: EPA 8260						
Acetone	ND	ug/kg	92.9	1		11/27/13 03:56	67-64-1	
Benzene	ND	ug/kg	4.6	1		11/27/13 03:56	71-43-2	
Bromobenzene	ND	ug/kg	4.6	1		11/27/13 03:56	108-86-1	
Bromochloromethane	ND	ug/kg	4.6	1		11/27/13 03:56	74-97-5	
Bromodichloromethane	ND	ug/kg	4.6	1		11/27/13 03:56	75-27-4	
Bromoform	ND	ug/kg	4.6	1		11/27/13 03:56	75-25-2	
Bromomethane	ND	ug/kg	9.3	1		11/27/13 03:56	74-83-9	
2-Butanone (MEK)	ND	ug/kg	92.9	1		11/27/13 03:56	78-93-3	
n-Butylbenzene	ND	ug/kg	4.6	1		11/27/13 03:56	104-51-8	
sec-Butylbenzene	ND	ug/kg	4.6	1		11/27/13 03:56	135-98-8	
tert-Butylbenzene	ND	ug/kg	4.6	1		11/27/13 03:56	98-06-6	
Carbon tetrachloride	ND	ug/kg	4.6	1		11/27/13 03:56	56-23-5	
Chlorobenzene	ND	ug/kg	4.6	1		11/27/13 03:56	108-90-7	
Chloroethane	ND	ug/kg	9.3	1		11/27/13 03:56	75-00-3	
Chloroform	ND	ug/kg	4.6	1		11/27/13 03:56	67-66-3	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B5**      **Lab ID: 92180233015**      Collected: 11/18/13 15:15      Received: 11/20/13 14:15      Matrix: Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260/5035A Volatile Organics</b>		Analytical Method: EPA 8260						
Chloromethane	ND	ug/kg	9.3	1		11/27/13 03:56	74-87-3	
2-Chlorotoluene	ND	ug/kg	4.6	1		11/27/13 03:56	95-49-8	
4-Chlorotoluene	ND	ug/kg	4.6	1		11/27/13 03:56	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	4.6	1		11/27/13 03:56	96-12-8	
Dibromochloromethane	ND	ug/kg	4.6	1		11/27/13 03:56	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	4.6	1		11/27/13 03:56	106-93-4	
Dibromomethane	ND	ug/kg	4.6	1		11/27/13 03:56	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	4.6	1		11/27/13 03:56	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	4.6	1		11/27/13 03:56	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	4.6	1		11/27/13 03:56	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	9.3	1		11/27/13 03:56	75-71-8	
1,1-Dichloroethane	ND	ug/kg	4.6	1		11/27/13 03:56	75-34-3	
1,2-Dichloroethane	ND	ug/kg	4.6	1		11/27/13 03:56	107-06-2	
1,1-Dichloroethene	ND	ug/kg	4.6	1		11/27/13 03:56	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	4.6	1		11/27/13 03:56	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	4.6	1		11/27/13 03:56	156-60-5	
1,2-Dichloropropane	ND	ug/kg	4.6	1		11/27/13 03:56	78-87-5	
1,3-Dichloropropane	ND	ug/kg	4.6	1		11/27/13 03:56	142-28-9	
2,2-Dichloropropane	ND	ug/kg	4.6	1		11/27/13 03:56	594-20-7	
1,1-Dichloropropene	ND	ug/kg	4.6	1		11/27/13 03:56	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	4.6	1		11/27/13 03:56	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	4.6	1		11/27/13 03:56	10061-02-6	
Diisopropyl ether	ND	ug/kg	4.6	1		11/27/13 03:56	108-20-3	
Ethylbenzene	ND	ug/kg	4.6	1		11/27/13 03:56	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	4.6	1		11/27/13 03:56	87-68-3	
2-Hexanone	ND	ug/kg	46.5	1		11/27/13 03:56	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	4.6	1		11/27/13 03:56	98-82-8	
p-Isopropyltoluene	ND	ug/kg	4.6	1		11/27/13 03:56	99-87-6	
Methylene Chloride	ND	ug/kg	18.6	1		11/27/13 03:56	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	46.5	1		11/27/13 03:56	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	4.6	1		11/27/13 03:56	1634-04-4	
Naphthalene	ND	ug/kg	4.6	1		11/27/13 03:56	91-20-3	
n-Propylbenzene	ND	ug/kg	4.6	1		11/27/13 03:56	103-65-1	
Styrene	ND	ug/kg	4.6	1		11/27/13 03:56	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	4.6	1		11/27/13 03:56	630-20-6	
1,1,1,2,2-Tetrachloroethane	ND	ug/kg	4.6	1		11/27/13 03:56	79-34-5	
Tetrachloroethene	ND	ug/kg	4.6	1		11/27/13 03:56	127-18-4	
Toluene	ND	ug/kg	4.6	1		11/27/13 03:56	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	4.6	1		11/27/13 03:56	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	4.6	1		11/27/13 03:56	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	4.6	1		11/27/13 03:56	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	4.6	1		11/27/13 03:56	79-00-5	
Trichloroethene	ND	ug/kg	4.6	1		11/27/13 03:56	79-01-6	
Trichlorofluoromethane	ND	ug/kg	4.6	1		11/27/13 03:56	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	4.6	1		11/27/13 03:56	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	4.6	1		11/27/13 03:56	95-63-6	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



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 Kinsey Ave. Suite 100  
 Huntersville, NC 28078  
 (704)875-9092

### ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B5**      **Lab ID: 92180233015**      Collected: 11/18/13 15:15      Received: 11/20/13 14:15      Matrix: Solid

*Results reported on a "dry-weight" basis*

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260/5035A Volatile Organics</b>		Analytical Method: EPA 8260						
1,3,5-Trimethylbenzene	ND	ug/kg	4.6	1		11/27/13 03:56	108-67-8	
Vinyl acetate	ND	ug/kg	46.5	1		11/27/13 03:56	108-05-4	
Vinyl chloride	ND	ug/kg	9.3	1		11/27/13 03:56	75-01-4	
Xylene (Total)	ND	ug/kg	9.3	1		11/27/13 03:56	1330-20-7	
m&p-Xylene	ND	ug/kg	9.3	1		11/27/13 03:56	179601-23-1	
o-Xylene	ND	ug/kg	4.6	1		11/27/13 03:56	95-47-6	
<b>Surrogates</b>								
Toluene-d8 (S)	100	%	70-130	1		11/27/13 03:56	2037-26-5	
4-Bromofluorobenzene (S)	102	%	70-130	1		11/27/13 03:56	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	70-132	1		11/27/13 03:56	17060-07-0	
<b>Percent Moisture</b>		Analytical Method: ASTM D2974-87						
Percent Moisture	<b>22.9</b>	%	0.10	1		12/04/13 08:22		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
 without the written consent of Pace Analytical Services, Inc..



## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B4**      **Lab ID: 92180233016**      Collected: 11/18/13 15:20      Received: 11/20/13 14:15      Matrix: Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Microwave</b>		Analytical Method: EPA 8270    Preparation Method: EPA 3546						
Acenaphthene	ND	ug/kg	421	1	11/21/13 10:55	12/02/13 22:21	83-32-9	
Acenaphthylene	ND	ug/kg	421	1	11/21/13 10:55	12/02/13 22:21	208-96-8	
Aniline	ND	ug/kg	421	1	11/21/13 10:55	12/02/13 22:21	62-53-3	
Anthracene	ND	ug/kg	421	1	11/21/13 10:55	12/02/13 22:21	120-12-7	
Benzo(a)anthracene	ND	ug/kg	421	1	11/21/13 10:55	12/02/13 22:21	56-55-3	
Benzo(a)pyrene	ND	ug/kg	421	1	11/21/13 10:55	12/02/13 22:21	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	421	1	11/21/13 10:55	12/02/13 22:21	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	421	1	11/21/13 10:55	12/02/13 22:21	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	421	1	11/21/13 10:55	12/02/13 22:21	207-08-9	
Benzoic Acid	ND	ug/kg	2110	1	11/21/13 10:55	12/02/13 22:21	65-85-0	
Benzyl alcohol	ND	ug/kg	843	1	11/21/13 10:55	12/02/13 22:21	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	421	1	11/21/13 10:55	12/02/13 22:21	101-55-3	
Butylbenzylphthalate	ND	ug/kg	421	1	11/21/13 10:55	12/02/13 22:21	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	843	1	11/21/13 10:55	12/02/13 22:21	59-50-7	
4-Chloroaniline	ND	ug/kg	2110	1	11/21/13 10:55	12/02/13 22:21	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	421	1	11/21/13 10:55	12/02/13 22:21	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	421	1	11/21/13 10:55	12/02/13 22:21	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	421	1	11/21/13 10:55	12/02/13 22:21	108-60-1	
2-Chloronaphthalene	ND	ug/kg	421	1	11/21/13 10:55	12/02/13 22:21	91-58-7	
2-Chlorophenol	ND	ug/kg	421	1	11/21/13 10:55	12/02/13 22:21	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	421	1	11/21/13 10:55	12/02/13 22:21	7005-72-3	
Chrysene	ND	ug/kg	421	1	11/21/13 10:55	12/02/13 22:21	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	421	1	11/21/13 10:55	12/02/13 22:21	53-70-3	
Dibenzofuran	ND	ug/kg	421	1	11/21/13 10:55	12/02/13 22:21	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	421	1	11/21/13 10:55	12/02/13 22:21	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	421	1	11/21/13 10:55	12/02/13 22:21	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	421	1	11/21/13 10:55	12/02/13 22:21	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	2110	1	11/21/13 10:55	12/02/13 22:21	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	421	1	11/21/13 10:55	12/02/13 22:21	120-83-2	
Diethylphthalate	ND	ug/kg	421	1	11/21/13 10:55	12/02/13 22:21	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	421	1	11/21/13 10:55	12/02/13 22:21	105-67-9	
Dimethylphthalate	ND	ug/kg	421	1	11/21/13 10:55	12/02/13 22:21	131-11-3	
Di-n-butylphthalate	ND	ug/kg	421	1	11/21/13 10:55	12/02/13 22:21	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	843	1	11/21/13 10:55	12/02/13 22:21	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	2110	1	11/21/13 10:55	12/02/13 22:21	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	421	1	11/21/13 10:55	12/02/13 22:21	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	421	1	11/21/13 10:55	12/02/13 22:21	606-20-2	
Di-n-octylphthalate	ND	ug/kg	421	1	11/21/13 10:55	12/02/13 22:21	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	421	1	11/21/13 10:55	12/02/13 22:21	117-81-7	
Fluoranthene	ND	ug/kg	421	1	11/21/13 10:55	12/02/13 22:21	206-44-0	
Fluorene	ND	ug/kg	421	1	11/21/13 10:55	12/02/13 22:21	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	421	1	11/21/13 10:55	12/02/13 22:21	87-68-3	
Hexachlorobenzene	ND	ug/kg	421	1	11/21/13 10:55	12/02/13 22:21	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	421	1	11/21/13 10:55	12/02/13 22:21	77-47-4	
Hexachloroethane	ND	ug/kg	421	1	11/21/13 10:55	12/02/13 22:21	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	421	1	11/21/13 10:55	12/02/13 22:21	193-39-5	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B4**      **Lab ID: 92180233016**      Collected: 11/18/13 15:20      Received: 11/20/13 14:15      Matrix: Solid

*Results reported on a "dry-weight" basis*

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Microwave</b>		Analytical Method: EPA 8270    Preparation Method: EPA 3546						
Isophorone	ND	ug/kg	421	1	11/21/13 10:55	12/02/13 22:21	78-59-1	
1-Methylnaphthalene	ND	ug/kg	421	1	11/21/13 10:55	12/02/13 22:21	90-12-0	
2-Methylnaphthalene	ND	ug/kg	421	1	11/21/13 10:55	12/02/13 22:21	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	421	1	11/21/13 10:55	12/02/13 22:21	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	421	1	11/21/13 10:55	12/02/13 22:21		
Naphthalene	ND	ug/kg	421	1	11/21/13 10:55	12/02/13 22:21	91-20-3	
2-Nitroaniline	ND	ug/kg	2110	1	11/21/13 10:55	12/02/13 22:21	88-74-4	
3-Nitroaniline	ND	ug/kg	2110	1	11/21/13 10:55	12/02/13 22:21	99-09-2	
4-Nitroaniline	ND	ug/kg	843	1	11/21/13 10:55	12/02/13 22:21	100-01-6	
Nitrobenzene	ND	ug/kg	421	1	11/21/13 10:55	12/02/13 22:21	98-95-3	
2-Nitrophenol	ND	ug/kg	421	1	11/21/13 10:55	12/02/13 22:21	88-75-5	
4-Nitrophenol	ND	ug/kg	2110	1	11/21/13 10:55	12/02/13 22:21	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	421	1	11/21/13 10:55	12/02/13 22:21	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	421	1	11/21/13 10:55	12/02/13 22:21	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	421	1	11/21/13 10:55	12/02/13 22:21	86-30-6	
Pentachlorophenol	ND	ug/kg	2110	1	11/21/13 10:55	12/02/13 22:21	87-86-5	
Phenanthrene	ND	ug/kg	421	1	11/21/13 10:55	12/02/13 22:21	85-01-8	
Phenol	ND	ug/kg	421	1	11/21/13 10:55	12/02/13 22:21	108-95-2	
Pyrene	ND	ug/kg	421	1	11/21/13 10:55	12/02/13 22:21	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/kg	421	1	11/21/13 10:55	12/02/13 22:21	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	421	1	11/21/13 10:55	12/02/13 22:21	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	421	1	11/21/13 10:55	12/02/13 22:21	88-06-2	
<b>Surrogates</b>								
Nitrobenzene-d5 (S)	53 %		23-110	1	11/21/13 10:55	12/02/13 22:21	4165-60-0	
2-Fluorobiphenyl (S)	59 %		30-110	1	11/21/13 10:55	12/02/13 22:21	321-60-8	
Terphenyl-d14 (S)	43 %		28-110	1	11/21/13 10:55	12/02/13 22:21	1718-51-0	
Phenol-d6 (S)	59 %		22-110	1	11/21/13 10:55	12/02/13 22:21	13127-88-3	
2-Fluorophenol (S)	59 %		13-110	1	11/21/13 10:55	12/02/13 22:21	367-12-4	
2,4,6-Tribromophenol (S)	76 %		27-110	1	11/21/13 10:55	12/02/13 22:21	118-79-6	
<b>8260/5035A Volatile Organics</b>		Analytical Method: EPA 8260						
Acetone	ND	ug/kg	85.8	1		11/27/13 04:15	67-64-1	
Benzene	ND	ug/kg	4.3	1		11/27/13 04:15	71-43-2	
Bromobenzene	ND	ug/kg	4.3	1		11/27/13 04:15	108-86-1	
Bromochloromethane	ND	ug/kg	4.3	1		11/27/13 04:15	74-97-5	
Bromodichloromethane	ND	ug/kg	4.3	1		11/27/13 04:15	75-27-4	
Bromoform	ND	ug/kg	4.3	1		11/27/13 04:15	75-25-2	
Bromomethane	ND	ug/kg	8.6	1		11/27/13 04:15	74-83-9	
2-Butanone (MEK)	ND	ug/kg	85.8	1		11/27/13 04:15	78-93-3	
n-Butylbenzene	ND	ug/kg	4.3	1		11/27/13 04:15	104-51-8	
sec-Butylbenzene	ND	ug/kg	4.3	1		11/27/13 04:15	135-98-8	
tert-Butylbenzene	ND	ug/kg	4.3	1		11/27/13 04:15	98-06-6	
Carbon tetrachloride	ND	ug/kg	4.3	1		11/27/13 04:15	56-23-5	
Chlorobenzene	ND	ug/kg	4.3	1		11/27/13 04:15	108-90-7	
Chloroethane	ND	ug/kg	8.6	1		11/27/13 04:15	75-00-3	
Chloroform	ND	ug/kg	4.3	1		11/27/13 04:15	67-66-3	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B4**      **Lab ID: 92180233016**      Collected: 11/18/13 15:20      Received: 11/20/13 14:15      Matrix: Solid

