Preliminary Site Assessment

NCDOT Project U-5008

Charlotte - Sugar Creek Grade Separation

Parcel: Ark Promotions, Inc. Property

Owner: Ark Promotions, Inc.

530 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

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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: Ark Promotions, Inc. Property
530 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.

Analee Farrell, E.I.
Staff Environmental Professional

Christopher L. Corbitt, PG
Senior Geologist

Attachments

PRELIMINARY SITE ASSESSMENT

U-5008 – SUGAR CREEK GRADE SEPARATION
PARCEL – ARK PROMOTIONS, INC. PROPERTY
530 E. SUGAR CREEK ROAD
CHARLOTTE, MECKLENBURG COUNTY, NORTH CAROLINA

1.0 INTRODUCTION

1.1 Site Description

Site Name	Ark Promotions, Inc. Property
Site Location/Address	530 E. Sugar Creek Road, Charlotte, Mecklenburg County, North Carolina
General Site Description	The site is occupied by a large vacant manufacturing building. The site also maintains asphalt-paved access drives and a parking lot near the building. Landscaped areas are located along E. Sugar Creek Road.

1.2 Site History

Currently, the Ark Promotions property is occupied by a vacant building that manufactured aircraft parts and auxiliary equipment in the past. According to information reviewed from the North Carolina Department of Environment and Natural Resources (NCDENR), the site operated as a small quantity hazardous waste generator. The former facility (Kaiser Fluid Technologies) is also listed by the NCDENR UST Section as having a release (Incident No. 85906) of chlorinated solvents, in particular trichloroethene (TCE), that has impacted soils and groundwater on the property.

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 conducted at the site included a geophysical investigation, collection of eleven (11) 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 19, 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 eleven (11) soil borings (AB-1 through AB-11) along the eastern portion of the Ark Promotions property on November 19, 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 within a mostly grass-covered area along the eastern side and southeastern corner of the Ark Promotions property within the proposed right of way along Sugar Creek Road 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 approximate 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 AB-1 through AB-11 were advanced to a depth of 10 feet bgs. The soils mostly consisted of orange brown, brown and dark brown clayey silt. No petroleum odors were noted in any of the screened samples. Elevated PID readings were reported in borings AB-3, AB-4, AB-5 and AB-6 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.

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 a copy of the laboratory analytical report.

4.0 DATA EVALUATION

4.1 Soil Sample Analytical Results and Interpretation

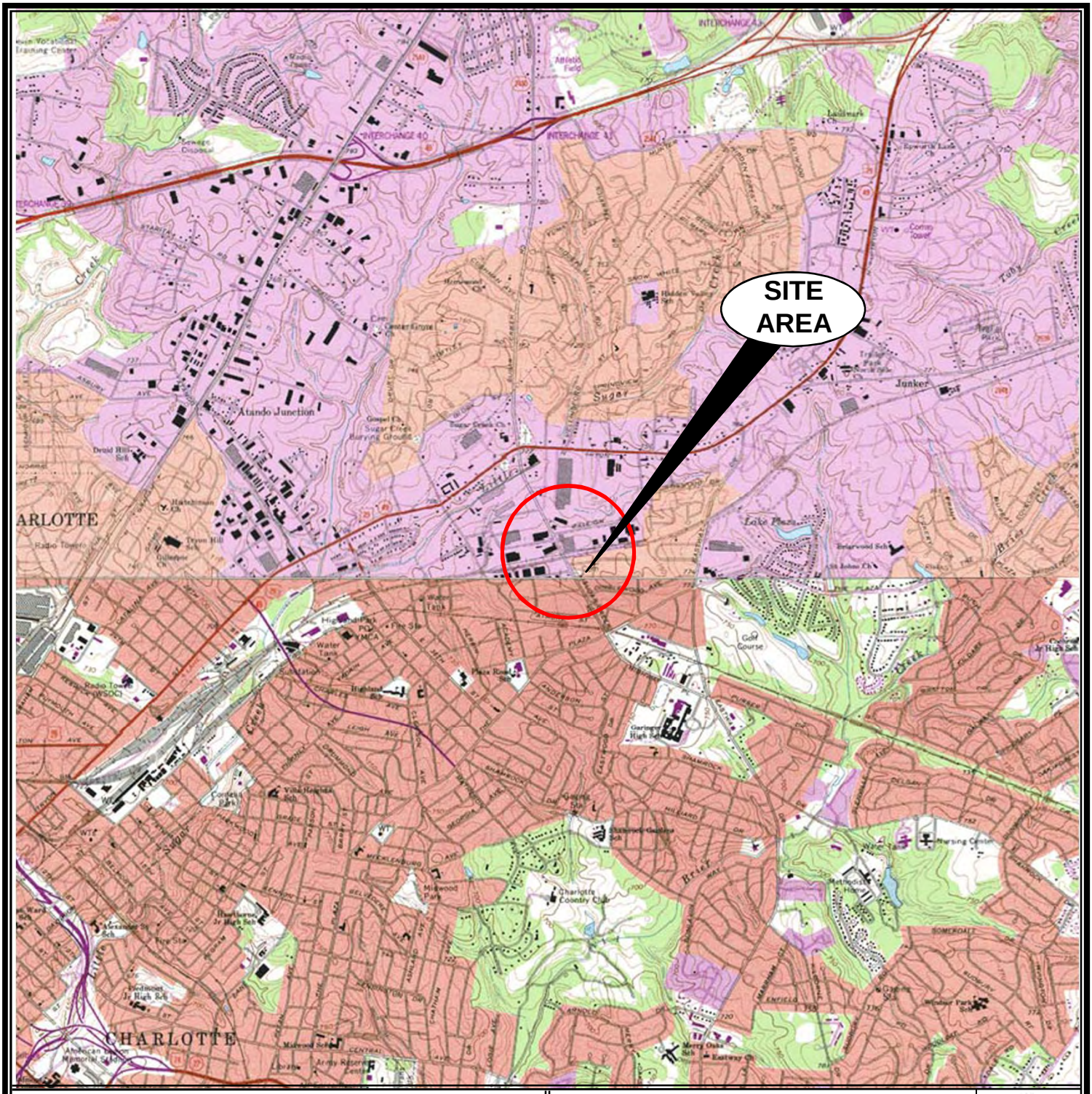
Based on the laboratory results, acetone was detected in samples AB-5, AB-6, AB-8, and AB-9 at concentrations above laboratory reporting limits. According to the laboratory data, acetone is considered to be a laboratory artifact because one of the soil preservatives (sodium bisulfate) reacts with humic acid to produce ketones such as acetone. No other volatile or semi-volatile organic compounds were detected above the laboratory reporting limits in the eleven soil samples obtained from the Ark Promotions property. A summary of 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.
- Eleven soil borings were advanced to depths of approximately 10 feet bgs.
- Acetone, a laboratory artifact, was detected in soil samples AB-5, AB-6, AB-8, and AB-9 at concentrations above laboratory reporting limits. The detection of acetone is not considered to be representative of the site.
- No other volatile and semi-volatile organic compounds were detected above laboratory reporting limits in the eleven soil samples obtained from the Ark Promotions 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 proposed right of way project area located on the Ark Promotions property.

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



USGS TOPOGRAPHIC MAP

ARK PROMOTIONS INC. PROPERTY
530 E. SUGAR CREEK ROAD

CHARLOTTE, NORTH CAROLINA

Terracon

N

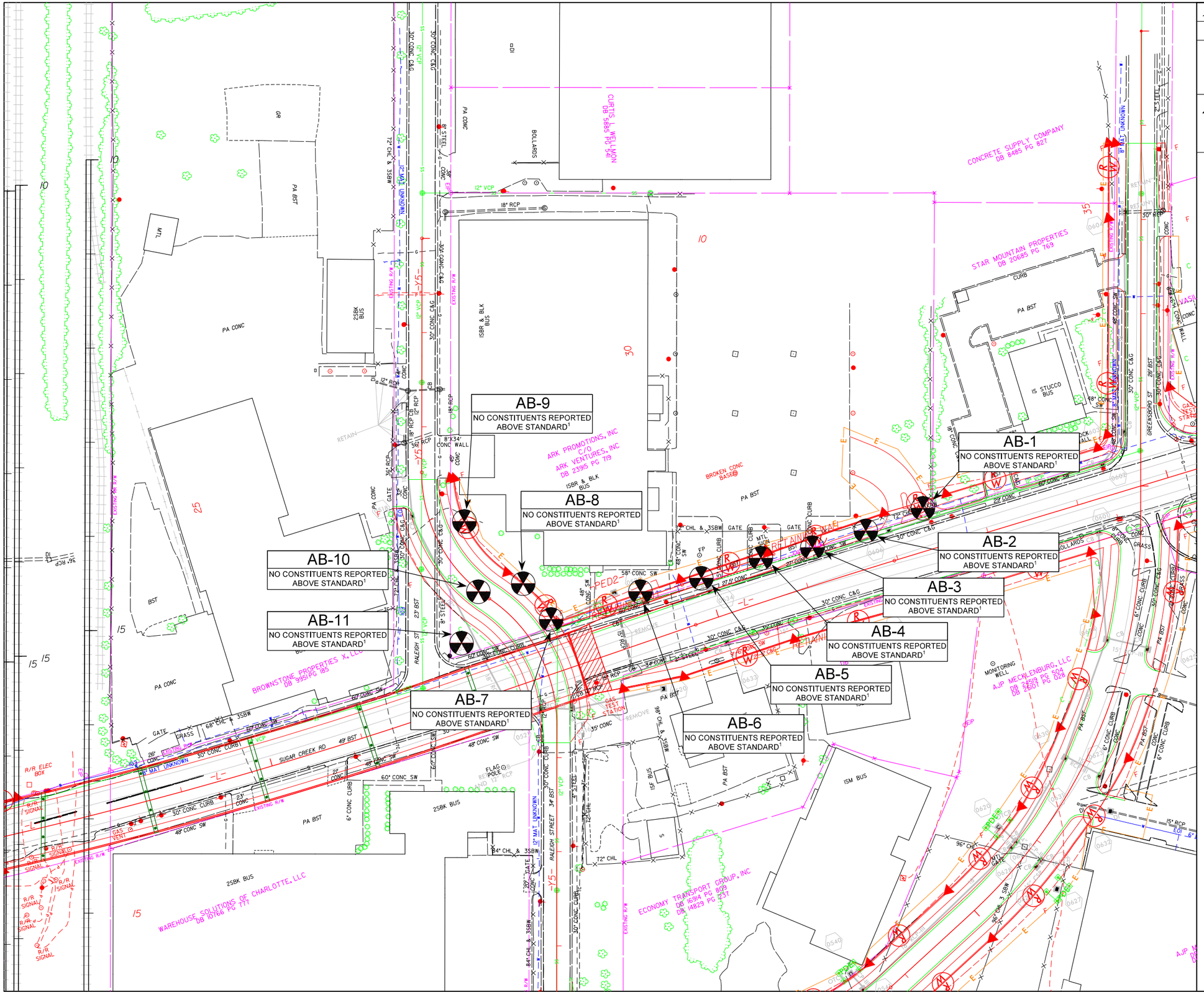
PROJECT NO.: 71137774	
DATE: December 2013	
DRAWN BY: ALF	
SCALE: 1" = 2000'	EXHIBIT NO. 1

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

PROJECT REFERENCE NO.	EXHIBIT
41141.1.1 (U–5008)	2

SITE DIAGRAM WITH SOIL BORING LOCATIONS AND ANALYTICAL DATA

ARK PROMOTIONS INC. PROPERTY
530 E SUGAR CREEK ROAD
MECKLENBURG COUNTY



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

NOTES:

1. MAXIMUM SOIL CONTAMINANT CONCENTRATION LEVELS (MSCCs)

0 100 200

FEET

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: Ark Promotions, Inc. Property

Analytical Method ⟶				8270
Sample ID#	PID (ppm)	Contaminant of Concern ⟶		Acetone
		Date Collected (mm/dd/yy)	Sample Depth (ft BGS)	
AB-1	0.0	11/19/13	5-10	ND
AB-2	0.0	11/19/13	5-10	ND
AB-3	23.4	11/19/13	5-10	ND
AB-4	74.8	11/19/13	0-5	ND
AB-5	86.6	11/19/13	0-5	0.299
AB-6	49.7	11/19/13	5-10	0.135
AB-7	0.0	11/19/13	5-10	ND
AB-8	0.0	11/19/13	5-10	0.248
AB-9	0.0	11/19/13	5-10	0.166
AB-10	0.0	11/19/13	5-10	ND
AB-11	0.0	11/19/13	5-10	ND
Soil-to-Water Maximum Contaminant Concentration (Soil mg/kg)				24

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

APPENDIX A
BORING LOGS

SOIL BORING LOG

PROJECT NAME: Ark Promotions, Inc. Property	SOIL BORING I.D.: AB-1
PROJECT NO.: 71137774	DATE(S) DRILLED: November 19, 2013
PROJECT LOCATION: 530 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	light brown/red/orange clayey silt
					0.5	
					1.0	
					1.5	
					2.0	
0 - 5.0		NA	0.0		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	0.0		7.5	
					8.0	
					8.5	
					9.0	
					9.5	
					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	

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

Terracon

SOIL BORING LOG

PROJECT NAME: Ark Promotions, Inc. Property	SOIL BORING I.D.: AB-2
PROJECT NO.: 71137774	DATE(S) DRILLED: November 19, 2013
PROJECT LOCATION: 530 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	brown/orange clayey silt
					0.5	
					1.0	
					1.5	
					2.0	
0 - 5.0		NA	0.0		2.5	
					3.0	
					3.5	
					4.0	
					4.5	
					5.0	
					5.5	brown clayey silt
					6.0	
					6.5	
					7.0	
5.0-10.0		NA	0.0		7.5	
					8.0	
					8.5	
					9.0	
					9.5	
					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	

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

Terracon

SOIL BORING LOG

PROJECT NAME: Ark Promotions, Inc. Property	SOIL BORING I.D.: AB-3
PROJECT NO.: 71137774	DATE(S) DRILLED: November 19, 2013
PROJECT LOCATION: 530 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	brown/orange clayey silt
					0.5	
					1.0	
					1.5	
					2.0	
0 - 5.0		NA	23.4		2.5	
					3.0	
					3.5	
					4.0	
					4.5	
					5.0	
					5.5	brown clayey silt
					6.0	
					6.5	
					7.0	
5.0-10.0		NA	23.4		7.5	
					8.0	
					8.5	
					9.0	
					9.5	
					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	

DRILLING METHODS
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RC - ROCK CORING
WR - WATER ROTARY

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

* - Sample collected for analysis
ND = <1 ppm

Terracon

SOIL BORING LOG

PROJECT NAME: Ark Promotions, Inc. Property	SOIL BORING I.D.: AB-4
PROJECT NO.: 71137774	DATE(S) DRILLED: November 19, 2013
PROJECT LOCATION: 530 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	dark brown/tan/orange clayey silt
					0.5	
					1.0	
					1.5	
					2.0	
0 - 5.0		NA	74.8		2.5	
					3.0	
					3.5	
					4.0	
					4.5	
					5.0	
					5.5	light brown/orange clayey silt
					6.0	
					6.5	
					7.0	
5.0-10.0		NA	9.5		7.5	
					8.0	
					8.5	
					9.0	
					9.5	
					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	

DRILLING METHODS
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RC - ROCK CORING
WR - WATER ROTARY

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

* - Sample collected for analysis
ND = <1 ppm

Terracon

SOIL BORING LOG

PROJECT NAME: Ark Promotions, Inc. Property	SOIL BORING I.D.: AB-5
PROJECT NO.: 71137774	DATE(S) DRILLED: November 19, 2013
PROJECT LOCATION: 530 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	orange/brown clayey silt
					0.5	
					1.0	
					1.5	
					2.0	
0 - 5.0		NA	86.6		2.5	
					3.0	
					3.5	
					4.0	
					4.5	
					5.0	
					5.5	brown/tan clayey silt
					6.0	
					6.5	
					7.0	
5.0-10.0		NA	20.2		7.5	
					8.0	
					8.5	
					9.0	
					9.5	
					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	

DRILLING METHODS
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RC - ROCK CORING
WR - WATER ROTARY

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

* - Sample collected for analysis
ND = <1 ppm

Terracon

SOIL BORING LOG

PROJECT NAME: Ark Promotions, Inc. Property	SOIL BORING I.D.: AB-6
PROJECT NO.: 71137774	DATE(S) DRILLED: November 19, 2013
PROJECT LOCATION: 530 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	brown/orange clayey silt
					0.5	
					1.0	
					1.5	
					2.0	
0 - 5.0		NA	1.6		2.5	
					3.0	
					3.5	
					4.0	
					4.5	
					5.0	
					5.5	brown clayey silt
					6.0	
					6.5	
					7.0	
5.0-10.0		NA	49.7		7.5	
					8.0	
					8.5	
					9.0	
					9.5	
					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	

DRILLING METHODS
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WR - WATER ROTARY

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

* - Sample collected for analysis
ND = <1 ppm

Terracon

SOIL BORING LOG

PROJECT NAME: Ark Promotions, Inc. Property	SOIL BORING I.D.: AB-7
PROJECT NO.: 71137774	DATE(S) DRILLED: November 19, 2013
PROJECT LOCATION: 530 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	orange/brown clayey silt
					0.5	
					1.0	
					1.5	
					2.0	
0 - 5.0		NA	0.0		2.5	
					3.0	
					3.5	
					4.0	
					4.5	
					5.0	
					5.5	brown/tan clayey silt
					6.0	
					6.5	
					7.0	
5.0-10.0		NA	0.0		7.5	
					8.0	
					8.5	
					9.0	
					9.5	
					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	

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

Terracon

SOIL BORING LOG

PROJECT NAME: Ark Promotions, Inc. Property	SOIL BORING I.D.: AB-8
PROJECT NO.: 71137774	DATE(S) DRILLED: November 19, 2013
PROJECT LOCATION: 530 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	brown/orange clayey silt
					0.5	
					1.0	
					1.5	
					2.0	
0 - 5.0		NA	0.0		2.5	
					3.0	
					3.5	
					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	
					9.0	
					9.5	
					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	

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

Terracon

SOIL BORING LOG

PROJECT NAME: Ark Promotions, Inc. Property	SOIL BORING I.D.: AB-9
PROJECT NO.: 71137774	DATE(S) DRILLED: November 19, 2013
PROJECT LOCATION: 530 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	brown/orange clayey silt
					0.5	
					1.0	
					1.5	
					2.0	
0 - 5.0		NA	0.0		2.5	
					3.0	
					3.5	
					4.0	
					4.5	
					5.0	
					5.5	brown clayey silt
					6.0	
					6.5	
					7.0	
5.0-10.0		NA	0.0		7.5	
					8.0	
					8.5	
					9.0	
					9.5	
					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	

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

Terracon

SOIL BORING LOG

PROJECT NAME: Ark Promotions, Inc. Property	SOIL BORING I.D.: AB-10
PROJECT NO.: 71137774	DATE(S) DRILLED: November 19, 2013
PROJECT LOCATION: 530 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	brown/orange clayey silt
					0.5	
					1.0	
					1.5	
					2.0	
0 - 5.0		NA	0.0		2.5	
					3.0	
					3.5	
					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	
					9.0	
					9.5	
					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	

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

Terracon

SOIL BORING LOG

PROJECT NAME: Ark Promotions, Inc. Property	SOIL BORING I.D.: AB-11
PROJECT NO.: 71137774	DATE(S) DRILLED: November 19, 2013
PROJECT LOCATION: 530 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	dark brown/tan/orange clayey silt
					0.5	
					1.0	
					1.5	
					2.0	
0 - 5.0		NA	0.0		2.5	
					3.0	
					3.5	
					4.0	
					4.5	
					5.0	
					5.5	light brown/orange clayey silt
					6.0	
					6.5	
					7.0	
5.0-10.0		NA	0.0		7.5	
					8.0	
					8.5	
					9.0	
					9.5	
					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	

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

Terracon

APPENDIX B
PHOTOGRAPHS

Photo 1 View of Ark Promotions Property (formerly Kaiser Fluid Technologies), looking northwest from Raleigh Street.

APPENDIX C
GEOPHYSICAL SURVEY REPORT

PYRAMID ENVIRONMENTAL & ENGINEERING, P.C.

PYRAMID ENVIRONMENTAL & ENGINEERING
(PROJECT 2013-259)

GEOPHYSICAL SURVEY

ARK PROMOTIONS, INC. PROPERTY – 530 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
530 E. Sugar Creek Road
Charlotte, Mecklenburg County, North Carolina

Table of Contents

Figures

EXECUTIVE SUMMARY

Project Description: Pyramid Environmental conducted a geophysical investigation for Terracon at the Ark Promotions, Inc. property, located at 530 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 an electromagnetic (EM) induction-metal detection and ground penetrating radar (GPR) surveys.

Geophysical Results: The majority 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. An area of suspected reinforced concrete was observed as an anomaly in the EM data at the location of a concrete sidewalk, and was investigated further with GPR. Reconnaissance scans by the GPR confirmed the presence of reinforcement within the concrete sidewalk, and did not record any other significant features. 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 Ark Promotions, Inc. property, located at 530 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 grid spanned approximately 175 feet from west to east and approximately 550 feet from north to south. 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 grassy medians and open space. 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 across select EM differential anomalies and/or across areas of reinforced concrete 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 survey area at the property are presented in **Figure 2**. 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.

Discussion of EM Anomalies: The EM response across the south boundary of the survey area was the result of reinforced concrete curbing adjacent to Raleigh Street. The EM anomaly at X=180, Y=20 was the result of a power pole and sign. The EM anomaly at X=90, Y=85 was the result of a drop inlet. The EM anomaly at X=185, Y=135 was the result of a manhole cover. The EM anomaly at X=160, Y=185 was suspected to be the result of reinforcement within the concrete sidewalk. The EM anomalies at X=175, Y=250 and X=175, Y=270 were the combined result of water meter access panels, a fire water access pipe, and a fire water access panel. The EM anomaly at X=180, Y=380 was the result of a fire hydrant. The EM anomaly at X=185, Y=485 was the result of a manhole cover. The EM anomaly at X=190, Y=550 was the result of a power pole. The EM response along the west boundary of the survey area from Y=390 to Y=540

was the result of a chain link fence extending across this location. The varying EM response extending from north to south across the majority of the survey area at X=175-180 was associated with a water main line in this area. The water line had been marked by utility locators. The anomaly at X=160, Y=320 was suspected to be a utility associated with the water main line. Any other minor anomalies not discussed above were interpreted to be insignificant isolated zones of debris.

Discussion of GPR Survey

All of the EM anomalies recorded by the survey could be directly attributable to visible objects at the ground surface or utilities, with the exception of the feature at X=160, Y=180. This feature was associated with a concrete sidewalk leading to the building on-site, and was suspected to be the result of reinforcement within a portion of the concrete. GPR reconnaissance scans across the sidewalk confirmed the presence of reinforcement within the concrete.

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 properties at 530 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.
- The majority 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.
- An area of suspected reinforced concrete was observed as an anomaly in the EM data at the location of a concrete sidewalk, and was investigated further with GPR.
- Reconnaissance scans by the GPR confirmed the presence of reinforcement within the concrete sidewalk, and did not record any other significant features.
- 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, reinforced concrete, or other restrictions to the accessibility of the geophysical instruments could not be fully investigated.