*Results reported on a "dry-weight" basis*

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260/5035A Volatile Organics</b>		Analytical Method: EPA 8260						
Chloromethane	ND	ug/kg	8.6	1		11/27/13 04:15	74-87-3	
2-Chlorotoluene	ND	ug/kg	4.3	1		11/27/13 04:15	95-49-8	
4-Chlorotoluene	ND	ug/kg	4.3	1		11/27/13 04:15	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	4.3	1		11/27/13 04:15	96-12-8	
Dibromochloromethane	ND	ug/kg	4.3	1		11/27/13 04:15	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	4.3	1		11/27/13 04:15	106-93-4	
Dibromomethane	ND	ug/kg	4.3	1		11/27/13 04:15	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	4.3	1		11/27/13 04:15	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	4.3	1		11/27/13 04:15	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	4.3	1		11/27/13 04:15	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	8.6	1		11/27/13 04:15	75-71-8	
1,1-Dichloroethane	ND	ug/kg	4.3	1		11/27/13 04:15	75-34-3	
1,2-Dichloroethane	ND	ug/kg	4.3	1		11/27/13 04:15	107-06-2	
1,1-Dichloroethene	ND	ug/kg	4.3	1		11/27/13 04:15	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	4.3	1		11/27/13 04:15	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	4.3	1		11/27/13 04:15	156-60-5	
1,2-Dichloropropane	ND	ug/kg	4.3	1		11/27/13 04:15	78-87-5	
1,3-Dichloropropane	ND	ug/kg	4.3	1		11/27/13 04:15	142-28-9	
2,2-Dichloropropane	ND	ug/kg	4.3	1		11/27/13 04:15	594-20-7	
1,1-Dichloropropene	ND	ug/kg	4.3	1		11/27/13 04:15	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	4.3	1		11/27/13 04:15	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	4.3	1		11/27/13 04:15	10061-02-6	
Diisopropyl ether	ND	ug/kg	4.3	1		11/27/13 04:15	108-20-3	
Ethylbenzene	ND	ug/kg	4.3	1		11/27/13 04:15	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	4.3	1		11/27/13 04:15	87-68-3	
2-Hexanone	ND	ug/kg	42.9	1		11/27/13 04:15	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	4.3	1		11/27/13 04:15	98-82-8	
p-Isopropyltoluene	ND	ug/kg	4.3	1		11/27/13 04:15	99-87-6	
Methylene Chloride	ND	ug/kg	17.2	1		11/27/13 04:15	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	42.9	1		11/27/13 04:15	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	4.3	1		11/27/13 04:15	1634-04-4	
Naphthalene	ND	ug/kg	4.3	1		11/27/13 04:15	91-20-3	
n-Propylbenzene	ND	ug/kg	4.3	1		11/27/13 04:15	103-65-1	
Styrene	ND	ug/kg	4.3	1		11/27/13 04:15	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	4.3	1		11/27/13 04:15	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	4.3	1		11/27/13 04:15	79-34-5	
Tetrachloroethene	ND	ug/kg	4.3	1		11/27/13 04:15	127-18-4	
Toluene	ND	ug/kg	4.3	1		11/27/13 04:15	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	4.3	1		11/27/13 04:15	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	4.3	1		11/27/13 04:15	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	4.3	1		11/27/13 04:15	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	4.3	1		11/27/13 04:15	79-00-5	
Trichloroethene	ND	ug/kg	4.3	1		11/27/13 04:15	79-01-6	
Trichlorofluoromethane	ND	ug/kg	4.3	1		11/27/13 04:15	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	4.3	1		11/27/13 04:15	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	4.3	1		11/27/13 04:15	95-63-6	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



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 Kinsey Ave. Suite 100  
 Huntersville, NC 28078  
 (704)875-9092

### ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

Sample: B4 Lab ID: 92180233016 Collected: 11/18/13 15:20 Received: 11/20/13 14:15 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260/5035A Volatile Organics</b>		Analytical Method: EPA 8260						
1,3,5-Trimethylbenzene	ND	ug/kg	4.3	1		11/27/13 04:15	108-67-8	
Vinyl acetate	ND	ug/kg	42.9	1		11/27/13 04:15	108-05-4	
Vinyl chloride	ND	ug/kg	8.6	1		11/27/13 04:15	75-01-4	
Xylene (Total)	ND	ug/kg	8.6	1		11/27/13 04:15	1330-20-7	
m&p-Xylene	ND	ug/kg	8.6	1		11/27/13 04:15	179601-23-1	
o-Xylene	ND	ug/kg	4.3	1		11/27/13 04:15	95-47-6	
<b>Surrogates</b>								
Toluene-d8 (S)	99 %		70-130	1		11/27/13 04:15	2037-26-5	
4-Bromofluorobenzene (S)	105 %		70-130	1		11/27/13 04:15	460-00-4	
1,2-Dichloroethane-d4 (S)	103 %		70-132	1		11/27/13 04:15	17060-07-0	
<b>Percent Moisture</b>		Analytical Method: ASTM D2974-87						
Percent Moisture	21.7 %		0.10	1		12/04/13 08:23		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
 without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B3**      **Lab ID: 92180233017**      Collected: 11/18/13 15:25      Received: 11/20/13 14:15      Matrix: Solid

*Results reported on a "dry-weight" basis*

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Microwave</b>		Analytical Method: EPA 8270    Preparation Method: EPA 3546						
Acenaphthene	ND	ug/kg	364	1	11/21/13 10:55	12/03/13 15:19	83-32-9	
Acenaphthylene	ND	ug/kg	364	1	11/21/13 10:55	12/03/13 15:19	208-96-8	
Aniline	ND	ug/kg	364	1	11/21/13 10:55	12/03/13 15:19	62-53-3	
Anthracene	ND	ug/kg	364	1	11/21/13 10:55	12/03/13 15:19	120-12-7	
Benzo(a)anthracene	ND	ug/kg	364	1	11/21/13 10:55	12/03/13 15:19	56-55-3	
Benzo(a)pyrene	ND	ug/kg	364	1	11/21/13 10:55	12/03/13 15:19	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	364	1	11/21/13 10:55	12/03/13 15:19	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	364	1	11/21/13 10:55	12/03/13 15:19	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	364	1	11/21/13 10:55	12/03/13 15:19	207-08-9	
Benzoic Acid	ND	ug/kg	1820	1	11/21/13 10:55	12/03/13 15:19	65-85-0	
Benzyl alcohol	ND	ug/kg	729	1	11/21/13 10:55	12/03/13 15:19	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	364	1	11/21/13 10:55	12/03/13 15:19	101-55-3	
Butylbenzylphthalate	ND	ug/kg	364	1	11/21/13 10:55	12/03/13 15:19	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	729	1	11/21/13 10:55	12/03/13 15:19	59-50-7	
4-Chloroaniline	ND	ug/kg	1820	1	11/21/13 10:55	12/03/13 15:19	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	364	1	11/21/13 10:55	12/03/13 15:19	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	364	1	11/21/13 10:55	12/03/13 15:19	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	364	1	11/21/13 10:55	12/03/13 15:19	108-60-1	
2-Chloronaphthalene	ND	ug/kg	364	1	11/21/13 10:55	12/03/13 15:19	91-58-7	
2-Chlorophenol	ND	ug/kg	364	1	11/21/13 10:55	12/03/13 15:19	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	364	1	11/21/13 10:55	12/03/13 15:19	7005-72-3	
Chrysene	ND	ug/kg	364	1	11/21/13 10:55	12/03/13 15:19	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	364	1	11/21/13 10:55	12/03/13 15:19	53-70-3	
Dibenzofuran	ND	ug/kg	364	1	11/21/13 10:55	12/03/13 15:19	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	364	1	11/21/13 10:55	12/03/13 15:19	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	364	1	11/21/13 10:55	12/03/13 15:19	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	364	1	11/21/13 10:55	12/03/13 15:19	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	1820	1	11/21/13 10:55	12/03/13 15:19	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	364	1	11/21/13 10:55	12/03/13 15:19	120-83-2	
Diethylphthalate	ND	ug/kg	364	1	11/21/13 10:55	12/03/13 15:19	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	364	1	11/21/13 10:55	12/03/13 15:19	105-67-9	
Dimethylphthalate	ND	ug/kg	364	1	11/21/13 10:55	12/03/13 15:19	131-11-3	
Di-n-butylphthalate	ND	ug/kg	364	1	11/21/13 10:55	12/03/13 15:19	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	729	1	11/21/13 10:55	12/03/13 15:19	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	1820	1	11/21/13 10:55	12/03/13 15:19	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	364	1	11/21/13 10:55	12/03/13 15:19	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	364	1	11/21/13 10:55	12/03/13 15:19	606-20-2	
Di-n-octylphthalate	ND	ug/kg	364	1	11/21/13 10:55	12/03/13 15:19	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	364	1	11/21/13 10:55	12/03/13 15:19	117-81-7	
Fluoranthene	ND	ug/kg	364	1	11/21/13 10:55	12/03/13 15:19	206-44-0	
Fluorene	ND	ug/kg	364	1	11/21/13 10:55	12/03/13 15:19	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	364	1	11/21/13 10:55	12/03/13 15:19	87-68-3	
Hexachlorobenzene	ND	ug/kg	364	1	11/21/13 10:55	12/03/13 15:19	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	364	1	11/21/13 10:55	12/03/13 15:19	77-47-4	
Hexachloroethane	ND	ug/kg	364	1	11/21/13 10:55	12/03/13 15:19	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	364	1	11/21/13 10:55	12/03/13 15:19	193-39-5	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B3**      **Lab ID: 92180233017**      Collected: 11/18/13 15:25      Received: 11/20/13 14:15      Matrix: Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Microwave</b>		Analytical Method: EPA 8270    Preparation Method: EPA 3546						
Isophorone	ND	ug/kg	364	1	11/21/13 10:55	12/03/13 15:19	78-59-1	
1-Methylnaphthalene	ND	ug/kg	364	1	11/21/13 10:55	12/03/13 15:19	90-12-0	
2-Methylnaphthalene	ND	ug/kg	364	1	11/21/13 10:55	12/03/13 15:19	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	364	1	11/21/13 10:55	12/03/13 15:19	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	364	1	11/21/13 10:55	12/03/13 15:19		
Naphthalene	ND	ug/kg	364	1	11/21/13 10:55	12/03/13 15:19	91-20-3	
2-Nitroaniline	ND	ug/kg	1820	1	11/21/13 10:55	12/03/13 15:19	88-74-4	
3-Nitroaniline	ND	ug/kg	1820	1	11/21/13 10:55	12/03/13 15:19	99-09-2	
4-Nitroaniline	ND	ug/kg	729	1	11/21/13 10:55	12/03/13 15:19	100-01-6	
Nitrobenzene	ND	ug/kg	364	1	11/21/13 10:55	12/03/13 15:19	98-95-3	
2-Nitrophenol	ND	ug/kg	364	1	11/21/13 10:55	12/03/13 15:19	88-75-5	
4-Nitrophenol	ND	ug/kg	1820	1	11/21/13 10:55	12/03/13 15:19	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	364	1	11/21/13 10:55	12/03/13 15:19	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	364	1	11/21/13 10:55	12/03/13 15:19	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	364	1	11/21/13 10:55	12/03/13 15:19	86-30-6	
Pentachlorophenol	ND	ug/kg	1820	1	11/21/13 10:55	12/03/13 15:19	87-86-5	
Phenanthrene	ND	ug/kg	364	1	11/21/13 10:55	12/03/13 15:19	85-01-8	
Phenol	ND	ug/kg	364	1	11/21/13 10:55	12/03/13 15:19	108-95-2	
Pyrene	ND	ug/kg	364	1	11/21/13 10:55	12/03/13 15:19	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/kg	364	1	11/21/13 10:55	12/03/13 15:19	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	364	1	11/21/13 10:55	12/03/13 15:19	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	364	1	11/21/13 10:55	12/03/13 15:19	88-06-2	
<b>Surrogates</b>								
Nitrobenzene-d5 (S)	47 %		23-110	1	11/21/13 10:55	12/03/13 15:19	4165-60-0	
2-Fluorobiphenyl (S)	54 %		30-110	1	11/21/13 10:55	12/03/13 15:19	321-60-8	
Terphenyl-d14 (S)	68 %		28-110	1	11/21/13 10:55	12/03/13 15:19	1718-51-0	
Phenol-d6 (S)	59 %		22-110	1	11/21/13 10:55	12/03/13 15:19	13127-88-3	
2-Fluorophenol (S)	56 %		13-110	1	11/21/13 10:55	12/03/13 15:19	367-12-4	
2,4,6-Tribromophenol (S)	68 %		27-110	1	11/21/13 10:55	12/03/13 15:19	118-79-6	
<b>8260/5035A Volatile Organics</b>		Analytical Method: EPA 8260						
Acetone	ND	ug/kg	72.4	1		11/27/13 04:35	67-64-1	
Benzene	ND	ug/kg	3.6	1		11/27/13 04:35	71-43-2	
Bromobenzene	ND	ug/kg	3.6	1		11/27/13 04:35	108-86-1	
Bromochloromethane	ND	ug/kg	3.6	1		11/27/13 04:35	74-97-5	
Bromodichloromethane	ND	ug/kg	3.6	1		11/27/13 04:35	75-27-4	
Bromoform	ND	ug/kg	3.6	1		11/27/13 04:35	75-25-2	
Bromomethane	ND	ug/kg	7.2	1		11/27/13 04:35	74-83-9	
2-Butanone (MEK)	ND	ug/kg	72.4	1		11/27/13 04:35	78-93-3	
n-Butylbenzene	ND	ug/kg	3.6	1		11/27/13 04:35	104-51-8	
sec-Butylbenzene	ND	ug/kg	3.6	1		11/27/13 04:35	135-98-8	
tert-Butylbenzene	ND	ug/kg	3.6	1		11/27/13 04:35	98-06-6	
Carbon tetrachloride	ND	ug/kg	3.6	1		11/27/13 04:35	56-23-5	
Chlorobenzene	ND	ug/kg	3.6	1		11/27/13 04:35	108-90-7	
Chloroethane	ND	ug/kg	7.2	1		11/27/13 04:35	75-00-3	
Chloroform	ND	ug/kg	3.6	1		11/27/13 04:35	67-66-3	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B3**      **Lab ID: 92180233017**      Collected: 11/18/13 15:25      Received: 11/20/13 14:15      Matrix: Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260/5035A Volatile Organics</b>		Analytical Method: EPA 8260						
Chloromethane	ND	ug/kg	7.2	1		11/27/13 04:35	74-87-3	
2-Chlorotoluene	ND	ug/kg	3.6	1		11/27/13 04:35	95-49-8	
4-Chlorotoluene	ND	ug/kg	3.6	1		11/27/13 04:35	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	3.6	1		11/27/13 04:35	96-12-8	
Dibromochloromethane	ND	ug/kg	3.6	1		11/27/13 04:35	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	3.6	1		11/27/13 04:35	106-93-4	
Dibromomethane	ND	ug/kg	3.6	1		11/27/13 04:35	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	3.6	1		11/27/13 04:35	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	3.6	1		11/27/13 04:35	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	3.6	1		11/27/13 04:35	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	7.2	1		11/27/13 04:35	75-71-8	
1,1-Dichloroethane	ND	ug/kg	3.6	1		11/27/13 04:35	75-34-3	
1,2-Dichloroethane	ND	ug/kg	3.6	1		11/27/13 04:35	107-06-2	
1,1-Dichloroethene	ND	ug/kg	3.6	1		11/27/13 04:35	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	3.6	1		11/27/13 04:35	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	3.6	1		11/27/13 04:35	156-60-5	
1,2-Dichloropropane	ND	ug/kg	3.6	1		11/27/13 04:35	78-87-5	
1,3-Dichloropropane	ND	ug/kg	3.6	1		11/27/13 04:35	142-28-9	
2,2-Dichloropropane	ND	ug/kg	3.6	1		11/27/13 04:35	594-20-7	
1,1-Dichloropropene	ND	ug/kg	3.6	1		11/27/13 04:35	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	3.6	1		11/27/13 04:35	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	3.6	1		11/27/13 04:35	10061-02-6	
Diisopropyl ether	ND	ug/kg	3.6	1		11/27/13 04:35	108-20-3	
Ethylbenzene	ND	ug/kg	3.6	1		11/27/13 04:35	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	3.6	1		11/27/13 04:35	87-68-3	
2-Hexanone	ND	ug/kg	36.2	1		11/27/13 04:35	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	3.6	1		11/27/13 04:35	98-82-8	
p-Isopropyltoluene	ND	ug/kg	3.6	1		11/27/13 04:35	99-87-6	
Methylene Chloride	ND	ug/kg	14.5	1		11/27/13 04:35	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	36.2	1		11/27/13 04:35	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	3.6	1		11/27/13 04:35	1634-04-4	
Naphthalene	ND	ug/kg	3.6	1		11/27/13 04:35	91-20-3	
n-Propylbenzene	ND	ug/kg	3.6	1		11/27/13 04:35	103-65-1	
Styrene	ND	ug/kg	3.6	1		11/27/13 04:35	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	3.6	1		11/27/13 04:35	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	3.6	1		11/27/13 04:35	79-34-5	
Tetrachloroethene	ND	ug/kg	3.6	1		11/27/13 04:35	127-18-4	
Toluene	ND	ug/kg	3.6	1		11/27/13 04:35	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	3.6	1		11/27/13 04:35	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	3.6	1		11/27/13 04:35	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	3.6	1		11/27/13 04:35	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	3.6	1		11/27/13 04:35	79-00-5	
Trichloroethene	ND	ug/kg	3.6	1		11/27/13 04:35	79-01-6	
Trichlorofluoromethane	ND	ug/kg	3.6	1		11/27/13 04:35	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	3.6	1		11/27/13 04:35	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	3.6	1		11/27/13 04:35	95-63-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



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 Kinsey Ave. Suite 100  
 Huntersville, NC 28078  
 (704)875-9092

### ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1  
 Pace Project No.: 92180233

Sample: B3 Lab ID: 92180233017 Collected: 11/18/13 15:25 Received: 11/20/13 14:15 Matrix: Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260/5035A Volatile Organics</b>		Analytical Method: EPA 8260						
1,3,5-Trimethylbenzene	ND	ug/kg	3.6	1		11/27/13 04:35	108-67-8	
Vinyl acetate	ND	ug/kg	36.2	1		11/27/13 04:35	108-05-4	
Vinyl chloride	ND	ug/kg	7.2	1		11/27/13 04:35	75-01-4	
Xylene (Total)	ND	ug/kg	7.2	1		11/27/13 04:35	1330-20-7	
m&p-Xylene	ND	ug/kg	7.2	1		11/27/13 04:35	179601-23-1	
o-Xylene	ND	ug/kg	3.6	1		11/27/13 04:35	95-47-6	
<b>Surrogates</b>								
Toluene-d8 (S)	100	%	70-130	1		11/27/13 04:35	2037-26-5	
4-Bromofluorobenzene (S)	105	%	70-130	1		11/27/13 04:35	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	70-132	1		11/27/13 04:35	17060-07-0	
<b>Percent Moisture</b>		Analytical Method: ASTM D2974-87						
Percent Moisture	9.4	%	0.10	1		12/04/13 08:23		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
 without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B2**      **Lab ID: 92180233018**      Collected: 11/18/13 15:35      Received: 11/20/13 14:15      Matrix: Solid