Approximate Boundaries of the Geophysical Survey Area

View of East Side of Ark Property
(Facing Approximately North)

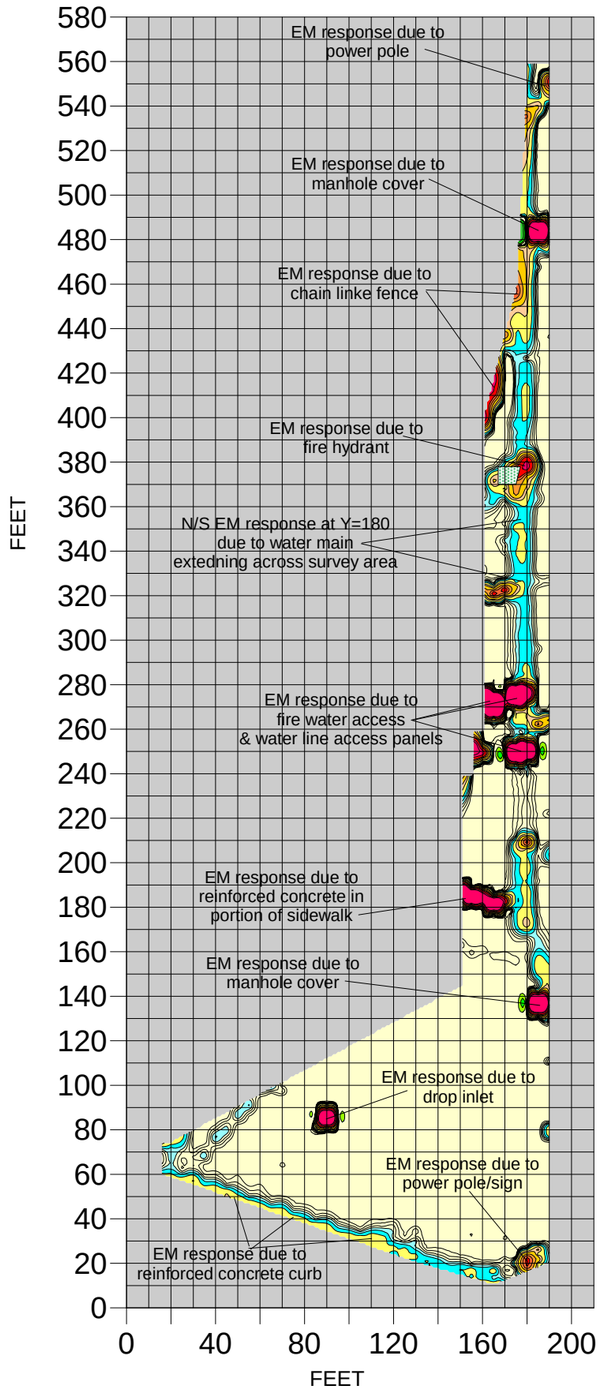
View of West Side of Ark Property
(Facing Approximately West)

TITLE	ARK PROMOTIONS, INC. PROPERTY: GEOPHYSICAL SURVEY BOUNDARIES AND SITE PHOTOGRAPHS
PROJECT	SUGAR CREEK ROAD NCDOT ROW IMPROVEMENT PROJECT CHARLOTTE, MECKLENBURG COUNTY, NC

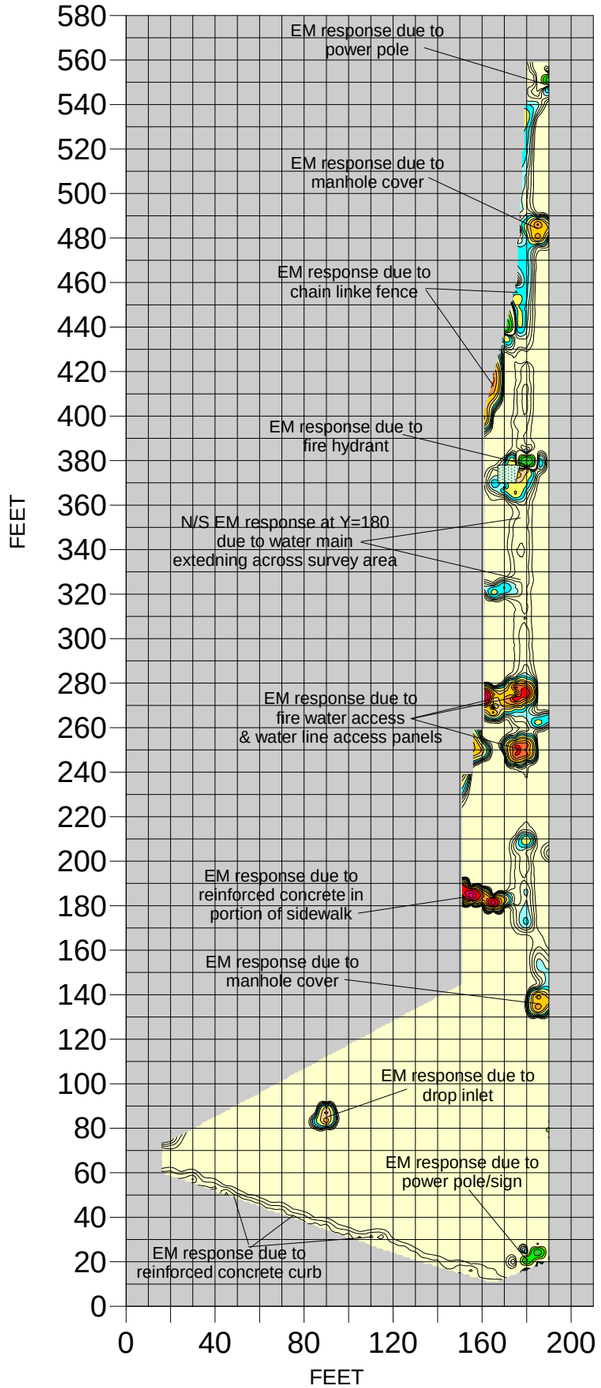
PYRAMID ENVIRONMENTAL & ENGINEERING, P.C
503 INDUSTRIAL AVENUE
GREENSBORO, NC 27460
(336) 335-3174 (p) (336) 691-0648 (f)
License # C1251 Eng. / License # C257 Geology

DATE	11/6/2013	CLIENT	TERRACON
PYRAMID PROJECT #:	2013-259		**FIGURE 1**

EM61 Bottom Coil Results



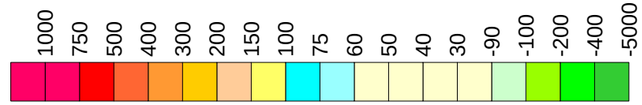
EM61 Differential Results



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)



TITLE: ARK PROMOTIONS, INC. PROPERTIES: EM61 BOTTOM COIL & DIFFERENTIAL RESULTS CONTOUR MAPS

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

PYRAMID ENVIRONMENTAL & ENGINEERING, P.C.
503 INDUSTRIAL AVENUE
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License # C1251 Eng. / License # C257 Geology

DATE: 11/6/2013

CLIENT: TERRACON

PYRAMID PROJECT #: 2013-259

FIGURE 2

APPENDIX D
LABORATORY ANAYLTICAL 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 Kincey 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.: 92180232

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

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

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(828)254-7176

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

CERTIFICATIONS

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

Charlotte Certification IDs
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Certification #: 99006001
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
West Virginia Certification #: 357
Virginia/VELAP Certification #: 460221

REPORT OF LABORATORY ANALYSIS

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

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

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

SAMPLE ANALYTE COUNT

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92180232001	**AB9**	EPA 8270	BPJ	74	PASI-C
		EPA 8260	DLK	70	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
92180232002	**AB10**	EPA 8270	BPJ	74	PASI-C
		EPA 8260	DLK	70	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
92180232003	**AB8**	EPA 8270	BPJ	74	PASI-C
		EPA 8260	DLK	70	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
92180232004	**AB11**	EPA 8270	BPJ	74	PASI-C
		EPA 8260	DLK	70	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
92180232005	**AB7**	EPA 8270	BPJ	74	PASI-C
		EPA 8260	DLK	70	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
92180232006	**AB6**	EPA 8270	BPJ	74	PASI-C
		EPA 8260	DLK	70	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
92180232007	**AB5**	EPA 8270	BPJ	74	PASI-C
		EPA 8260	DLK	70	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
92180232008	**AB4**	EPA 8270	BPJ	74	PASI-C
		EPA 8260	DLK	70	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
92180232009	**AB3**	EPA 8270	BPJ	74	PASI-C
		EPA 8260	DLK	70	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
92180232010	**AB2**	EPA 8270	BPJ	74	PASI-C
		EPA 8260	DLK	70	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
92180232011	**AB1**	EPA 8270	BPJ	74	PASI-C
		EPA 8260	DLK	70	PASI-C
		ASTM D2974-87	TNM	1	PASI-C

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(828)254-7176

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

SUMMARY OF DETECTION

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92180232001	**AB9**					
EPA 8260	Acetone	166	ug/kg	118	11/27/13 21:09	A+
ASTM D2974-87	Percent Moisture	22.4	%	0.10	12/04/13 08:11	
92180232002	**AB10**					
ASTM D2974-87	Percent Moisture	23.9	%	0.10	12/04/13 08:11	
92180232003	**AB8**					
EPA 8260	Acetone	248	ug/kg	81.9	12/01/13 15:37	
ASTM D2974-87	Percent Moisture	18.9	%	0.10	12/04/13 08:12	
92180232004	**AB11**					
ASTM D2974-87	Percent Moisture	19.1	%	0.10	12/04/13 08:12	
92180232005	**AB7**					
ASTM D2974-87	Percent Moisture	19.7	%	0.10	12/04/13 08:12	
92180232006	**AB6**					
EPA 8260	Acetone	135	ug/kg	83.4	12/01/13 16:35	A+
ASTM D2974-87	Percent Moisture	19.8	%	0.10	12/04/13 08:12	
92180232007	**AB5**					
EPA 8260	Acetone	299	ug/kg	83.8	12/01/13 16:55	
ASTM D2974-87	Percent Moisture	14.8	%	0.10	12/04/13 08:12	
92180232008	**AB4**					
ASTM D2974-87	Percent Moisture	13.2	%	0.10	12/04/13 08:12	
92180232009	**AB3**					
ASTM D2974-87	Percent Moisture	19.7	%	0.10	12/04/13 08:13	
92180232010	**AB2**					
ASTM D2974-87	Percent Moisture	15.7	%	0.10	12/04/13 08:13	
92180232011	**AB1**					
ASTM D2974-87	Percent Moisture	14.2	%	0.10	12/04/13 08:13	

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PROJECT NARRATIVE

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

Method: **EPA 8270**
Description: 8270 MSSV Microwave
Client: NCDOT West Central
Date: December 05, 2013

General Information:
11 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.

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

QC Batch: OEXT/24935

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92180232003

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

- MSD (Lab ID: 1094345)
  - 1,2-Dichlorobenzene

R1: RPD value was outside control limits.

- MSD (Lab ID: 1094345)
  - Phenol

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

Method: **EPA 8270**
Description: 8270 MSSV Microwave
Client: NCDOT West Central
Date: December 05, 2013

Analyte Comments:

QC Batch: OEXT/24935

2g: This flag applies to all compounds with RPD greater than 30%.

- MSD (Lab ID: 1094345)
  - Phenol

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PROJECT NARRATIVE

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

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

General Information:
11 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.

QC Batch: MSV/25086

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92180392034

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 1096332)
  - Acetone
  - Styrene
- MSD (Lab ID: 1096333)
  - Styrene

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

QC Batch: MSV/25095

R1: RPD value was outside control limits.

- DUP (Lab ID: 1096618)
  - Acetone

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PROJECT NARRATIVE

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

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

Additional Comments:

Analyte Comments:

QC Batch: MSV/25059

1g: The internal standard response is below criteria. No hits associated with this internal standard. Results unaffected by high bias.

- AB9 (Lab ID: 92180232001)
  - Dichlorodifluoromethane

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

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ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

Sample: AB9 **Lab ID: 92180232001** Collected: 11/19/13 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
8270 MSSV Microwave	Analytical Method: EPA 8270 Preparation Method: EPA 3546							
Acenaphthene	ND	ug/kg	425	1	11/26/13 13:40	11/27/13 14:38	83-32-9	
Acenaphthylene	ND	ug/kg	425	1	11/26/13 13:40	11/27/13 14:38	208-96-8	
Aniline	ND	ug/kg	425	1	11/26/13 13:40	11/27/13 14:38	62-53-3	
Anthracene	ND	ug/kg	425	1	11/26/13 13:40	11/27/13 14:38	120-12-7	
Benzo(a)anthracene	ND	ug/kg	425	1	11/26/13 13:40	11/27/13 14:38	56-55-3	
Benzo(a)pyrene	ND	ug/kg	425	1	11/26/13 13:40	11/27/13 14:38	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	425	1	11/26/13 13:40	11/27/13 14:38	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	425	1	11/26/13 13:40	11/27/13 14:38	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	425	1	11/26/13 13:40	11/27/13 14:38	207-08-9	
Benzoic Acid	ND	ug/kg	2130	1	11/26/13 13:40	11/27/13 14:38	65-85-0	
Benzyl alcohol	ND	ug/kg	850	1	11/26/13 13:40	11/27/13 14:38	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	425	1	11/26/13 13:40	11/27/13 14:38	101-55-3	
Butylbenzylphthalate	ND	ug/kg	425	1	11/26/13 13:40	11/27/13 14:38	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	850	1	11/26/13 13:40	11/27/13 14:38	59-50-7	
4-Chloroaniline	ND	ug/kg	2130	1	11/26/13 13:40	11/27/13 14:38	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	425	1	11/26/13 13:40	11/27/13 14:38	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	425	1	11/26/13 13:40	11/27/13 14:38	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	425	1	11/26/13 13:40	11/27/13 14:38	108-60-1	
2-Chloronaphthalene	ND	ug/kg	425	1	11/26/13 13:40	11/27/13 14:38	91-58-7	
2-Chlorophenol	ND	ug/kg	425	1	11/26/13 13:40	11/27/13 14:38	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	425	1	11/26/13 13:40	11/27/13 14:38	7005-72-3	
Chrysene	ND	ug/kg	425	1	11/26/13 13:40	11/27/13 14:38	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	425	1	11/26/13 13:40	11/27/13 14:38	53-70-3	
Dibenzofuran	ND	ug/kg	425	1	11/26/13 13:40	11/27/13 14:38	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	425	1	11/26/13 13:40	11/27/13 14:38	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	425	1	11/26/13 13:40	11/27/13 14:38	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	425	1	11/26/13 13:40	11/27/13 14:38	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	2130	1	11/26/13 13:40	11/27/13 14:38	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	425	1	11/26/13 13:40	11/27/13 14:38	120-83-2	
Diethylphthalate	ND	ug/kg	425	1	11/26/13 13:40	11/27/13 14:38	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	425	1	11/26/13 13:40	11/27/13 14:38	105-67-9	
Dimethylphthalate	ND	ug/kg	425	1	11/26/13 13:40	11/27/13 14:38	131-11-3	
Di-n-butylphthalate	ND	ug/kg	425	1	11/26/13 13:40	11/27/13 14:38	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	850	1	11/26/13 13:40	11/27/13 14:38	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	2130	1	11/26/13 13:40	11/27/13 14:38	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	425	1	11/26/13 13:40	11/27/13 14:38	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	425	1	11/26/13 13:40	11/27/13 14:38	606-20-2	
Di-n-octylphthalate	ND	ug/kg	425	1	11/26/13 13:40	11/27/13 14:38	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	425	1	11/26/13 13:40	11/27/13 14:38	117-81-7	
Fluoranthene	ND	ug/kg	425	1	11/26/13 13:40	11/27/13 14:38	206-44-0	
Fluorene	ND	ug/kg	425	1	11/26/13 13:40	11/27/13 14:38	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	425	1	11/26/13 13:40	11/27/13 14:38	87-68-3	
Hexachlorobenzene	ND	ug/kg	425	1	11/26/13 13:40	11/27/13 14:38	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	425	1	11/26/13 13:40	11/27/13 14:38	77-47-4	
Hexachloroethane	ND	ug/kg	425	1	11/26/13 13:40	11/27/13 14:38	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	425	1	11/26/13 13:40	11/27/13 14:38	193-39-5	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

Sample: AB9 **Lab ID: 92180232001** Collected: 11/19/13 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
8270 MSSV Microwave	Analytical Method: EPA 8270 Preparation Method: EPA 3546							
Isophorone	ND	ug/kg	425	1	11/26/13 13:40	11/27/13 14:38	78-59-1	
1-Methylnaphthalene	ND	ug/kg	425	1	11/26/13 13:40	11/27/13 14:38	90-12-0	
2-Methylnaphthalene	ND	ug/kg	425	1	11/26/13 13:40	11/27/13 14:38	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	425	1	11/26/13 13:40	11/27/13 14:38	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	425	1	11/26/13 13:40	11/27/13 14:38		
Naphthalene	ND	ug/kg	425	1	11/26/13 13:40	11/27/13 14:38	91-20-3	
2-Nitroaniline	ND	ug/kg	2130	1	11/26/13 13:40	11/27/13 14:38	88-74-4	
3-Nitroaniline	ND	ug/kg	2130	1	11/26/13 13:40	11/27/13 14:38	99-09-2	
4-Nitroaniline	ND	ug/kg	850	1	11/26/13 13:40	11/27/13 14:38	100-01-6	
Nitrobenzene	ND	ug/kg	425	1	11/26/13 13:40	11/27/13 14:38	98-95-3	
2-Nitrophenol	ND	ug/kg	425	1	11/26/13 13:40	11/27/13 14:38	88-75-5	
4-Nitrophenol	ND	ug/kg	2130	1	11/26/13 13:40	11/27/13 14:38	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	425	1	11/26/13 13:40	11/27/13 14:38	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	425	1	11/26/13 13:40	11/27/13 14:38	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	425	1	11/26/13 13:40	11/27/13 14:38	86-30-6	
Pentachlorophenol	ND	ug/kg	2130	1	11/26/13 13:40	11/27/13 14:38	87-86-5	
Phenanthrene	ND	ug/kg	425	1	11/26/13 13:40	11/27/13 14:38	85-01-8	
Phenol	ND	ug/kg	425	1	11/26/13 13:40	11/27/13 14:38	108-95-2	
Pyrene	ND	ug/kg	425	1	11/26/13 13:40	11/27/13 14:38	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/kg	425	1	11/26/13 13:40	11/27/13 14:38	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	425	1	11/26/13 13:40	11/27/13 14:38	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	425	1	11/26/13 13:40	11/27/13 14:38	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	58	%	23-110	1	11/26/13 13:40	11/27/13 14:38	4165-60-0	
2-Fluorobiphenyl (S)	58	%	30-110	1	11/26/13 13:40	11/27/13 14:38	321-60-8	
Terphenyl-d14 (S)	70	%	28-110	1	11/26/13 13:40	11/27/13 14:38	1718-51-0	
Phenol-d6 (S)	60	%	22-110	1	11/26/13 13:40	11/27/13 14:38	13127-88-3	
2-Fluorophenol (S)	60	%	13-110	1	11/26/13 13:40	11/27/13 14:38	367-12-4	
2,4,6-Tribromophenol (S)	81	%	27-110	1	11/26/13 13:40	11/27/13 14:38	118-79-6	
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
Acetone	**166**	ug/kg	118	1		11/27/13 21:09	67-64-1	A+
Benzene	ND	ug/kg	5.9	1		11/27/13 21:09	71-43-2	
Bromobenzene	ND	ug/kg	5.9	1		11/27/13 21:09	108-86-1	
Bromochloromethane	ND	ug/kg	5.9	1		11/27/13 21:09	74-97-5	
Bromodichloromethane	ND	ug/kg	5.9	1		11/27/13 21:09	75-27-4	
Bromoform	ND	ug/kg	5.9	1		11/27/13 21:09	75-25-2	
Bromomethane	ND	ug/kg	11.8	1		11/27/13 21:09	74-83-9	
2-Butanone (MEK)	ND	ug/kg	118	1		11/27/13 21:09	78-93-3	
n-Butylbenzene	ND	ug/kg	5.9	1		11/27/13 21:09	104-51-8	
sec-Butylbenzene	ND	ug/kg	5.9	1		11/27/13 21:09	135-98-8	
tert-Butylbenzene	ND	ug/kg	5.9	1		11/27/13 21:09	98-06-6	
Carbon tetrachloride	ND	ug/kg	5.9	1		11/27/13 21:09	56-23-5	
Chlorobenzene	ND	ug/kg	5.9	1		11/27/13 21:09	108-90-7	
Chloroethane	ND	ug/kg	11.8	1		11/27/13 21:09	75-00-3	
Chloroform	ND	ug/kg	5.9	1		11/27/13 21:09	67-66-3	

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ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

Sample: AB9 **Lab ID: 92180232001** Collected: 11/19/13 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
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
Chloromethane	ND	ug/kg	11.8	1		11/27/13 21:09	74-87-3	
2-Chlorotoluene	ND	ug/kg	5.9	1		11/27/13 21:09	95-49-8	
4-Chlorotoluene	ND	ug/kg	5.9	1		11/27/13 21:09	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	5.9	1		11/27/13 21:09	96-12-8	
Dibromochloromethane	ND	ug/kg	5.9	1		11/27/13 21:09	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	5.9	1		11/27/13 21:09	106-93-4	
Dibromomethane	ND	ug/kg	5.9	1		11/27/13 21:09	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	5.9	1		11/27/13 21:09	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	5.9	1		11/27/13 21:09	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	5.9	1		11/27/13 21:09	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	11.8	1		11/27/13 21:09	75-71-8	1g
1,1-Dichloroethane	ND	ug/kg	5.9	1		11/27/13 21:09	75-34-3	
1,2-Dichloroethane	ND	ug/kg	5.9	1		11/27/13 21:09	107-06-2	
1,1-Dichloroethene	ND	ug/kg	5.9	1		11/27/13 21:09	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	5.9	1		11/27/13 21:09	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	5.9	1		11/27/13 21:09	156-60-5	
1,2-Dichloropropane	ND	ug/kg	5.9	1		11/27/13 21:09	78-87-5	
1,3-Dichloropropane	ND	ug/kg	5.9	1		11/27/13 21:09	142-28-9	
2,2-Dichloropropane	ND	ug/kg	5.9	1		11/27/13 21:09	594-20-7	
1,1-Dichloropropene	ND	ug/kg	5.9	1		11/27/13 21:09	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	5.9	1		11/27/13 21:09	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	5.9	1		11/27/13 21:09	10061-02-6	
Diisopropyl ether	ND	ug/kg	5.9	1		11/27/13 21:09	108-20-3	
Ethylbenzene	ND	ug/kg	5.9	1		11/27/13 21:09	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	5.9	1		11/27/13 21:09	87-68-3	
2-Hexanone	ND	ug/kg	59.1	1		11/27/13 21:09	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	5.9	1		11/27/13 21:09	98-82-8	
p-Isopropyltoluene	ND	ug/kg	5.9	1		11/27/13 21:09	99-87-6	
Methylene Chloride	ND	ug/kg	23.6	1		11/27/13 21:09	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	59.1	1		11/27/13 21:09	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	5.9	1		11/27/13 21:09	1634-04-4	
Naphthalene	ND	ug/kg	5.9	1		11/27/13 21:09	91-20-3	
n-Propylbenzene	ND	ug/kg	5.9	1		11/27/13 21:09	103-65-1	
Styrene	ND	ug/kg	5.9	1		11/27/13 21:09	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	5.9	1		11/27/13 21:09	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	5.9	1		11/27/13 21:09	79-34-5	
Tetrachloroethene	ND	ug/kg	5.9	1		11/27/13 21:09	127-18-4	
Toluene	ND	ug/kg	5.9	1		11/27/13 21:09	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	5.9	1		11/27/13 21:09	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	5.9	1		11/27/13 21:09	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	5.9	1		11/27/13 21:09	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	5.9	1		11/27/13 21:09	79-00-5	
Trichloroethene	ND	ug/kg	5.9	1		11/27/13 21:09	79-01-6	
Trichlorofluoromethane	ND	ug/kg	5.9	1		11/27/13 21:09	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	5.9	1		11/27/13 21:09	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	5.9	1		11/27/13 21:09	95-63-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

Sample: AB9 **Lab ID: 92180232001** Collected: 11/19/13 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
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
1,3,5-Trimethylbenzene	ND	ug/kg	5.9	1		11/27/13 21:09	108-67-8	
Vinyl acetate	ND	ug/kg	59.1	1		11/27/13 21:09	108-05-4	
Vinyl chloride	ND	ug/kg	11.8	1		11/27/13 21:09	75-01-4	
Xylene (Total)	ND	ug/kg	11.8	1		11/27/13 21:09	1330-20-7	
m&p-Xylene	ND	ug/kg	11.8	1		11/27/13 21:09	179601-23-1	
o-Xylene	ND	ug/kg	5.9	1		11/27/13 21:09	95-47-6	
Surrogates								
Toluene-d8 (S)	95	%	70-130	1		11/27/13 21:09	2037-26-5	
4-Bromofluorobenzene (S)	94	%	70-130	1		11/27/13 21:09	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	70-132	1		11/27/13 21:09	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**22.4**	%	0.10	1		12/04/13 08:11		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

Sample: AB10 **Lab ID: 92180232002** Collected: 11/19/13 10:05 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							
Acenaphthene	ND	ug/kg	434	1	11/26/13 13:40	11/27/13 15:09	83-32-9	
Acenaphthylene	ND	ug/kg	434	1	11/26/13 13:40	11/27/13 15:09	208-96-8	
Aniline	ND	ug/kg	434	1	11/26/13 13:40	11/27/13 15:09	62-53-3	
Anthracene	ND	ug/kg	434	1	11/26/13 13:40	11/27/13 15:09	120-12-7	
Benzo(a)anthracene	ND	ug/kg	434	1	11/26/13 13:40	11/27/13 15:09	56-55-3	
Benzo(a)pyrene	ND	ug/kg	434	1	11/26/13 13:40	11/27/13 15:09	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	434	1	11/26/13 13:40	11/27/13 15:09	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	434	1	11/26/13 13:40	11/27/13 15:09	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	434	1	11/26/13 13:40	11/27/13 15:09	207-08-9	
Benzoic Acid	ND	ug/kg	2170	1	11/26/13 13:40	11/27/13 15:09	65-85-0	
Benzyl alcohol	ND	ug/kg	868	1	11/26/13 13:40	11/27/13 15:09	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	434	1	11/26/13 13:40	11/27/13 15:09	101-55-3	
Butylbenzylphthalate	ND	ug/kg	434	1	11/26/13 13:40	11/27/13 15:09	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	868	1	11/26/13 13:40	11/27/13 15:09	59-50-7	
4-Chloroaniline	ND	ug/kg	2170	1	11/26/13 13:40	11/27/13 15:09	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	434	1	11/26/13 13:40	11/27/13 15:09	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	434	1	11/26/13 13:40	11/27/13 15:09	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	434	1	11/26/13 13:40	11/27/13 15:09	108-60-1	
2-Chloronaphthalene	ND	ug/kg	434	1	11/26/13 13:40	11/27/13 15:09	91-58-7	
2-Chlorophenol	ND	ug/kg	434	1	11/26/13 13:40	11/27/13 15:09	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	434	1	11/26/13 13:40	11/27/13 15:09	7005-72-3	
Chrysene	ND	ug/kg	434	1	11/26/13 13:40	11/27/13 15:09	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	434	1	11/26/13 13:40	11/27/13 15:09	53-70-3	
Dibenzofuran	ND	ug/kg	434	1	11/26/13 13:40	11/27/13 15:09	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	434	1	11/26/13 13:40	11/27/13 15:09	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	434	1	11/26/13 13:40	11/27/13 15:09	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	434	1	11/26/13 13:40	11/27/13 15:09	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	2170	1	11/26/13 13:40	11/27/13 15:09	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	434	1	11/26/13 13:40	11/27/13 15:09	120-83-2	
Diethylphthalate	ND	ug/kg	434	1	11/26/13 13:40	11/27/13 15:09	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	434	1	11/26/13 13:40	11/27/13 15:09	105-67-9	
Dimethylphthalate	ND	ug/kg	434	1	11/26/13 13:40	11/27/13 15:09	131-11-3	
Di-n-butylphthalate	ND	ug/kg	434	1	11/26/13 13:40	11/27/13 15:09	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	868	1	11/26/13 13:40	11/27/13 15:09	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	2170	1	11/26/13 13:40	11/27/13 15:09	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	434	1	11/26/13 13:40	11/27/13 15:09	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	434	1	11/26/13 13:40	11/27/13 15:09	606-20-2	
Di-n-octylphthalate	ND	ug/kg	434	1	11/26/13 13:40	11/27/13 15:09	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	434	1	11/26/13 13:40	11/27/13 15:09	117-81-7	
Fluoranthene	ND	ug/kg	434	1	11/26/13 13:40	11/27/13 15:09	206-44-0	
Fluorene	ND	ug/kg	434	1	11/26/13 13:40	11/27/13 15:09	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	434	1	11/26/13 13:40	11/27/13 15:09	87-68-3	
Hexachlorobenzene	ND	ug/kg	434	1	11/26/13 13:40	11/27/13 15:09	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	434	1	11/26/13 13:40	11/27/13 15:09	77-47-4	
Hexachloroethane	ND	ug/kg	434	1	11/26/13 13:40	11/27/13 15:09	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	434	1	11/26/13 13:40	11/27/13 15:09	193-39-5	

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ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

Sample: AB10 **Lab ID: 92180232002** Collected: 11/19/13 10:05 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	434	1	11/26/13 13:40	11/27/13 15:09	78-59-1	
1-Methylnaphthalene	ND	ug/kg	434	1	11/26/13 13:40	11/27/13 15:09	90-12-0	
2-Methylnaphthalene	ND	ug/kg	434	1	11/26/13 13:40	11/27/13 15:09	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	434	1	11/26/13 13:40	11/27/13 15:09	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	434	1	11/26/13 13:40	11/27/13 15:09		
Naphthalene	ND	ug/kg	434	1	11/26/13 13:40	11/27/13 15:09	91-20-3	
2-Nitroaniline	ND	ug/kg	2170	1	11/26/13 13:40	11/27/13 15:09	88-74-4	
3-Nitroaniline	ND	ug/kg	2170	1	11/26/13 13:40	11/27/13 15:09	99-09-2	
4-Nitroaniline	ND	ug/kg	868	1	11/26/13 13:40	11/27/13 15:09	100-01-6	
Nitrobenzene	ND	ug/kg	434	1	11/26/13 13:40	11/27/13 15:09	98-95-3	
2-Nitrophenol	ND	ug/kg	434	1	11/26/13 13:40	11/27/13 15:09	88-75-5	
4-Nitrophenol	ND	ug/kg	2170	1	11/26/13 13:40	11/27/13 15:09	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	434	1	11/26/13 13:40	11/27/13 15:09	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	434	1	11/26/13 13:40	11/27/13 15:09	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	434	1	11/26/13 13:40	11/27/13 15:09	86-30-6	
Pentachlorophenol	ND	ug/kg	2170	1	11/26/13 13:40	11/27/13 15:09	87-86-5	
Phenanthrene	ND	ug/kg	434	1	11/26/13 13:40	11/27/13 15:09	85-01-8	
Phenol	ND	ug/kg	434	1	11/26/13 13:40	11/27/13 15:09	108-95-2	
Pyrene	ND	ug/kg	434	1	11/26/13 13:40	11/27/13 15:09	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/kg	434	1	11/26/13 13:40	11/27/13 15:09	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	434	1	11/26/13 13:40	11/27/13 15:09	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	434	1	11/26/13 13:40	11/27/13 15:09	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	67	%	23-110	1	11/26/13 13:40	11/27/13 15:09	4165-60-0	
2-Fluorobiphenyl (S)	72	%	30-110	1	11/26/13 13:40	11/27/13 15:09	321-60-8	
Terphenyl-d14 (S)	72	%	28-110	1	11/26/13 13:40	11/27/13 15:09	1718-51-0	
Phenol-d6 (S)	66	%	22-110	1	11/26/13 13:40	11/27/13 15:09	13127-88-3	
2-Fluorophenol (S)	68	%	13-110	1	11/26/13 13:40	11/27/13 15:09	367-12-4	
2,4,6-Tribromophenol (S)	87	%	27-110	1	11/26/13 13:40	11/27/13 15:09	118-79-6	
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
Acetone	ND	ug/kg	107	1		11/29/13 17:02	67-64-1	
Benzene	ND	ug/kg	5.3	1		11/29/13 17:02	71-43-2	
Bromobenzene	ND	ug/kg	5.3	1		11/29/13 17:02	108-86-1	
Bromochloromethane	ND	ug/kg	5.3	1		11/29/13 17:02	74-97-5	
Bromodichloromethane	ND	ug/kg	5.3	1		11/29/13 17:02	75-27-4	
Bromoform	ND	ug/kg	5.3	1		11/29/13 17:02	75-25-2	
Bromomethane	ND	ug/kg	10.7	1		11/29/13 17:02	74-83-9	
2-Butanone (MEK)	ND	ug/kg	107	1		11/29/13 17:02	78-93-3	
n-Butylbenzene	ND	ug/kg	5.3	1		11/29/13 17:02	104-51-8	
sec-Butylbenzene	ND	ug/kg	5.3	1		11/29/13 17:02	135-98-8	
tert-Butylbenzene	ND	ug/kg	5.3	1		11/29/13 17:02	98-06-6	
Carbon tetrachloride	ND	ug/kg	5.3	1		11/29/13 17:02	56-23-5	
Chlorobenzene	ND	ug/kg	5.3	1		11/29/13 17:02	108-90-7	
Chloroethane	ND	ug/kg	10.7	1		11/29/13 17:02	75-00-3	
Chloroform	ND	ug/kg	5.3	1		11/29/13 17:02	67-66-3	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

Sample: AB10 **Lab ID: 92180232002** Collected: 11/19/13 10:05 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
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
Chloromethane	ND	ug/kg	10.7	1		11/29/13 17:02	74-87-3	
2-Chlorotoluene	ND	ug/kg	5.3	1		11/29/13 17:02	95-49-8	
4-Chlorotoluene	ND	ug/kg	5.3	1		11/29/13 17:02	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	5.3	1		11/29/13 17:02	96-12-8	
Dibromochloromethane	ND	ug/kg	5.3	1		11/29/13 17:02	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	5.3	1		11/29/13 17:02	106-93-4	
Dibromomethane	ND	ug/kg	5.3	1		11/29/13 17:02	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	5.3	1		11/29/13 17:02	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	5.3	1		11/29/13 17:02	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	5.3	1		11/29/13 17:02	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	10.7	1		11/29/13 17:02	75-71-8	
1,1-Dichloroethane	ND	ug/kg	5.3	1		11/29/13 17:02	75-34-3	
1,2-Dichloroethane	ND	ug/kg	5.3	1		11/29/13 17:02	107-06-2	
1,1-Dichloroethene	ND	ug/kg	5.3	1		11/29/13 17:02	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	5.3	1		11/29/13 17:02	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	5.3	1		11/29/13 17:02	156-60-5	
1,2-Dichloropropane	ND	ug/kg	5.3	1		11/29/13 17:02	78-87-5	
1,3-Dichloropropane	ND	ug/kg	5.3	1		11/29/13 17:02	142-28-9	
2,2-Dichloropropane	ND	ug/kg	5.3	1		11/29/13 17:02	594-20-7	
1,1-Dichloropropene	ND	ug/kg	5.3	1		11/29/13 17:02	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	5.3	1		11/29/13 17:02	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	5.3	1		11/29/13 17:02	10061-02-6	
Diisopropyl ether	ND	ug/kg	5.3	1		11/29/13 17:02	108-20-3	
Ethylbenzene	ND	ug/kg	5.3	1		11/29/13 17:02	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	5.3	1		11/29/13 17:02	87-68-3	
2-Hexanone	ND	ug/kg	53.3	1		11/29/13 17:02	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	5.3	1		11/29/13 17:02	98-82-8	
p-Isopropyltoluene	ND	ug/kg	5.3	1		11/29/13 17:02	99-87-6	
Methylene Chloride	ND	ug/kg	21.3	1		11/29/13 17:02	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	53.3	1		11/29/13 17:02	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	5.3	1		11/29/13 17:02	1634-04-4	
Naphthalene	ND	ug/kg	5.3	1		11/29/13 17:02	91-20-3	
n-Propylbenzene	ND	ug/kg	5.3	1		11/29/13 17:02	103-65-1	
Styrene	ND	ug/kg	5.3	1		11/29/13 17:02	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	5.3	1		11/29/13 17:02	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	5.3	1		11/29/13 17:02	79-34-5	
Tetrachloroethene	ND	ug/kg	5.3	1		11/29/13 17:02	127-18-4	
Toluene	ND	ug/kg	5.3	1		11/29/13 17:02	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	5.3	1		11/29/13 17:02	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	5.3	1		11/29/13 17:02	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	5.3	1		11/29/13 17:02	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	5.3	1		11/29/13 17:02	79-00-5	
Trichloroethene	ND	ug/kg	5.3	1		11/29/13 17:02	79-01-6	
Trichlorofluoromethane	ND	ug/kg	5.3	1		11/29/13 17:02	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	5.3	1		11/29/13 17:02	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	5.3	1		11/29/13 17:02	95-63-6	

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ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

Sample: AB10 **Lab ID: 92180232002** Collected: 11/19/13 10:05 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
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
1,3,5-Trimethylbenzene	ND	ug/kg	5.3	1		11/29/13 17:02	108-67-8	
Vinyl acetate	ND	ug/kg	53.3	1		11/29/13 17:02	108-05-4	
Vinyl chloride	ND	ug/kg	10.7	1		11/29/13 17:02	75-01-4	
Xylene (Total)	ND	ug/kg	10.7	1		11/29/13 17:02	1330-20-7	
m&p-Xylene	ND	ug/kg	10.7	1		11/29/13 17:02	179601-23-1	
o-Xylene	ND	ug/kg	5.3	1		11/29/13 17:02	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%	70-130	1		11/29/13 17:02	2037-26-5	
4-Bromofluorobenzene (S)	97	%	70-130	1		11/29/13 17:02	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	70-132	1		11/29/13 17:02	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**23.9**	%	0.10	1		12/04/13 08:11		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

Sample: AB8 **Lab ID: 92180232003** Collected: 11/19/13 10:10 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							
Acenaphthene	ND	ug/kg	407	1	11/26/13 13:40	11/27/13 15:40	83-32-9	
Acenaphthylene	ND	ug/kg	407	1	11/26/13 13:40	11/27/13 15:40	208-96-8	
Aniline	ND	ug/kg	407	1	11/26/13 13:40	11/27/13 15:40	62-53-3	
Anthracene	ND	ug/kg	407	1	11/26/13 13:40	11/27/13 15:40	120-12-7	
Benzo(a)anthracene	ND	ug/kg	407	1	11/26/13 13:40	11/27/13 15:40	56-55-3	
Benzo(a)pyrene	ND	ug/kg	407	1	11/26/13 13:40	11/27/13 15:40	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	407	1	11/26/13 13:40	11/27/13 15:40	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	407	1	11/26/13 13:40	11/27/13 15:40	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	407	1	11/26/13 13:40	11/27/13 15:40	207-08-9	
Benzoic Acid	ND	ug/kg	2030	1	11/26/13 13:40	11/27/13 15:40	65-85-0	
Benzyl alcohol	ND	ug/kg	814	1	11/26/13 13:40	11/27/13 15:40	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	407	1	11/26/13 13:40	11/27/13 15:40	101-55-3	
Butylbenzylphthalate	ND	ug/kg	407	1	11/26/13 13:40	11/27/13 15:40	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	814	1	11/26/13 13:40	11/27/13 15:40	59-50-7	
4-Chloroaniline	ND	ug/kg	2030	1	11/26/13 13:40	11/27/13 15:40	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	407	1	11/26/13 13:40	11/27/13 15:40	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	407	1	11/26/13 13:40	11/27/13 15:40	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	407	1	11/26/13 13:40	11/27/13 15:40	108-60-1	
2-Chloronaphthalene	ND	ug/kg	407	1	11/26/13 13:40	11/27/13 15:40	91-58-7	
2-Chlorophenol	ND	ug/kg	407	1	11/26/13 13:40	11/27/13 15:40	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	407	1	11/26/13 13:40	11/27/13 15:40	7005-72-3	
Chrysene	ND	ug/kg	407	1	11/26/13 13:40	11/27/13 15:40	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	407	1	11/26/13 13:40	11/27/13 15:40	53-70-3	
Dibenzofuran	ND	ug/kg	407	1	11/26/13 13:40	11/27/13 15:40	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	407	1	11/26/13 13:40	11/27/13 15:40	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	407	1	11/26/13 13:40	11/27/13 15:40	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	407	1	11/26/13 13:40	11/27/13 15:40	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	2030	1	11/26/13 13:40	11/27/13 15:40	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	407	1	11/26/13 13:40	11/27/13 15:40	120-83-2	
Diethylphthalate	ND	ug/kg	407	1	11/26/13 13:40	11/27/13 15:40	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	407	1	11/26/13 13:40	11/27/13 15:40	105-67-9	
Dimethylphthalate	ND	ug/kg	407	1	11/26/13 13:40	11/27/13 15:40	131-11-3	
Di-n-butylphthalate	ND	ug/kg	407	1	11/26/13 13:40	11/27/13 15:40	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	814	1	11/26/13 13:40	11/27/13 15:40	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	2030	1	11/26/13 13:40	11/27/13 15:40	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	407	1	11/26/13 13:40	11/27/13 15:40	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	407	1	11/26/13 13:40	11/27/13 15:40	606-20-2	
Di-n-octylphthalate	ND	ug/kg	407	1	11/26/13 13:40	11/27/13 15:40	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	407	1	11/26/13 13:40	11/27/13 15:40	117-81-7	
Fluoranthene	ND	ug/kg	407	1	11/26/13 13:40	11/27/13 15:40	206-44-0	
Fluorene	ND	ug/kg	407	1	11/26/13 13:40	11/27/13 15:40	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	407	1	11/26/13 13:40	11/27/13 15:40	87-68-3	
Hexachlorobenzene	ND	ug/kg	407	1	11/26/13 13:40	11/27/13 15:40	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	407	1	11/26/13 13:40	11/27/13 15:40	77-47-4	
Hexachloroethane	ND	ug/kg	407	1	11/26/13 13:40	11/27/13 15:40	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	407	1	11/26/13 13:40	11/27/13 15:40	193-39-5	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

Sample: AB8 **Lab ID: 92180232003** Collected: 11/19/13 10:10 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	407	1	11/26/13 13:40	11/27/13 15:40	78-59-1	
1-Methylnaphthalene	ND	ug/kg	407	1	11/26/13 13:40	11/27/13 15:40	90-12-0	
2-Methylnaphthalene	ND	ug/kg	407	1	11/26/13 13:40	11/27/13 15:40	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	407	1	11/26/13 13:40	11/27/13 15:40	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	407	1	11/26/13 13:40	11/27/13 15:40		
Naphthalene	ND	ug/kg	407	1	11/26/13 13:40	11/27/13 15:40	91-20-3	
2-Nitroaniline	ND	ug/kg	2030	1	11/26/13 13:40	11/27/13 15:40	88-74-4	
3-Nitroaniline	ND	ug/kg	2030	1	11/26/13 13:40	11/27/13 15:40	99-09-2	
4-Nitroaniline	ND	ug/kg	814	1	11/26/13 13:40	11/27/13 15:40	100-01-6	
Nitrobenzene	ND	ug/kg	407	1	11/26/13 13:40	11/27/13 15:40	98-95-3	
2-Nitrophenol	ND	ug/kg	407	1	11/26/13 13:40	11/27/13 15:40	88-75-5	
4-Nitrophenol	ND	ug/kg	2030	1	11/26/13 13:40	11/27/13 15:40	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	407	1	11/26/13 13:40	11/27/13 15:40	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	407	1	11/26/13 13:40	11/27/13 15:40	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	407	1	11/26/13 13:40	11/27/13 15:40	86-30-6	
Pentachlorophenol	ND	ug/kg	2030	1	11/26/13 13:40	11/27/13 15:40	87-86-5	
Phenanthrene	ND	ug/kg	407	1	11/26/13 13:40	11/27/13 15:40	85-01-8	
Phenol	ND	ug/kg	407	1	11/26/13 13:40	11/27/13 15:40	108-95-2	
Pyrene	ND	ug/kg	407	1	11/26/13 13:40	11/27/13 15:40	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/kg	407	1	11/26/13 13:40	11/27/13 15:40	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	407	1	11/26/13 13:40	11/27/13 15:40	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	407	1	11/26/13 13:40	11/27/13 15:40	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	65	%	23-110	1	11/26/13 13:40	11/27/13 15:40	4165-60-0	
2-Fluorobiphenyl (S)	73	%	30-110	1	11/26/13 13:40	11/27/13 15:40	321-60-8	
Terphenyl-d14 (S)	75	%	28-110	1	11/26/13 13:40	11/27/13 15:40	1718-51-0	
Phenol-d6 (S)	51	%	22-110	1	11/26/13 13:40	11/27/13 15:40	13127-88-3	
2-Fluorophenol (S)	58	%	13-110	1	11/26/13 13:40	11/27/13 15:40	367-12-4	
2,4,6-Tribromophenol (S)	65	%	27-110	1	11/26/13 13:40	11/27/13 15:40	118-79-6	
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
Acetone	**248**	ug/kg	81.9	1		12/01/13 15:37	67-64-1	
Benzene	ND	ug/kg	4.1	1		12/01/13 15:37	71-43-2	
Bromobenzene	ND	ug/kg	4.1	1		12/01/13 15:37	108-86-1	
Bromochloromethane	ND	ug/kg	4.1	1		12/01/13 15:37	74-97-5	
Bromodichloromethane	ND	ug/kg	4.1	1		12/01/13 15:37	75-27-4	
Bromoform	ND	ug/kg	4.1	1		12/01/13 15:37	75-25-2	
Bromomethane	ND	ug/kg	8.2	1		12/01/13 15:37	74-83-9	
2-Butanone (MEK)	ND	ug/kg	81.9	1		12/01/13 15:37	78-93-3	
n-Butylbenzene	ND	ug/kg	4.1	1		12/01/13 15:37	104-51-8	
sec-Butylbenzene	ND	ug/kg	4.1	1		12/01/13 15:37	135-98-8	
tert-Butylbenzene	ND	ug/kg	4.1	1		12/01/13 15:37	98-06-6	
Carbon tetrachloride	ND	ug/kg	4.1	1		12/01/13 15:37	56-23-5	
Chlorobenzene	ND	ug/kg	4.1	1		12/01/13 15:37	108-90-7	
Chloroethane	ND	ug/kg	8.2	1		12/01/13 15:37	75-00-3	
Chloroform	ND	ug/kg	4.1	1		12/01/13 15:37	67-66-3	

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ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

Sample: AB8 **Lab ID: 92180232003** Collected: 11/19/13 10:10 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
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
Chloromethane	ND	ug/kg	8.2	1		12/01/13 15:37	74-87-3	
2-Chlorotoluene	ND	ug/kg	4.1	1		12/01/13 15:37	95-49-8	
4-Chlorotoluene	ND	ug/kg	4.1	1		12/01/13 15:37	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	4.1	1		12/01/13 15:37	96-12-8	
Dibromochloromethane	ND	ug/kg	4.1	1		12/01/13 15:37	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	4.1	1		12/01/13 15:37	106-93-4	
Dibromomethane	ND	ug/kg	4.1	1		12/01/13 15:37	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	4.1	1		12/01/13 15:37	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	4.1	1		12/01/13 15:37	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	4.1	1		12/01/13 15:37	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	8.2	1		12/01/13 15:37	75-71-8	
1,1-Dichloroethane	ND	ug/kg	4.1	1		12/01/13 15:37	75-34-3	
1,2-Dichloroethane	ND	ug/kg	4.1	1		12/01/13 15:37	107-06-2	
1,1-Dichloroethene	ND	ug/kg	4.1	1		12/01/13 15:37	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	4.1	1		12/01/13 15:37	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	4.1	1		12/01/13 15:37	156-60-5	
1,2-Dichloropropane	ND	ug/kg	4.1	1		12/01/13 15:37	78-87-5	
1,3-Dichloropropane	ND	ug/kg	4.1	1		12/01/13 15:37	142-28-9	
2,2-Dichloropropane	ND	ug/kg	4.1	1		12/01/13 15:37	594-20-7	
1,1-Dichloropropene	ND	ug/kg	4.1	1		12/01/13 15:37	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	4.1	1		12/01/13 15:37	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	4.1	1		12/01/13 15:37	10061-02-6	
Diisopropyl ether	ND	ug/kg	4.1	1		12/01/13 15:37	108-20-3	
Ethylbenzene	ND	ug/kg	4.1	1		12/01/13 15:37	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	4.1	1		12/01/13 15:37	87-68-3	
2-Hexanone	ND	ug/kg	40.9	1		12/01/13 15:37	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	4.1	1		12/01/13 15:37	98-82-8	
p-Isopropyltoluene	ND	ug/kg	4.1	1		12/01/13 15:37	99-87-6	
Methylene Chloride	ND	ug/kg	16.4	1		12/01/13 15:37	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	40.9	1		12/01/13 15:37	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	4.1	1		12/01/13 15:37	1634-04-4	
Naphthalene	ND	ug/kg	4.1	1		12/01/13 15:37	91-20-3	
n-Propylbenzene	ND	ug/kg	4.1	1		12/01/13 15:37	103-65-1	
Styrene	ND	ug/kg	4.1	1		12/01/13 15:37	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	4.1	1		12/01/13 15:37	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	4.1	1		12/01/13 15:37	79-34-5	
Tetrachloroethene	ND	ug/kg	4.1	1		12/01/13 15:37	127-18-4	
Toluene	ND	ug/kg	4.1	1		12/01/13 15:37	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	4.1	1		12/01/13 15:37	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	4.1	1		12/01/13 15:37	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	4.1	1		12/01/13 15:37	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	4.1	1		12/01/13 15:37	79-00-5	
Trichloroethene	ND	ug/kg	4.1	1		12/01/13 15:37	79-01-6	
Trichlorofluoromethane	ND	ug/kg	4.1	1		12/01/13 15:37	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	4.1	1		12/01/13 15:37	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	4.1	1		12/01/13 15:37	95-63-6	

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ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

Sample: AB8 **Lab ID: 92180232003** Collected: 11/19/13 10:10 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
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
1,3,5-Trimethylbenzene	ND	ug/kg	4.1	1		12/01/13 15:37	108-67-8	
Vinyl acetate	ND	ug/kg	40.9	1		12/01/13 15:37	108-05-4	
Vinyl chloride	ND	ug/kg	8.2	1		12/01/13 15:37	75-01-4	
Xylene (Total)	ND	ug/kg	8.2	1		12/01/13 15:37	1330-20-7	
m&p-Xylene	ND	ug/kg	8.2	1		12/01/13 15:37	179601-23-1	
o-Xylene	ND	ug/kg	4.1	1		12/01/13 15:37	95-47-6	
Surrogates								
Toluene-d8 (S)	105	%	70-130	1		12/01/13 15:37	2037-26-5	
4-Bromofluorobenzene (S)	101	%	70-130	1		12/01/13 15:37	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	70-132	1		12/01/13 15:37	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**18.9**	%	0.10	1		12/04/13 08:12		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

Sample: AB11 **Lab ID: 92180232004** Collected: 11/19/13 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
8270 MSSV Microwave	Analytical Method: EPA 8270 Preparation Method: EPA 3546							
Acenaphthene	ND	ug/kg	408	1	11/26/13 13:40	11/27/13 17:14	83-32-9	
Acenaphthylene	ND	ug/kg	408	1	11/26/13 13:40	11/27/13 17:14	208-96-8	
Aniline	ND	ug/kg	408	1	11/26/13 13:40	11/27/13 17:14	62-53-3	
Anthracene	ND	ug/kg	408	1	11/26/13 13:40	11/27/13 17:14	120-12-7	
Benzo(a)anthracene	ND	ug/kg	408	1	11/26/13 13:40	11/27/13 17:14	56-55-3	
Benzo(a)pyrene	ND	ug/kg	408	1	11/26/13 13:40	11/27/13 17:14	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	408	1	11/26/13 13:40	11/27/13 17:14	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	408	1	11/26/13 13:40	11/27/13 17:14	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	408	1	11/26/13 13:40	11/27/13 17:14	207-08-9	
Benzoic Acid	ND	ug/kg	2040	1	11/26/13 13:40	11/27/13 17:14	65-85-0	
Benzyl alcohol	ND	ug/kg	816	1	11/26/13 13:40	11/27/13 17:14	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	408	1	11/26/13 13:40	11/27/13 17:14	101-55-3	
Butylbenzylphthalate	ND	ug/kg	408	1	11/26/13 13:40	11/27/13 17:14	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	816	1	11/26/13 13:40	11/27/13 17:14	59-50-7	
4-Chloroaniline	ND	ug/kg	2040	1	11/26/13 13:40	11/27/13 17:14	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	408	1	11/26/13 13:40	11/27/13 17:14	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	408	1	11/26/13 13:40	11/27/13 17:14	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	408	1	11/26/13 13:40	11/27/13 17:14	108-60-1	
2-Chloronaphthalene	ND	ug/kg	408	1	11/26/13 13:40	11/27/13 17:14	91-58-7	
2-Chlorophenol	ND	ug/kg	408	1	11/26/13 13:40	11/27/13 17:14	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	408	1	11/26/13 13:40	11/27/13 17:14	7005-72-3	
Chrysene	ND	ug/kg	408	1	11/26/13 13:40	11/27/13 17:14	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	408	1	11/26/13 13:40	11/27/13 17:14	53-70-3	
Dibenzofuran	ND	ug/kg	408	1	11/26/13 13:40	11/27/13 17:14	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	408	1	11/26/13 13:40	11/27/13 17:14	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	408	1	11/26/13 13:40	11/27/13 17:14	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	408	1	11/26/13 13:40	11/27/13 17:14	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	2040	1	11/26/13 13:40	11/27/13 17:14	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	408	1	11/26/13 13:40	11/27/13 17:14	120-83-2	
Diethylphthalate	ND	ug/kg	408	1	11/26/13 13:40	11/27/13 17:14	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	408	1	11/26/13 13:40	11/27/13 17:14	105-67-9	
Dimethylphthalate	ND	ug/kg	408	1	11/26/13 13:40	11/27/13 17:14	131-11-3	
Di-n-butylphthalate	ND	ug/kg	408	1	11/26/13 13:40	11/27/13 17:14	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	816	1	11/26/13 13:40	11/27/13 17:14	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	2040	1	11/26/13 13:40	11/27/13 17:14	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	408	1	11/26/13 13:40	11/27/13 17:14	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	408	1	11/26/13 13:40	11/27/13 17:14	606-20-2	
Di-n-octylphthalate	ND	ug/kg	408	1	11/26/13 13:40	11/27/13 17:14	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	408	1	11/26/13 13:40	11/27/13 17:14	117-81-7	
Fluoranthene	ND	ug/kg	408	1	11/26/13 13:40	11/27/13 17:14	206-44-0	
Fluorene	ND	ug/kg	408	1	11/26/13 13:40	11/27/13 17:14	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	408	1	11/26/13 13:40	11/27/13 17:14	87-68-3	
Hexachlorobenzene	ND	ug/kg	408	1	11/26/13 13:40	11/27/13 17:14	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	408	1	11/26/13 13:40	11/27/13 17:14	77-47-4	
Hexachloroethane	ND	ug/kg	408	1	11/26/13 13:40	11/27/13 17:14	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	408	1	11/26/13 13:40	11/27/13 17:14	193-39-5	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