*Results reported on a "dry-weight" basis*

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Microwave</b>		Analytical Method: EPA 8270    Preparation Method: EPA 3546						
Acenaphthene	ND	ug/kg	393	1	11/21/13 10:55	12/03/13 15:51	83-32-9	
Acenaphthylene	ND	ug/kg	393	1	11/21/13 10:55	12/03/13 15:51	208-96-8	
Aniline	ND	ug/kg	393	1	11/21/13 10:55	12/03/13 15:51	62-53-3	
Anthracene	ND	ug/kg	393	1	11/21/13 10:55	12/03/13 15:51	120-12-7	
Benzo(a)anthracene	ND	ug/kg	393	1	11/21/13 10:55	12/03/13 15:51	56-55-3	
Benzo(a)pyrene	ND	ug/kg	393	1	11/21/13 10:55	12/03/13 15:51	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	393	1	11/21/13 10:55	12/03/13 15:51	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	393	1	11/21/13 10:55	12/03/13 15:51	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	393	1	11/21/13 10:55	12/03/13 15:51	207-08-9	
Benzoic Acid	ND	ug/kg	1960	1	11/21/13 10:55	12/03/13 15:51	65-85-0	
Benzyl alcohol	ND	ug/kg	785	1	11/21/13 10:55	12/03/13 15:51	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	393	1	11/21/13 10:55	12/03/13 15:51	101-55-3	
Butylbenzylphthalate	ND	ug/kg	393	1	11/21/13 10:55	12/03/13 15:51	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	785	1	11/21/13 10:55	12/03/13 15:51	59-50-7	
4-Chloroaniline	ND	ug/kg	1960	1	11/21/13 10:55	12/03/13 15:51	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	393	1	11/21/13 10:55	12/03/13 15:51	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	393	1	11/21/13 10:55	12/03/13 15:51	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	393	1	11/21/13 10:55	12/03/13 15:51	108-60-1	
2-Chloronaphthalene	ND	ug/kg	393	1	11/21/13 10:55	12/03/13 15:51	91-58-7	
2-Chlorophenol	ND	ug/kg	393	1	11/21/13 10:55	12/03/13 15:51	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	393	1	11/21/13 10:55	12/03/13 15:51	7005-72-3	
Chrysene	ND	ug/kg	393	1	11/21/13 10:55	12/03/13 15:51	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	393	1	11/21/13 10:55	12/03/13 15:51	53-70-3	
Dibenzofuran	ND	ug/kg	393	1	11/21/13 10:55	12/03/13 15:51	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	393	1	11/21/13 10:55	12/03/13 15:51	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	393	1	11/21/13 10:55	12/03/13 15:51	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	393	1	11/21/13 10:55	12/03/13 15:51	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	1960	1	11/21/13 10:55	12/03/13 15:51	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	393	1	11/21/13 10:55	12/03/13 15:51	120-83-2	
Diethylphthalate	ND	ug/kg	393	1	11/21/13 10:55	12/03/13 15:51	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	393	1	11/21/13 10:55	12/03/13 15:51	105-67-9	
Dimethylphthalate	ND	ug/kg	393	1	11/21/13 10:55	12/03/13 15:51	131-11-3	
Di-n-butylphthalate	ND	ug/kg	393	1	11/21/13 10:55	12/03/13 15:51	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	785	1	11/21/13 10:55	12/03/13 15:51	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	1960	1	11/21/13 10:55	12/03/13 15:51	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	393	1	11/21/13 10:55	12/03/13 15:51	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	393	1	11/21/13 10:55	12/03/13 15:51	606-20-2	
Di-n-octylphthalate	ND	ug/kg	393	1	11/21/13 10:55	12/03/13 15:51	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	393	1	11/21/13 10:55	12/03/13 15:51	117-81-7	
Fluoranthene	ND	ug/kg	393	1	11/21/13 10:55	12/03/13 15:51	206-44-0	
Fluorene	ND	ug/kg	393	1	11/21/13 10:55	12/03/13 15:51	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	393	1	11/21/13 10:55	12/03/13 15:51	87-68-3	
Hexachlorobenzene	ND	ug/kg	393	1	11/21/13 10:55	12/03/13 15:51	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	393	1	11/21/13 10:55	12/03/13 15:51	77-47-4	
Hexachloroethane	ND	ug/kg	393	1	11/21/13 10:55	12/03/13 15:51	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	393	1	11/21/13 10:55	12/03/13 15:51	193-39-5	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B2**      **Lab ID: 92180233018**      Collected: 11/18/13 15:35      Received: 11/20/13 14:15      Matrix: Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Microwave</b>		Analytical Method: EPA 8270    Preparation Method: EPA 3546						
Isophorone	ND	ug/kg	393	1	11/21/13 10:55	12/03/13 15:51	78-59-1	
1-Methylnaphthalene	ND	ug/kg	393	1	11/21/13 10:55	12/03/13 15:51	90-12-0	
2-Methylnaphthalene	ND	ug/kg	393	1	11/21/13 10:55	12/03/13 15:51	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	393	1	11/21/13 10:55	12/03/13 15:51	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	393	1	11/21/13 10:55	12/03/13 15:51		
Naphthalene	ND	ug/kg	393	1	11/21/13 10:55	12/03/13 15:51	91-20-3	
2-Nitroaniline	ND	ug/kg	1960	1	11/21/13 10:55	12/03/13 15:51	88-74-4	
3-Nitroaniline	ND	ug/kg	1960	1	11/21/13 10:55	12/03/13 15:51	99-09-2	
4-Nitroaniline	ND	ug/kg	785	1	11/21/13 10:55	12/03/13 15:51	100-01-6	
Nitrobenzene	ND	ug/kg	393	1	11/21/13 10:55	12/03/13 15:51	98-95-3	
2-Nitrophenol	ND	ug/kg	393	1	11/21/13 10:55	12/03/13 15:51	88-75-5	
4-Nitrophenol	ND	ug/kg	1960	1	11/21/13 10:55	12/03/13 15:51	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	393	1	11/21/13 10:55	12/03/13 15:51	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	393	1	11/21/13 10:55	12/03/13 15:51	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	393	1	11/21/13 10:55	12/03/13 15:51	86-30-6	
Pentachlorophenol	ND	ug/kg	1960	1	11/21/13 10:55	12/03/13 15:51	87-86-5	
Phenanthrene	ND	ug/kg	393	1	11/21/13 10:55	12/03/13 15:51	85-01-8	
Phenol	ND	ug/kg	393	1	11/21/13 10:55	12/03/13 15:51	108-95-2	
Pyrene	ND	ug/kg	393	1	11/21/13 10:55	12/03/13 15:51	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/kg	393	1	11/21/13 10:55	12/03/13 15:51	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	393	1	11/21/13 10:55	12/03/13 15:51	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	393	1	11/21/13 10:55	12/03/13 15:51	88-06-2	
<b>Surrogates</b>								
Nitrobenzene-d5 (S)	47 %		23-110	1	11/21/13 10:55	12/03/13 15:51	4165-60-0	
2-Fluorobiphenyl (S)	52 %		30-110	1	11/21/13 10:55	12/03/13 15:51	321-60-8	
Terphenyl-d14 (S)	48 %		28-110	1	11/21/13 10:55	12/03/13 15:51	1718-51-0	
Phenol-d6 (S)	60 %		22-110	1	11/21/13 10:55	12/03/13 15:51	13127-88-3	
2-Fluorophenol (S)	59 %		13-110	1	11/21/13 10:55	12/03/13 15:51	367-12-4	
2,4,6-Tribromophenol (S)	54 %		27-110	1	11/21/13 10:55	12/03/13 15:51	118-79-6	
<b>8260/5035A Volatile Organics</b>		Analytical Method: EPA 8260						
Acetone	ND	ug/kg	77.5	1		11/27/13 04:55	67-64-1	
Benzene	ND	ug/kg	3.9	1		11/27/13 04:55	71-43-2	
Bromobenzene	ND	ug/kg	3.9	1		11/27/13 04:55	108-86-1	
Bromochloromethane	ND	ug/kg	3.9	1		11/27/13 04:55	74-97-5	
Bromodichloromethane	ND	ug/kg	3.9	1		11/27/13 04:55	75-27-4	
Bromoform	ND	ug/kg	3.9	1		11/27/13 04:55	75-25-2	
Bromomethane	ND	ug/kg	7.7	1		11/27/13 04:55	74-83-9	
2-Butanone (MEK)	ND	ug/kg	77.5	1		11/27/13 04:55	78-93-3	
n-Butylbenzene	ND	ug/kg	3.9	1		11/27/13 04:55	104-51-8	
sec-Butylbenzene	ND	ug/kg	3.9	1		11/27/13 04:55	135-98-8	
tert-Butylbenzene	ND	ug/kg	3.9	1		11/27/13 04:55	98-06-6	
Carbon tetrachloride	ND	ug/kg	3.9	1		11/27/13 04:55	56-23-5	
Chlorobenzene	ND	ug/kg	3.9	1		11/27/13 04:55	108-90-7	
Chloroethane	ND	ug/kg	7.7	1		11/27/13 04:55	75-00-3	
Chloroform	ND	ug/kg	3.9	1		11/27/13 04:55	67-66-3	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B2**      **Lab ID: 92180233018**      Collected: 11/18/13 15:35      Received: 11/20/13 14:15      Matrix: Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260/5035A Volatile Organics</b>		Analytical Method: EPA 8260						
Chloromethane	ND	ug/kg	7.7	1		11/27/13 04:55	74-87-3	
2-Chlorotoluene	ND	ug/kg	3.9	1		11/27/13 04:55	95-49-8	
4-Chlorotoluene	ND	ug/kg	3.9	1		11/27/13 04:55	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	3.9	1		11/27/13 04:55	96-12-8	
Dibromochloromethane	ND	ug/kg	3.9	1		11/27/13 04:55	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	3.9	1		11/27/13 04:55	106-93-4	
Dibromomethane	ND	ug/kg	3.9	1		11/27/13 04:55	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	3.9	1		11/27/13 04:55	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	3.9	1		11/27/13 04:55	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	3.9	1		11/27/13 04:55	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	7.7	1		11/27/13 04:55	75-71-8	
1,1-Dichloroethane	ND	ug/kg	3.9	1		11/27/13 04:55	75-34-3	
1,2-Dichloroethane	ND	ug/kg	3.9	1		11/27/13 04:55	107-06-2	
1,1-Dichloroethene	ND	ug/kg	3.9	1		11/27/13 04:55	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	3.9	1		11/27/13 04:55	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	3.9	1		11/27/13 04:55	156-60-5	
1,2-Dichloropropane	ND	ug/kg	3.9	1		11/27/13 04:55	78-87-5	
1,3-Dichloropropane	ND	ug/kg	3.9	1		11/27/13 04:55	142-28-9	
2,2-Dichloropropane	ND	ug/kg	3.9	1		11/27/13 04:55	594-20-7	
1,1-Dichloropropene	ND	ug/kg	3.9	1		11/27/13 04:55	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	3.9	1		11/27/13 04:55	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	3.9	1		11/27/13 04:55	10061-02-6	
Diisopropyl ether	ND	ug/kg	3.9	1		11/27/13 04:55	108-20-3	
Ethylbenzene	ND	ug/kg	3.9	1		11/27/13 04:55	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	3.9	1		11/27/13 04:55	87-68-3	
2-Hexanone	ND	ug/kg	38.7	1		11/27/13 04:55	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	3.9	1		11/27/13 04:55	98-82-8	
p-Isopropyltoluene	ND	ug/kg	3.9	1		11/27/13 04:55	99-87-6	
Methylene Chloride	ND	ug/kg	15.5	1		11/27/13 04:55	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	38.7	1		11/27/13 04:55	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	3.9	1		11/27/13 04:55	1634-04-4	
Naphthalene	ND	ug/kg	3.9	1		11/27/13 04:55	91-20-3	
n-Propylbenzene	ND	ug/kg	3.9	1		11/27/13 04:55	103-65-1	
Styrene	ND	ug/kg	3.9	1		11/27/13 04:55	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	3.9	1		11/27/13 04:55	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	3.9	1		11/27/13 04:55	79-34-5	
Tetrachloroethene	ND	ug/kg	3.9	1		11/27/13 04:55	127-18-4	
Toluene	ND	ug/kg	3.9	1		11/27/13 04:55	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	3.9	1		11/27/13 04:55	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	3.9	1		11/27/13 04:55	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	3.9	1		11/27/13 04:55	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	3.9	1		11/27/13 04:55	79-00-5	
Trichloroethene	ND	ug/kg	3.9	1		11/27/13 04:55	79-01-6	
Trichlorofluoromethane	ND	ug/kg	3.9	1		11/27/13 04:55	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	3.9	1		11/27/13 04:55	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	3.9	1		11/27/13 04:55	95-63-6	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



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 Kinsey Ave. Suite 100  
 Huntersville, NC 28078  
 (704)875-9092

### ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1  
 Pace Project No.: 92180233

**Sample: B2**      **Lab ID: 92180233018**      Collected: 11/18/13 15:35      Received: 11/20/13 14:15      Matrix: Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260/5035A Volatile Organics</b>		Analytical Method: EPA 8260						
1,3,5-Trimethylbenzene	ND	ug/kg	3.9	1		11/27/13 04:55	108-67-8	
Vinyl acetate	ND	ug/kg	38.7	1		11/27/13 04:55	108-05-4	
Vinyl chloride	ND	ug/kg	7.7	1		11/27/13 04:55	75-01-4	
Xylene (Total)	ND	ug/kg	7.7	1		11/27/13 04:55	1330-20-7	
m&p-Xylene	ND	ug/kg	7.7	1		11/27/13 04:55	179601-23-1	
o-Xylene	ND	ug/kg	3.9	1		11/27/13 04:55	95-47-6	
<b>Surrogates</b>								
Toluene-d8 (S)	101	%	70-130	1		11/27/13 04:55	2037-26-5	
4-Bromofluorobenzene (S)	100	%	70-130	1		11/27/13 04:55	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	70-132	1		11/27/13 04:55	17060-07-0	
<b>Percent Moisture</b>		Analytical Method: ASTM D2974-87						
Percent Moisture	<b>16.0</b>	%	0.10	1		12/04/13 08:24		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
 without the written consent of Pace Analytical Services, Inc..



## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B1**      **Lab ID: 92180233019**      Collected: 11/18/13 15:40      Received: 11/20/13 14:15      Matrix: Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Microwave</b>		Analytical Method: EPA 8270    Preparation Method: EPA 3546						
Acenaphthene	ND	ug/kg	417	1	11/21/13 10:55	12/03/13 16:54	83-32-9	
Acenaphthylene	ND	ug/kg	417	1	11/21/13 10:55	12/03/13 16:54	208-96-8	
Aniline	ND	ug/kg	417	1	11/21/13 10:55	12/03/13 16:54	62-53-3	
Anthracene	ND	ug/kg	417	1	11/21/13 10:55	12/03/13 16:54	120-12-7	
Benzo(a)anthracene	ND	ug/kg	417	1	11/21/13 10:55	12/03/13 16:54	56-55-3	
Benzo(a)pyrene	ND	ug/kg	417	1	11/21/13 10:55	12/03/13 16:54	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	417	1	11/21/13 10:55	12/03/13 16:54	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	417	1	11/21/13 10:55	12/03/13 16:54	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	417	1	11/21/13 10:55	12/03/13 16:54	207-08-9	
Benzoic Acid	ND	ug/kg	2080	1	11/21/13 10:55	12/03/13 16:54	65-85-0	
Benzyl alcohol	ND	ug/kg	833	1	11/21/13 10:55	12/03/13 16:54	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	417	1	11/21/13 10:55	12/03/13 16:54	101-55-3	
Butylbenzylphthalate	ND	ug/kg	417	1	11/21/13 10:55	12/03/13 16:54	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	833	1	11/21/13 10:55	12/03/13 16:54	59-50-7	
4-Chloroaniline	ND	ug/kg	2080	1	11/21/13 10:55	12/03/13 16:54	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	417	1	11/21/13 10:55	12/03/13 16:54	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	417	1	11/21/13 10:55	12/03/13 16:54	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	417	1	11/21/13 10:55	12/03/13 16:54	108-60-1	
2-Chloronaphthalene	ND	ug/kg	417	1	11/21/13 10:55	12/03/13 16:54	91-58-7	
2-Chlorophenol	ND	ug/kg	417	1	11/21/13 10:55	12/03/13 16:54	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	417	1	11/21/13 10:55	12/03/13 16:54	7005-72-3	
Chrysene	ND	ug/kg	417	1	11/21/13 10:55	12/03/13 16:54	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	417	1	11/21/13 10:55	12/03/13 16:54	53-70-3	
Dibenzofuran	ND	ug/kg	417	1	11/21/13 10:55	12/03/13 16:54	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	417	1	11/21/13 10:55	12/03/13 16:54	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	417	1	11/21/13 10:55	12/03/13 16:54	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	417	1	11/21/13 10:55	12/03/13 16:54	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	2080	1	11/21/13 10:55	12/03/13 16:54	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	417	1	11/21/13 10:55	12/03/13 16:54	120-83-2	
Diethylphthalate	ND	ug/kg	417	1	11/21/13 10:55	12/03/13 16:54	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	417	1	11/21/13 10:55	12/03/13 16:54	105-67-9	
Dimethylphthalate	ND	ug/kg	417	1	11/21/13 10:55	12/03/13 16:54	131-11-3	
Di-n-butylphthalate	ND	ug/kg	417	1	11/21/13 10:55	12/03/13 16:54	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	833	1	11/21/13 10:55	12/03/13 16:54	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	2080	1	11/21/13 10:55	12/03/13 16:54	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	417	1	11/21/13 10:55	12/03/13 16:54	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	417	1	11/21/13 10:55	12/03/13 16:54	606-20-2	
Di-n-octylphthalate	ND	ug/kg	417	1	11/21/13 10:55	12/03/13 16:54	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	417	1	11/21/13 10:55	12/03/13 16:54	117-81-7	
Fluoranthene	ND	ug/kg	417	1	11/21/13 10:55	12/03/13 16:54	206-44-0	
Fluorene	ND	ug/kg	417	1	11/21/13 10:55	12/03/13 16:54	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	417	1	11/21/13 10:55	12/03/13 16:54	87-68-3	
Hexachlorobenzene	ND	ug/kg	417	1	11/21/13 10:55	12/03/13 16:54	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	417	1	11/21/13 10:55	12/03/13 16:54	77-47-4	
Hexachloroethane	ND	ug/kg	417	1	11/21/13 10:55	12/03/13 16:54	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	417	1	11/21/13 10:55	12/03/13 16:54	193-39-5	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B1**      **Lab ID: 92180233019**      Collected: 11/18/13 15:40      Received: 11/20/13 14:15      Matrix: Solid

*Results reported on a "dry-weight" basis*

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV Microwave</b>		Analytical Method: EPA 8270    Preparation Method: EPA 3546						
Isophorone	ND	ug/kg	417	1	11/21/13 10:55	12/03/13 16:54	78-59-1	
1-Methylnaphthalene	ND	ug/kg	417	1	11/21/13 10:55	12/03/13 16:54	90-12-0	
2-Methylnaphthalene	ND	ug/kg	417	1	11/21/13 10:55	12/03/13 16:54	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	417	1	11/21/13 10:55	12/03/13 16:54	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	417	1	11/21/13 10:55	12/03/13 16:54		
Naphthalene	ND	ug/kg	417	1	11/21/13 10:55	12/03/13 16:54	91-20-3	
2-Nitroaniline	ND	ug/kg	2080	1	11/21/13 10:55	12/03/13 16:54	88-74-4	
3-Nitroaniline	ND	ug/kg	2080	1	11/21/13 10:55	12/03/13 16:54	99-09-2	
4-Nitroaniline	ND	ug/kg	833	1	11/21/13 10:55	12/03/13 16:54	100-01-6	
Nitrobenzene	ND	ug/kg	417	1	11/21/13 10:55	12/03/13 16:54	98-95-3	
2-Nitrophenol	ND	ug/kg	417	1	11/21/13 10:55	12/03/13 16:54	88-75-5	
4-Nitrophenol	ND	ug/kg	2080	1	11/21/13 10:55	12/03/13 16:54	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	417	1	11/21/13 10:55	12/03/13 16:54	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	417	1	11/21/13 10:55	12/03/13 16:54	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	417	1	11/21/13 10:55	12/03/13 16:54	86-30-6	
Pentachlorophenol	ND	ug/kg	2080	1	11/21/13 10:55	12/03/13 16:54	87-86-5	
Phenanthrene	ND	ug/kg	417	1	11/21/13 10:55	12/03/13 16:54	85-01-8	
Phenol	ND	ug/kg	417	1	11/21/13 10:55	12/03/13 16:54	108-95-2	
Pyrene	ND	ug/kg	417	1	11/21/13 10:55	12/03/13 16:54	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/kg	417	1	11/21/13 10:55	12/03/13 16:54	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	417	1	11/21/13 10:55	12/03/13 16:54	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	417	1	11/21/13 10:55	12/03/13 16:54	88-06-2	
<b>Surrogates</b>								
Nitrobenzene-d5 (S)	48 %		23-110	1	11/21/13 10:55	12/03/13 16:54	4165-60-0	
2-Fluorobiphenyl (S)	44 %		30-110	1	11/21/13 10:55	12/03/13 16:54	321-60-8	
Terphenyl-d14 (S)	47 %		28-110	1	11/21/13 10:55	12/03/13 16:54	1718-51-0	
Phenol-d6 (S)	68 %		22-110	1	11/21/13 10:55	12/03/13 16:54	13127-88-3	
2-Fluorophenol (S)	67 %		13-110	1	11/21/13 10:55	12/03/13 16:54	367-12-4	
2,4,6-Tribromophenol (S)	53 %		27-110	1	11/21/13 10:55	12/03/13 16:54	118-79-6	
<b>8260/5035A Volatile Organics</b>		Analytical Method: EPA 8260						
Acetone	ND	ug/kg	81.7	1		11/27/13 05:14	67-64-1	
Benzene	ND	ug/kg	4.1	1		11/27/13 05:14	71-43-2	
Bromobenzene	ND	ug/kg	4.1	1		11/27/13 05:14	108-86-1	
Bromochloromethane	ND	ug/kg	4.1	1		11/27/13 05:14	74-97-5	
Bromodichloromethane	ND	ug/kg	4.1	1		11/27/13 05:14	75-27-4	
Bromoform	ND	ug/kg	4.1	1		11/27/13 05:14	75-25-2	
Bromomethane	ND	ug/kg	8.2	1		11/27/13 05:14	74-83-9	
2-Butanone (MEK)	ND	ug/kg	81.7	1		11/27/13 05:14	78-93-3	
n-Butylbenzene	ND	ug/kg	4.1	1		11/27/13 05:14	104-51-8	
sec-Butylbenzene	ND	ug/kg	4.1	1		11/27/13 05:14	135-98-8	
tert-Butylbenzene	ND	ug/kg	4.1	1		11/27/13 05:14	98-06-6	
Carbon tetrachloride	ND	ug/kg	4.1	1		11/27/13 05:14	56-23-5	
Chlorobenzene	ND	ug/kg	4.1	1		11/27/13 05:14	108-90-7	
Chloroethane	ND	ug/kg	8.2	1		11/27/13 05:14	75-00-3	
Chloroform	ND	ug/kg	4.1	1		11/27/13 05:14	67-66-3	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B1**      **Lab ID: 92180233019**      Collected: 11/18/13 15:40      Received: 11/20/13 14:15      Matrix: Solid

*Results reported on a "dry-weight" basis*

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260/5035A Volatile Organics</b>		Analytical Method: EPA 8260						
Chloromethane	ND	ug/kg	8.2	1		11/27/13 05:14	74-87-3	
2-Chlorotoluene	ND	ug/kg	4.1	1		11/27/13 05:14	95-49-8	
4-Chlorotoluene	ND	ug/kg	4.1	1		11/27/13 05:14	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	4.1	1		11/27/13 05:14	96-12-8	
Dibromochloromethane	ND	ug/kg	4.1	1		11/27/13 05:14	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	4.1	1		11/27/13 05:14	106-93-4	
Dibromomethane	ND	ug/kg	4.1	1		11/27/13 05:14	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	4.1	1		11/27/13 05:14	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	4.1	1		11/27/13 05:14	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	4.1	1		11/27/13 05:14	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	8.2	1		11/27/13 05:14	75-71-8	
1,1-Dichloroethane	ND	ug/kg	4.1	1		11/27/13 05:14	75-34-3	
1,2-Dichloroethane	ND	ug/kg	4.1	1		11/27/13 05:14	107-06-2	
1,1-Dichloroethene	ND	ug/kg	4.1	1		11/27/13 05:14	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	4.1	1		11/27/13 05:14	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	4.1	1		11/27/13 05:14	156-60-5	
1,2-Dichloropropane	ND	ug/kg	4.1	1		11/27/13 05:14	78-87-5	
1,3-Dichloropropane	ND	ug/kg	4.1	1		11/27/13 05:14	142-28-9	
2,2-Dichloropropane	ND	ug/kg	4.1	1		11/27/13 05:14	594-20-7	
1,1-Dichloropropene	ND	ug/kg	4.1	1		11/27/13 05:14	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	4.1	1		11/27/13 05:14	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	4.1	1		11/27/13 05:14	10061-02-6	
Diisopropyl ether	ND	ug/kg	4.1	1		11/27/13 05:14	108-20-3	
Ethylbenzene	ND	ug/kg	4.1	1		11/27/13 05:14	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	4.1	1		11/27/13 05:14	87-68-3	
2-Hexanone	ND	ug/kg	40.8	1		11/27/13 05:14	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	4.1	1		11/27/13 05:14	98-82-8	
p-Isopropyltoluene	ND	ug/kg	4.1	1		11/27/13 05:14	99-87-6	
Methylene Chloride	ND	ug/kg	16.3	1		11/27/13 05:14	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	40.8	1		11/27/13 05:14	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	4.1	1		11/27/13 05:14	1634-04-4	
Naphthalene	ND	ug/kg	4.1	1		11/27/13 05:14	91-20-3	
n-Propylbenzene	ND	ug/kg	4.1	1		11/27/13 05:14	103-65-1	
Styrene	ND	ug/kg	4.1	1		11/27/13 05:14	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	4.1	1		11/27/13 05:14	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	4.1	1		11/27/13 05:14	79-34-5	
Tetrachloroethene	ND	ug/kg	4.1	1		11/27/13 05:14	127-18-4	
Toluene	ND	ug/kg	4.1	1		11/27/13 05:14	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	4.1	1		11/27/13 05:14	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	4.1	1		11/27/13 05:14	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	4.1	1		11/27/13 05:14	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	4.1	1		11/27/13 05:14	79-00-5	
Trichloroethene	ND	ug/kg	4.1	1		11/27/13 05:14	79-01-6	
Trichlorofluoromethane	ND	ug/kg	4.1	1		11/27/13 05:14	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	4.1	1		11/27/13 05:14	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	4.1	1		11/27/13 05:14	95-63-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



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 Kinsey Ave. Suite 100  
 Huntersville, NC 28078  
 (704)875-9092

### ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

**Sample: B1**      **Lab ID: 92180233019**      Collected: 11/18/13 15:40      Received: 11/20/13 14:15      Matrix: Solid

*Results reported on a "dry-weight" basis*

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260/5035A Volatile Organics</b>		Analytical Method: EPA 8260						
1,3,5-Trimethylbenzene	ND	ug/kg	4.1	1		11/27/13 05:14	108-67-8	
Vinyl acetate	ND	ug/kg	40.8	1		11/27/13 05:14	108-05-4	
Vinyl chloride	ND	ug/kg	8.2	1		11/27/13 05:14	75-01-4	
Xylene (Total)	ND	ug/kg	8.2	1		11/27/13 05:14	1330-20-7	
m&p-Xylene	ND	ug/kg	8.2	1		11/27/13 05:14	179601-23-1	
o-Xylene	ND	ug/kg	4.1	1		11/27/13 05:14	95-47-6	
<b>Surrogates</b>								
Toluene-d8 (S)	98	%	70-130	1		11/27/13 05:14	2037-26-5	
4-Bromofluorobenzene (S)	106	%	70-130	1		11/27/13 05:14	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	70-132	1		11/27/13 05:14	17060-07-0	
<b>Percent Moisture</b>		Analytical Method: ASTM D2974-87						
Percent Moisture	<b>20.8</b>	%	0.10	1		12/04/13 08:24		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
 without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

QC Batch: MSV/25027 Analysis Method: EPA 8260  
 QC Batch Method: EPA 8260 Analysis Description: 8260 MSV 5035A Volatile Organics  
 Associated Lab Samples: 92180233001, 92180233002, 92180233003

METHOD BLANK: 1093600 Matrix: Solid

Associated Lab Samples: 92180233001, 92180233002, 92180233003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	5.4	11/25/13 18:32	
1,1,1-Trichloroethane	ug/kg	ND	5.4	11/25/13 18:32	
1,1,2,2-Tetrachloroethane	ug/kg	ND	5.4	11/25/13 18:32	
1,1,2-Trichloroethane	ug/kg	ND	5.4	11/25/13 18:32	
1,1-Dichloroethane	ug/kg	ND	5.4	11/25/13 18:32	
1,1-Dichloroethene	ug/kg	ND	5.4	11/25/13 18:32	
1,1-Dichloropropene	ug/kg	ND	5.4	11/25/13 18:32	
1,2,3-Trichlorobenzene	ug/kg	ND	5.4	11/25/13 18:32	
1,2,3-Trichloropropane	ug/kg	ND	5.4	11/25/13 18:32	
1,2,4-Trichlorobenzene	ug/kg	ND	5.4	11/25/13 18:32	
1,2,4-Trimethylbenzene	ug/kg	ND	5.4	11/25/13 18:32	
1,2-Dibromo-3-chloropropane	ug/kg	ND	5.4	11/25/13 18:32	
1,2-Dibromoethane (EDB)	ug/kg	ND	5.4	11/25/13 18:32	
1,2-Dichlorobenzene	ug/kg	ND	5.4	11/25/13 18:32	
1,2-Dichloroethane	ug/kg	ND	5.4	11/25/13 18:32	
1,2-Dichloropropane	ug/kg	ND	5.4	11/25/13 18:32	
1,3,5-Trimethylbenzene	ug/kg	ND	5.4	11/25/13 18:32	
1,3-Dichlorobenzene	ug/kg	ND	5.4	11/25/13 18:32	
1,3-Dichloropropane	ug/kg	ND	5.4	11/25/13 18:32	
1,4-Dichlorobenzene	ug/kg	ND	5.4	11/25/13 18:32	
2,2-Dichloropropane	ug/kg	ND	5.4	11/25/13 18:32	
2-Butanone (MEK)	ug/kg	ND	108	11/25/13 18:32	
2-Chlorotoluene	ug/kg	ND	5.4	11/25/13 18:32	
2-Hexanone	ug/kg	ND	53.8	11/25/13 18:32	
4-Chlorotoluene	ug/kg	ND	5.4	11/25/13 18:32	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	53.8	11/25/13 18:32	
Acetone	ug/kg	ND	108	11/25/13 18:32	
Benzene	ug/kg	ND	5.4	11/25/13 18:32	
Bromobenzene	ug/kg	ND	5.4	11/25/13 18:32	
Bromochloromethane	ug/kg	ND	5.4	11/25/13 18:32	
Bromodichloromethane	ug/kg	ND	5.4	11/25/13 18:32	
Bromoform	ug/kg	ND	5.4	11/25/13 18:32	
Bromomethane	ug/kg	ND	10.8	11/25/13 18:32	
Carbon tetrachloride	ug/kg	ND	5.4	11/25/13 18:32	
Chlorobenzene	ug/kg	ND	5.4	11/25/13 18:32	
Chloroethane	ug/kg	ND	10.8	11/25/13 18:32	
Chloroform	ug/kg	ND	5.4	11/25/13 18:32	
Chloromethane	ug/kg	ND	10.8	11/25/13 18:32	
cis-1,2-Dichloroethene	ug/kg	ND	5.4	11/25/13 18:32	
cis-1,3-Dichloropropene	ug/kg	ND	5.4	11/25/13 18:32	
Dibromochloromethane	ug/kg	ND	5.4	11/25/13 18:32	
Dibromomethane	ug/kg	ND	5.4	11/25/13 18:32	
Dichlorodifluoromethane	ug/kg	ND	10.8	11/25/13 18:32	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

METHOD BLANK: 1093600

Matrix: Solid

Associated Lab Samples: 92180233001, 92180233002, 92180233003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diisopropyl ether	ug/kg	ND	5.4	11/25/13 18:32	
Ethylbenzene	ug/kg	ND	5.4	11/25/13 18:32	
Hexachloro-1,3-butadiene	ug/kg	ND	5.4	11/25/13 18:32	
Isopropylbenzene (Cumene)	ug/kg	ND	5.4	11/25/13 18:32	
m&p-Xylene	ug/kg	ND	10.8	11/25/13 18:32	
Methyl-tert-butyl ether	ug/kg	ND	5.4	11/25/13 18:32	
Methylene Chloride	ug/kg	ND	21.5	11/25/13 18:32	
n-Butylbenzene	ug/kg	ND	5.4	11/25/13 18:32	
n-Propylbenzene	ug/kg	ND	5.4	11/25/13 18:32	
Naphthalene	ug/kg	ND	5.4	11/25/13 18:32	
o-Xylene	ug/kg	ND	5.4	11/25/13 18:32	
p-Isopropyltoluene	ug/kg	ND	5.4	11/25/13 18:32	
sec-Butylbenzene	ug/kg	ND	5.4	11/25/13 18:32	
Styrene	ug/kg	ND	5.4	11/25/13 18:32	
tert-Butylbenzene	ug/kg	ND	5.4	11/25/13 18:32	
Tetrachloroethene	ug/kg	ND	5.4	11/25/13 18:32	
Toluene	ug/kg	ND	5.4	11/25/13 18:32	
trans-1,2-Dichloroethene	ug/kg	ND	5.4	11/25/13 18:32	
trans-1,3-Dichloropropene	ug/kg	ND	5.4	11/25/13 18:32	
Trichloroethene	ug/kg	ND	5.4	11/25/13 18:32	
Trichlorofluoromethane	ug/kg	ND	5.4	11/25/13 18:32	
Vinyl acetate	ug/kg	ND	53.8	11/25/13 18:32	
Vinyl chloride	ug/kg	ND	10.8	11/25/13 18:32	
Xylene (Total)	ug/kg	ND	10.8	11/25/13 18:32	
1,2-Dichloroethane-d4 (S)	%	109	70-132	11/25/13 18:32	
4-Bromofluorobenzene (S)	%	106	70-130	11/25/13 18:32	
Toluene-d8 (S)	%	101	70-130	11/25/13 18:32	