Sample: AB11 **Lab ID: 92180232004** Collected: 11/19/13 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
8270 MSSV Microwave	Analytical Method: EPA 8270 Preparation Method: EPA 3546							
Isophorone	ND	ug/kg	408	1	11/26/13 13:40	11/27/13 17:14	78-59-1	
1-Methylnaphthalene	ND	ug/kg	408	1	11/26/13 13:40	11/27/13 17:14	90-12-0	
2-Methylnaphthalene	ND	ug/kg	408	1	11/26/13 13:40	11/27/13 17:14	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	408	1	11/26/13 13:40	11/27/13 17:14	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	408	1	11/26/13 13:40	11/27/13 17:14		
Naphthalene	ND	ug/kg	408	1	11/26/13 13:40	11/27/13 17:14	91-20-3	
2-Nitroaniline	ND	ug/kg	2040	1	11/26/13 13:40	11/27/13 17:14	88-74-4	
3-Nitroaniline	ND	ug/kg	2040	1	11/26/13 13:40	11/27/13 17:14	99-09-2	
4-Nitroaniline	ND	ug/kg	816	1	11/26/13 13:40	11/27/13 17:14	100-01-6	
Nitrobenzene	ND	ug/kg	408	1	11/26/13 13:40	11/27/13 17:14	98-95-3	
2-Nitrophenol	ND	ug/kg	408	1	11/26/13 13:40	11/27/13 17:14	88-75-5	
4-Nitrophenol	ND	ug/kg	2040	1	11/26/13 13:40	11/27/13 17:14	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	408	1	11/26/13 13:40	11/27/13 17:14	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	408	1	11/26/13 13:40	11/27/13 17:14	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	408	1	11/26/13 13:40	11/27/13 17:14	86-30-6	
Pentachlorophenol	ND	ug/kg	2040	1	11/26/13 13:40	11/27/13 17:14	87-86-5	
Phenanthrene	ND	ug/kg	408	1	11/26/13 13:40	11/27/13 17:14	85-01-8	
Phenol	ND	ug/kg	408	1	11/26/13 13:40	11/27/13 17:14	108-95-2	
Pyrene	ND	ug/kg	408	1	11/26/13 13:40	11/27/13 17:14	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/kg	408	1	11/26/13 13:40	11/27/13 17:14	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	408	1	11/26/13 13:40	11/27/13 17:14	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	408	1	11/26/13 13:40	11/27/13 17:14	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	56	%	23-110	1	11/26/13 13:40	11/27/13 17:14	4165-60-0	
2-Fluorobiphenyl (S)	58	%	30-110	1	11/26/13 13:40	11/27/13 17:14	321-60-8	
Terphenyl-d14 (S)	64	%	28-110	1	11/26/13 13:40	11/27/13 17:14	1718-51-0	
Phenol-d6 (S)	52	%	22-110	1	11/26/13 13:40	11/27/13 17:14	13127-88-3	
2-Fluorophenol (S)	54	%	13-110	1	11/26/13 13:40	11/27/13 17:14	367-12-4	
2,4,6-Tribromophenol (S)	63	%	27-110	1	11/26/13 13:40	11/27/13 17:14	118-79-6	
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
Acetone	ND	ug/kg	89.1	1		12/01/13 15:56	67-64-1	
Benzene	ND	ug/kg	4.5	1		12/01/13 15:56	71-43-2	
Bromobenzene	ND	ug/kg	4.5	1		12/01/13 15:56	108-86-1	
Bromochloromethane	ND	ug/kg	4.5	1		12/01/13 15:56	74-97-5	
Bromodichloromethane	ND	ug/kg	4.5	1		12/01/13 15:56	75-27-4	
Bromoform	ND	ug/kg	4.5	1		12/01/13 15:56	75-25-2	
Bromomethane	ND	ug/kg	8.9	1		12/01/13 15:56	74-83-9	
2-Butanone (MEK)	ND	ug/kg	89.1	1		12/01/13 15:56	78-93-3	
n-Butylbenzene	ND	ug/kg	4.5	1		12/01/13 15:56	104-51-8	
sec-Butylbenzene	ND	ug/kg	4.5	1		12/01/13 15:56	135-98-8	
tert-Butylbenzene	ND	ug/kg	4.5	1		12/01/13 15:56	98-06-6	
Carbon tetrachloride	ND	ug/kg	4.5	1		12/01/13 15:56	56-23-5	
Chlorobenzene	ND	ug/kg	4.5	1		12/01/13 15:56	108-90-7	
Chloroethane	ND	ug/kg	8.9	1		12/01/13 15:56	75-00-3	
Chloroform	ND	ug/kg	4.5	1		12/01/13 15:56	67-66-3	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

Sample: AB11 **Lab ID: 92180232004** Collected: 11/19/13 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
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
Chloromethane	ND	ug/kg	8.9	1		12/01/13 15:56	74-87-3	
2-Chlorotoluene	ND	ug/kg	4.5	1		12/01/13 15:56	95-49-8	
4-Chlorotoluene	ND	ug/kg	4.5	1		12/01/13 15:56	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	4.5	1		12/01/13 15:56	96-12-8	
Dibromochloromethane	ND	ug/kg	4.5	1		12/01/13 15:56	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	4.5	1		12/01/13 15:56	106-93-4	
Dibromomethane	ND	ug/kg	4.5	1		12/01/13 15:56	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	4.5	1		12/01/13 15:56	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	4.5	1		12/01/13 15:56	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	4.5	1		12/01/13 15:56	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	8.9	1		12/01/13 15:56	75-71-8	
1,1-Dichloroethane	ND	ug/kg	4.5	1		12/01/13 15:56	75-34-3	
1,2-Dichloroethane	ND	ug/kg	4.5	1		12/01/13 15:56	107-06-2	
1,1-Dichloroethene	ND	ug/kg	4.5	1		12/01/13 15:56	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	4.5	1		12/01/13 15:56	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	4.5	1		12/01/13 15:56	156-60-5	
1,2-Dichloropropane	ND	ug/kg	4.5	1		12/01/13 15:56	78-87-5	
1,3-Dichloropropane	ND	ug/kg	4.5	1		12/01/13 15:56	142-28-9	
2,2-Dichloropropane	ND	ug/kg	4.5	1		12/01/13 15:56	594-20-7	
1,1-Dichloropropene	ND	ug/kg	4.5	1		12/01/13 15:56	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	4.5	1		12/01/13 15:56	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	4.5	1		12/01/13 15:56	10061-02-6	
Diisopropyl ether	ND	ug/kg	4.5	1		12/01/13 15:56	108-20-3	
Ethylbenzene	ND	ug/kg	4.5	1		12/01/13 15:56	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	4.5	1		12/01/13 15:56	87-68-3	
2-Hexanone	ND	ug/kg	44.5	1		12/01/13 15:56	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	4.5	1		12/01/13 15:56	98-82-8	
p-Isopropyltoluene	ND	ug/kg	4.5	1		12/01/13 15:56	99-87-6	
Methylene Chloride	ND	ug/kg	17.8	1		12/01/13 15:56	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	44.5	1		12/01/13 15:56	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	4.5	1		12/01/13 15:56	1634-04-4	
Naphthalene	ND	ug/kg	4.5	1		12/01/13 15:56	91-20-3	
n-Propylbenzene	ND	ug/kg	4.5	1		12/01/13 15:56	103-65-1	
Styrene	ND	ug/kg	4.5	1		12/01/13 15:56	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	4.5	1		12/01/13 15:56	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	4.5	1		12/01/13 15:56	79-34-5	
Tetrachloroethene	ND	ug/kg	4.5	1		12/01/13 15:56	127-18-4	
Toluene	ND	ug/kg	4.5	1		12/01/13 15:56	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	4.5	1		12/01/13 15:56	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	4.5	1		12/01/13 15:56	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	4.5	1		12/01/13 15:56	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	4.5	1		12/01/13 15:56	79-00-5	
Trichloroethene	ND	ug/kg	4.5	1		12/01/13 15:56	79-01-6	
Trichlorofluoromethane	ND	ug/kg	4.5	1		12/01/13 15:56	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	4.5	1		12/01/13 15:56	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	4.5	1		12/01/13 15:56	95-63-6	

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ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

Sample: AB11 **Lab ID: 92180232004** Collected: 11/19/13 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
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
1,3,5-Trimethylbenzene	ND	ug/kg	4.5	1		12/01/13 15:56	108-67-8	
Vinyl acetate	ND	ug/kg	44.5	1		12/01/13 15:56	108-05-4	
Vinyl chloride	ND	ug/kg	8.9	1		12/01/13 15:56	75-01-4	
Xylene (Total)	ND	ug/kg	8.9	1		12/01/13 15:56	1330-20-7	
m&p-Xylene	ND	ug/kg	8.9	1		12/01/13 15:56	179601-23-1	
o-Xylene	ND	ug/kg	4.5	1		12/01/13 15:56	95-47-6	
Surrogates								
Toluene-d8 (S)	103	%	70-130	1		12/01/13 15:56	2037-26-5	
4-Bromofluorobenzene (S)	98	%	70-130	1		12/01/13 15:56	460-00-4	
1,2-Dichloroethane-d4 (S)	123	%	70-132	1		12/01/13 15:56	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**19.1**	%	0.10	1		12/04/13 08:12		

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ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

Sample: AB7 **Lab ID: 92180232005** Collected: 11/19/13 10:20 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
8270 MSSV Microwave	Analytical Method: EPA 8270 Preparation Method: EPA 3546							
Acenaphthene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 17:45	83-32-9	
Acenaphthylene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 17:45	208-96-8	
Aniline	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 17:45	62-53-3	
Anthracene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 17:45	120-12-7	
Benzo(a)anthracene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 17:45	56-55-3	
Benzo(a)pyrene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 17:45	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 17:45	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 17:45	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 17:45	207-08-9	
Benzoic Acid	ND	ug/kg	2050	1	11/26/13 13:40	11/27/13 17:45	65-85-0	
Benzyl alcohol	ND	ug/kg	821	1	11/26/13 13:40	11/27/13 17:45	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 17:45	101-55-3	
Butylbenzylphthalate	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 17:45	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	821	1	11/26/13 13:40	11/27/13 17:45	59-50-7	
4-Chloroaniline	ND	ug/kg	2050	1	11/26/13 13:40	11/27/13 17:45	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 17:45	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 17:45	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 17:45	108-60-1	
2-Chloronaphthalene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 17:45	91-58-7	
2-Chlorophenol	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 17:45	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 17:45	7005-72-3	
Chrysene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 17:45	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 17:45	53-70-3	
Dibenzofuran	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 17:45	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 17:45	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 17:45	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 17:45	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	2050	1	11/26/13 13:40	11/27/13 17:45	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 17:45	120-83-2	
Diethylphthalate	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 17:45	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 17:45	105-67-9	
Dimethylphthalate	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 17:45	131-11-3	
Di-n-butylphthalate	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 17:45	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	821	1	11/26/13 13:40	11/27/13 17:45	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	2050	1	11/26/13 13:40	11/27/13 17:45	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 17:45	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 17:45	606-20-2	
Di-n-octylphthalate	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 17:45	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 17:45	117-81-7	
Fluoranthene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 17:45	206-44-0	
Fluorene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 17:45	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 17:45	87-68-3	
Hexachlorobenzene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 17:45	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 17:45	77-47-4	
Hexachloroethane	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 17:45	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 17:45	193-39-5	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

Sample: AB7 **Lab ID: 92180232005** Collected: 11/19/13 10:20 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
8270 MSSV Microwave	Analytical Method: EPA 8270 Preparation Method: EPA 3546							
Isophorone	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 17:45	78-59-1	
1-Methylnaphthalene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 17:45	90-12-0	
2-Methylnaphthalene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 17:45	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 17:45	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 17:45		
Naphthalene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 17:45	91-20-3	
2-Nitroaniline	ND	ug/kg	2050	1	11/26/13 13:40	11/27/13 17:45	88-74-4	
3-Nitroaniline	ND	ug/kg	2050	1	11/26/13 13:40	11/27/13 17:45	99-09-2	
4-Nitroaniline	ND	ug/kg	821	1	11/26/13 13:40	11/27/13 17:45	100-01-6	
Nitrobenzene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 17:45	98-95-3	
2-Nitrophenol	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 17:45	88-75-5	
4-Nitrophenol	ND	ug/kg	2050	1	11/26/13 13:40	11/27/13 17:45	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 17:45	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 17:45	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 17:45	86-30-6	
Pentachlorophenol	ND	ug/kg	2050	1	11/26/13 13:40	11/27/13 17:45	87-86-5	
Phenanthrene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 17:45	85-01-8	
Phenol	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 17:45	108-95-2	
Pyrene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 17:45	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 17:45	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 17:45	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 17:45	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	59	%	23-110	1	11/26/13 13:40	11/27/13 17:45	4165-60-0	
2-Fluorobiphenyl (S)	60	%	30-110	1	11/26/13 13:40	11/27/13 17:45	321-60-8	
Terphenyl-d14 (S)	70	%	28-110	1	11/26/13 13:40	11/27/13 17:45	1718-51-0	
Phenol-d6 (S)	58	%	22-110	1	11/26/13 13:40	11/27/13 17:45	13127-88-3	
2-Fluorophenol (S)	57	%	13-110	1	11/26/13 13:40	11/27/13 17:45	367-12-4	
2,4,6-Tribromophenol (S)	62	%	27-110	1	11/26/13 13:40	11/27/13 17:45	118-79-6	
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
Acetone	ND	ug/kg	103	1		12/01/13 16:16	67-64-1	
Benzene	ND	ug/kg	5.1	1		12/01/13 16:16	71-43-2	
Bromobenzene	ND	ug/kg	5.1	1		12/01/13 16:16	108-86-1	
Bromochloromethane	ND	ug/kg	5.1	1		12/01/13 16:16	74-97-5	
Bromodichloromethane	ND	ug/kg	5.1	1		12/01/13 16:16	75-27-4	
Bromoform	ND	ug/kg	5.1	1		12/01/13 16:16	75-25-2	
Bromomethane	ND	ug/kg	10.3	1		12/01/13 16:16	74-83-9	
2-Butanone (MEK)	ND	ug/kg	103	1		12/01/13 16:16	78-93-3	
n-Butylbenzene	ND	ug/kg	5.1	1		12/01/13 16:16	104-51-8	
sec-Butylbenzene	ND	ug/kg	5.1	1		12/01/13 16:16	135-98-8	
tert-Butylbenzene	ND	ug/kg	5.1	1		12/01/13 16:16	98-06-6	
Carbon tetrachloride	ND	ug/kg	5.1	1		12/01/13 16:16	56-23-5	
Chlorobenzene	ND	ug/kg	5.1	1		12/01/13 16:16	108-90-7	
Chloroethane	ND	ug/kg	10.3	1		12/01/13 16:16	75-00-3	
Chloroform	ND	ug/kg	5.1	1		12/01/13 16:16	67-66-3	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

Sample: AB7 **Lab ID: 92180232005** Collected: 11/19/13 10:20 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
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
Chloromethane	ND	ug/kg	10.3	1		12/01/13 16:16	74-87-3	
2-Chlorotoluene	ND	ug/kg	5.1	1		12/01/13 16:16	95-49-8	
4-Chlorotoluene	ND	ug/kg	5.1	1		12/01/13 16:16	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	5.1	1		12/01/13 16:16	96-12-8	
Dibromochloromethane	ND	ug/kg	5.1	1		12/01/13 16:16	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	5.1	1		12/01/13 16:16	106-93-4	
Dibromomethane	ND	ug/kg	5.1	1		12/01/13 16:16	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	5.1	1		12/01/13 16:16	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	5.1	1		12/01/13 16:16	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	5.1	1		12/01/13 16:16	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	10.3	1		12/01/13 16:16	75-71-8	
1,1-Dichloroethane	ND	ug/kg	5.1	1		12/01/13 16:16	75-34-3	
1,2-Dichloroethane	ND	ug/kg	5.1	1		12/01/13 16:16	107-06-2	
1,1-Dichloroethene	ND	ug/kg	5.1	1		12/01/13 16:16	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	5.1	1		12/01/13 16:16	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	5.1	1		12/01/13 16:16	156-60-5	
1,2-Dichloropropane	ND	ug/kg	5.1	1		12/01/13 16:16	78-87-5	
1,3-Dichloropropane	ND	ug/kg	5.1	1		12/01/13 16:16	142-28-9	
2,2-Dichloropropane	ND	ug/kg	5.1	1		12/01/13 16:16	594-20-7	
1,1-Dichloropropene	ND	ug/kg	5.1	1		12/01/13 16:16	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	5.1	1		12/01/13 16:16	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	5.1	1		12/01/13 16:16	10061-02-6	
Diisopropyl ether	ND	ug/kg	5.1	1		12/01/13 16:16	108-20-3	
Ethylbenzene	ND	ug/kg	5.1	1		12/01/13 16:16	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	5.1	1		12/01/13 16:16	87-68-3	
2-Hexanone	ND	ug/kg	51.4	1		12/01/13 16:16	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	5.1	1		12/01/13 16:16	98-82-8	
p-Isopropyltoluene	ND	ug/kg	5.1	1		12/01/13 16:16	99-87-6	
Methylene Chloride	ND	ug/kg	20.6	1		12/01/13 16:16	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	51.4	1		12/01/13 16:16	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	5.1	1		12/01/13 16:16	1634-04-4	
Naphthalene	ND	ug/kg	5.1	1		12/01/13 16:16	91-20-3	
n-Propylbenzene	ND	ug/kg	5.1	1		12/01/13 16:16	103-65-1	
Styrene	ND	ug/kg	5.1	1		12/01/13 16:16	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	5.1	1		12/01/13 16:16	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	5.1	1		12/01/13 16:16	79-34-5	
Tetrachloroethene	ND	ug/kg	5.1	1		12/01/13 16:16	127-18-4	
Toluene	ND	ug/kg	5.1	1		12/01/13 16:16	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	5.1	1		12/01/13 16:16	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	5.1	1		12/01/13 16:16	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	5.1	1		12/01/13 16:16	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	5.1	1		12/01/13 16:16	79-00-5	
Trichloroethene	ND	ug/kg	5.1	1		12/01/13 16:16	79-01-6	
Trichlorofluoromethane	ND	ug/kg	5.1	1		12/01/13 16:16	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	5.1	1		12/01/13 16:16	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	5.1	1		12/01/13 16:16	95-63-6	

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ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

Sample: AB7 **Lab ID: 92180232005** Collected: 11/19/13 10:20 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
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
1,3,5-Trimethylbenzene	ND	ug/kg	5.1	1		12/01/13 16:16	108-67-8	
Vinyl acetate	ND	ug/kg	51.4	1		12/01/13 16:16	108-05-4	
Vinyl chloride	ND	ug/kg	10.3	1		12/01/13 16:16	75-01-4	
Xylene (Total)	ND	ug/kg	10.3	1		12/01/13 16:16	1330-20-7	
m&p-Xylene	ND	ug/kg	10.3	1		12/01/13 16:16	179601-23-1	
o-Xylene	ND	ug/kg	5.1	1		12/01/13 16:16	95-47-6	
Surrogates								
Toluene-d8 (S)	103	%	70-130	1		12/01/13 16:16	2037-26-5	
4-Bromofluorobenzene (S)	99	%	70-130	1		12/01/13 16:16	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	70-132	1		12/01/13 16:16	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**19.7**	%	0.10	1		12/04/13 08:12		

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ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

Sample: AB6 **Lab ID: 92180232006** Collected: 11/19/13 11:20 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
8270 MSSV Microwave	Analytical Method: EPA 8270 Preparation Method: EPA 3546							
Acenaphthene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 18:16	83-32-9	
Acenaphthylene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 18:16	208-96-8	
Aniline	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 18:16	62-53-3	
Anthracene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 18:16	120-12-7	
Benzo(a)anthracene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 18:16	56-55-3	
Benzo(a)pyrene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 18:16	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 18:16	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 18:16	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 18:16	207-08-9	
Benzoic Acid	ND	ug/kg	2060	1	11/26/13 13:40	11/27/13 18:16	65-85-0	
Benzyl alcohol	ND	ug/kg	822	1	11/26/13 13:40	11/27/13 18:16	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 18:16	101-55-3	
Butylbenzylphthalate	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 18:16	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	822	1	11/26/13 13:40	11/27/13 18:16	59-50-7	
4-Chloroaniline	ND	ug/kg	2060	1	11/26/13 13:40	11/27/13 18:16	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 18:16	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 18:16	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 18:16	108-60-1	
2-Chloronaphthalene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 18:16	91-58-7	
2-Chlorophenol	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 18:16	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 18:16	7005-72-3	
Chrysene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 18:16	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 18:16	53-70-3	
Dibenzofuran	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 18:16	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 18:16	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 18:16	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 18:16	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	2060	1	11/26/13 13:40	11/27/13 18:16	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 18:16	120-83-2	
Diethylphthalate	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 18:16	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 18:16	105-67-9	
Dimethylphthalate	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 18:16	131-11-3	
Di-n-butylphthalate	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 18:16	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	822	1	11/26/13 13:40	11/27/13 18:16	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	2060	1	11/26/13 13:40	11/27/13 18:16	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 18:16	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 18:16	606-20-2	
Di-n-octylphthalate	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 18:16	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 18:16	117-81-7	
Fluoranthene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 18:16	206-44-0	
Fluorene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 18:16	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 18:16	87-68-3	
Hexachlorobenzene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 18:16	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 18:16	77-47-4	
Hexachloroethane	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 18:16	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 18:16	193-39-5	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

Sample: AB6 **Lab ID: 92180232006** Collected: 11/19/13 11:20 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
8270 MSSV Microwave	Analytical Method: EPA 8270 Preparation Method: EPA 3546							
Isophorone	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 18:16	78-59-1	
1-Methylnaphthalene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 18:16	90-12-0	
2-Methylnaphthalene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 18:16	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 18:16	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 18:16		
Naphthalene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 18:16	91-20-3	
2-Nitroaniline	ND	ug/kg	2060	1	11/26/13 13:40	11/27/13 18:16	88-74-4	
3-Nitroaniline	ND	ug/kg	2060	1	11/26/13 13:40	11/27/13 18:16	99-09-2	
4-Nitroaniline	ND	ug/kg	822	1	11/26/13 13:40	11/27/13 18:16	100-01-6	
Nitrobenzene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 18:16	98-95-3	
2-Nitrophenol	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 18:16	88-75-5	
4-Nitrophenol	ND	ug/kg	2060	1	11/26/13 13:40	11/27/13 18:16	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 18:16	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 18:16	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 18:16	86-30-6	
Pentachlorophenol	ND	ug/kg	2060	1	11/26/13 13:40	11/27/13 18:16	87-86-5	
Phenanthrene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 18:16	85-01-8	
Phenol	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 18:16	108-95-2	
Pyrene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 18:16	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 18:16	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 18:16	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 18:16	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	44	%	23-110	1	11/26/13 13:40	11/27/13 18:16	4165-60-0	
2-Fluorobiphenyl (S)	46	%	30-110	1	11/26/13 13:40	11/27/13 18:16	321-60-8	
Terphenyl-d14 (S)	54	%	28-110	1	11/26/13 13:40	11/27/13 18:16	1718-51-0	
Phenol-d6 (S)	34	%	22-110	1	11/26/13 13:40	11/27/13 18:16	13127-88-3	
2-Fluorophenol (S)	35	%	13-110	1	11/26/13 13:40	11/27/13 18:16	367-12-4	
2,4,6-Tribromophenol (S)	38	%	27-110	1	11/26/13 13:40	11/27/13 18:16	118-79-6	
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
Acetone	**135**	ug/kg	83.4	1		12/01/13 16:35	67-64-1	A+
Benzene	ND	ug/kg	4.2	1		12/01/13 16:35	71-43-2	
Bromobenzene	ND	ug/kg	4.2	1		12/01/13 16:35	108-86-1	
Bromochloromethane	ND	ug/kg	4.2	1		12/01/13 16:35	74-97-5	
Bromodichloromethane	ND	ug/kg	4.2	1		12/01/13 16:35	75-27-4	
Bromoform	ND	ug/kg	4.2	1		12/01/13 16:35	75-25-2	
Bromomethane	ND	ug/kg	8.3	1		12/01/13 16:35	74-83-9	
2-Butanone (MEK)	ND	ug/kg	83.4	1		12/01/13 16:35	78-93-3	
n-Butylbenzene	ND	ug/kg	4.2	1		12/01/13 16:35	104-51-8	
sec-Butylbenzene	ND	ug/kg	4.2	1		12/01/13 16:35	135-98-8	
tert-Butylbenzene	ND	ug/kg	4.2	1		12/01/13 16:35	98-06-6	
Carbon tetrachloride	ND	ug/kg	4.2	1		12/01/13 16:35	56-23-5	
Chlorobenzene	ND	ug/kg	4.2	1		12/01/13 16:35	108-90-7	
Chloroethane	ND	ug/kg	8.3	1		12/01/13 16:35	75-00-3	
Chloroform	ND	ug/kg	4.2	1		12/01/13 16:35	67-66-3	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

Sample: AB6 **Lab ID: 92180232006** Collected: 11/19/13 11:20 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
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
Chloromethane	ND	ug/kg	8.3	1		12/01/13 16:35	74-87-3	
2-Chlorotoluene	ND	ug/kg	4.2	1		12/01/13 16:35	95-49-8	
4-Chlorotoluene	ND	ug/kg	4.2	1		12/01/13 16:35	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	4.2	1		12/01/13 16:35	96-12-8	
Dibromochloromethane	ND	ug/kg	4.2	1		12/01/13 16:35	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	4.2	1		12/01/13 16:35	106-93-4	
Dibromomethane	ND	ug/kg	4.2	1		12/01/13 16:35	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	4.2	1		12/01/13 16:35	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	4.2	1		12/01/13 16:35	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	4.2	1		12/01/13 16:35	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	8.3	1		12/01/13 16:35	75-71-8	
1,1-Dichloroethane	ND	ug/kg	4.2	1		12/01/13 16:35	75-34-3	
1,2-Dichloroethane	ND	ug/kg	4.2	1		12/01/13 16:35	107-06-2	
1,1-Dichloroethene	ND	ug/kg	4.2	1		12/01/13 16:35	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	4.2	1		12/01/13 16:35	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	4.2	1		12/01/13 16:35	156-60-5	
1,2-Dichloropropane	ND	ug/kg	4.2	1		12/01/13 16:35	78-87-5	
1,3-Dichloropropane	ND	ug/kg	4.2	1		12/01/13 16:35	142-28-9	
2,2-Dichloropropane	ND	ug/kg	4.2	1		12/01/13 16:35	594-20-7	
1,1-Dichloropropene	ND	ug/kg	4.2	1		12/01/13 16:35	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	4.2	1		12/01/13 16:35	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	4.2	1		12/01/13 16:35	10061-02-6	
Diisopropyl ether	ND	ug/kg	4.2	1		12/01/13 16:35	108-20-3	
Ethylbenzene	ND	ug/kg	4.2	1		12/01/13 16:35	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	4.2	1		12/01/13 16:35	87-68-3	
2-Hexanone	ND	ug/kg	41.7	1		12/01/13 16:35	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	4.2	1		12/01/13 16:35	98-82-8	
p-Isopropyltoluene	ND	ug/kg	4.2	1		12/01/13 16:35	99-87-6	
Methylene Chloride	ND	ug/kg	16.7	1		12/01/13 16:35	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	41.7	1		12/01/13 16:35	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	4.2	1		12/01/13 16:35	1634-04-4	
Naphthalene	ND	ug/kg	4.2	1		12/01/13 16:35	91-20-3	
n-Propylbenzene	ND	ug/kg	4.2	1		12/01/13 16:35	103-65-1	
Styrene	ND	ug/kg	4.2	1		12/01/13 16:35	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	4.2	1		12/01/13 16:35	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	4.2	1		12/01/13 16:35	79-34-5	
Tetrachloroethene	ND	ug/kg	4.2	1		12/01/13 16:35	127-18-4	
Toluene	ND	ug/kg	4.2	1		12/01/13 16:35	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	4.2	1		12/01/13 16:35	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	4.2	1		12/01/13 16:35	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	4.2	1		12/01/13 16:35	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	4.2	1		12/01/13 16:35	79-00-5	
Trichloroethene	ND	ug/kg	4.2	1		12/01/13 16:35	79-01-6	
Trichlorofluoromethane	ND	ug/kg	4.2	1		12/01/13 16:35	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	4.2	1		12/01/13 16:35	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	4.2	1		12/01/13 16:35	95-63-6	

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ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

Sample: AB6 **Lab ID: 92180232006** Collected: 11/19/13 11:20 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
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
1,3,5-Trimethylbenzene	ND	ug/kg	4.2	1		12/01/13 16:35	108-67-8	
Vinyl acetate	ND	ug/kg	41.7	1		12/01/13 16:35	108-05-4	
Vinyl chloride	ND	ug/kg	8.3	1		12/01/13 16:35	75-01-4	
Xylene (Total)	ND	ug/kg	8.3	1		12/01/13 16:35	1330-20-7	
m&p-Xylene	ND	ug/kg	8.3	1		12/01/13 16:35	179601-23-1	
o-Xylene	ND	ug/kg	4.2	1		12/01/13 16:35	95-47-6	
Surrogates								
Toluene-d8 (S)	102	%	70-130	1		12/01/13 16:35	2037-26-5	
4-Bromofluorobenzene (S)	92	%	70-130	1		12/01/13 16:35	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	70-132	1		12/01/13 16:35	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**19.8**	%	0.10	1		12/04/13 08:12		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

Sample: AB5 **Lab ID: 92180232007** Collected: 11/19/13 11:30 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
8270 MSSV Microwave	Analytical Method: EPA 8270 Preparation Method: EPA 3546							
Acenaphthene	ND	ug/kg	387	1	11/26/13 13:40	11/27/13 18:47	83-32-9	
Acenaphthylene	ND	ug/kg	387	1	11/26/13 13:40	11/27/13 18:47	208-96-8	
Aniline	ND	ug/kg	387	1	11/26/13 13:40	11/27/13 18:47	62-53-3	
Anthracene	ND	ug/kg	387	1	11/26/13 13:40	11/27/13 18:47	120-12-7	
Benzo(a)anthracene	ND	ug/kg	387	1	11/26/13 13:40	11/27/13 18:47	56-55-3	
Benzo(a)pyrene	ND	ug/kg	387	1	11/26/13 13:40	11/27/13 18:47	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	387	1	11/26/13 13:40	11/27/13 18:47	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	387	1	11/26/13 13:40	11/27/13 18:47	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	387	1	11/26/13 13:40	11/27/13 18:47	207-08-9	
Benzoic Acid	ND	ug/kg	1940	1	11/26/13 13:40	11/27/13 18:47	65-85-0	
Benzyl alcohol	ND	ug/kg	774	1	11/26/13 13:40	11/27/13 18:47	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	387	1	11/26/13 13:40	11/27/13 18:47	101-55-3	
Butylbenzylphthalate	ND	ug/kg	387	1	11/26/13 13:40	11/27/13 18:47	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	774	1	11/26/13 13:40	11/27/13 18:47	59-50-7	
4-Chloroaniline	ND	ug/kg	1940	1	11/26/13 13:40	11/27/13 18:47	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	387	1	11/26/13 13:40	11/27/13 18:47	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	387	1	11/26/13 13:40	11/27/13 18:47	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	387	1	11/26/13 13:40	11/27/13 18:47	108-60-1	
2-Chloronaphthalene	ND	ug/kg	387	1	11/26/13 13:40	11/27/13 18:47	91-58-7	
2-Chlorophenol	ND	ug/kg	387	1	11/26/13 13:40	11/27/13 18:47	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	387	1	11/26/13 13:40	11/27/13 18:47	7005-72-3	
Chrysene	ND	ug/kg	387	1	11/26/13 13:40	11/27/13 18:47	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	387	1	11/26/13 13:40	11/27/13 18:47	53-70-3	
Dibenzofuran	ND	ug/kg	387	1	11/26/13 13:40	11/27/13 18:47	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	387	1	11/26/13 13:40	11/27/13 18:47	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	387	1	11/26/13 13:40	11/27/13 18:47	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	387	1	11/26/13 13:40	11/27/13 18:47	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	1940	1	11/26/13 13:40	11/27/13 18:47	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	387	1	11/26/13 13:40	11/27/13 18:47	120-83-2	
Diethylphthalate	ND	ug/kg	387	1	11/26/13 13:40	11/27/13 18:47	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	387	1	11/26/13 13:40	11/27/13 18:47	105-67-9	
Dimethylphthalate	ND	ug/kg	387	1	11/26/13 13:40	11/27/13 18:47	131-11-3	
Di-n-butylphthalate	ND	ug/kg	387	1	11/26/13 13:40	11/27/13 18:47	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	774	1	11/26/13 13:40	11/27/13 18:47	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	1940	1	11/26/13 13:40	11/27/13 18:47	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	387	1	11/26/13 13:40	11/27/13 18:47	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	387	1	11/26/13 13:40	11/27/13 18:47	606-20-2	
Di-n-octylphthalate	ND	ug/kg	387	1	11/26/13 13:40	11/27/13 18:47	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	387	1	11/26/13 13:40	11/27/13 18:47	117-81-7	
Fluoranthene	ND	ug/kg	387	1	11/26/13 13:40	11/27/13 18:47	206-44-0	
Fluorene	ND	ug/kg	387	1	11/26/13 13:40	11/27/13 18:47	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	387	1	11/26/13 13:40	11/27/13 18:47	87-68-3	
Hexachlorobenzene	ND	ug/kg	387	1	11/26/13 13:40	11/27/13 18:47	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	387	1	11/26/13 13:40	11/27/13 18:47	77-47-4	
Hexachloroethane	ND	ug/kg	387	1	11/26/13 13:40	11/27/13 18:47	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	387	1	11/26/13 13:40	11/27/13 18:47	193-39-5	

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ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

Sample: AB5 **Lab ID: 92180232007** Collected: 11/19/13 11:30 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
8270 MSSV Microwave	Analytical Method: EPA 8270 Preparation Method: EPA 3546							
Isophorone	ND	ug/kg	387	1	11/26/13 13:40	11/27/13 18:47	78-59-1	
1-Methylnaphthalene	ND	ug/kg	387	1	11/26/13 13:40	11/27/13 18:47	90-12-0	
2-Methylnaphthalene	ND	ug/kg	387	1	11/26/13 13:40	11/27/13 18:47	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	387	1	11/26/13 13:40	11/27/13 18:47	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	387	1	11/26/13 13:40	11/27/13 18:47		
Naphthalene	ND	ug/kg	387	1	11/26/13 13:40	11/27/13 18:47	91-20-3	
2-Nitroaniline	ND	ug/kg	1940	1	11/26/13 13:40	11/27/13 18:47	88-74-4	
3-Nitroaniline	ND	ug/kg	1940	1	11/26/13 13:40	11/27/13 18:47	99-09-2	
4-Nitroaniline	ND	ug/kg	774	1	11/26/13 13:40	11/27/13 18:47	100-01-6	
Nitrobenzene	ND	ug/kg	387	1	11/26/13 13:40	11/27/13 18:47	98-95-3	
2-Nitrophenol	ND	ug/kg	387	1	11/26/13 13:40	11/27/13 18:47	88-75-5	
4-Nitrophenol	ND	ug/kg	1940	1	11/26/13 13:40	11/27/13 18:47	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	387	1	11/26/13 13:40	11/27/13 18:47	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	387	1	11/26/13 13:40	11/27/13 18:47	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	387	1	11/26/13 13:40	11/27/13 18:47	86-30-6	
Pentachlorophenol	ND	ug/kg	1940	1	11/26/13 13:40	11/27/13 18:47	87-86-5	
Phenanthrene	ND	ug/kg	387	1	11/26/13 13:40	11/27/13 18:47	85-01-8	
Phenol	ND	ug/kg	387	1	11/26/13 13:40	11/27/13 18:47	108-95-2	
Pyrene	ND	ug/kg	387	1	11/26/13 13:40	11/27/13 18:47	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/kg	387	1	11/26/13 13:40	11/27/13 18:47	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	387	1	11/26/13 13:40	11/27/13 18:47	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	387	1	11/26/13 13:40	11/27/13 18:47	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	62	%	23-110	1	11/26/13 13:40	11/27/13 18:47	4165-60-0	
2-Fluorobiphenyl (S)	66	%	30-110	1	11/26/13 13:40	11/27/13 18:47	321-60-8	
Terphenyl-d14 (S)	80	%	28-110	1	11/26/13 13:40	11/27/13 18:47	1718-51-0	
Phenol-d6 (S)	63	%	22-110	1	11/26/13 13:40	11/27/13 18:47	13127-88-3	
2-Fluorophenol (S)	61	%	13-110	1	11/26/13 13:40	11/27/13 18:47	367-12-4	
2,4,6-Tribromophenol (S)	80	%	27-110	1	11/26/13 13:40	11/27/13 18:47	118-79-6	
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
Acetone	**299**	ug/kg	83.8	1		12/01/13 16:55	67-64-1	
Benzene	ND	ug/kg	4.2	1		12/01/13 16:55	71-43-2	
Bromobenzene	ND	ug/kg	4.2	1		12/01/13 16:55	108-86-1	
Bromochloromethane	ND	ug/kg	4.2	1		12/01/13 16:55	74-97-5	
Bromodichloromethane	ND	ug/kg	4.2	1		12/01/13 16:55	75-27-4	
Bromoform	ND	ug/kg	4.2	1		12/01/13 16:55	75-25-2	
Bromomethane	ND	ug/kg	8.4	1		12/01/13 16:55	74-83-9	
2-Butanone (MEK)	ND	ug/kg	83.8	1		12/01/13 16:55	78-93-3	
n-Butylbenzene	ND	ug/kg	4.2	1		12/01/13 16:55	104-51-8	
sec-Butylbenzene	ND	ug/kg	4.2	1		12/01/13 16:55	135-98-8	
tert-Butylbenzene	ND	ug/kg	4.2	1		12/01/13 16:55	98-06-6	
Carbon tetrachloride	ND	ug/kg	4.2	1		12/01/13 16:55	56-23-5	
Chlorobenzene	ND	ug/kg	4.2	1		12/01/13 16:55	108-90-7	
Chloroethane	ND	ug/kg	8.4	1		12/01/13 16:55	75-00-3	
Chloroform	ND	ug/kg	4.2	1		12/01/13 16:55	67-66-3	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

Sample: AB5 **Lab ID: 92180232007** Collected: 11/19/13 11:30 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
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
Chloromethane	ND	ug/kg	8.4	1		12/01/13 16:55	74-87-3	
2-Chlorotoluene	ND	ug/kg	4.2	1		12/01/13 16:55	95-49-8	
4-Chlorotoluene	ND	ug/kg	4.2	1		12/01/13 16:55	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	4.2	1		12/01/13 16:55	96-12-8	
Dibromochloromethane	ND	ug/kg	4.2	1		12/01/13 16:55	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	4.2	1		12/01/13 16:55	106-93-4	
Dibromomethane	ND	ug/kg	4.2	1		12/01/13 16:55	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	4.2	1		12/01/13 16:55	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	4.2	1		12/01/13 16:55	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	4.2	1		12/01/13 16:55	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	8.4	1		12/01/13 16:55	75-71-8	
1,1-Dichloroethane	ND	ug/kg	4.2	1		12/01/13 16:55	75-34-3	
1,2-Dichloroethane	ND	ug/kg	4.2	1		12/01/13 16:55	107-06-2	
1,1-Dichloroethene	ND	ug/kg	4.2	1		12/01/13 16:55	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	4.2	1		12/01/13 16:55	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	4.2	1		12/01/13 16:55	156-60-5	
1,2-Dichloropropane	ND	ug/kg	4.2	1		12/01/13 16:55	78-87-5	
1,3-Dichloropropane	ND	ug/kg	4.2	1		12/01/13 16:55	142-28-9	
2,2-Dichloropropane	ND	ug/kg	4.2	1		12/01/13 16:55	594-20-7	
1,1-Dichloropropene	ND	ug/kg	4.2	1		12/01/13 16:55	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	4.2	1		12/01/13 16:55	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	4.2	1		12/01/13 16:55	10061-02-6	
Diisopropyl ether	ND	ug/kg	4.2	1		12/01/13 16:55	108-20-3	
Ethylbenzene	ND	ug/kg	4.2	1		12/01/13 16:55	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	4.2	1		12/01/13 16:55	87-68-3	
2-Hexanone	ND	ug/kg	41.9	1		12/01/13 16:55	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	4.2	1		12/01/13 16:55	98-82-8	
p-Isopropyltoluene	ND	ug/kg	4.2	1		12/01/13 16:55	99-87-6	
Methylene Chloride	ND	ug/kg	16.8	1		12/01/13 16:55	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	41.9	1		12/01/13 16:55	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	4.2	1		12/01/13 16:55	1634-04-4	
Naphthalene	ND	ug/kg	4.2	1		12/01/13 16:55	91-20-3	
n-Propylbenzene	ND	ug/kg	4.2	1		12/01/13 16:55	103-65-1	
Styrene	ND	ug/kg	4.2	1		12/01/13 16:55	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	4.2	1		12/01/13 16:55	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	4.2	1		12/01/13 16:55	79-34-5	
Tetrachloroethene	ND	ug/kg	4.2	1		12/01/13 16:55	127-18-4	
Toluene	ND	ug/kg	4.2	1		12/01/13 16:55	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	4.2	1		12/01/13 16:55	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	4.2	1		12/01/13 16:55	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	4.2	1		12/01/13 16:55	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	4.2	1		12/01/13 16:55	79-00-5	
Trichloroethene	ND	ug/kg	4.2	1		12/01/13 16:55	79-01-6	
Trichlorofluoromethane	ND	ug/kg	4.2	1		12/01/13 16:55	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	4.2	1		12/01/13 16:55	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	4.2	1		12/01/13 16:55	95-63-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

Sample: AB5 **Lab ID: 92180232007** Collected: 11/19/13 11:30 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
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
1,3,5-Trimethylbenzene	ND	ug/kg	4.2	1		12/01/13 16:55	108-67-8	
Vinyl acetate	ND	ug/kg	41.9	1		12/01/13 16:55	108-05-4	
Vinyl chloride	ND	ug/kg	8.4	1		12/01/13 16:55	75-01-4	
Xylene (Total)	ND	ug/kg	8.4	1		12/01/13 16:55	1330-20-7	
m&p-Xylene	ND	ug/kg	8.4	1		12/01/13 16:55	179601-23-1	
o-Xylene	ND	ug/kg	4.2	1		12/01/13 16:55	95-47-6	
Surrogates								
Toluene-d8 (S)	102	%	70-130	1		12/01/13 16:55	2037-26-5	
4-Bromofluorobenzene (S)	94	%	70-130	1		12/01/13 16:55	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	70-132	1		12/01/13 16:55	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**14.8**	%	0.10	1		12/04/13 08:12		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

Sample: AB4 **Lab ID: 92180232008** Collected: 11/19/13 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
8270 MSSV Microwave	Analytical Method: EPA 8270 Preparation Method: EPA 3546							
Acenaphthene	ND	ug/kg	380	1	11/26/13 13:40	11/27/13 19:19	83-32-9	
Acenaphthylene	ND	ug/kg	380	1	11/26/13 13:40	11/27/13 19:19	208-96-8	
Aniline	ND	ug/kg	380	1	11/26/13 13:40	11/27/13 19:19	62-53-3	
Anthracene	ND	ug/kg	380	1	11/26/13 13:40	11/27/13 19:19	120-12-7	
Benzo(a)anthracene	ND	ug/kg	380	1	11/26/13 13:40	11/27/13 19:19	56-55-3	
Benzo(a)pyrene	ND	ug/kg	380	1	11/26/13 13:40	11/27/13 19:19	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	380	1	11/26/13 13:40	11/27/13 19:19	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	380	1	11/26/13 13:40	11/27/13 19:19	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	380	1	11/26/13 13:40	11/27/13 19:19	207-08-9	
Benzoic Acid	ND	ug/kg	1900	1	11/26/13 13:40	11/27/13 19:19	65-85-0	
Benzyl alcohol	ND	ug/kg	760	1	11/26/13 13:40	11/27/13 19:19	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	380	1	11/26/13 13:40	11/27/13 19:19	101-55-3	
Butylbenzylphthalate	ND	ug/kg	380	1	11/26/13 13:40	11/27/13 19:19	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	760	1	11/26/13 13:40	11/27/13 19:19	59-50-7	
4-Chloroaniline	ND	ug/kg	1900	1	11/26/13 13:40	11/27/13 19:19	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	380	1	11/26/13 13:40	11/27/13 19:19	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	380	1	11/26/13 13:40	11/27/13 19:19	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	380	1	11/26/13 13:40	11/27/13 19:19	108-60-1	
2-Chloronaphthalene	ND	ug/kg	380	1	11/26/13 13:40	11/27/13 19:19	91-58-7	
2-Chlorophenol	ND	ug/kg	380	1	11/26/13 13:40	11/27/13 19:19	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	380	1	11/26/13 13:40	11/27/13 19:19	7005-72-3	
Chrysene	ND	ug/kg	380	1	11/26/13 13:40	11/27/13 19:19	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	380	1	11/26/13 13:40	11/27/13 19:19	53-70-3	
Dibenzofuran	ND	ug/kg	380	1	11/26/13 13:40	11/27/13 19:19	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	380	1	11/26/13 13:40	11/27/13 19:19	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	380	1	11/26/13 13:40	11/27/13 19:19	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	380	1	11/26/13 13:40	11/27/13 19:19	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	1900	1	11/26/13 13:40	11/27/13 19:19	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	380	1	11/26/13 13:40	11/27/13 19:19	120-83-2	
Diethylphthalate	ND	ug/kg	380	1	11/26/13 13:40	11/27/13 19:19	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	380	1	11/26/13 13:40	11/27/13 19:19	105-67-9	
Dimethylphthalate	ND	ug/kg	380	1	11/26/13 13:40	11/27/13 19:19	131-11-3	
Di-n-butylphthalate	ND	ug/kg	380	1	11/26/13 13:40	11/27/13 19:19	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	760	1	11/26/13 13:40	11/27/13 19:19	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	1900	1	11/26/13 13:40	11/27/13 19:19	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	380	1	11/26/13 13:40	11/27/13 19:19	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	380	1	11/26/13 13:40	11/27/13 19:19	606-20-2	
Di-n-octylphthalate	ND	ug/kg	380	1	11/26/13 13:40	11/27/13 19:19	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	380	1	11/26/13 13:40	11/27/13 19:19	117-81-7	
Fluoranthene	ND	ug/kg	380	1	11/26/13 13:40	11/27/13 19:19	206-44-0	
Fluorene	ND	ug/kg	380	1	11/26/13 13:40	11/27/13 19:19	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	380	1	11/26/13 13:40	11/27/13 19:19	87-68-3	
Hexachlorobenzene	ND	ug/kg	380	1	11/26/13 13:40	11/27/13 19:19	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	380	1	11/26/13 13:40	11/27/13 19:19	77-47-4	
Hexachloroethane	ND	ug/kg	380	1	11/26/13 13:40	11/27/13 19:19	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	380	1	11/26/13 13:40	11/27/13 19:19	193-39-5	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

Sample: AB4 **Lab ID: 92180232008** Collected: 11/19/13 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
8270 MSSV Microwave	Analytical Method: EPA 8270 Preparation Method: EPA 3546							
Isophorone	ND	ug/kg	380	1	11/26/13 13:40	11/27/13 19:19	78-59-1	
1-Methylnaphthalene	ND	ug/kg	380	1	11/26/13 13:40	11/27/13 19:19	90-12-0	
2-Methylnaphthalene	ND	ug/kg	380	1	11/26/13 13:40	11/27/13 19:19	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	380	1	11/26/13 13:40	11/27/13 19:19	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	380	1	11/26/13 13:40	11/27/13 19:19		
Naphthalene	ND	ug/kg	380	1	11/26/13 13:40	11/27/13 19:19	91-20-3	
2-Nitroaniline	ND	ug/kg	1900	1	11/26/13 13:40	11/27/13 19:19	88-74-4	
3-Nitroaniline	ND	ug/kg	1900	1	11/26/13 13:40	11/27/13 19:19	99-09-2	
4-Nitroaniline	ND	ug/kg	760	1	11/26/13 13:40	11/27/13 19:19	100-01-6	
Nitrobenzene	ND	ug/kg	380	1	11/26/13 13:40	11/27/13 19:19	98-95-3	
2-Nitrophenol	ND	ug/kg	380	1	11/26/13 13:40	11/27/13 19:19	88-75-5	
4-Nitrophenol	ND	ug/kg	1900	1	11/26/13 13:40	11/27/13 19:19	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	380	1	11/26/13 13:40	11/27/13 19:19	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	380	1	11/26/13 13:40	11/27/13 19:19	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	380	1	11/26/13 13:40	11/27/13 19:19	86-30-6	
Pentachlorophenol	ND	ug/kg	1900	1	11/26/13 13:40	11/27/13 19:19	87-86-5	
Phenanthrene	ND	ug/kg	380	1	11/26/13 13:40	11/27/13 19:19	85-01-8	
Phenol	ND	ug/kg	380	1	11/26/13 13:40	11/27/13 19:19	108-95-2	
Pyrene	ND	ug/kg	380	1	11/26/13 13:40	11/27/13 19:19	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/kg	380	1	11/26/13 13:40	11/27/13 19:19	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	380	1	11/26/13 13:40	11/27/13 19:19	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	380	1	11/26/13 13:40	11/27/13 19:19	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	61	%	23-110	1	11/26/13 13:40	11/27/13 19:19	4165-60-0	
2-Fluorobiphenyl (S)	70	%	30-110	1	11/26/13 13:40	11/27/13 19:19	321-60-8	
Terphenyl-d14 (S)	79	%	28-110	1	11/26/13 13:40	11/27/13 19:19	1718-51-0	
Phenol-d6 (S)	59	%	22-110	1	11/26/13 13:40	11/27/13 19:19	13127-88-3	
2-Fluorophenol (S)	59	%	13-110	1	11/26/13 13:40	11/27/13 19:19	367-12-4	
2,4,6-Tribromophenol (S)	71	%	27-110	1	11/26/13 13:40	11/27/13 19:19	118-79-6	
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
Acetone	ND	ug/kg	81.4	1		12/01/13 17:15	67-64-1	
Benzene	ND	ug/kg	4.1	1		12/01/13 17:15	71-43-2	
Bromobenzene	ND	ug/kg	4.1	1		12/01/13 17:15	108-86-1	
Bromochloromethane	ND	ug/kg	4.1	1		12/01/13 17:15	74-97-5	
Bromodichloromethane	ND	ug/kg	4.1	1		12/01/13 17:15	75-27-4	
Bromoform	ND	ug/kg	4.1	1		12/01/13 17:15	75-25-2	
Bromomethane	ND	ug/kg	8.1	1		12/01/13 17:15	74-83-9	
2-Butanone (MEK)	ND	ug/kg	81.4	1		12/01/13 17:15	78-93-3	
n-Butylbenzene	ND	ug/kg	4.1	1		12/01/13 17:15	104-51-8	
sec-Butylbenzene	ND	ug/kg	4.1	1		12/01/13 17:15	135-98-8	
tert-Butylbenzene	ND	ug/kg	4.1	1		12/01/13 17:15	98-06-6	
Carbon tetrachloride	ND	ug/kg	4.1	1		12/01/13 17:15	56-23-5	
Chlorobenzene	ND	ug/kg	4.1	1		12/01/13 17:15	108-90-7	
Chloroethane	ND	ug/kg	8.1	1		12/01/13 17:15	75-00-3	
Chloroform	ND	ug/kg	4.1	1		12/01/13 17:15	67-66-3	