LABORATORY CONTROL SAMPLE: 1093601

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	52.6	48.6	92	70-131	
1,1,1-Trichloroethane	ug/kg	52.6	46.7	89	70-141	
1,1,2,2-Tetrachloroethane	ug/kg	52.6	46.6	89	70-130	
1,1,2-Trichloroethane	ug/kg	52.6	49.3	94	70-132	
1,1-Dichloroethane	ug/kg	52.6	42.8	81	70-143	
1,1-Dichloroethene	ug/kg	52.6	42.7	81	70-137	
1,1-Dichloropropene	ug/kg	52.6	44.6	85	70-135	
1,2,3-Trichlorobenzene	ug/kg	52.6	47.0	89	69-153	
1,2,3-Trichloropropane	ug/kg	52.6	48.3	92	70-130	
1,2,4-Trichlorobenzene	ug/kg	52.6	44.6	85	55-171	
1,2,4-Trimethylbenzene	ug/kg	52.6	45.6	87	70-149	
1,2-Dibromo-3-chloropropane	ug/kg	52.6	48.5	92	68-141	
1,2-Dibromoethane (EDB)	ug/kg	52.6	48.0	91	70-130	
1,2-Dichlorobenzene	ug/kg	52.6	47.4	90	70-140	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### QUALITY CONTROL DATA

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

LABORATORY CONTROL SAMPLE: 1093601

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/kg	52.6	46.8	89	70-137	
1,2-Dichloropropane	ug/kg	52.6	45.4	86	70-133	
1,3,5-Trimethylbenzene	ug/kg	52.6	45.5	86	70-143	
1,3-Dichlorobenzene	ug/kg	52.6	45.2	86	70-144	
1,3-Dichloropropane	ug/kg	52.6	46.5	88	70-132	
1,4-Dichlorobenzene	ug/kg	52.6	45.6	87	70-142	
2,2-Dichloropropane	ug/kg	52.6	44.9	85	68-152	
2-Butanone (MEK)	ug/kg	105	93J	88	70-149	
2-Chlorotoluene	ug/kg	52.6	44.2	84	70-141	
2-Hexanone	ug/kg	105	90.9	86	70-149	
4-Chlorotoluene	ug/kg	52.6	46.1	88	70-149	
4-Methyl-2-pentanone (MIBK)	ug/kg	105	95.3	91	70-153	
Acetone	ug/kg	105	89.9J	85	70-157	
Benzene	ug/kg	52.6	44.0	84	70-130	
Bromobenzene	ug/kg	52.6	44.3	84	70-141	
Bromochloromethane	ug/kg	52.6	46.4	88	70-149	
Bromodichloromethane	ug/kg	52.6	46.4	88	70-130	
Bromoform	ug/kg	52.6	48.8	93	70-131	
Bromomethane	ug/kg	52.6	44.7	85	64-136	
Carbon tetrachloride	ug/kg	52.6	44.6	85	70-154	
Chlorobenzene	ug/kg	52.6	45.4	86	70-135	
Chloroethane	ug/kg	52.6	40.3	77	68-151	
Chloroform	ug/kg	52.6	45.4	86	70-130	
Chloromethane	ug/kg	52.6	44.4	84	70-132	
cis-1,2-Dichloroethene	ug/kg	52.6	42.9	82	70-140	
cis-1,3-Dichloropropene	ug/kg	52.6	47.1	90	70-137	
Dibromochloromethane	ug/kg	52.6	48.9	93	70-130	
Dibromomethane	ug/kg	52.6	46.5	88	70-136	
Dichlorodifluoromethane	ug/kg	52.6	38.5	73	36-148	
Diisopropyl ether	ug/kg	52.6	44.5	85	70-139	
Ethylbenzene	ug/kg	52.6	45.2	86	70-137	
Hexachloro-1,3-butadiene	ug/kg	52.6	49.0	93	70-145	
Isopropylbenzene (Cumene)	ug/kg	52.6	48.3	92	70-141	
m&p-Xylene	ug/kg	105	93.3	89	70-140	
Methyl-tert-butyl ether	ug/kg	52.6	47.7	91	45-150	
Methylene Chloride	ug/kg	52.6	38.4	73	70-133	
n-Butylbenzene	ug/kg	52.6	45.8	87	65-155	
n-Propylbenzene	ug/kg	52.6	46.0	87	70-148	
Naphthalene	ug/kg	52.6	46.5	88	70-148	
o-Xylene	ug/kg	52.6	47.7	91	70-141	
p-Isopropyltoluene	ug/kg	52.6	49.2	93	70-148	
sec-Butylbenzene	ug/kg	52.6	47.8	91	70-145	
Styrene	ug/kg	52.6	48.1	91	70-138	
tert-Butylbenzene	ug/kg	52.6	49.2	93	70-143	
Tetrachloroethene	ug/kg	52.6	46.4	88	70-140	
Toluene	ug/kg	52.6	45.6	87	70-130	
trans-1,2-Dichloroethene	ug/kg	52.6	42.4	81	70-136	
trans-1,3-Dichloropropene	ug/kg	52.6	48.1	91	70-138	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

LABORATORY CONTROL SAMPLE: 1093601

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Trichloroethene	ug/kg	52.6	46.4	88	70-132	
Trichlorofluoromethane	ug/kg	52.6	46.0	87	69-134	
Vinyl acetate	ug/kg	105	96.3	91	24-161	
Vinyl chloride	ug/kg	52.6	40.1	76	55-140	
Xylene (Total)	ug/kg	158	141	89	70-141	
1,2-Dichloroethane-d4 (S)	%			102	70-132	
4-Bromofluorobenzene (S)	%			104	70-130	
Toluene-d8 (S)	%			100	70-130	

MATRIX SPIKE SAMPLE: 1094091

Parameter	Units	92180233001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/kg		ND	59.6	50.4	85	49-180
Benzene	ug/kg		ND	59.6	56.3	95	50-166
Chlorobenzene	ug/kg		ND	59.6	54.5	92	43-169
Toluene	ug/kg		ND	59.6	52.5	88	52-163
Trichloroethene	ug/kg		ND	59.6	54.8	92	49-167
1,2-Dichloroethane-d4 (S)	%					98	70-132
4-Bromofluorobenzene (S)	%					100	70-130
Toluene-d8 (S)	%					98	70-130

SAMPLE DUPLICATE: 1094067

Parameter	Units	92179825002 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-Dichloroethane	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		
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		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### QUALITY CONTROL DATA

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

SAMPLE DUPLICATE: 1094067

Parameter	Units	92179825002 Result	Dup Result	RPD	Qualifiers
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	18.9J		
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		
Xylene (Total)	ug/kg	ND	ND		
1,2-Dichloroethane-d4 (S)	%	97	92		1
4-Bromofluorobenzene (S)	%	99	107		12

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
 without the written consent of Pace Analytical Services, Inc..



**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 Kinsey Ave. Suite 100  
Huntersville, NC 28078  
(704)875-9092

### QUALITY CONTROL DATA

Project: NCDOT SUGAR CREEK 41141.1.1  
Pace Project No.: 92180233

SAMPLE DUPLICATE: 1094067

Parameter	Units	92179825002 Result	Dup Result	RPD	Qualifiers
Toluene-d8 (S)	%	101	102	5	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

QC Batch: MSV/25028 Analysis Method: EPA 8260  
 QC Batch Method: EPA 8260 Analysis Description: 8260 MSV 5035A Volatile Organics  
 Associated Lab Samples: 92180233004, 92180233005, 92180233006, 92180233007, 92180233008, 92180233009

METHOD BLANK: 1093602 Matrix: Solid  
 Associated Lab Samples: 92180233004, 92180233005, 92180233006, 92180233007, 92180233008, 92180233009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	5.0	11/25/13 18:12	
1,1,1-Trichloroethane	ug/kg	ND	5.0	11/25/13 18:12	
1,1,2,2-Tetrachloroethane	ug/kg	ND	5.0	11/25/13 18:12	
1,1,2-Trichloroethane	ug/kg	ND	5.0	11/25/13 18:12	
1,1-Dichloroethane	ug/kg	ND	5.0	11/25/13 18:12	
1,1-Dichloroethene	ug/kg	ND	5.0	11/25/13 18:12	
1,1-Dichloropropene	ug/kg	ND	5.0	11/25/13 18:12	
1,2,3-Trichlorobenzene	ug/kg	ND	5.0	11/25/13 18:12	
1,2,3-Trichloropropane	ug/kg	ND	5.0	11/25/13 18:12	
1,2,4-Trichlorobenzene	ug/kg	ND	5.0	11/25/13 18:12	
1,2,4-Trimethylbenzene	ug/kg	ND	5.0	11/25/13 18:12	
1,2-Dibromo-3-chloropropane	ug/kg	ND	5.0	11/25/13 18:12	
1,2-Dibromoethane (EDB)	ug/kg	ND	5.0	11/25/13 18:12	
1,2-Dichlorobenzene	ug/kg	ND	5.0	11/25/13 18:12	
1,2-Dichloroethane	ug/kg	ND	5.0	11/25/13 18:12	
1,2-Dichloropropane	ug/kg	ND	5.0	11/25/13 18:12	
1,3,5-Trimethylbenzene	ug/kg	ND	5.0	11/25/13 18:12	
1,3-Dichlorobenzene	ug/kg	ND	5.0	11/25/13 18:12	
1,3-Dichloropropane	ug/kg	ND	5.0	11/25/13 18:12	
1,4-Dichlorobenzene	ug/kg	ND	5.0	11/25/13 18:12	
2,2-Dichloropropane	ug/kg	ND	5.0	11/25/13 18:12	
2-Butanone (MEK)	ug/kg	ND	100	11/25/13 18:12	
2-Chlorotoluene	ug/kg	ND	5.0	11/25/13 18:12	
2-Hexanone	ug/kg	ND	50.1	11/25/13 18:12	
4-Chlorotoluene	ug/kg	ND	5.0	11/25/13 18:12	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	50.1	11/25/13 18:12	
Acetone	ug/kg	ND	100	11/25/13 18:12	
Benzene	ug/kg	ND	5.0	11/25/13 18:12	
Bromobenzene	ug/kg	ND	5.0	11/25/13 18:12	
Bromochloromethane	ug/kg	ND	5.0	11/25/13 18:12	
Bromodichloromethane	ug/kg	ND	5.0	11/25/13 18:12	
Bromoform	ug/kg	ND	5.0	11/25/13 18:12	
Bromomethane	ug/kg	ND	10.0	11/25/13 18:12	
Carbon tetrachloride	ug/kg	ND	5.0	11/25/13 18:12	
Chlorobenzene	ug/kg	ND	5.0	11/25/13 18:12	
Chloroethane	ug/kg	ND	10.0	11/25/13 18:12	
Chloroform	ug/kg	ND	5.0	11/25/13 18:12	
Chloromethane	ug/kg	ND	10.0	11/25/13 18:12	
cis-1,2-Dichloroethene	ug/kg	ND	5.0	11/25/13 18:12	
cis-1,3-Dichloropropene	ug/kg	ND	5.0	11/25/13 18:12	
Dibromochloromethane	ug/kg	ND	5.0	11/25/13 18:12	
Dibromomethane	ug/kg	ND	5.0	11/25/13 18:12	
Dichlorodifluoromethane	ug/kg	ND	10.0	11/25/13 18:12	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

METHOD BLANK: 1093602

Matrix: Solid

Associated Lab Samples: 92180233004, 92180233005, 92180233006, 92180233007, 92180233008, 92180233009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diisopropyl ether	ug/kg	ND	5.0	11/25/13 18:12	
Ethylbenzene	ug/kg	ND	5.0	11/25/13 18:12	
Hexachloro-1,3-butadiene	ug/kg	ND	5.0	11/25/13 18:12	
Isopropylbenzene (Cumene)	ug/kg	ND	5.0	11/25/13 18:12	
m&p-Xylene	ug/kg	ND	10.0	11/25/13 18:12	
Methyl-tert-butyl ether	ug/kg	ND	5.0	11/25/13 18:12	
Methylene Chloride	ug/kg	ND	20.0	11/25/13 18:12	
n-Butylbenzene	ug/kg	ND	5.0	11/25/13 18:12	
n-Propylbenzene	ug/kg	ND	5.0	11/25/13 18:12	
Naphthalene	ug/kg	ND	5.0	11/25/13 18:12	
o-Xylene	ug/kg	ND	5.0	11/25/13 18:12	
p-Isopropyltoluene	ug/kg	ND	5.0	11/25/13 18:12	
sec-Butylbenzene	ug/kg	ND	5.0	11/25/13 18:12	
Styrene	ug/kg	ND	5.0	11/25/13 18:12	
tert-Butylbenzene	ug/kg	ND	5.0	11/25/13 18:12	
Tetrachloroethene	ug/kg	ND	5.0	11/25/13 18:12	
Toluene	ug/kg	ND	5.0	11/25/13 18:12	
trans-1,2-Dichloroethene	ug/kg	ND	5.0	11/25/13 18:12	
trans-1,3-Dichloropropene	ug/kg	ND	5.0	11/25/13 18:12	
Trichloroethene	ug/kg	ND	5.0	11/25/13 18:12	
Trichlorofluoromethane	ug/kg	ND	5.0	11/25/13 18:12	
Vinyl acetate	ug/kg	ND	50.1	11/25/13 18:12	
Vinyl chloride	ug/kg	ND	10.0	11/25/13 18:12	
Xylene (Total)	ug/kg	ND	10.0	11/25/13 18:12	
1,2-Dichloroethane-d4 (S)	%	104	70-132	11/25/13 18:12	
4-Bromofluorobenzene (S)	%	103	70-130	11/25/13 18:12	
Toluene-d8 (S)	%	101	70-130	11/25/13 18:12	

LABORATORY CONTROL SAMPLE: 1093603

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	52.6	64.3	122	70-131	
1,1,1-Trichloroethane	ug/kg	52.6	63.8	121	70-141	
1,1,2,2-Tetrachloroethane	ug/kg	52.6	53.4	102	70-130	
1,1,2-Trichloroethane	ug/kg	52.6	59.3	113	70-132	
1,1-Dichloroethane	ug/kg	52.6	57.8	110	70-143	
1,1-Dichloroethene	ug/kg	52.6	61.3	116	70-137	
1,1-Dichloropropene	ug/kg	52.6	68.5	130	70-135	
1,2,3-Trichlorobenzene	ug/kg	52.6	60.6	115	69-153	
1,2,3-Trichloropropane	ug/kg	52.6	58.1	110	70-130	
1,2,4-Trichlorobenzene	ug/kg	52.6	62.7	119	55-171	
1,2,4-Trimethylbenzene	ug/kg	52.6	63.2	120	70-149	
1,2-Dibromo-3-chloropropane	ug/kg	52.6	56.6	108	68-141	
1,2-Dibromoethane (EDB)	ug/kg	52.6	56.3	107	70-130	
1,2-Dichlorobenzene	ug/kg	52.6	61.7	117	70-140	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### QUALITY CONTROL DATA