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ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

Sample: AB4 **Lab ID: 92180232008** Collected: 11/19/13 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
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
Chloromethane	ND	ug/kg	8.1	1		12/01/13 17:15	74-87-3	
2-Chlorotoluene	ND	ug/kg	4.1	1		12/01/13 17:15	95-49-8	
4-Chlorotoluene	ND	ug/kg	4.1	1		12/01/13 17:15	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	4.1	1		12/01/13 17:15	96-12-8	
Dibromochloromethane	ND	ug/kg	4.1	1		12/01/13 17:15	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	4.1	1		12/01/13 17:15	106-93-4	
Dibromomethane	ND	ug/kg	4.1	1		12/01/13 17:15	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	4.1	1		12/01/13 17:15	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	4.1	1		12/01/13 17:15	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	4.1	1		12/01/13 17:15	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	8.1	1		12/01/13 17:15	75-71-8	
1,1-Dichloroethane	ND	ug/kg	4.1	1		12/01/13 17:15	75-34-3	
1,2-Dichloroethane	ND	ug/kg	4.1	1		12/01/13 17:15	107-06-2	
1,1-Dichloroethene	ND	ug/kg	4.1	1		12/01/13 17:15	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	4.1	1		12/01/13 17:15	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	4.1	1		12/01/13 17:15	156-60-5	
1,2-Dichloropropane	ND	ug/kg	4.1	1		12/01/13 17:15	78-87-5	
1,3-Dichloropropane	ND	ug/kg	4.1	1		12/01/13 17:15	142-28-9	
2,2-Dichloropropane	ND	ug/kg	4.1	1		12/01/13 17:15	594-20-7	
1,1-Dichloropropene	ND	ug/kg	4.1	1		12/01/13 17:15	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	4.1	1		12/01/13 17:15	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	4.1	1		12/01/13 17:15	10061-02-6	
Diisopropyl ether	ND	ug/kg	4.1	1		12/01/13 17:15	108-20-3	
Ethylbenzene	ND	ug/kg	4.1	1		12/01/13 17:15	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	4.1	1		12/01/13 17:15	87-68-3	
2-Hexanone	ND	ug/kg	40.7	1		12/01/13 17:15	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	4.1	1		12/01/13 17:15	98-82-8	
p-Isopropyltoluene	ND	ug/kg	4.1	1		12/01/13 17:15	99-87-6	
Methylene Chloride	ND	ug/kg	16.3	1		12/01/13 17:15	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	40.7	1		12/01/13 17:15	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	4.1	1		12/01/13 17:15	1634-04-4	
Naphthalene	ND	ug/kg	4.1	1		12/01/13 17:15	91-20-3	
n-Propylbenzene	ND	ug/kg	4.1	1		12/01/13 17:15	103-65-1	
Styrene	ND	ug/kg	4.1	1		12/01/13 17:15	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	4.1	1		12/01/13 17:15	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	4.1	1		12/01/13 17:15	79-34-5	
Tetrachloroethene	ND	ug/kg	4.1	1		12/01/13 17:15	127-18-4	
Toluene	ND	ug/kg	4.1	1		12/01/13 17:15	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	4.1	1		12/01/13 17:15	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	4.1	1		12/01/13 17:15	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	4.1	1		12/01/13 17:15	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	4.1	1		12/01/13 17:15	79-00-5	
Trichloroethene	ND	ug/kg	4.1	1		12/01/13 17:15	79-01-6	
Trichlorofluoromethane	ND	ug/kg	4.1	1		12/01/13 17:15	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	4.1	1		12/01/13 17:15	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	4.1	1		12/01/13 17:15	95-63-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

Sample: AB4 **Lab ID: 92180232008** Collected: 11/19/13 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
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
1,3,5-Trimethylbenzene	ND	ug/kg	4.1	1		12/01/13 17:15	108-67-8	
Vinyl acetate	ND	ug/kg	40.7	1		12/01/13 17:15	108-05-4	
Vinyl chloride	ND	ug/kg	8.1	1		12/01/13 17:15	75-01-4	
Xylene (Total)	ND	ug/kg	8.1	1		12/01/13 17:15	1330-20-7	
m&p-Xylene	ND	ug/kg	8.1	1		12/01/13 17:15	179601-23-1	
o-Xylene	ND	ug/kg	4.1	1		12/01/13 17:15	95-47-6	
Surrogates								
Toluene-d8 (S)	103	%	70-130	1		12/01/13 17:15	2037-26-5	
4-Bromofluorobenzene (S)	100	%	70-130	1		12/01/13 17:15	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	70-132	1		12/01/13 17:15	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**13.2**	%	0.10	1		12/04/13 08:12		

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ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

Sample: AB3 **Lab ID: 92180232009** Collected: 11/19/13 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
8270 MSSV Microwave	Analytical Method: EPA 8270 Preparation Method: EPA 3546							
Acenaphthene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 19:51	83-32-9	
Acenaphthylene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 19:51	208-96-8	
Aniline	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 19:51	62-53-3	
Anthracene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 19:51	120-12-7	
Benzo(a)anthracene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 19:51	56-55-3	
Benzo(a)pyrene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 19:51	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 19:51	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 19:51	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 19:51	207-08-9	
Benzoic Acid	ND	ug/kg	2050	1	11/26/13 13:40	11/27/13 19:51	65-85-0	
Benzyl alcohol	ND	ug/kg	822	1	11/26/13 13:40	11/27/13 19:51	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 19:51	101-55-3	
Butylbenzylphthalate	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 19:51	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	822	1	11/26/13 13:40	11/27/13 19:51	59-50-7	
4-Chloroaniline	ND	ug/kg	2050	1	11/26/13 13:40	11/27/13 19:51	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 19:51	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 19:51	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 19:51	108-60-1	
2-Chloronaphthalene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 19:51	91-58-7	
2-Chlorophenol	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 19:51	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 19:51	7005-72-3	
Chrysene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 19:51	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 19:51	53-70-3	
Dibenzofuran	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 19:51	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 19:51	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 19:51	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 19:51	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	2050	1	11/26/13 13:40	11/27/13 19:51	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 19:51	120-83-2	
Diethylphthalate	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 19:51	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 19:51	105-67-9	
Dimethylphthalate	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 19:51	131-11-3	
Di-n-butylphthalate	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 19:51	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	822	1	11/26/13 13:40	11/27/13 19:51	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	2050	1	11/26/13 13:40	11/27/13 19:51	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 19:51	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 19:51	606-20-2	
Di-n-octylphthalate	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 19:51	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 19:51	117-81-7	
Fluoranthene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 19:51	206-44-0	
Fluorene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 19:51	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 19:51	87-68-3	
Hexachlorobenzene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 19:51	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 19:51	77-47-4	
Hexachloroethane	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 19:51	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 19:51	193-39-5	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

Sample: AB3 **Lab ID: 92180232009** Collected: 11/19/13 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
8270 MSSV Microwave	Analytical Method: EPA 8270 Preparation Method: EPA 3546							
Isophorone	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 19:51	78-59-1	
1-Methylnaphthalene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 19:51	90-12-0	
2-Methylnaphthalene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 19:51	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 19:51	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 19:51		
Naphthalene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 19:51	91-20-3	
2-Nitroaniline	ND	ug/kg	2050	1	11/26/13 13:40	11/27/13 19:51	88-74-4	
3-Nitroaniline	ND	ug/kg	2050	1	11/26/13 13:40	11/27/13 19:51	99-09-2	
4-Nitroaniline	ND	ug/kg	822	1	11/26/13 13:40	11/27/13 19:51	100-01-6	
Nitrobenzene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 19:51	98-95-3	
2-Nitrophenol	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 19:51	88-75-5	
4-Nitrophenol	ND	ug/kg	2050	1	11/26/13 13:40	11/27/13 19:51	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 19:51	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 19:51	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 19:51	86-30-6	
Pentachlorophenol	ND	ug/kg	2050	1	11/26/13 13:40	11/27/13 19:51	87-86-5	
Phenanthrene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 19:51	85-01-8	
Phenol	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 19:51	108-95-2	
Pyrene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 19:51	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 19:51	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 19:51	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	411	1	11/26/13 13:40	11/27/13 19:51	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	58	%	23-110	1	11/26/13 13:40	11/27/13 19:51	4165-60-0	
2-Fluorobiphenyl (S)	59	%	30-110	1	11/26/13 13:40	11/27/13 19:51	321-60-8	
Terphenyl-d14 (S)	68	%	28-110	1	11/26/13 13:40	11/27/13 19:51	1718-51-0	
Phenol-d6 (S)	52	%	22-110	1	11/26/13 13:40	11/27/13 19:51	13127-88-3	
2-Fluorophenol (S)	53	%	13-110	1	11/26/13 13:40	11/27/13 19:51	367-12-4	
2,4,6-Tribromophenol (S)	67	%	27-110	1	11/26/13 13:40	11/27/13 19:51	118-79-6	
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
Acetone	ND	ug/kg	83.2	1		12/01/13 17:34	67-64-1	
Benzene	ND	ug/kg	4.2	1		12/01/13 17:34	71-43-2	
Bromobenzene	ND	ug/kg	4.2	1		12/01/13 17:34	108-86-1	
Bromochloromethane	ND	ug/kg	4.2	1		12/01/13 17:34	74-97-5	
Bromodichloromethane	ND	ug/kg	4.2	1		12/01/13 17:34	75-27-4	
Bromoform	ND	ug/kg	4.2	1		12/01/13 17:34	75-25-2	
Bromomethane	ND	ug/kg	8.3	1		12/01/13 17:34	74-83-9	
2-Butanone (MEK)	ND	ug/kg	83.2	1		12/01/13 17:34	78-93-3	
n-Butylbenzene	ND	ug/kg	4.2	1		12/01/13 17:34	104-51-8	
sec-Butylbenzene	ND	ug/kg	4.2	1		12/01/13 17:34	135-98-8	
tert-Butylbenzene	ND	ug/kg	4.2	1		12/01/13 17:34	98-06-6	
Carbon tetrachloride	ND	ug/kg	4.2	1		12/01/13 17:34	56-23-5	
Chlorobenzene	ND	ug/kg	4.2	1		12/01/13 17:34	108-90-7	
Chloroethane	ND	ug/kg	8.3	1		12/01/13 17:34	75-00-3	
Chloroform	ND	ug/kg	4.2	1		12/01/13 17:34	67-66-3	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

Sample: AB3 **Lab ID: 92180232009** Collected: 11/19/13 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
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
Chloromethane	ND	ug/kg	8.3	1		12/01/13 17:34	74-87-3	
2-Chlorotoluene	ND	ug/kg	4.2	1		12/01/13 17:34	95-49-8	
4-Chlorotoluene	ND	ug/kg	4.2	1		12/01/13 17:34	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	4.2	1		12/01/13 17:34	96-12-8	
Dibromochloromethane	ND	ug/kg	4.2	1		12/01/13 17:34	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	4.2	1		12/01/13 17:34	106-93-4	
Dibromomethane	ND	ug/kg	4.2	1		12/01/13 17:34	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	4.2	1		12/01/13 17:34	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	4.2	1		12/01/13 17:34	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	4.2	1		12/01/13 17:34	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	8.3	1		12/01/13 17:34	75-71-8	
1,1-Dichloroethane	ND	ug/kg	4.2	1		12/01/13 17:34	75-34-3	
1,2-Dichloroethane	ND	ug/kg	4.2	1		12/01/13 17:34	107-06-2	
1,1-Dichloroethene	ND	ug/kg	4.2	1		12/01/13 17:34	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	4.2	1		12/01/13 17:34	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	4.2	1		12/01/13 17:34	156-60-5	
1,2-Dichloropropane	ND	ug/kg	4.2	1		12/01/13 17:34	78-87-5	
1,3-Dichloropropane	ND	ug/kg	4.2	1		12/01/13 17:34	142-28-9	
2,2-Dichloropropane	ND	ug/kg	4.2	1		12/01/13 17:34	594-20-7	
1,1-Dichloropropene	ND	ug/kg	4.2	1		12/01/13 17:34	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	4.2	1		12/01/13 17:34	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	4.2	1		12/01/13 17:34	10061-02-6	
Diisopropyl ether	ND	ug/kg	4.2	1		12/01/13 17:34	108-20-3	
Ethylbenzene	ND	ug/kg	4.2	1		12/01/13 17:34	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	4.2	1		12/01/13 17:34	87-68-3	
2-Hexanone	ND	ug/kg	41.6	1		12/01/13 17:34	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	4.2	1		12/01/13 17:34	98-82-8	
p-Isopropyltoluene	ND	ug/kg	4.2	1		12/01/13 17:34	99-87-6	
Methylene Chloride	ND	ug/kg	16.6	1		12/01/13 17:34	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	41.6	1		12/01/13 17:34	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	4.2	1		12/01/13 17:34	1634-04-4	
Naphthalene	ND	ug/kg	4.2	1		12/01/13 17:34	91-20-3	
n-Propylbenzene	ND	ug/kg	4.2	1		12/01/13 17:34	103-65-1	
Styrene	ND	ug/kg	4.2	1		12/01/13 17:34	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	4.2	1		12/01/13 17:34	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	4.2	1		12/01/13 17:34	79-34-5	
Tetrachloroethene	ND	ug/kg	4.2	1		12/01/13 17:34	127-18-4	
Toluene	ND	ug/kg	4.2	1		12/01/13 17:34	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	4.2	1		12/01/13 17:34	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	4.2	1		12/01/13 17:34	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	4.2	1		12/01/13 17:34	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	4.2	1		12/01/13 17:34	79-00-5	
Trichloroethene	ND	ug/kg	4.2	1		12/01/13 17:34	79-01-6	
Trichlorofluoromethane	ND	ug/kg	4.2	1		12/01/13 17:34	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	4.2	1		12/01/13 17:34	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	4.2	1		12/01/13 17:34	95-63-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

Sample: AB3 **Lab ID: 92180232009** Collected: 11/19/13 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
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
1,3,5-Trimethylbenzene	ND	ug/kg	4.2	1		12/01/13 17:34	108-67-8	
Vinyl acetate	ND	ug/kg	41.6	1		12/01/13 17:34	108-05-4	
Vinyl chloride	ND	ug/kg	8.3	1		12/01/13 17:34	75-01-4	
Xylene (Total)	ND	ug/kg	8.3	1		12/01/13 17:34	1330-20-7	
m&p-Xylene	ND	ug/kg	8.3	1		12/01/13 17:34	179601-23-1	
o-Xylene	ND	ug/kg	4.2	1		12/01/13 17:34	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%	70-130	1		12/01/13 17:34	2037-26-5	
4-Bromofluorobenzene (S)	97	%	70-130	1		12/01/13 17:34	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	70-132	1		12/01/13 17:34	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**19.7**	%	0.10	1		12/04/13 08:13		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

Sample: AB2 **Lab ID: 92180232010** Collected: 11/19/13 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
8270 MSSV Microwave	Analytical Method: EPA 8270 Preparation Method: EPA 3546							
Acenaphthene	ND	ug/kg	391	1	11/26/13 13:40	12/01/13 13:04	83-32-9	
Acenaphthylene	ND	ug/kg	391	1	11/26/13 13:40	12/01/13 13:04	208-96-8	
Aniline	ND	ug/kg	391	1	11/26/13 13:40	12/01/13 13:04	62-53-3	
Anthracene	ND	ug/kg	391	1	11/26/13 13:40	12/01/13 13:04	120-12-7	
Benzo(a)anthracene	ND	ug/kg	391	1	11/26/13 13:40	12/01/13 13:04	56-55-3	
Benzo(a)pyrene	ND	ug/kg	391	1	11/26/13 13:40	12/01/13 13:04	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	391	1	11/26/13 13:40	12/01/13 13:04	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	391	1	11/26/13 13:40	12/01/13 13:04	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	391	1	11/26/13 13:40	12/01/13 13:04	207-08-9	
Benzoic Acid	ND	ug/kg	1960	1	11/26/13 13:40	12/01/13 13:04	65-85-0	
Benzyl alcohol	ND	ug/kg	783	1	11/26/13 13:40	12/01/13 13:04	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	391	1	11/26/13 13:40	12/01/13 13:04	101-55-3	
Butylbenzylphthalate	ND	ug/kg	391	1	11/26/13 13:40	12/01/13 13:04	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	783	1	11/26/13 13:40	12/01/13 13:04	59-50-7	
4-Chloroaniline	ND	ug/kg	1960	1	11/26/13 13:40	12/01/13 13:04	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	391	1	11/26/13 13:40	12/01/13 13:04	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	391	1	11/26/13 13:40	12/01/13 13:04	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	391	1	11/26/13 13:40	12/01/13 13:04	108-60-1	
2-Chloronaphthalene	ND	ug/kg	391	1	11/26/13 13:40	12/01/13 13:04	91-58-7	
2-Chlorophenol	ND	ug/kg	391	1	11/26/13 13:40	12/01/13 13:04	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	391	1	11/26/13 13:40	12/01/13 13:04	7005-72-3	
Chrysene	ND	ug/kg	391	1	11/26/13 13:40	12/01/13 13:04	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	391	1	11/26/13 13:40	12/01/13 13:04	53-70-3	
Dibenzofuran	ND	ug/kg	391	1	11/26/13 13:40	12/01/13 13:04	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	391	1	11/26/13 13:40	12/01/13 13:04	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	391	1	11/26/13 13:40	12/01/13 13:04	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	391	1	11/26/13 13:40	12/01/13 13:04	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	1960	1	11/26/13 13:40	12/01/13 13:04	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	391	1	11/26/13 13:40	12/01/13 13:04	120-83-2	
Diethylphthalate	ND	ug/kg	391	1	11/26/13 13:40	12/01/13 13:04	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	391	1	11/26/13 13:40	12/01/13 13:04	105-67-9	
Dimethylphthalate	ND	ug/kg	391	1	11/26/13 13:40	12/01/13 13:04	131-11-3	
Di-n-butylphthalate	ND	ug/kg	391	1	11/26/13 13:40	12/01/13 13:04	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	783	1	11/26/13 13:40	12/01/13 13:04	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	1960	1	11/26/13 13:40	12/01/13 13:04	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	391	1	11/26/13 13:40	12/01/13 13:04	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	391	1	11/26/13 13:40	12/01/13 13:04	606-20-2	
Di-n-octylphthalate	ND	ug/kg	391	1	11/26/13 13:40	12/01/13 13:04	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	391	1	11/26/13 13:40	12/01/13 13:04	117-81-7	
Fluoranthene	ND	ug/kg	391	1	11/26/13 13:40	12/01/13 13:04	206-44-0	
Fluorene	ND	ug/kg	391	1	11/26/13 13:40	12/01/13 13:04	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	391	1	11/26/13 13:40	12/01/13 13:04	87-68-3	
Hexachlorobenzene	ND	ug/kg	391	1	11/26/13 13:40	12/01/13 13:04	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	391	1	11/26/13 13:40	12/01/13 13:04	77-47-4	
Hexachloroethane	ND	ug/kg	391	1	11/26/13 13:40	12/01/13 13:04	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	391	1	11/26/13 13:40	12/01/13 13:04	193-39-5	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

Sample: AB2 **Lab ID: 92180232010** Collected: 11/19/13 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
8270 MSSV Microwave	Analytical Method: EPA 8270 Preparation Method: EPA 3546							
Isophorone	ND	ug/kg	391	1	11/26/13 13:40	12/01/13 13:04	78-59-1	
1-Methylnaphthalene	ND	ug/kg	391	1	11/26/13 13:40	12/01/13 13:04	90-12-0	
2-Methylnaphthalene	ND	ug/kg	391	1	11/26/13 13:40	12/01/13 13:04	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	391	1	11/26/13 13:40	12/01/13 13:04	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	391	1	11/26/13 13:40	12/01/13 13:04		
Naphthalene	ND	ug/kg	391	1	11/26/13 13:40	12/01/13 13:04	91-20-3	
2-Nitroaniline	ND	ug/kg	1960	1	11/26/13 13:40	12/01/13 13:04	88-74-4	
3-Nitroaniline	ND	ug/kg	1960	1	11/26/13 13:40	12/01/13 13:04	99-09-2	
4-Nitroaniline	ND	ug/kg	783	1	11/26/13 13:40	12/01/13 13:04	100-01-6	
Nitrobenzene	ND	ug/kg	391	1	11/26/13 13:40	12/01/13 13:04	98-95-3	
2-Nitrophenol	ND	ug/kg	391	1	11/26/13 13:40	12/01/13 13:04	88-75-5	
4-Nitrophenol	ND	ug/kg	1960	1	11/26/13 13:40	12/01/13 13:04	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	391	1	11/26/13 13:40	12/01/13 13:04	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	391	1	11/26/13 13:40	12/01/13 13:04	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	391	1	11/26/13 13:40	12/01/13 13:04	86-30-6	
Pentachlorophenol	ND	ug/kg	1960	1	11/26/13 13:40	12/01/13 13:04	87-86-5	
Phenanthrene	ND	ug/kg	391	1	11/26/13 13:40	12/01/13 13:04	85-01-8	
Phenol	ND	ug/kg	391	1	11/26/13 13:40	12/01/13 13:04	108-95-2	
Pyrene	ND	ug/kg	391	1	11/26/13 13:40	12/01/13 13:04	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/kg	391	1	11/26/13 13:40	12/01/13 13:04	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	391	1	11/26/13 13:40	12/01/13 13:04	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	391	1	11/26/13 13:40	12/01/13 13:04	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	39	%	23-110	1	11/26/13 13:40	12/01/13 13:04	4165-60-0	
2-Fluorobiphenyl (S)	35	%	30-110	1	11/26/13 13:40	12/01/13 13:04	321-60-8	
Terphenyl-d14 (S)	50	%	28-110	1	11/26/13 13:40	12/01/13 13:04	1718-51-0	
Phenol-d6 (S)	35	%	22-110	1	11/26/13 13:40	12/01/13 13:04	13127-88-3	
2-Fluorophenol (S)	34	%	13-110	1	11/26/13 13:40	12/01/13 13:04	367-12-4	
2,4,6-Tribromophenol (S)	33	%	27-110	1	11/26/13 13:40	12/01/13 13:04	118-79-6	
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
Acetone	ND	ug/kg	77.7	1		12/01/13 17:54	67-64-1	
Benzene	ND	ug/kg	3.9	1		12/01/13 17:54	71-43-2	
Bromobenzene	ND	ug/kg	3.9	1		12/01/13 17:54	108-86-1	
Bromochloromethane	ND	ug/kg	3.9	1		12/01/13 17:54	74-97-5	
Bromodichloromethane	ND	ug/kg	3.9	1		12/01/13 17:54	75-27-4	
Bromoform	ND	ug/kg	3.9	1		12/01/13 17:54	75-25-2	
Bromomethane	ND	ug/kg	7.8	1		12/01/13 17:54	74-83-9	
2-Butanone (MEK)	ND	ug/kg	77.7	1		12/01/13 17:54	78-93-3	
n-Butylbenzene	ND	ug/kg	3.9	1		12/01/13 17:54	104-51-8	
sec-Butylbenzene	ND	ug/kg	3.9	1		12/01/13 17:54	135-98-8	
tert-Butylbenzene	ND	ug/kg	3.9	1		12/01/13 17:54	98-06-6	
Carbon tetrachloride	ND	ug/kg	3.9	1		12/01/13 17:54	56-23-5	
Chlorobenzene	ND	ug/kg	3.9	1		12/01/13 17:54	108-90-7	
Chloroethane	ND	ug/kg	7.8	1		12/01/13 17:54	75-00-3	
Chloroform	ND	ug/kg	3.9	1		12/01/13 17:54	67-66-3	

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ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

Sample: AB2 **Lab ID: 92180232010** Collected: 11/19/13 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
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
Chloromethane	ND	ug/kg	7.8	1		12/01/13 17:54	74-87-3	
2-Chlorotoluene	ND	ug/kg	3.9	1		12/01/13 17:54	95-49-8	
4-Chlorotoluene	ND	ug/kg	3.9	1		12/01/13 17:54	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	3.9	1		12/01/13 17:54	96-12-8	
Dibromochloromethane	ND	ug/kg	3.9	1		12/01/13 17:54	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	3.9	1		12/01/13 17:54	106-93-4	
Dibromomethane	ND	ug/kg	3.9	1		12/01/13 17:54	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	3.9	1		12/01/13 17:54	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	3.9	1		12/01/13 17:54	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	3.9	1		12/01/13 17:54	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	7.8	1		12/01/13 17:54	75-71-8	
1,1-Dichloroethane	ND	ug/kg	3.9	1		12/01/13 17:54	75-34-3	
1,2-Dichloroethane	ND	ug/kg	3.9	1		12/01/13 17:54	107-06-2	
1,1-Dichloroethene	ND	ug/kg	3.9	1		12/01/13 17:54	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	3.9	1		12/01/13 17:54	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	3.9	1		12/01/13 17:54	156-60-5	
1,2-Dichloropropane	ND	ug/kg	3.9	1		12/01/13 17:54	78-87-5	
1,3-Dichloropropane	ND	ug/kg	3.9	1		12/01/13 17:54	142-28-9	
2,2-Dichloropropane	ND	ug/kg	3.9	1		12/01/13 17:54	594-20-7	
1,1-Dichloropropene	ND	ug/kg	3.9	1		12/01/13 17:54	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	3.9	1		12/01/13 17:54	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	3.9	1		12/01/13 17:54	10061-02-6	
Diisopropyl ether	ND	ug/kg	3.9	1		12/01/13 17:54	108-20-3	
Ethylbenzene	ND	ug/kg	3.9	1		12/01/13 17:54	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	3.9	1		12/01/13 17:54	87-68-3	
2-Hexanone	ND	ug/kg	38.9	1		12/01/13 17:54	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	3.9	1		12/01/13 17:54	98-82-8	
p-Isopropyltoluene	ND	ug/kg	3.9	1		12/01/13 17:54	99-87-6	
Methylene Chloride	ND	ug/kg	15.5	1		12/01/13 17:54	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	38.9	1		12/01/13 17:54	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	3.9	1		12/01/13 17:54	1634-04-4	
Naphthalene	ND	ug/kg	3.9	1		12/01/13 17:54	91-20-3	
n-Propylbenzene	ND	ug/kg	3.9	1		12/01/13 17:54	103-65-1	
Styrene	ND	ug/kg	3.9	1		12/01/13 17:54	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	3.9	1		12/01/13 17:54	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	3.9	1		12/01/13 17:54	79-34-5	
Tetrachloroethene	ND	ug/kg	3.9	1		12/01/13 17:54	127-18-4	
Toluene	ND	ug/kg	3.9	1		12/01/13 17:54	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	3.9	1		12/01/13 17:54	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	3.9	1		12/01/13 17:54	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	3.9	1		12/01/13 17:54	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	3.9	1		12/01/13 17:54	79-00-5	
Trichloroethene	ND	ug/kg	3.9	1		12/01/13 17:54	79-01-6	
Trichlorofluoromethane	ND	ug/kg	3.9	1		12/01/13 17:54	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	3.9	1		12/01/13 17:54	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	3.9	1		12/01/13 17:54	95-63-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

Sample: AB2 **Lab ID: 92180232010** Collected: 11/19/13 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
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
1,3,5-Trimethylbenzene	ND	ug/kg	3.9	1		12/01/13 17:54	108-67-8	
Vinyl acetate	ND	ug/kg	38.9	1		12/01/13 17:54	108-05-4	
Vinyl chloride	ND	ug/kg	7.8	1		12/01/13 17:54	75-01-4	
Xylene (Total)	ND	ug/kg	7.8	1		12/01/13 17:54	1330-20-7	
m&p-Xylene	ND	ug/kg	7.8	1		12/01/13 17:54	179601-23-1	
o-Xylene	ND	ug/kg	3.9	1		12/01/13 17:54	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%	70-130	1		12/01/13 17:54	2037-26-5	
4-Bromofluorobenzene (S)	98	%	70-130	1		12/01/13 17:54	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	70-132	1		12/01/13 17:54	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**15.7**	%	0.10	1		12/04/13 08:13		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

Sample: AB1 **Lab ID: 92180232011** Collected: 11/19/13 11:55 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
8270 MSSV Microwave	Analytical Method: EPA 8270 Preparation Method: EPA 3546							
Acenaphthene	ND	ug/kg	385	1	11/26/13 13:40	12/01/13 13:37	83-32-9	
Acenaphthylene	ND	ug/kg	385	1	11/26/13 13:40	12/01/13 13:37	208-96-8	
Aniline	ND	ug/kg	385	1	11/26/13 13:40	12/01/13 13:37	62-53-3	
Anthracene	ND	ug/kg	385	1	11/26/13 13:40	12/01/13 13:37	120-12-7	
Benzo(a)anthracene	ND	ug/kg	385	1	11/26/13 13:40	12/01/13 13:37	56-55-3	
Benzo(a)pyrene	ND	ug/kg	385	1	11/26/13 13:40	12/01/13 13:37	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	385	1	11/26/13 13:40	12/01/13 13:37	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	385	1	11/26/13 13:40	12/01/13 13:37	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	385	1	11/26/13 13:40	12/01/13 13:37	207-08-9	
Benzoic Acid	ND	ug/kg	1920	1	11/26/13 13:40	12/01/13 13:37	65-85-0	
Benzyl alcohol	ND	ug/kg	769	1	11/26/13 13:40	12/01/13 13:37	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	385	1	11/26/13 13:40	12/01/13 13:37	101-55-3	
Butylbenzylphthalate	ND	ug/kg	385	1	11/26/13 13:40	12/01/13 13:37	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	769	1	11/26/13 13:40	12/01/13 13:37	59-50-7	
4-Chloroaniline	ND	ug/kg	1920	1	11/26/13 13:40	12/01/13 13:37	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	385	1	11/26/13 13:40	12/01/13 13:37	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	385	1	11/26/13 13:40	12/01/13 13:37	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	385	1	11/26/13 13:40	12/01/13 13:37	108-60-1	
2-Chloronaphthalene	ND	ug/kg	385	1	11/26/13 13:40	12/01/13 13:37	91-58-7	
2-Chlorophenol	ND	ug/kg	385	1	11/26/13 13:40	12/01/13 13:37	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	385	1	11/26/13 13:40	12/01/13 13:37	7005-72-3	
Chrysene	ND	ug/kg	385	1	11/26/13 13:40	12/01/13 13:37	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	385	1	11/26/13 13:40	12/01/13 13:37	53-70-3	
Dibenzofuran	ND	ug/kg	385	1	11/26/13 13:40	12/01/13 13:37	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	385	1	11/26/13 13:40	12/01/13 13:37	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	385	1	11/26/13 13:40	12/01/13 13:37	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	385	1	11/26/13 13:40	12/01/13 13:37	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	1920	1	11/26/13 13:40	12/01/13 13:37	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	385	1	11/26/13 13:40	12/01/13 13:37	120-83-2	
Diethylphthalate	ND	ug/kg	385	1	11/26/13 13:40	12/01/13 13:37	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	385	1	11/26/13 13:40	12/01/13 13:37	105-67-9	
Dimethylphthalate	ND	ug/kg	385	1	11/26/13 13:40	12/01/13 13:37	131-11-3	
Di-n-butylphthalate	ND	ug/kg	385	1	11/26/13 13:40	12/01/13 13:37	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	769	1	11/26/13 13:40	12/01/13 13:37	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	1920	1	11/26/13 13:40	12/01/13 13:37	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	385	1	11/26/13 13:40	12/01/13 13:37	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	385	1	11/26/13 13:40	12/01/13 13:37	606-20-2	
Di-n-octylphthalate	ND	ug/kg	385	1	11/26/13 13:40	12/01/13 13:37	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	385	1	11/26/13 13:40	12/01/13 13:37	117-81-7	
Fluoranthene	ND	ug/kg	385	1	11/26/13 13:40	12/01/13 13:37	206-44-0	
Fluorene	ND	ug/kg	385	1	11/26/13 13:40	12/01/13 13:37	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	385	1	11/26/13 13:40	12/01/13 13:37	87-68-3	
Hexachlorobenzene	ND	ug/kg	385	1	11/26/13 13:40	12/01/13 13:37	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	385	1	11/26/13 13:40	12/01/13 13:37	77-47-4	
Hexachloroethane	ND	ug/kg	385	1	11/26/13 13:40	12/01/13 13:37	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	385	1	11/26/13 13:40	12/01/13 13:37	193-39-5	

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ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

Sample: AB1 **Lab ID: 92180232011** Collected: 11/19/13 11:55 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
8270 MSSV Microwave	Analytical Method: EPA 8270 Preparation Method: EPA 3546							
Isophorone	ND	ug/kg	385	1	11/26/13 13:40	12/01/13 13:37	78-59-1	
1-Methylnaphthalene	ND	ug/kg	385	1	11/26/13 13:40	12/01/13 13:37	90-12-0	
2-Methylnaphthalene	ND	ug/kg	385	1	11/26/13 13:40	12/01/13 13:37	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	385	1	11/26/13 13:40	12/01/13 13:37	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	385	1	11/26/13 13:40	12/01/13 13:37		
Naphthalene	ND	ug/kg	385	1	11/26/13 13:40	12/01/13 13:37	91-20-3	
2-Nitroaniline	ND	ug/kg	1920	1	11/26/13 13:40	12/01/13 13:37	88-74-4	
3-Nitroaniline	ND	ug/kg	1920	1	11/26/13 13:40	12/01/13 13:37	99-09-2	
4-Nitroaniline	ND	ug/kg	769	1	11/26/13 13:40	12/01/13 13:37	100-01-6	
Nitrobenzene	ND	ug/kg	385	1	11/26/13 13:40	12/01/13 13:37	98-95-3	
2-Nitrophenol	ND	ug/kg	385	1	11/26/13 13:40	12/01/13 13:37	88-75-5	
4-Nitrophenol	ND	ug/kg	1920	1	11/26/13 13:40	12/01/13 13:37	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	385	1	11/26/13 13:40	12/01/13 13:37	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	385	1	11/26/13 13:40	12/01/13 13:37	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	385	1	11/26/13 13:40	12/01/13 13:37	86-30-6	
Pentachlorophenol	ND	ug/kg	1920	1	11/26/13 13:40	12/01/13 13:37	87-86-5	
Phenanthrene	ND	ug/kg	385	1	11/26/13 13:40	12/01/13 13:37	85-01-8	
Phenol	ND	ug/kg	385	1	11/26/13 13:40	12/01/13 13:37	108-95-2	
Pyrene	ND	ug/kg	385	1	11/26/13 13:40	12/01/13 13:37	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/kg	385	1	11/26/13 13:40	12/01/13 13:37	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	385	1	11/26/13 13:40	12/01/13 13:37	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	385	1	11/26/13 13:40	12/01/13 13:37	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	55	%	23-110	1	11/26/13 13:40	12/01/13 13:37	4165-60-0	
2-Fluorobiphenyl (S)	57	%	30-110	1	11/26/13 13:40	12/01/13 13:37	321-60-8	
Terphenyl-d14 (S)	66	%	28-110	1	11/26/13 13:40	12/01/13 13:37	1718-51-0	
Phenol-d6 (S)	52	%	22-110	1	11/26/13 13:40	12/01/13 13:37	13127-88-3	
2-Fluorophenol (S)	52	%	13-110	1	11/26/13 13:40	12/01/13 13:37	367-12-4	
2,4,6-Tribromophenol (S)	63	%	27-110	1	11/26/13 13:40	12/01/13 13:37	118-79-6	
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
Acetone	ND	ug/kg	78.0	1		12/01/13 18:14	67-64-1	
Benzene	ND	ug/kg	3.9	1		12/01/13 18:14	71-43-2	
Bromobenzene	ND	ug/kg	3.9	1		12/01/13 18:14	108-86-1	
Bromochloromethane	ND	ug/kg	3.9	1		12/01/13 18:14	74-97-5	
Bromodichloromethane	ND	ug/kg	3.9	1		12/01/13 18:14	75-27-4	
Bromoform	ND	ug/kg	3.9	1		12/01/13 18:14	75-25-2	
Bromomethane	ND	ug/kg	7.8	1		12/01/13 18:14	74-83-9	
2-Butanone (MEK)	ND	ug/kg	78.0	1		12/01/13 18:14	78-93-3	
n-Butylbenzene	ND	ug/kg	3.9	1		12/01/13 18:14	104-51-8	
sec-Butylbenzene	ND	ug/kg	3.9	1		12/01/13 18:14	135-98-8	
tert-Butylbenzene	ND	ug/kg	3.9	1		12/01/13 18:14	98-06-6	
Carbon tetrachloride	ND	ug/kg	3.9	1		12/01/13 18:14	56-23-5	
Chlorobenzene	ND	ug/kg	3.9	1		12/01/13 18:14	108-90-7	
Chloroethane	ND	ug/kg	7.8	1		12/01/13 18:14	75-00-3	
Chloroform	ND	ug/kg	3.9	1		12/01/13 18:14	67-66-3	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

Sample: AB1 **Lab ID: 92180232011** Collected: 11/19/13 11:55 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
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
Chloromethane	ND	ug/kg	7.8	1		12/01/13 18:14	74-87-3	
2-Chlorotoluene	ND	ug/kg	3.9	1		12/01/13 18:14	95-49-8	
4-Chlorotoluene	ND	ug/kg	3.9	1		12/01/13 18:14	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	3.9	1		12/01/13 18:14	96-12-8	
Dibromochloromethane	ND	ug/kg	3.9	1		12/01/13 18:14	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	3.9	1		12/01/13 18:14	106-93-4	
Dibromomethane	ND	ug/kg	3.9	1		12/01/13 18:14	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	3.9	1		12/01/13 18:14	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	3.9	1		12/01/13 18:14	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	3.9	1		12/01/13 18:14	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	7.8	1		12/01/13 18:14	75-71-8	
1,1-Dichloroethane	ND	ug/kg	3.9	1		12/01/13 18:14	75-34-3	
1,2-Dichloroethane	ND	ug/kg	3.9	1		12/01/13 18:14	107-06-2	
1,1-Dichloroethene	ND	ug/kg	3.9	1		12/01/13 18:14	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	3.9	1		12/01/13 18:14	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	3.9	1		12/01/13 18:14	156-60-5	
1,2-Dichloropropane	ND	ug/kg	3.9	1		12/01/13 18:14	78-87-5	
1,3-Dichloropropane	ND	ug/kg	3.9	1		12/01/13 18:14	142-28-9	
2,2-Dichloropropane	ND	ug/kg	3.9	1		12/01/13 18:14	594-20-7	
1,1-Dichloropropene	ND	ug/kg	3.9	1		12/01/13 18:14	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	3.9	1		12/01/13 18:14	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	3.9	1		12/01/13 18:14	10061-02-6	
Diisopropyl ether	ND	ug/kg	3.9	1		12/01/13 18:14	108-20-3	
Ethylbenzene	ND	ug/kg	3.9	1		12/01/13 18:14	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	3.9	1		12/01/13 18:14	87-68-3	
2-Hexanone	ND	ug/kg	39.0	1		12/01/13 18:14	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	3.9	1		12/01/13 18:14	98-82-8	
p-Isopropyltoluene	ND	ug/kg	3.9	1		12/01/13 18:14	99-87-6	
Methylene Chloride	ND	ug/kg	15.6	1		12/01/13 18:14	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	39.0	1		12/01/13 18:14	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	3.9	1		12/01/13 18:14	1634-04-4	
Naphthalene	ND	ug/kg	3.9	1		12/01/13 18:14	91-20-3	
n-Propylbenzene	ND	ug/kg	3.9	1		12/01/13 18:14	103-65-1	
Styrene	ND	ug/kg	3.9	1		12/01/13 18:14	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	3.9	1		12/01/13 18:14	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	3.9	1		12/01/13 18:14	79-34-5	
Tetrachloroethene	ND	ug/kg	3.9	1		12/01/13 18:14	127-18-4	
Toluene	ND	ug/kg	3.9	1		12/01/13 18:14	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	3.9	1		12/01/13 18:14	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	3.9	1		12/01/13 18:14	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	3.9	1		12/01/13 18:14	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	3.9	1		12/01/13 18:14	79-00-5	
Trichloroethene	ND	ug/kg	3.9	1		12/01/13 18:14	79-01-6	
Trichlorofluoromethane	ND	ug/kg	3.9	1		12/01/13 18:14	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	3.9	1		12/01/13 18:14	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	3.9	1		12/01/13 18:14	95-63-6	

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ANALYTICAL RESULTS

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

Sample: AB1 **Lab ID: 92180232011** Collected: 11/19/13 11:55 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
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
1,3,5-Trimethylbenzene	ND	ug/kg	3.9	1		12/01/13 18:14	108-67-8	
Vinyl acetate	ND	ug/kg	39.0	1		12/01/13 18:14	108-05-4	
Vinyl chloride	ND	ug/kg	7.8	1		12/01/13 18:14	75-01-4	
Xylene (Total)	ND	ug/kg	7.8	1		12/01/13 18:14	1330-20-7	
m&p-Xylene	ND	ug/kg	7.8	1		12/01/13 18:14	179601-23-1	
o-Xylene	ND	ug/kg	3.9	1		12/01/13 18:14	95-47-6	
Surrogates								
Toluene-d8 (S)	100	%	70-130	1		12/01/13 18:14	2037-26-5	
4-Bromofluorobenzene (S)	101	%	70-130	1		12/01/13 18:14	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	70-132	1		12/01/13 18:14	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**14.2**	%	0.10	1		12/04/13 08:13		

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QUALITY CONTROL DATA

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

QC Batch: MSV/25059
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV 5035A Volatile Organics
Associated Lab Samples: 92180232001

METHOD BLANK: 1095457
Matrix: Solid
Associated Lab Samples: 92180232001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	5.2	11/27/13 11:39	
1,1,1-Trichloroethane	ug/kg	ND	5.2	11/27/13 11:39	
1,1,2,2-Tetrachloroethane	ug/kg	ND	5.2	11/27/13 11:39	
1,1,2-Trichloroethane	ug/kg	ND	5.2	11/27/13 11:39	
1,1-Dichloroethane	ug/kg	ND	5.2	11/27/13 11:39	
1,1-Dichloroethene	ug/kg	ND	5.2	11/27/13 11:39	
1,1-Dichloropropene	ug/kg	ND	5.2	11/27/13 11:39	
1,2,3-Trichlorobenzene	ug/kg	ND	5.2	11/27/13 11:39	
1,2,3-Trichloropropane	ug/kg	ND	5.2	11/27/13 11:39	
1,2,4-Trichlorobenzene	ug/kg	ND	5.2	11/27/13 11:39	
1,2,4-Trimethylbenzene	ug/kg	ND	5.2	11/27/13 11:39	
1,2-Dibromo-3-chloropropane	ug/kg	ND	5.2	11/27/13 11:39	
1,2-Dibromoethane (EDB)	ug/kg	ND	5.2	11/27/13 11:39	
1,2-Dichlorobenzene	ug/kg	ND	5.2	11/27/13 11:39	
1,2-Dichloroethane	ug/kg	ND	5.2	11/27/13 11:39	
1,2-Dichloropropane	ug/kg	ND	5.2	11/27/13 11:39	
1,3,5-Trimethylbenzene	ug/kg	ND	5.2	11/27/13 11:39	
1,3-Dichlorobenzene	ug/kg	ND	5.2	11/27/13 11:39	
1,3-Dichloropropane	ug/kg	ND	5.2	11/27/13 11:39	
1,4-Dichlorobenzene	ug/kg	ND	5.2	11/27/13 11:39	
2,2-Dichloropropane	ug/kg	ND	5.2	11/27/13 11:39	
2-Butanone (MEK)	ug/kg	ND	105	11/27/13 11:39	
2-Chlorotoluene	ug/kg	ND	5.2	11/27/13 11:39	
2-Hexanone	ug/kg	ND	52.3	11/27/13 11:39	
4-Chlorotoluene	ug/kg	ND	5.2	11/27/13 11:39	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	52.3	11/27/13 11:39	
Acetone	ug/kg	ND	105	11/27/13 11:39	
Benzene	ug/kg	ND	5.2	11/27/13 11:39	
Bromobenzene	ug/kg	ND	5.2	11/27/13 11:39	
Bromochloromethane	ug/kg	ND	5.2	11/27/13 11:39	
Bromodichloromethane	ug/kg	ND	5.2	11/27/13 11:39	
Bromoform	ug/kg	ND	5.2	11/27/13 11:39	
Bromomethane	ug/kg	ND	10.5	11/27/13 11:39	
Carbon tetrachloride	ug/kg	ND	5.2	11/27/13 11:39	
Chlorobenzene	ug/kg	ND	5.2	11/27/13 11:39	
Chloroethane	ug/kg	ND	10.5	11/27/13 11:39	
Chloroform	ug/kg	ND	5.2	11/27/13 11:39	
Chloromethane	ug/kg	ND	10.5	11/27/13 11:39	
cis-1,2-Dichloroethene	ug/kg	ND	5.2	11/27/13 11:39	
cis-1,3-Dichloropropene	ug/kg	ND	5.2	11/27/13 11:39	
Dibromochloromethane	ug/kg	ND	5.2	11/27/13 11:39	
Dibromomethane	ug/kg	ND	5.2	11/27/13 11:39	
Dichlorodifluoromethane	ug/kg	ND	10.5	11/27/13 11:39	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

METHOD BLANK: 1095457 Matrix: Solid
Associated Lab Samples: 92180232001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diisopropyl ether	ug/kg	ND	5.2	11/27/13 11:39	
Ethylbenzene	ug/kg	ND	5.2	11/27/13 11:39	
Hexachloro-1,3-butadiene	ug/kg	ND	5.2	11/27/13 11:39	
Isopropylbenzene (Cumene)	ug/kg	ND	5.2	11/27/13 11:39	
m&p-Xylene	ug/kg	ND	10.5	11/27/13 11:39	
Methyl-tert-butyl ether	ug/kg	ND	5.2	11/27/13 11:39	
Methylene Chloride	ug/kg	ND	20.9	11/27/13 11:39	
n-Butylbenzene	ug/kg	ND	5.2	11/27/13 11:39	
n-Propylbenzene	ug/kg	ND	5.2	11/27/13 11:39	
Naphthalene	ug/kg	ND	5.2	11/27/13 11:39	
o-Xylene	ug/kg	ND	5.2	11/27/13 11:39	
p-Isopropyltoluene	ug/kg	ND	5.2	11/27/13 11:39	
sec-Butylbenzene	ug/kg	ND	5.2	11/27/13 11:39	
Styrene	ug/kg	ND	5.2	11/27/13 11:39	
tert-Butylbenzene	ug/kg	ND	5.2	11/27/13 11:39	
Tetrachloroethene	ug/kg	ND	5.2	11/27/13 11:39	
Toluene	ug/kg	ND	5.2	11/27/13 11:39	
trans-1,2-Dichloroethene	ug/kg	ND	5.2	11/27/13 11:39	
trans-1,3-Dichloropropene	ug/kg	ND	5.2	11/27/13 11:39	
Trichloroethene	ug/kg	ND	5.2	11/27/13 11:39	
Trichlorofluoromethane	ug/kg	ND	5.2	11/27/13 11:39	
Vinyl acetate	ug/kg	ND	52.3	11/27/13 11:39	
Vinyl chloride	ug/kg	ND	10.5	11/27/13 11:39	
Xylene (Total)	ug/kg	ND	10.5	11/27/13 11:39	
1,2-Dichloroethane-d4 (S)	%	102	70-132	11/27/13 11:39	
4-Bromofluorobenzene (S)	%	111	70-130	11/27/13 11:39	
Toluene-d8 (S)	%	100	70-130	11/27/13 11:39	

LABORATORY CONTROL SAMPLE: 1095458

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	55.7	59.1	106	70-131	
1,1,1-Trichloroethane	ug/kg	55.7	53.0	95	70-141	
1,1,2,2-Tetrachloroethane	ug/kg	55.7	54.4	98	70-130	
1,1,2-Trichloroethane	ug/kg	55.7	54.7	98	70-132	
1,1-Dichloroethane	ug/kg	55.7	48.2	87	70-143	
1,1-Dichloroethene	ug/kg	55.7	49.9	90	70-137	
1,1-Dichloropropene	ug/kg	55.7	52.9	95	70-135	
1,2,3-Trichlorobenzene	ug/kg	55.7	59.0	106	69-153	
1,2,3-Trichloropropane	ug/kg	55.7	58.0	104	70-130	
1,2,4-Trichlorobenzene	ug/kg	55.7	59.2	106	55-171	
1,2,4-Trimethylbenzene	ug/kg	55.7	57.5	103	70-149	
1,2-Dibromo-3-chloropropane	ug/kg	55.7	52.1	94	68-141	
1,2-Dibromoethane (EDB)	ug/kg	55.7	53.6	96	70-130	
1,2-Dichlorobenzene	ug/kg	55.7	56.0	101	70-140	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

LABORATORY CONTROL SAMPLE: 1095458

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/kg	55.7	51.1	92	70-137	
1,2-Dichloropropane	ug/kg	55.7	53.9	97	70-133	
1,3,5-Trimethylbenzene	ug/kg	55.7	57.5	103	70-143	
1,3-Dichlorobenzene	ug/kg	55.7	56.1	101	70-144	
1,3-Dichloropropane	ug/kg	55.7	52.5	94	70-132	
1,4-Dichlorobenzene	ug/kg	55.7	57.3	103	70-142	
2,2-Dichloropropane	ug/kg	55.7	53.3	96	68-152	
2-Butanone (MEK)	ug/kg	111	91.2J	82	70-149	
2-Chlorotoluene	ug/kg	55.7	53.2	96	70-141	
2-Hexanone	ug/kg	111	112	101	70-149	
4-Chlorotoluene	ug/kg	55.7	55.0	99	70-149	
4-Methyl-2-pentanone (MIBK)	ug/kg	111	108	97	70-153	
Acetone	ug/kg	111	92.2J	83	70-157	
Benzene	ug/kg	55.7	56.1	101	70-130	
Bromobenzene	ug/kg	55.7	51.8	93	70-141	
Bromochloromethane	ug/kg	55.7	51.3	92	70-149	
Bromodichloromethane	ug/kg	55.7	57.2	103	70-130	
Bromoform	ug/kg	55.7	62.2	112	70-131	
Bromomethane	ug/kg	55.7	59.3	107	64-136	
Carbon tetrachloride	ug/kg	55.7	60.9	109	70-154	
Chlorobenzene	ug/kg	55.7	57.6	103	70-135	
Chloroethane	ug/kg	55.7	47.5	85	68-151	
Chloroform	ug/kg	55.7	50.9	91	70-130	
Chloromethane	ug/kg	55.7	52.3	94	70-132	
cis-1,2-Dichloroethene	ug/kg	55.7	47.4	85	70-140	
cis-1,3-Dichloropropene	ug/kg	55.7	55.6	100	70-137	
Dibromochloromethane	ug/kg	55.7	57.2	103	70-130	
Dibromomethane	ug/kg	55.7	53.7	96	70-136	
Dichlorodifluoromethane	ug/kg	55.7	56.8	102	36-148	
Diisopropyl ether	ug/kg	55.7	50.6	91	70-139	
Ethylbenzene	ug/kg	55.7	58.6	105	70-137	
Hexachloro-1,3-butadiene	ug/kg	55.7	68.9	124	70-145	
Isopropylbenzene (Cumene)	ug/kg	55.7	62.4	112	70-141	
m&p-Xylene	ug/kg	111	121	109	70-140	
Methyl-tert-butyl ether	ug/kg	55.7	49.9	90	45-150	
Methylene Chloride	ug/kg	55.7	42.1	76	70-133	
n-Butylbenzene	ug/kg	55.7	59.1	106	65-155	
n-Propylbenzene	ug/kg	55.7	56.9	102	70-148	
Naphthalene	ug/kg	55.7	53.2	96	70-148	
o-Xylene	ug/kg	55.7	58.2	105	70-141	
p-Isopropyltoluene	ug/kg	55.7	61.3	110	70-148	
sec-Butylbenzene	ug/kg	55.7	57.9	104	70-145	
Styrene	ug/kg	55.7	60.2	108	70-138	
tert-Butylbenzene	ug/kg	55.7	57.5	103	70-143	
Tetrachloroethene	ug/kg	55.7	66.8	120	70-140	
Toluene	ug/kg	55.7	56.5	101	70-130	
trans-1,2-Dichloroethene	ug/kg	55.7	50.7	91	70-136	
trans-1,3-Dichloropropene	ug/kg	55.7	55.1	99	70-138	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