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

LABORATORY CONTROL SAMPLE: 1093603

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/kg	52.6	57.5	109	70-137	
1,2-Dichloropropane	ug/kg	52.6	60.3	115	70-133	
1,3,5-Trimethylbenzene	ug/kg	52.6	64.5	123	70-143	
1,3-Dichlorobenzene	ug/kg	52.6	61.6	117	70-144	
1,3-Dichloropropane	ug/kg	52.6	56.7	108	70-132	
1,4-Dichlorobenzene	ug/kg	52.6	62.6	119	70-142	
2,2-Dichloropropane	ug/kg	52.6	63.0	120	68-152	
2-Butanone (MEK)	ug/kg	105	108	103	70-149	
2-Chlorotoluene	ug/kg	52.6	60.2	114	70-141	
2-Hexanone	ug/kg	105	106	100	70-149	
4-Chlorotoluene	ug/kg	52.6	63.0	120	70-149	
4-Methyl-2-pentanone (MIBK)	ug/kg	105	115	109	70-153	
Acetone	ug/kg	105	106	100	70-157	
Benzene	ug/kg	52.6	63.4	120	70-130	
Bromobenzene	ug/kg	52.6	58.7	112	70-141	
Bromochloromethane	ug/kg	52.6	55.8	106	70-149	
Bromodichloromethane	ug/kg	52.6	59.4	113	70-130	
Bromoform	ug/kg	52.6	61.3	116	70-131	
Bromomethane	ug/kg	52.6	58.4	111	64-136	
Carbon tetrachloride	ug/kg	52.6	61.8	117	70-154	
Chlorobenzene	ug/kg	52.6	62.2	118	70-135	
Chloroethane	ug/kg	52.6	53.2	101	68-151	
Chloroform	ug/kg	52.6	59.9	114	70-130	
Chloromethane	ug/kg	52.6	66.8	127	70-132	
cis-1,2-Dichloroethene	ug/kg	52.6	55.5	105	70-140	
cis-1,3-Dichloropropene	ug/kg	52.6	64.1	122	70-137	
Dibromochloromethane	ug/kg	52.6	64.0	122	70-130	
Dibromomethane	ug/kg	52.6	54.1	103	70-136	
Dichlorodifluoromethane	ug/kg	52.6	61.8	117	36-148	
Diisopropyl ether	ug/kg	52.6	57.6	109	70-139	
Ethylbenzene	ug/kg	52.6	63.3	120	70-137	
Hexachloro-1,3-butadiene	ug/kg	52.6	64.6	123	70-145	
Isopropylbenzene (Cumene)	ug/kg	52.6	68.3	130	70-141	
m&p-Xylene	ug/kg	105	135	128	70-140	
Methyl-tert-butyl ether	ug/kg	52.6	56.6	107	45-150	
Methylene Chloride	ug/kg	52.6	51.7	98	70-133	
n-Butylbenzene	ug/kg	52.6	65.2	124	65-155	
n-Propylbenzene	ug/kg	52.6	65.1	124	70-148	
Naphthalene	ug/kg	52.6	57.2	109	70-148	
o-Xylene	ug/kg	52.6	66.6	127	70-141	
p-Isopropyltoluene	ug/kg	52.6	69.0	131	70-148	
sec-Butylbenzene	ug/kg	52.6	65.2	124	70-145	
Styrene	ug/kg	52.6	67.5	128	70-138	
tert-Butylbenzene	ug/kg	52.6	64.7	123	70-143	
Tetrachloroethene	ug/kg	52.6	66.7	127	70-140	
Toluene	ug/kg	52.6	64.5	123	70-130	
trans-1,2-Dichloroethene	ug/kg	52.6	58.3	111	70-136	
trans-1,3-Dichloropropene	ug/kg	52.6	64.5	123	70-138	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

LABORATORY CONTROL SAMPLE: 1093603

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Trichloroethene	ug/kg	52.6	68.2	130	70-132	
Trichlorofluoromethane	ug/kg	52.6	64.2	122	69-134	
Vinyl acetate	ug/kg	105	163	155	24-161	
Vinyl chloride	ug/kg	52.6	55.2	105	55-140	
Xylene (Total)	ug/kg	158	201	127	70-141	
1,2-Dichloroethane-d4 (S)	%			104	70-132	
4-Bromofluorobenzene (S)	%			103	70-130	
Toluene-d8 (S)	%			100	70-130	

MATRIX SPIKE SAMPLE: 1094074

Parameter	Units	92180233005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/kg		ND	43.8	32.7	75	49-180
Benzene	ug/kg		ND	43.8	35.9	82	50-166
Chlorobenzene	ug/kg		ND	43.8	35.9	82	43-169
Toluene	ug/kg		ND	43.8	35.3	81	52-163
Trichloroethene	ug/kg		ND	43.8	36.9	84	49-167
1,2-Dichloroethane-d4 (S)	%					103	70-132
4-Bromofluorobenzene (S)	%					105	70-130
Toluene-d8 (S)	%					99	70-130

SAMPLE DUPLICATE: 1094073

Parameter	Units	92180233004 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-Dichloroethane	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		
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		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



**QUALITY CONTROL DATA**

Project: NCDOT SUGAR CREEK 41141.1.1  
 Pace Project No.: 92180233

SAMPLE DUPLICATE: 1094073

Parameter	Units	92180233004 Result	Dup Result	RPD	Qualifiers
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	ND		
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		
Xylene (Total)	ug/kg	ND	ND		
1,2-Dichloroethane-d4 (S)	%	109	98		3
4-Bromofluorobenzene (S)	%	102	107		19

**REPORT OF LABORATORY ANALYSIS**

This report shall not be reproduced, except in full,  
 without the written consent of Pace Analytical Services, Inc..



**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 Kinsey Ave. Suite 100  
Huntersville, NC 28078  
(704)875-9092

### QUALITY CONTROL DATA

Project: NCDOT SUGAR CREEK 41141.1.1  
Pace Project No.: 92180233

SAMPLE DUPLICATE: 1094073

Parameter	Units	92180233004 Result	Dup Result	RPD	Qualifiers
Toluene-d8 (S)	%	98	101	17	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

QC Batch: MSV/25048 Analysis Method: EPA 8260  
 QC Batch Method: EPA 8260 Analysis Description: 8260 MSV 5035A Volatile Organics  
 Associated Lab Samples: 92180233010, 92180233011, 92180233012, 92180233013, 92180233014, 92180233015, 92180233016,  
 92180233017, 92180233018, 92180233019

METHOD BLANK: 1094556 Matrix: Solid  
 Associated Lab Samples: 92180233010, 92180233011, 92180233012, 92180233013, 92180233014, 92180233015, 92180233016,  
 92180233017, 92180233018, 92180233019

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	5.5	11/26/13 19:44	
1,1,1-Trichloroethane	ug/kg	ND	5.5	11/26/13 19:44	
1,1,2,2-Tetrachloroethane	ug/kg	ND	5.5	11/26/13 19:44	
1,1,2-Trichloroethane	ug/kg	ND	5.5	11/26/13 19:44	
1,1-Dichloroethane	ug/kg	ND	5.5	11/26/13 19:44	
1,1-Dichloroethene	ug/kg	ND	5.5	11/26/13 19:44	
1,1-Dichloropropene	ug/kg	ND	5.5	11/26/13 19:44	
1,2,3-Trichlorobenzene	ug/kg	ND	5.5	11/26/13 19:44	
1,2,3-Trichloropropane	ug/kg	ND	5.5	11/26/13 19:44	
1,2,4-Trichlorobenzene	ug/kg	ND	5.5	11/26/13 19:44	
1,2,4-Trimethylbenzene	ug/kg	ND	5.5	11/26/13 19:44	
1,2-Dibromo-3-chloropropane	ug/kg	ND	5.5	11/26/13 19:44	
1,2-Dibromoethane (EDB)	ug/kg	ND	5.5	11/26/13 19:44	
1,2-Dichlorobenzene	ug/kg	ND	5.5	11/26/13 19:44	
1,2-Dichloroethane	ug/kg	ND	5.5	11/26/13 19:44	
1,2-Dichloropropane	ug/kg	ND	5.5	11/26/13 19:44	
1,3,5-Trimethylbenzene	ug/kg	ND	5.5	11/26/13 19:44	
1,3-Dichlorobenzene	ug/kg	ND	5.5	11/26/13 19:44	
1,3-Dichloropropane	ug/kg	ND	5.5	11/26/13 19:44	
1,4-Dichlorobenzene	ug/kg	ND	5.5	11/26/13 19:44	
2,2-Dichloropropane	ug/kg	ND	5.5	11/26/13 19:44	
2-Butanone (MEK)	ug/kg	ND	110	11/26/13 19:44	
2-Chlorotoluene	ug/kg	ND	5.5	11/26/13 19:44	
2-Hexanone	ug/kg	ND	55.2	11/26/13 19:44	
4-Chlorotoluene	ug/kg	ND	5.5	11/26/13 19:44	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	55.2	11/26/13 19:44	
Acetone	ug/kg	ND	110	11/26/13 19:44	
Benzene	ug/kg	ND	5.5	11/26/13 19:44	
Bromobenzene	ug/kg	ND	5.5	11/26/13 19:44	
Bromochloromethane	ug/kg	ND	5.5	11/26/13 19:44	
Bromodichloromethane	ug/kg	ND	5.5	11/26/13 19:44	
Bromoform	ug/kg	ND	5.5	11/26/13 19:44	
Bromomethane	ug/kg	ND	11.0	11/26/13 19:44	
Carbon tetrachloride	ug/kg	ND	5.5	11/26/13 19:44	
Chlorobenzene	ug/kg	ND	5.5	11/26/13 19:44	
Chloroethane	ug/kg	ND	11.0	11/26/13 19:44	
Chloroform	ug/kg	ND	5.5	11/26/13 19:44	
Chloromethane	ug/kg	ND	11.0	11/26/13 19:44	
cis-1,2-Dichloroethene	ug/kg	ND	5.5	11/26/13 19:44	
cis-1,3-Dichloropropene	ug/kg	ND	5.5	11/26/13 19:44	
Dibromochloromethane	ug/kg	ND	5.5	11/26/13 19:44	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
 without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

METHOD BLANK: 1094556

Matrix: Solid

Associated Lab Samples: 92180233010, 92180233011, 92180233012, 92180233013, 92180233014, 92180233015, 92180233016, 92180233017, 92180233018, 92180233019

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dibromomethane	ug/kg	ND	5.5	11/26/13 19:44	
Dichlorodifluoromethane	ug/kg	ND	11.0	11/26/13 19:44	
Diisopropyl ether	ug/kg	ND	5.5	11/26/13 19:44	
Ethylbenzene	ug/kg	ND	5.5	11/26/13 19:44	
Hexachloro-1,3-butadiene	ug/kg	ND	5.5	11/26/13 19:44	
Isopropylbenzene (Cumene)	ug/kg	ND	5.5	11/26/13 19:44	
m&p-Xylene	ug/kg	ND	11.0	11/26/13 19:44	
Methyl-tert-butyl ether	ug/kg	ND	5.5	11/26/13 19:44	
Methylene Chloride	ug/kg	ND	22.1	11/26/13 19:44	
n-Butylbenzene	ug/kg	ND	5.5	11/26/13 19:44	
n-Propylbenzene	ug/kg	ND	5.5	11/26/13 19:44	
Naphthalene	ug/kg	ND	5.5	11/26/13 19:44	
o-Xylene	ug/kg	ND	5.5	11/26/13 19:44	
p-Isopropyltoluene	ug/kg	ND	5.5	11/26/13 19:44	
sec-Butylbenzene	ug/kg	ND	5.5	11/26/13 19:44	
Styrene	ug/kg	ND	5.5	11/26/13 19:44	
tert-Butylbenzene	ug/kg	ND	5.5	11/26/13 19:44	
Tetrachloroethene	ug/kg	ND	5.5	11/26/13 19:44	
Toluene	ug/kg	ND	5.5	11/26/13 19:44	
trans-1,2-Dichloroethene	ug/kg	ND	5.5	11/26/13 19:44	
trans-1,3-Dichloropropene	ug/kg	ND	5.5	11/26/13 19:44	
Trichloroethene	ug/kg	ND	5.5	11/26/13 19:44	
Trichlorofluoromethane	ug/kg	ND	5.5	11/26/13 19:44	
Vinyl acetate	ug/kg	ND	55.2	11/26/13 19:44	
Vinyl chloride	ug/kg	ND	11.0	11/26/13 19:44	
Xylene (Total)	ug/kg	ND	11.0	11/26/13 19:44	
1,2-Dichloroethane-d4 (S)	%	97	70-132	11/26/13 19:44	
4-Bromofluorobenzene (S)	%	106	70-130	11/26/13 19:44	
Toluene-d8 (S)	%	99	70-130	11/26/13 19:44	

LABORATORY CONTROL SAMPLE: 1094557

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	55.1	59.7	108	70-131	
1,1,1-Trichloroethane	ug/kg	55.1	47.3	86	70-141	
1,1,2,2-Tetrachloroethane	ug/kg	55.1	64.4	117	70-130	
1,1,2-Trichloroethane	ug/kg	55.1	64.0	116	70-132	
1,1-Dichloroethane	ug/kg	55.1	46.9	85	70-143	
1,1-Dichloroethene	ug/kg	55.1	44.4	81	70-137	
1,1-Dichloropropene	ug/kg	55.1	47.4	86	70-135	
1,2,3-Trichlorobenzene	ug/kg	55.1	48.9	89	69-153	
1,2,3-Trichloropropane	ug/kg	55.1	63.4	115	70-130	
1,2,4-Trichlorobenzene	ug/kg	55.1	43.0	78	55-171	
1,2,4-Trimethylbenzene	ug/kg	55.1	46.3	84	70-149	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### QUALITY CONTROL DATA

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

LABORATORY CONTROL SAMPLE: 1094557

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/kg	55.1	62.7	114	68-141	
1,2-Dibromoethane (EDB)	ug/kg	55.1	61.9	112	70-130	
1,2-Dichlorobenzene	ug/kg	55.1	51.6	94	70-140	
1,2-Dichloroethane	ug/kg	55.1	57.4	104	70-137	
1,2-Dichloropropane	ug/kg	55.1	56.5	103	70-133	
1,3,5-Trimethylbenzene	ug/kg	55.1	48.1	87	70-143	
1,3-Dichlorobenzene	ug/kg	55.1	46.6	85	70-144	
1,3-Dichloropropane	ug/kg	55.1	60.1	109	70-132	
1,4-Dichlorobenzene	ug/kg	55.1	48.5	88	70-142	
2,2-Dichloropropane	ug/kg	55.1	44.4	81	68-152	
2-Butanone (MEK)	ug/kg	110	120	109	70-149	
2-Chlorotoluene	ug/kg	55.1	47.6	86	70-141	
2-Hexanone	ug/kg	110	137	125	70-149	
4-Chlorotoluene	ug/kg	55.1	47.7	87	70-149	
4-Methyl-2-pentanone (MIBK)	ug/kg	110	132	120	70-153	
Acetone	ug/kg	110	119	108	70-157	
Benzene	ug/kg	55.1	53.4	97	70-130	
Bromobenzene	ug/kg	55.1	50.4	92	70-141	
Bromochloromethane	ug/kg	55.1	54.8	100	70-149	
Bromodichloromethane	ug/kg	55.1	58.0	105	70-130	
Bromoform	ug/kg	55.1	68.1	124	70-131	
Bromomethane	ug/kg	55.1	55.9	102	64-136	
Carbon tetrachloride	ug/kg	55.1	48.6	88	70-154	
Chlorobenzene	ug/kg	55.1	51.9	94	70-135	
Chloroethane	ug/kg	55.1	46.9	85	68-151	
Chloroform	ug/kg	55.1	51.3	93	70-130	
Chloromethane	ug/kg	55.1	48.0	87	70-132	
cis-1,2-Dichloroethene	ug/kg	55.1	49.3	90	70-140	
cis-1,3-Dichloropropene	ug/kg	55.1	58.0	105	70-137	
Dibromochloromethane	ug/kg	55.1	62.6	114	70-130	
Dibromomethane	ug/kg	55.1	59.8	109	70-136	
Dichlorodifluoromethane	ug/kg	55.1	47.6	86	36-148	
Diisopropyl ether	ug/kg	55.1	53.1	96	70-139	
Ethylbenzene	ug/kg	55.1	51.4	93	70-137	
Hexachloro-1,3-butadiene	ug/kg	55.1	50.9	92	70-145	
Isopropylbenzene (Cumene)	ug/kg	55.1	53.1	96	70-141	
m&p-Xylene	ug/kg	110	105	95	70-140	
Methyl-tert-butyl ether	ug/kg	55.1	56.7	103	45-150	
Methylene Chloride	ug/kg	55.1	47.8	87	70-133	
n-Butylbenzene	ug/kg	55.1	44.6	81	65-155	
n-Propylbenzene	ug/kg	55.1	47.4	86	70-148	
Naphthalene	ug/kg	55.1	53.7	98	70-148	
o-Xylene	ug/kg	55.1	53.6	97	70-141	
p-Isopropyltoluene	ug/kg	55.1	47.5	86	70-148	
sec-Butylbenzene	ug/kg	55.1	47.8	87	70-145	
Styrene	ug/kg	55.1	56.7	103	70-138	
tert-Butylbenzene	ug/kg	55.1	47.9	87	70-143	
Tetrachloroethene	ug/kg	55.1	52.2	95	70-140	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

LABORATORY CONTROL SAMPLE: 1094557

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Toluene	ug/kg	55.1	51.2	93	70-130	
trans-1,2-Dichloroethene	ug/kg	55.1	46.1	84	70-136	
trans-1,3-Dichloropropene	ug/kg	55.1	60.1	109	70-138	
Trichloroethene	ug/kg	55.1	50.4	92	70-132	
Trichlorofluoromethane	ug/kg	55.1	49.0	89	69-134	
Vinyl acetate	ug/kg	110	52.8J	48	24-161	
Vinyl chloride	ug/kg	55.1	46.5	85	55-140	
Xylene (Total)	ug/kg	165	159	96	70-141	
1,2-Dichloroethane-d4 (S)	%			100	70-132	
4-Bromofluorobenzene (S)	%			111	70-130	
Toluene-d8 (S)	%			100	70-130	

MATRIX SPIKE SAMPLE: 1095302

Parameter	Units	92180233019 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/kg	ND	45.7	42.4	93	49-180	
Benzene	ug/kg	ND	45.7	43.5	95	50-166	
Chlorobenzene	ug/kg	ND	45.7	44.7	98	43-169	
Toluene	ug/kg	ND	45.7	42.9	94	52-163	
Trichloroethene	ug/kg	ND	45.7	46.3	101	49-167	
1,2-Dichloroethane-d4 (S)	%				108	70-132	
4-Bromofluorobenzene (S)	%				106	70-130	
Toluene-d8 (S)	%				97	70-130	

SAMPLE DUPLICATE: 1095301

Parameter	Units	92180233018 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		
1,2-Dichloropropane	ug/kg	ND	ND		
1,3,5-Trimethylbenzene	ug/kg	ND	ND		
1,3-Dichlorobenzene	ug/kg	ND	ND		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

SAMPLE DUPLICATE: 1095301

Parameter	Units	92180233018 Result	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	ND	ND		
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		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



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 Kinsey Ave. Suite 100  
Huntersville, NC 28078  
(704)875-9092

### QUALITY CONTROL DATA

Project: NCDOT SUGAR CREEK 41141.1.1  
Pace Project No.: 92180233

SAMPLE DUPLICATE: 1095301

Parameter	Units	92180233018 Result	Dup Result	RPD	Qualifiers
Xylene (Total)	ug/kg	ND	ND		
1,2-Dichloroethane-d4 (S)	%	105	131	31	
4-Bromofluorobenzene (S)	%	100	108	16	
Toluene-d8 (S)	%	101	99	7	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

QC Batch: OEXT/24843 Analysis Method: EPA 8270  
 QC Batch Method: EPA 3546 Analysis Description: 8270 Solid MSSV Microwave  
 Associated Lab Samples: 92180233001, 92180233002, 92180233003, 92180233004, 92180233005, 92180233006, 92180233007, 92180233008, 92180233009, 92180233010, 92180233011, 92180233012, 92180233013, 92180233014, 92180233015, 92180233016, 92180233017, 92180233018, 92180233019

METHOD BLANK: 1091251 Matrix: Solid

Associated Lab Samples: 92180233001, 92180233002, 92180233003, 92180233004, 92180233005, 92180233006, 92180233007, 92180233008, 92180233009, 92180233010, 92180233011, 92180233012, 92180233013, 92180233014, 92180233015, 92180233016, 92180233017, 92180233018, 92180233019

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	ND	330	12/02/13 12:07	
1,2-Dichlorobenzene	ug/kg	ND	330	12/02/13 12:07	
1,3-Dichlorobenzene	ug/kg	ND	330	12/02/13 12:07	
1,4-Dichlorobenzene	ug/kg	ND	330	12/02/13 12:07	
1-Methylnaphthalene	ug/kg	ND	330	12/02/13 12:07	
2,4,5-Trichlorophenol	ug/kg	ND	330	12/02/13 12:07	
2,4,6-Trichlorophenol	ug/kg	ND	330	12/02/13 12:07	
2,4-Dichlorophenol	ug/kg	ND	330	12/02/13 12:07	
2,4-Dimethylphenol	ug/kg	ND	330	12/02/13 12:07	
2,4-Dinitrophenol	ug/kg	ND	1650	12/02/13 12:07	
2,4-Dinitrotoluene	ug/kg	ND	330	12/02/13 12:07	
2,6-Dinitrotoluene	ug/kg	ND	330	12/02/13 12:07	
2-Chloronaphthalene	ug/kg	ND	330	12/02/13 12:07	
2-Chlorophenol	ug/kg	ND	330	12/02/13 12:07	
2-Methylnaphthalene	ug/kg	ND	330	12/02/13 12:07	
2-Methylphenol(o-Cresol)	ug/kg	ND	330	12/02/13 12:07	
2-Nitroaniline	ug/kg	ND	1650	12/02/13 12:07	
2-Nitrophenol	ug/kg	ND	330	12/02/13 12:07	
3&4-Methylphenol(m&p Cresol)	ug/kg	ND	330	12/02/13 12:07	
3,3'-Dichlorobenzidine	ug/kg	ND	1650	12/02/13 12:07	
3-Nitroaniline	ug/kg	ND	1650	12/02/13 12:07	
4,6-Dinitro-2-methylphenol	ug/kg	ND	660	12/02/13 12:07	
4-Bromophenylphenyl ether	ug/kg	ND	330	12/02/13 12:07	
4-Chloro-3-methylphenol	ug/kg	ND	660	12/02/13 12:07	
4-Chloroaniline	ug/kg	ND	1650	12/02/13 12:07	
4-Chlorophenylphenyl ether	ug/kg	ND	330	12/02/13 12:07	
4-Nitroaniline	ug/kg	ND	660	12/02/13 12:07	
4-Nitrophenol	ug/kg	ND	1650	12/02/13 12:07	
Acenaphthene	ug/kg	ND	330	12/02/13 12:07	
Acenaphthylene	ug/kg	ND	330	12/02/13 12:07	
Aniline	ug/kg	ND	330	12/02/13 12:07	
Anthracene	ug/kg	ND	330	12/02/13 12:07	
Benzo(a)anthracene	ug/kg	ND	330	12/02/13 12:07	
Benzo(a)pyrene	ug/kg	ND	330	12/02/13 12:07	
Benzo(b)fluoranthene	ug/kg	ND	330	12/02/13 12:07	
Benzo(g,h,i)perylene	ug/kg	ND	330	12/02/13 12:07	
Benzo(k)fluoranthene	ug/kg	ND	330	12/02/13 12:07	
Benzoic Acid	ug/kg	ND	1650	12/02/13 12:07	
Benzyl alcohol	ug/kg	ND	660	12/02/13 12:07	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

METHOD BLANK: 1091251

Matrix: Solid

Associated Lab Samples: 92180233001, 92180233002, 92180233003, 92180233004, 92180233005, 92180233006, 92180233007, 92180233008, 92180233009, 92180233010, 92180233011, 92180233012, 92180233013, 92180233014, 92180233015, 92180233016, 92180233017, 92180233018, 92180233019

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
bis(2-Chloroethoxy)methane	ug/kg	ND	330	12/02/13 12:07	
bis(2-Chloroethyl) ether	ug/kg	ND	330	12/02/13 12:07	
bis(2-Chloroisopropyl) ether	ug/kg	ND	330	12/02/13 12:07	
bis(2-Ethylhexyl)phthalate	ug/kg	ND	330	12/02/13 12:07	
Butylbenzylphthalate	ug/kg	ND	330	12/02/13 12:07	
Chrysene	ug/kg	ND	330	12/02/13 12:07	
Di-n-butylphthalate	ug/kg	ND	330	12/02/13 12:07	
Di-n-octylphthalate	ug/kg	ND	330	12/02/13 12:07	
Dibenz(a,h)anthracene	ug/kg	ND	330	12/02/13 12:07	
Dibenzofuran	ug/kg	ND	330	12/02/13 12:07	
Diethylphthalate	ug/kg	ND	330	12/02/13 12:07	
Dimethylphthalate	ug/kg	ND	330	12/02/13 12:07	
Fluoranthene	ug/kg	ND	330	12/02/13 12:07	
Fluorene	ug/kg	ND	330	12/02/13 12:07	
Hexachloro-1,3-butadiene	ug/kg	ND	330	12/02/13 12:07	
Hexachlorobenzene	ug/kg	ND	330	12/02/13 12:07	
Hexachlorocyclopentadiene	ug/kg	ND	330	12/02/13 12:07	
Hexachloroethane	ug/kg	ND	330	12/02/13 12:07	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	330	12/02/13 12:07	
Isophorone	ug/kg	ND	330	12/02/13 12:07	
N-Nitroso-di-n-propylamine	ug/kg	ND	330	12/02/13 12:07	
N-Nitrosodimethylamine	ug/kg	ND	330	12/02/13 12:07	
N-Nitrosodiphenylamine	ug/kg	ND	330	12/02/13 12:07	
Naphthalene	ug/kg	ND	330	12/02/13 12:07	
Nitrobenzene	ug/kg	ND	330	12/02/13 12:07	
Pentachlorophenol	ug/kg	ND	1650	12/02/13 12:07	
Phenanthrene	ug/kg	ND	330	12/02/13 12:07	
Phenol	ug/kg	ND	330	12/02/13 12:07	
Pyrene	ug/kg	ND	330	12/02/13 12:07	
2,4,6-Tribromophenol (S)	%	91	27-110	12/02/13 12:07	
2-Fluorobiphenyl (S)	%	76	30-110	12/02/13 12:07	
2-Fluorophenol (S)	%	73	13-110	12/02/13 12:07	
Nitrobenzene-d5 (S)	%	69	23-110	12/02/13 12:07	
Phenol-d6 (S)	%	72	22-110	12/02/13 12:07	
Terphenyl-d14 (S)	%	77	28-110	12/02/13 12:07	

LABORATORY CONTROL SAMPLE: 1091252

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	1670	1150	69	39-101	
1,2-Dichlorobenzene	ug/kg	1670	1060	64	36-110	
1,3-Dichlorobenzene	ug/kg	1670	1040	63	35-110	
1,4-Dichlorobenzene	ug/kg	1670	1060	64	35-110	
1-Methylnaphthalene	ug/kg	1670	1200	72	45-105	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### QUALITY CONTROL DATA

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

LABORATORY CONTROL SAMPLE: 1091252

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,4,5-Trichlorophenol	ug/kg	1670	1330	80	48-109	
2,4,6-Trichlorophenol	ug/kg	1670	1210	72	45-111	
2,4-Dichlorophenol	ug/kg	1670	1270	76	51-116	
2,4-Dimethylphenol	ug/kg	1670	1280	77	42-103	
2,4-Dinitrophenol	ug/kg	8330	8710	105	28-103	L3
2,4-Dinitrotoluene	ug/kg	1670	1530	92	46-114	
2,6-Dinitrotoluene	ug/kg	1670	1550	93	48-112	
2-Chloronaphthalene	ug/kg	1670	964	58	44-105	
2-Chlorophenol	ug/kg	1670	1240	74	36-110	
2-Methylnaphthalene	ug/kg	1670	1260	76	39-112	
2-Methylphenol(o-Cresol)	ug/kg	1670	1260	76	39-101	
2-Nitroaniline	ug/kg	3330	2260	68	44-111	
2-Nitrophenol	ug/kg	1670	1490	90	41-100	
3&4-Methylphenol(m&p Cresol)	ug/kg	1670	1190	71	43-103	
3,3'-Dichlorobenzidine	ug/kg	3330	2590	78	10-150	
3-Nitroaniline	ug/kg	3330	2920	88	35-110	
4,6-Dinitro-2-methylphenol	ug/kg	3330	3070	92	38-118	
4-Bromophenylphenyl ether	ug/kg	1670	1530	92	47-115	
4-Chloro-3-methylphenol	ug/kg	3330	2500	75	43-127	
4-Chloroaniline	ug/kg	3330	2490	75	34-109	
4-Chlorophenylphenyl ether	ug/kg	1670	1470	88	44-115	
4-Nitroaniline	ug/kg	3330	3070	92	37-111	
4-Nitrophenol	ug/kg	8330	6250	75	21-152	
Acenaphthene	ug/kg	1670	1310	78	38-117	
Acenaphthylene	ug/kg	1670	1300	78	46-107	
Aniline	ug/kg	1670	1030	62	29-110	
Anthracene	ug/kg	1670	1420	85	50-110	
Benzo(a)anthracene	ug/kg	1670	1410	85	47-116	
Benzo(a)pyrene	ug/kg	1670	1550	93	47-106	
Benzo(b)fluoranthene	ug/kg	1670	1470	88	47-109	
Benzo(g,h,i)perylene	ug/kg	1670	1510	91	39-115	
Benzo(k)fluoranthene	ug/kg	1670	1340	80	45-117	
Benzoic Acid	ug/kg	8330	5170	62	16-110	
Benzyl alcohol	ug/kg	3330	2150	64	38-105	
bis(2-Chloroethoxy)methane	ug/kg	1670	1150	69	39-110	
bis(2-Chloroethyl) ether	ug/kg	1670	1220	73	19-119	
bis(2-Chloroisopropyl) ether	ug/kg	1670	824	49	21-110	
bis(2-Ethylhexyl)phthalate	ug/kg	1670	1240	74	35-116	
Butylbenzylphthalate	ug/kg	1670	1250	75	38-110	
Chrysene	ug/kg	1670	1470	88	49-110	
Di-n-butylphthalate	ug/kg	1670	1250	75	43-109	
Di-n-octylphthalate	ug/kg	1670	1220	73	37-109	
Dibenz(a,h)anthracene	ug/kg	1670	1600	96	43-116	
Dibenzofuran	ug/kg	1670	1120	67	45-106	
Diethylphthalate	ug/kg	1670	1230	74	41-114	
Dimethylphthalate	ug/kg	1670	1120	67	43-110	
Fluoranthene	ug/kg	1670	1440	86	50-114	
Fluorene	ug/kg	1670	1420	85	46-114	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

LABORATORY CONTROL SAMPLE: 1091252

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Hexachloro-1,3-butadiene	ug/kg	1670	1200	72	28-111	
Hexachlorobenzene	ug/kg	1670	1230	74	46-120	
Hexachlorocyclopentadiene	ug/kg	1670	1650	99	18-119	
Hexachloroethane	ug/kg	1670	1010	61	33-110	
Indeno(1,2,3-cd)pyrene	ug/kg	1670	1550	93	42-115	
Isophorone	ug/kg	1670	1160	70	44-109	
N-Nitroso-di-n-propylamine	ug/kg	1670	857	51	43-104	
N-Nitrosodimethylamine	ug/kg	1670	1070	64	29-110	
N-Nitrosodiphenylamine	ug/kg	1670	1070	64	48-113	
Naphthalene	ug/kg	1670	1260	76	41-110	
Nitrobenzene	ug/kg	1670	1130	68	38-110	
Pentachlorophenol	ug/kg	3330	3000	90	32-128	
Phenanthrene	ug/kg	1670	1420	85	50-110	
Phenol	ug/kg	1670	1220	73	28-106	
Pyrene	ug/kg	1670	1340	81	45-114	
2,4,6-Tribromophenol (S)	%			100	27-110	
2-Fluorobiphenyl (S)	%			67	30-110	
2-Fluorophenol (S)	%			71	13-110	
Nitrobenzene-d5 (S)	%			67	23-110	
Phenol-d6 (S)	%			71	22-110	
Terphenyl-d14 (S)	%			81	28-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1091253 1091254

Parameter	Units	92180233003		MS	MSD	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
		Result	Conc.	Spike Conc.	Spike Conc.							
1,2,4-Trichlorobenzene	ug/kg	ND	1910	1910	1910	1010	702	53	37	18-119	36	
1,2-Dichlorobenzene	ug/kg	ND	1910	1910	1910	950	649	50	34	50-110	38	M1
1,3-Dichlorobenzene	ug/kg	ND	1910	1910	1910	932	641	49	34	27-110	37	
1,4-Dichlorobenzene	ug/kg	ND	1910	1910	1910	959	667	50	35	28-110	36	
1-Methylnaphthalene	ug/kg	ND	1910	1910	1910	1080	743	57	39	24-116	37	
2,4,5-Trichlorophenol	ug/kg	ND	1910	1910	1910	1270	1070	67	56	28-110	18	
2,4,6-Trichlorophenol	ug/kg	ND	1910	1910	1910	1160	867	61	45	17-117	29	
2,4-Dichlorophenol	ug/kg	ND	1910	1910	1910	1110	746	58	39	21-128	39	
2,4-Dimethylphenol	ug/kg	ND	1910	1910	1910	728	471	38	25	10-120	43	
2,4-Dinitrophenol	ug/kg	ND	9540	9540	9540	5780	5820	61	61	10-107	1	
2,4-Dinitrotoluene	ug/kg	ND	1910	1910	1910	1300	1280	68	67	36-109	2	
2,6-Dinitrotoluene	ug/kg	ND	1910	1910	1910	1330	1180	70	62	32-110	12	
2-Chloronaphthalene	ug/kg	ND	1910	1910	1910	964	669	51	35	30-107	36	
2-Chlorophenol	ug/kg	ND	1910	1910	1910	1080	735	56	39	14-106	38	
2-Methylnaphthalene	ug/kg	ND	1910	1910	1910	1130	775	59	41	10-135	38	
2-Methylphenol(o-Cresol)	ug/kg	ND	1910	1910	1910	968	652	51	34	10-124	39	
2-Nitroaniline	ug/kg	ND	3810	3810	3810	2100	1760J	55	46	26-116		
2-Nitrophenol	ug/kg	ND	1910	1910	1910	1310	927	69	49	28-103	34	
3&4-Methylphenol(m&p Cresol)	ug/kg	ND	1910	1910	1910	933	626	49	33	10-109	39	
3,3'-Dichlorobenzidine	ug/kg	ND	3810	3810	3810	1960	2090	51	55	10-150	7	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1091253 1091254											
Parameter	Units	92180233003 Result	MS	MSD	MS	MSD	MS	MSD	% Rec	% Rec	Qual
			Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec	Limits	RPD	
3-Nitroaniline	ug/kg	ND	3810	3810	2230	2260	58	59	22-110	1	
4,6-Dinitro-2-methylphenol	ug/kg	ND	3810	3810	2600	2730	68	72	13-121	5	
4-Bromophenylphenyl ether	ug/kg	ND	1910	1910	1470	1340	77	70	31-109	9	
4-Chloro-3-methylphenol	ug/kg	ND	3810	3810	2130	1660	56	43	13-128	25	
4-Chloroaniline	ug/kg	ND	3810	3810	1970	1450J	52	38	18-102		
4-Chlorophenylphenyl ether	ug/kg	ND	1910	1910	1370	1160	72	61	29-112	17	
4-Nitroaniline	ug/kg	ND	3810	3810	2260	2460	59	64	16-111	9	
4-Nitrophenol	ug/kg	ND	9540	9540	4510	4860	47	51	14-135	8	
Acenaphthene	ug/kg	ND	1910	1910	1190	899	62	47	26-114	27	
Acenaphthylene	ug/kg	ND	1910	1910	1150	843	60	44	32-108	31	
Aniline	ug/kg	ND	1910	1910	658	480	34	25	10-107	31	
Anthracene	ug/kg	ND	1910	1910	1190	1150	62	60	32-111	3	
Benzo(a)anthracene	ug/kg	ND	1910	1910	1220	1260	64	66	25-117	4	
Benzo(a)pyrene	ug/kg	ND	1910	1910	1300	1340	68	70	25-106	3	
Benzo(b)fluoranthene	ug/kg	ND	1910	1910	1300	1340	68	70	24-110	3	
Benzo(g,h,i)perylene	ug/kg	ND	1910	1910	1160	1280	61	67	19-112	10	
Benzo(k)fluoranthene	ug/kg	ND	1910	1910	1160	1130	61	59	24-114	2	
Benzoic Acid	ug/kg	ND	9540	9540	2750	1970	29	21	10-110	33	
Benzyl alcohol	ug/kg	ND	3810	3810	1860	1290	49	34	24-106	37	
bis(2-Chloroethoxy)methane	ug/kg	ND	1910	1910	1010	684	53	36	13-119	38	
bis(2-Chloroethyl) ether	ug/kg	ND	1910	1910	1110	759	58	40	10-134	38	
bis(2-Chloroisopropyl) ether	ug/kg	ND	1910	1910	745	503	39	26	10-113	39	
bis(2-Ethylhexyl)phthalate	ug/kg	ND	1910	1910	1100	1200	58	63	10-125	9	
Butylbenzylphthalate	ug/kg	ND	1910	1910	1120	1090	59	57	18-110	3	
Chrysene	ug/kg	ND	1910	1910	1260	1330	66	70	30-110	5	
Di-n-butylphthalate	ug/kg	ND	1910	1910	1070	1080	56	57	19-112	1	
Di-n-octylphthalate	ug/kg	ND	1910	1910	1160	1140	61	60	17-105	1	
Dibenz(a,h)anthracene	ug/kg	ND	1910	1910	1230	1320	64	69	23-111	7	
Dibenzofuran	ug/kg	ND	1910	1910	1030	817	54	43	35-103	23	
Diethylphthalate	ug/kg	ND	1910	1910	1070	1020	56	53	27-113	5	
Dimethylphthalate	ug/kg	ND	1910	1910	1050	920	55	48	26-111	13	
Fluoranthene	ug/kg	ND	1910	1910	1270	1340	67	70	33-109	5	
Fluorene	ug/kg	ND	1910	1910	1300	1100	68	58	32-113	17	
Hexachloro-1,3-butadiene	ug/kg	ND	1910	1910	1080	735	57	39	16-116	38	
Hexachlorobenzene	ug/kg	ND	1910	1910	1170	1130	61	59	27-120	3	
Hexachlorocyclopentadiene	ug/kg	ND	1910	1910	1090	731	57	38	10-108	39	
Hexachloroethane	ug/kg	ND	1910	1910	903	616	47	32	10-117	38	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	1910	1910	1190	1310	62	69	10-122	9	
Isophorone	ug/kg	ND	1910	1910	1040	706	54	37	28-114	38	
N-Nitroso-di-n-propylamine	ug/kg	ND	1910	1910	766	530	40	28	27-113	36	
N-Nitrosodimethylamine	ug/kg	ND	1910	1910	932	650	49	34	10-109	36	
N-Nitrosodiphenylamine	ug/kg	ND	1910	1910	928	859	49	45	10-128	8	
Naphthalene	ug/kg	ND	1910	1910	1100	786	58	41	25-110	34	
Nitrobenzene	ug/kg	ND	1910	1910	976	700	51	37	18-114	33	
Pentachlorophenol	ug/kg	ND	3810	3810	2360	2510	62	66	10-122	6	
Phenanthrene	ug/kg	ND	1910	1910	1250	1230	65	65	30-114	1	
Phenol	ug/kg	ND	1910	1910	986	686	52	36	11-102	36	1g,R1

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



**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 Kinsey Ave. Suite 100  
 Huntersville, NC 28078  
 (704)875-9092

**QUALITY CONTROL DATA**

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

Parameter	Units	1091253		1091254		MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
		92180233003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result					
Pyrene	ug/kg	ND	1910	1910	1240	1210	65	64	25-116	2
2,4,6-Tribromophenol (S)	%						71	69	27-110	
2-Fluorobiphenyl (S)	%						57	38	30-110	
2-Fluorophenol (S)	%						51	34	13-110	
Nitrobenzene-d5 (S)	%						50	35	23-110	
Phenol-d6 (S)	%						51	35	22-110	
Terphenyl-d14 (S)	%						65	63	28-110	

**REPORT OF LABORATORY ANALYSIS**

This report shall not be reproduced, except in full,  
 without the written consent of Pace Analytical Services, Inc..



**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 Kinsey Ave. Suite 100  
 Huntersville, NC 28078  
 (704)875-9092

**QUALITY CONTROL DATA**

Project: NCDOT SUGAR CREEK 41141.1.1  
 Pace Project No.: 92180233

QC Batch: PMST/6041 Analysis Method: ASTM D2974-87  
 QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture  
 Associated Lab Samples: 92180233001, 92180233002

SAMPLE DUPLICATE: 1097028

Parameter	Units	92179790001 Result	Dup Result	RPD	Qualifiers
Percent Moisture	%	18.0	17.8	1	

SAMPLE DUPLICATE: 1097029

Parameter	Units	92180233002 Result	Dup Result	RPD	Qualifiers
Percent Moisture	%	25.6	26.0	2	

**REPORT OF LABORATORY ANALYSIS**

This report shall not be reproduced, except in full,  
 without the written consent of Pace Analytical Services, Inc..



**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 Kinsey Ave. Suite 100  
 Huntersville, NC 28078  
 (704)875-9092

**QUALITY CONTROL DATA**

Project: NCDOT SUGAR CREEK 41141.1.1  
 Pace Project No.: 92180233

---

QC Batch: PMST/6042 Analysis Method: ASTM D2974-87  
 QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture  
 Associated Lab Samples: 92180233003, 92180233004, 92180233005, 92180233006, 92180233007, 92180233008, 92180233009,  
 92180233010, 92180233011, 92180233012, 92180233013, 92180233014, 92180233015, 92180233016,  
 92180233017, 92180233018, 92180233019

---

SAMPLE DUPLICATE: 1097030

Parameter	Units	92180233003 Result	Dup Result	RPD	Qualifiers
Percent Moisture	%	12.6	13.1	3	

SAMPLE DUPLICATE: 1097031

Parameter	Units	92179937005 Result	Dup Result	RPD	Qualifiers
Percent Moisture	%	24.4	26.9	10	

**REPORT OF LABORATORY ANALYSIS**

This report shall not be reproduced, except in full,  
 without the written consent of Pace Analytical Services, Inc..





## QUALIFIERS

Project: NCDOT SUGAR CREEK 41141.1.1  
Pace Project No.: 92180233

---

### 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-C Pace Analytical Services - Charlotte

### ANALYTE QUALIFIERS

1g This flag applies to all compounds with RPD greater than 30%.

A+ The reaction of the soil preservative, sodium bisulfate, is known to react with humic acid in soils to produce ketones. Based upon method blank results, the laboratory feels the ketones in this sample are a result of that reaction.

L3 Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

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

R1 RPD value was outside control limits.

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: NCDOT SUGAR CREEK 41141.1.1

Pace Project No.: 92180233

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92180233001	B10	EPA 3546	OEXT/24843	EPA 8270	MSSV/8501
92180233002	B11	EPA 3546	OEXT/24843	EPA 8270	MSSV/8501
92180233003	B12	EPA 3546	OEXT/24843	EPA 8270	MSSV/8501
92180233004	B13	EPA 3546	OEXT/24843	EPA 8270	MSSV/8501
92180233005	B14	EPA 3546	OEXT/24843	EPA 8270	MSSV/8501
92180233006	B15	EPA 3546	OEXT/24843	EPA 8270	MSSV/8501
92180233007	B16	EPA 3546	OEXT/24843	EPA 8270	MSSV/8501
92180233008	B17	EPA 3546	OEXT/24843	EPA 8270	MSSV/8501
92180233009	B18	EPA 3546	OEXT/24843	EPA 8270	MSSV/8501
92180233010	B19	EPA 3546	OEXT/24843	EPA 8270	MSSV/8501
92180233011	B9	EPA 3546	OEXT/24843	EPA 8270	MSSV/8501
92180233012	B8	EPA 3546	OEXT/24843	EPA 8270	MSSV/8501
92180233013	B7	EPA 3546	OEXT/24843	EPA 8270	MSSV/8501
92180233014	B6	EPA 3546	OEXT/24843	EPA 8270	MSSV/8501
92180233015	B5	EPA 3546	OEXT/24843	EPA 8270	MSSV/8501
92180233016	B4	EPA 3546	OEXT/24843	EPA 8270	MSSV/8501
92180233017	B3	EPA 3546	OEXT/24843	EPA 8270	MSSV/8501
92180233018	B2	EPA 3546	OEXT/24843	EPA 8270	MSSV/8501
92180233019	B1	EPA 3546	OEXT/24843	EPA 8270	MSSV/8501
92180233001	B10	EPA 8260	MSV/25027		
92180233002	B11	EPA 8260	MSV/25027		
92180233003	B12	EPA 8260	MSV/25027		
92180233004	B13	EPA 8260	MSV/25028		
92180233005	B14	EPA 8260	MSV/25028		
92180233006	B15	EPA 8260	MSV/25028		
92180233007	B16	EPA 8260	MSV/25028		
92180233008	B17	EPA 8260	MSV/25028		
92180233009	B18	EPA 8260	MSV/25028		
92180233010	B19	EPA 8260	MSV/25048		
92180233011	B9	EPA 8260	MSV/25048		
92180233012	B8	EPA 8260	MSV/25048		
92180233013	B7	EPA 8260	MSV/25048		
92180233014	B6	EPA 8260	MSV/25048		
92180233015	B5	EPA 8260	MSV/25048		
92180233016	B4	EPA 8260	MSV/25048		
92180233017	B3	EPA 8260	MSV/25048		
92180233018	B2	EPA 8260	MSV/25048		
92180233019	B1	EPA 8260	MSV/25048		
92180233001	B10	ASTM D2974-87	PMST/6041		
92180233002	B11	ASTM D2974-87	PMST/6041		
92180233003	B12	ASTM D2974-87	PMST/6042		
92180233004	B13	ASTM D2974-87	PMST/6042		
92180233005	B14	ASTM D2974-87	PMST/6042		
92180233006	B15	ASTM D2974-87	PMST/6042		
92180233007	B16	ASTM D2974-87	PMST/6042		
92180233008	B17	ASTM D2974-87	PMST/6042		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



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 Kinsey Ave. Suite 100  
Huntersville, NC 28078  
(704)875-9092

### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: NCDOT SUGAR CREEK 41141.1.1  
Pace Project No.: 92180233

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92180233009	B18	ASTM D2974-87	PMST/6042		
92180233010	B19	ASTM D2974-87	PMST/6042		
92180233011	B9	ASTM D2974-87	PMST/6042		
92180233012	B8	ASTM D2974-87	PMST/6042		
92180233013	B7	ASTM D2974-87	PMST/6042		
92180233014	B6	ASTM D2974-87	PMST/6042		
92180233015	B5	ASTM D2974-87	PMST/6042		
92180233016	B4	ASTM D2974-87	PMST/6042		
92180233017	B3	ASTM D2974-87	PMST/6042		
92180233018	B2	ASTM D2974-87	PMST/6042		
92180233019	B1	ASTM D2974-87	PMST/6042		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



Document Name: **Sample Condition Upon Receipt (SCUR)**

Document Number:  
**F-CHR-CS-03-rev.11**

Issuing Authority:  
Pace Huntersville Quality Office

Client Name: Remcon

Where Received:  Huntersville  Asheville  Eden  Raleigh

Courier:  Fed Ex  UPS  USPS  Client  Commercial  Pace Other \_\_\_\_\_

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

Packing Material:  Bubble Wrap  Bubble Bags  None  Other \_\_\_\_\_

Thermometer Used: IR Gun T1102 T1301 Type of Ice: Wet Blue None  Samples on ice, cooling process has begun

Temp Correction Factor T1102: No Correction T1301: No Correction

Corrected Cooler Temp.: 1.0 C Biological Tissue is Frozen: Yes No N/A

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 11/20/13 LMF 11/21/13

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 type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix:		
All containers needing preservation have been checked.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Comments/ Resolution: \_\_\_\_\_

SCURF Review:	<u>[Signature]</u>	Date:	<u>11/20/13</u>
SRF Review:	<u>[Signature]</u>	Date:	<u>11/21/13</u>

**WO# : 92180233**

92180233

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)



**CHAIN-OF-CUSTODY / Analytical Request Document**  
The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

**1732951**

**Section A**  
Required Client Information:

Company: **TERRELL CONSULTANTS**  
Address: **20206 SHELITA RD**  
**CHARLOTTE NC 28206**  
Email To: **clcorbett@terrellconsultants.com**  
Phone: **504.509.1977** Fax: **504.509.1988**  
Requested Due Date/TAT: **STANDARD**

**Section B**  
Required Project Information:

Report To: **CHRIS CORBITT**  
Copy To:  
Purchase Order No.:  
Project Name: **NC DOT - SUGAR CREEK**  
Project Number: **71137774**

**Section C**  
Invoice Information:

Attention: **SAME**  
Company Name:  
Address:  
Pace Quote Reference:  
Pace Project Manager: **KENN HERRING**  
Pace Profile #: **4860-1**

**REGULATORY AGENCY**

NPDES  GROUND WATER  DRINKING WATER  
 UST  RCRA  
Site Location STATE: **NC**

ITEM #	Section D Required Client Information SAMPLE ID (A-Z, 0-9 /, -) Sample IDs MUST BE UNIQUE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives		Analysis Test	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
				COMPOSITE START	COMPOSITE END/GRAB			H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>				
1	R10	SLG		DATE	TIME	DATE	TIME						D01
2	B11					11/18/13	9:45	5	2	2	1		D02
3	B12												D03
4	B13												D04
5	B14												D05
6	B15												D06
7	B16												D07
8	B17												D08
9	B18												D09
10	B19												D10
11	B9												D11
12	B8												D12

**ADDITIONAL COMMENTS**  
AB1 to AB11 separate lab report; B1 to B15 separate lab report

**RELINQUISHED BY / AFFILIATION**  
HERMAN

**ACCEPTED BY / AFFILIATION**  
Feyanul D Pace

**DATE** 11/20/13 14:15

**DATE** 11-20-13 14:15

**TEMPERATURE** 1.0

**RECEIVED ON ICE** Y

**CUSTODY SEALED COOLER** Y

**SAMPLES INTACT** Y

**ORIGINAL**

**SAMPLER NAME AND SIGNATURE**  
PRINT Name of SAMPLER: S. MIX  
SIGNATURE of SAMPLER: S. MIX

**DATE SIGNED** 11/20/13

**DATE SIGNED (MM/DD/YY)** 11/20/13

**Temp in °C**

**Received on Ice (Y/N)**

**Custody Sealed Cooler (Y/N)**

**Samples Intact (Y/N)**





www.pacelabs.com

# 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: **TERRACON**  
 Address: **TERRACON**

**Section B**  
 Required Project Information:  
 Report To: **CHRIS CORBITZ**  
 Copy To: **CHRIS CORBITZ**

**Section C**  
 Invoice Information:  
 Attention: **STANKE**  
 Company Name: **STANKE**  
 Address: **STANKE**

**Section D**  
 Required Client Information  
 Matrix Codes  
 Matrix / CODE  
 Drinking Water  
 Water  
 Waste Water  
 Product  
 Soil/Solid  
 Oil  
 Wipe  
 Air  
 Tissue  
 Other

Requested Due Date/TAT: **STANDARD**

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (A-Z, 0-9 / -)	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol	Other	Analysis Test	Y/N	Requested Analysis Filtered (Y/N)	
1	B7	SL	G	11/18/13	13:55			5	2												
2	B6			11/18/13	14:00																
3	B5			11/18/13	15:15																
4	B4			11/18/13	15:20																
5	B3			11/18/13	15:35																
6	B2			11/18/13	15:40																
7	B1			11/18/13	15:40																
8	AB9			11/20/13	10:00																
9	AB10			11/20/13	10:05																
10	AB8			11/20/13	10:10																
11	AB11			11/20/13	10:15																
12	AB7			11/20/13	10:20																

ADDITIONAL COMMENTS: **ABH to AB-11, separate lab report, B-1 to B-19 separate lab report**

RELINQUISHED BY / AFFILIATION: **STANKE / TERRACON**

DATE: **11/20/13**

ACCEPTED BY / AFFILIATION: **WIS / Stanke**

DATE: **11-20-13**

TIME: **1:00 PM**

REGULATORY AGENCY

Site Location STATE: **NC**

Temp in °C: \_\_\_\_\_

Received on Ice (Y/N): \_\_\_\_\_

Custody Sealed Cooler (Y/N): \_\_\_\_\_

Samples Intact (Y/N): \_\_\_\_\_

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: **S. MAX CHIVERS**

SIGNATURE OF SAMPLER: **[Signature]**

DATE Signed (MM/DD/YY): **11/20/13**

Page: **2** of **3**

1732952