LABORATORY CONTROL SAMPLE: 1095458

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Trichloroethene	ug/kg	55.7	59.9	108	70-132	
Trichlorofluoromethane	ug/kg	55.7	58.5	105	69-134	
Vinyl acetate	ug/kg	111	137	123	24-161	F3
Vinyl chloride	ug/kg	55.7	48.9	88	55-140	
Xylene (Total)	ug/kg	167	179	107	70-141	
1,2-Dichloroethane-d4 (S)	%			95	70-132	
4-Bromofluorobenzene (S)	%			111	70-130	
Toluene-d8 (S)	%			98	70-130	

QUALITY CONTROL DATA

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

QC Batch: MSV/25086
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV 5035A Volatile Organics
Associated Lab Samples: 92180232002

METHOD BLANK: 1096330
Matrix: Solid
Associated Lab Samples: 92180232002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	5.7	11/29/13 15:43	
1,1,1-Trichloroethane	ug/kg	ND	5.7	11/29/13 15:43	
1,1,2,2-Tetrachloroethane	ug/kg	ND	5.7	11/29/13 15:43	
1,1,2-Trichloroethane	ug/kg	ND	5.7	11/29/13 15:43	
1,1-Dichloroethane	ug/kg	ND	5.7	11/29/13 15:43	
1,1-Dichloroethene	ug/kg	ND	5.7	11/29/13 15:43	
1,1-Dichloropropene	ug/kg	ND	5.7	11/29/13 15:43	
1,2,3-Trichlorobenzene	ug/kg	ND	5.7	11/29/13 15:43	
1,2,3-Trichloropropane	ug/kg	ND	5.7	11/29/13 15:43	
1,2,4-Trichlorobenzene	ug/kg	ND	5.7	11/29/13 15:43	
1,2,4-Trimethylbenzene	ug/kg	ND	5.7	11/29/13 15:43	
1,2-Dibromo-3-chloropropane	ug/kg	ND	5.7	11/29/13 15:43	
1,2-Dibromoethane (EDB)	ug/kg	ND	5.7	11/29/13 15:43	
1,2-Dichlorobenzene	ug/kg	ND	5.7	11/29/13 15:43	
1,2-Dichloroethane	ug/kg	ND	5.7	11/29/13 15:43	
1,2-Dichloropropane	ug/kg	ND	5.7	11/29/13 15:43	
1,3,5-Trimethylbenzene	ug/kg	ND	5.7	11/29/13 15:43	
1,3-Dichlorobenzene	ug/kg	ND	5.7	11/29/13 15:43	
1,3-Dichloropropane	ug/kg	ND	5.7	11/29/13 15:43	
1,4-Dichlorobenzene	ug/kg	ND	5.7	11/29/13 15:43	
2,2-Dichloropropane	ug/kg	ND	5.7	11/29/13 15:43	
2-Butanone (MEK)	ug/kg	ND	114	11/29/13 15:43	
2-Chlorotoluene	ug/kg	ND	5.7	11/29/13 15:43	
2-Hexanone	ug/kg	ND	56.9	11/29/13 15:43	
4-Chlorotoluene	ug/kg	ND	5.7	11/29/13 15:43	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	56.9	11/29/13 15:43	
Acetone	ug/kg	ND	114	11/29/13 15:43	
Benzene	ug/kg	ND	5.7	11/29/13 15:43	
Bromobenzene	ug/kg	ND	5.7	11/29/13 15:43	
Bromochloromethane	ug/kg	ND	5.7	11/29/13 15:43	
Bromodichloromethane	ug/kg	ND	5.7	11/29/13 15:43	
Bromoform	ug/kg	ND	5.7	11/29/13 15:43	
Bromomethane	ug/kg	ND	11.4	11/29/13 15:43	
Carbon tetrachloride	ug/kg	ND	5.7	11/29/13 15:43	
Chlorobenzene	ug/kg	ND	5.7	11/29/13 15:43	
Chloroethane	ug/kg	ND	11.4	11/29/13 15:43	
Chloroform	ug/kg	ND	5.7	11/29/13 15:43	
Chloromethane	ug/kg	ND	11.4	11/29/13 15:43	
cis-1,2-Dichloroethene	ug/kg	ND	5.7	11/29/13 15:43	
cis-1,3-Dichloropropene	ug/kg	ND	5.7	11/29/13 15:43	
Dibromochloromethane	ug/kg	ND	5.7	11/29/13 15:43	
Dibromomethane	ug/kg	ND	5.7	11/29/13 15:43	
Dichlorodifluoromethane	ug/kg	ND	11.4	11/29/13 15:43	

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QUALITY CONTROL DATA

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

METHOD BLANK: 1096330 Matrix: Solid
Associated Lab Samples: 92180232002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diisopropyl ether	ug/kg	ND	5.7	11/29/13 15:43	
Ethylbenzene	ug/kg	ND	5.7	11/29/13 15:43	
Hexachloro-1,3-butadiene	ug/kg	ND	5.7	11/29/13 15:43	
Isopropylbenzene (Cumene)	ug/kg	ND	5.7	11/29/13 15:43	
m&p-Xylene	ug/kg	ND	11.4	11/29/13 15:43	
Methyl-tert-butyl ether	ug/kg	ND	5.7	11/29/13 15:43	
Methylene Chloride	ug/kg	ND	22.8	11/29/13 15:43	
n-Butylbenzene	ug/kg	ND	5.7	11/29/13 15:43	
n-Propylbenzene	ug/kg	ND	5.7	11/29/13 15:43	
Naphthalene	ug/kg	ND	5.7	11/29/13 15:43	
o-Xylene	ug/kg	ND	5.7	11/29/13 15:43	
p-Isopropyltoluene	ug/kg	ND	5.7	11/29/13 15:43	
sec-Butylbenzene	ug/kg	ND	5.7	11/29/13 15:43	
Styrene	ug/kg	ND	5.7	11/29/13 15:43	
tert-Butylbenzene	ug/kg	ND	5.7	11/29/13 15:43	
Tetrachloroethene	ug/kg	ND	5.7	11/29/13 15:43	
Toluene	ug/kg	ND	5.7	11/29/13 15:43	
trans-1,2-Dichloroethene	ug/kg	ND	5.7	11/29/13 15:43	
trans-1,3-Dichloropropene	ug/kg	ND	5.7	11/29/13 15:43	
Trichloroethene	ug/kg	ND	5.7	11/29/13 15:43	
Trichlorofluoromethane	ug/kg	ND	5.7	11/29/13 15:43	
Vinyl acetate	ug/kg	ND	56.9	11/29/13 15:43	
Vinyl chloride	ug/kg	ND	11.4	11/29/13 15:43	
Xylene (Total)	ug/kg	ND	11.4	11/29/13 15:43	
1,2-Dichloroethane-d4 (S)	%	104	70-132	11/29/13 15:43	
4-Bromofluorobenzene (S)	%	100	70-130	11/29/13 15:43	
Toluene-d8 (S)	%	102	70-130	11/29/13 15:43	

LABORATORY CONTROL SAMPLE: 1096331

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	53.8	55.5	103	70-131	
1,1,1-Trichloroethane	ug/kg	53.8	53.9	100	70-141	
1,1,2,2-Tetrachloroethane	ug/kg	53.8	60.8	113	70-130	
1,1,2-Trichloroethane	ug/kg	53.8	60.0	112	70-132	
1,1-Dichloroethane	ug/kg	53.8	53.7	100	70-143	
1,1-Dichloroethene	ug/kg	53.8	52.6	98	70-137	
1,1-Dichloropropene	ug/kg	53.8	55.5	103	70-135	
1,2,3-Trichlorobenzene	ug/kg	53.8	53.6	100	69-153	
1,2,3-Trichloropropane	ug/kg	53.8	59.3	110	70-130	
1,2,4-Trichlorobenzene	ug/kg	53.8	51.1	95	55-171	
1,2,4-Trimethylbenzene	ug/kg	53.8	52.9	98	70-149	
1,2-Dibromo-3-chloropropane	ug/kg	53.8	58.6	109	68-141	
1,2-Dibromoethane (EDB)	ug/kg	53.8	57.9	108	70-130	
1,2-Dichlorobenzene	ug/kg	53.8	53.0	99	70-140	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

LABORATORY CONTROL SAMPLE: 1096331

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/kg	53.8	58.3	108	70-137	
1,2-Dichloropropane	ug/kg	53.8	55.6	103	70-133	
1,3,5-Trimethylbenzene	ug/kg	53.8	52.3	97	70-143	
1,3-Dichlorobenzene	ug/kg	53.8	50.1	93	70-144	
1,3-Dichloropropane	ug/kg	53.8	57.4	107	70-132	
1,4-Dichlorobenzene	ug/kg	53.8	52.2	97	70-142	
2,2-Dichloropropane	ug/kg	53.8	53.0	99	68-152	
2-Butanone (MEK)	ug/kg	108	134	125	70-149	
2-Chlorotoluene	ug/kg	53.8	50.2	93	70-141	
2-Hexanone	ug/kg	108	130	121	70-149	
4-Chlorotoluene	ug/kg	53.8	51.1	95	70-149	
4-Methyl-2-pentanone (MIBK)	ug/kg	108	126	117	70-153	
Acetone	ug/kg	108	134	125	70-157	
Benzene	ug/kg	53.8	54.1	101	70-130	
Bromobenzene	ug/kg	53.8	52.8	98	70-141	
Bromochloromethane	ug/kg	53.8	62.8	117	70-149	
Bromodichloromethane	ug/kg	53.8	56.6	105	70-130	
Bromoform	ug/kg	53.8	59.4	110	70-131	
Bromomethane	ug/kg	53.8	71.7	133	64-136	F3
Carbon tetrachloride	ug/kg	53.8	51.4	96	70-154	
Chlorobenzene	ug/kg	53.8	52.2	97	70-135	
Chloroethane	ug/kg	53.8	58.5	109	68-151	
Chloroform	ug/kg	53.8	56.4	105	70-130	
Chloromethane	ug/kg	53.8	60.5	112	70-132	
cis-1,2-Dichloroethene	ug/kg	53.8	55.9	104	70-140	
cis-1,3-Dichloropropene	ug/kg	53.8	57.2	106	70-137	
Dibromochloromethane	ug/kg	53.8	57.4	107	70-130	
Dibromomethane	ug/kg	53.8	57.5	107	70-136	
Dichlorodifluoromethane	ug/kg	53.8	65.3	122	36-148	
Diisopropyl ether	ug/kg	53.8	55.7	104	70-139	
Ethylbenzene	ug/kg	53.8	52.5	98	70-137	
Hexachloro-1,3-butadiene	ug/kg	53.8	51.7	96	70-145	
Isopropylbenzene (Cumene)	ug/kg	53.8	54.7	102	70-141	
m&p-Xylene	ug/kg	108	108	101	70-140	
Methyl-tert-butyl ether	ug/kg	53.8	60.9	113	45-150	
Methylene Chloride	ug/kg	53.8	56.6	105	70-133	
n-Butylbenzene	ug/kg	53.8	51.3	95	65-155	
n-Propylbenzene	ug/kg	53.8	52.9	98	70-148	
Naphthalene	ug/kg	53.8	58.1	108	70-148	
o-Xylene	ug/kg	53.8	55.2	103	70-141	
p-Isopropyltoluene	ug/kg	53.8	53.6	100	70-148	
sec-Butylbenzene	ug/kg	53.8	52.8	98	70-145	
Styrene	ug/kg	53.8	56.2	105	70-138	
tert-Butylbenzene	ug/kg	53.8	53.1	99	70-143	
Tetrachloroethene	ug/kg	53.8	56.7	105	70-140	
Toluene	ug/kg	53.8	53.7	100	70-130	
trans-1,2-Dichloroethene	ug/kg	53.8	52.4	98	70-136	
trans-1,3-Dichloropropene	ug/kg	53.8	59.3	110	70-138	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

LABORATORY CONTROL SAMPLE: 1096331

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Trichloroethene	ug/kg	53.8	51.5	96	70-132	
Trichlorofluoromethane	ug/kg	53.8	56.9	106	69-134	
Vinyl acetate	ug/kg	108	99.9	93	24-161	
Vinyl chloride	ug/kg	53.8	56.8	106	55-140	
Xylene (Total)	ug/kg	161	164	101	70-141	
1,2-Dichloroethane-d4 (S)	%			111	70-132	
4-Bromofluorobenzene (S)	%			102	70-130	
Toluene-d8 (S)	%			101	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1096332 1096333

Parameter	Units	92180392034 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
1,1,1,2-Tetrachloroethane	ug/kg	ND	57.9	53	55.8	50.8	96	96	70-130	9	
1,1,1-Trichloroethane	ug/kg	ND	57.9	53	52.3	47.8	90	90	70-130	9	
1,1,2,2-Tetrachloroethane	ug/kg	ND	57.9	53	60.0	51.9	104	98	70-130	14	
1,1,2-Trichloroethane	ug/kg	ND	57.9	53	57.8	52.2	100	98	70-130	10	
1,1-Dichloroethane	ug/kg	ND	57.9	53	47.4	44.5	82	84	70-130	6	
1,1-Dichloroethene	ug/kg	ND	57.9	53	48.3	43.4	84	82	49-180	11	
1,1-Dichloropropene	ug/kg	ND	57.9	53	51.3	46.3	89	87	70-130	10	
1,2,3-Trichlorobenzene	ug/kg	ND	57.9	53	52.2	51.0	90	96	70-130	2	
1,2,3-Trichloropropane	ug/kg	ND	57.9	53	58.4	53.5	101	101	70-130	9	
1,2,4-Trichlorobenzene	ug/kg	ND	57.9	53	50.2	48.0	87	91	70-130	4	
1,2,4-Trimethylbenzene	ug/kg	ND	57.9	53	52.5	48.5	91	91	70-130	8	
1,2-Dibromo-3-chloropropane	ug/kg	ND	57.9	53	55.7	52.8	96	100	70-130	5	
1,2-Dibromoethane (EDB)	ug/kg	ND	57.9	53	56.8	52.5	98	99	70-130	8	
1,2-Dichlorobenzene	ug/kg	ND	57.9	53	54.4	49.8	94	94	70-130	9	
1,2-Dichloroethane	ug/kg	ND	57.9	53	56.1	51.0	97	96	70-130	10	
1,2-Dichloropropane	ug/kg	ND	57.9	53	50.0	46.9	86	88	70-130	6	
1,3,5-Trimethylbenzene	ug/kg	ND	57.9	53	54.2	49.1	94	93	70-130	10	
1,3-Dichlorobenzene	ug/kg	ND	57.9	53	52.4	48.5	91	92	70-130	8	
1,3-Dichloropropane	ug/kg	ND	57.9	53	54.9	50.7	95	96	70-130	8	
1,4-Dichlorobenzene	ug/kg	ND	57.9	53	52.6	49.7	91	94	70-130	6	
2,2-Dichloropropane	ug/kg	ND	57.9	53	48.2	44.5	83	84	70-130	8	
2-Butanone (MEK)	ug/kg	ND	116	106	117	108	101	102	70-130	8	
2-Chlorotoluene	ug/kg	ND	57.9	53	52.4	46.4	91	88	70-130	12	
2-Hexanone	ug/kg	ND	116	106	122	111	106	104	70-130	10	
4-Chlorotoluene	ug/kg	ND	57.9	53	53.6	48.5	93	91	70-130	10	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	116	106	115	107	99	101	70-130	7	
Acetone	ug/kg	106	116	106	184	183	68	73	70-130	0	M0
Benzene	ug/kg	ND	57.9	53	50.6	45.3	87	85	50-166	11	
Bromobenzene	ug/kg	ND	57.9	53	52.4	48.2	91	91	70-130	8	
Bromochloromethane	ug/kg	ND	57.9	53	53.8	52.7	93	99	70-130	2	
Bromodichloromethane	ug/kg	ND	57.9	53	53.9	48.9	93	92	70-130	10	
Bromoform	ug/kg	ND	57.9	53	59.3	55.5	102	105	70-130	7	
Bromomethane	ug/kg	ND	57.9	53	51.6	54.8	89	103	70-130	6	
Carbon tetrachloride	ug/kg	ND	57.9	53	52.3	46.5	90	88	70-130	12	

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QUALITY CONTROL DATA

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1096332 1096333

Parameter	Units	92180392034 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Chlorobenzene	ug/kg	ND	57.9	53	54.2	49.1	94	93	43-169	10	
Chloroethane	ug/kg	ND	57.9	53	49.5	41.9	86	79	70-130	17	
Chloroform	ug/kg	ND	57.9	53	52.5	47.4	91	89	70-130	10	
Chloromethane	ug/kg	ND	57.9	53	48.8	45.3	84	85	70-130	7	
cis-1,2-Dichloroethene	ug/kg	ND	57.9	53	49.7	46.9	86	88	70-130	6	
cis-1,3-Dichloropropene	ug/kg	ND	57.9	53	52.5	48.8	91	92	70-130	7	
Dibromochloromethane	ug/kg	ND	57.9	53	58.3	52.8	101	100	70-130	10	
Dibromomethane	ug/kg	ND	57.9	53	53.7	50.4	93	95	70-130	6	
Dichlorodifluoromethane	ug/kg	ND	57.9	53	52.7	43.7	91	82	70-130	19	
Diisopropyl ether	ug/kg	ND	57.9	53	50.0	45.5	86	86	70-130	10	
Ethylbenzene	ug/kg	ND	57.9	53	54.0	48.9	93	92	70-130	10	
Hexachloro-1,3-butadiene	ug/kg	ND	57.9	53	56.6	50.8	98	96	70-130	11	
Isopropylbenzene (Cumene)	ug/kg	ND	57.9	53	56.6	51.1	98	96	70-130	10	
m&p-Xylene	ug/kg	ND	116	106	113	103	98	97	70-130	10	
Methyl-tert-butyl ether	ug/kg	ND	57.9	53	55.5	50.2	96	95	70-130	10	
Methylene Chloride	ug/kg	ND	57.9	53	53.0	47.6	92	90	70-130	11	
n-Butylbenzene	ug/kg	ND	57.9	53	55.4	49.6	96	93	70-130	11	
n-Propylbenzene	ug/kg	ND	57.9	53	55.5	49.0	96	92	70-130	12	
Naphthalene	ug/kg	ND	57.9	53	49.3	49.2	85	93	70-130	0	
o-Xylene	ug/kg	ND	57.9	53	55.4	50.2	96	95	70-130	10	
p-Isopropyltoluene	ug/kg	ND	57.9	53	57.6	52.8	100	100	70-130	9	
sec-Butylbenzene	ug/kg	ND	57.9	53	56.0	51.4	97	97	70-130	9	
Styrene	ug/kg	ND	57.9	53	36.5	36.7	63	69	70-130	1	M0
tert-Butylbenzene	ug/kg	ND	57.9	53	56.6	51.4	98	97	70-130	10	
Tetrachloroethene	ug/kg	ND	57.9	53	60.7	55.5	105	105	70-130	9	
Toluene	ug/kg	ND	57.9	53	52.8	47.5	91	90	52-163	11	
trans-1,2-Dichloroethene	ug/kg	ND	57.9	53	49.2	43.6	85	82	70-130	12	
trans-1,3-Dichloropropene	ug/kg	ND	57.9	53	55.6	51.3	96	97	70-130	8	
Trichloroethene	ug/kg	ND	57.9	53	51.2	47.2	88	89	49-167	8	
Trichlorofluoromethane	ug/kg	ND	57.9	53	56.2	50.5	97	95	70-130	11	
Vinyl acetate	ug/kg	ND	116	106	85.3	83.1	74	78	70-130	3	
Vinyl chloride	ug/kg	ND	57.9	53	45.4	43.1	79	81	70-130	5	
1,2-Dichloroethane-d4 (S)	%						104	104	70-132		
4-Bromofluorobenzene (S)	%						103	103	70-130		
Toluene-d8 (S)	%						99	100	70-130		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

QC Batch: MSV/25095 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV 5035A Volatile Organics
Associated Lab Samples: 92180232003, 92180232004, 92180232005, 92180232006, 92180232007, 92180232008, 92180232009, 92180232010, 92180232011

METHOD BLANK: 1096501 Matrix: Solid
Associated Lab Samples: 92180232003, 92180232004, 92180232005, 92180232006, 92180232007, 92180232008, 92180232009, 92180232010, 92180232011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	5.4	12/01/13 11:41	
1,1,1-Trichloroethane	ug/kg	ND	5.4	12/01/13 11:41	
1,1,2,2-Tetrachloroethane	ug/kg	ND	5.4	12/01/13 11:41	
1,1,2-Trichloroethane	ug/kg	ND	5.4	12/01/13 11:41	
1,1-Dichloroethane	ug/kg	ND	5.4	12/01/13 11:41	
1,1-Dichloroethene	ug/kg	ND	5.4	12/01/13 11:41	
1,1-Dichloropropene	ug/kg	ND	5.4	12/01/13 11:41	
1,2,3-Trichlorobenzene	ug/kg	ND	5.4	12/01/13 11:41	
1,2,3-Trichloropropane	ug/kg	ND	5.4	12/01/13 11:41	
1,2,4-Trichlorobenzene	ug/kg	ND	5.4	12/01/13 11:41	
1,2,4-Trimethylbenzene	ug/kg	ND	5.4	12/01/13 11:41	
1,2-Dibromo-3-chloropropane	ug/kg	ND	5.4	12/01/13 11:41	
1,2-Dibromoethane (EDB)	ug/kg	ND	5.4	12/01/13 11:41	
1,2-Dichlorobenzene	ug/kg	ND	5.4	12/01/13 11:41	
1,2-Dichloroethane	ug/kg	ND	5.4	12/01/13 11:41	
1,2-Dichloropropane	ug/kg	ND	5.4	12/01/13 11:41	
1,3,5-Trimethylbenzene	ug/kg	ND	5.4	12/01/13 11:41	
1,3-Dichlorobenzene	ug/kg	ND	5.4	12/01/13 11:41	
1,3-Dichloropropane	ug/kg	ND	5.4	12/01/13 11:41	
1,4-Dichlorobenzene	ug/kg	ND	5.4	12/01/13 11:41	
2,2-Dichloropropane	ug/kg	ND	5.4	12/01/13 11:41	
2-Butanone (MEK)	ug/kg	ND	108	12/01/13 11:41	
2-Chlorotoluene	ug/kg	ND	5.4	12/01/13 11:41	
2-Hexanone	ug/kg	ND	53.9	12/01/13 11:41	
4-Chlorotoluene	ug/kg	ND	5.4	12/01/13 11:41	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	53.9	12/01/13 11:41	
Acetone	ug/kg	ND	108	12/01/13 11:41	
Benzene	ug/kg	ND	5.4	12/01/13 11:41	
Bromobenzene	ug/kg	ND	5.4	12/01/13 11:41	
Bromochloromethane	ug/kg	ND	5.4	12/01/13 11:41	
Bromodichloromethane	ug/kg	ND	5.4	12/01/13 11:41	
Bromoform	ug/kg	ND	5.4	12/01/13 11:41	
Bromomethane	ug/kg	ND	10.8	12/01/13 11:41	
Carbon tetrachloride	ug/kg	ND	5.4	12/01/13 11:41	
Chlorobenzene	ug/kg	ND	5.4	12/01/13 11:41	
Chloroethane	ug/kg	ND	10.8	12/01/13 11:41	
Chloroform	ug/kg	ND	5.4	12/01/13 11:41	
Chloromethane	ug/kg	ND	10.8	12/01/13 11:41	
cis-1,2-Dichloroethene	ug/kg	ND	5.4	12/01/13 11:41	
cis-1,3-Dichloropropene	ug/kg	ND	5.4	12/01/13 11:41	
Dibromochloromethane	ug/kg	ND	5.4	12/01/13 11:41	

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QUALITY CONTROL DATA

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

METHOD BLANK: 1096501 Matrix: Solid

Associated Lab Samples: 92180232003, 92180232004, 92180232005, 92180232006, 92180232007, 92180232008, 92180232009, 92180232010, 92180232011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dibromomethane	ug/kg	ND	5.4	12/01/13 11:41	
Dichlorodifluoromethane	ug/kg	ND	10.8	12/01/13 11:41	
Diisopropyl ether	ug/kg	ND	5.4	12/01/13 11:41	
Ethylbenzene	ug/kg	ND	5.4	12/01/13 11:41	
Hexachloro-1,3-butadiene	ug/kg	ND	5.4	12/01/13 11:41	
Isopropylbenzene (Cumene)	ug/kg	ND	5.4	12/01/13 11:41	
m&p-Xylene	ug/kg	ND	10.8	12/01/13 11:41	
Methyl-tert-butyl ether	ug/kg	ND	5.4	12/01/13 11:41	
Methylene Chloride	ug/kg	ND	21.6	12/01/13 11:41	
n-Butylbenzene	ug/kg	ND	5.4	12/01/13 11:41	
n-Propylbenzene	ug/kg	ND	5.4	12/01/13 11:41	
Naphthalene	ug/kg	ND	5.4	12/01/13 11:41	
o-Xylene	ug/kg	ND	5.4	12/01/13 11:41	
p-Isopropyltoluene	ug/kg	ND	5.4	12/01/13 11:41	
sec-Butylbenzene	ug/kg	ND	5.4	12/01/13 11:41	
Styrene	ug/kg	ND	5.4	12/01/13 11:41	
tert-Butylbenzene	ug/kg	ND	5.4	12/01/13 11:41	
Tetrachloroethene	ug/kg	ND	5.4	12/01/13 11:41	
Toluene	ug/kg	ND	5.4	12/01/13 11:41	
trans-1,2-Dichloroethene	ug/kg	ND	5.4	12/01/13 11:41	
trans-1,3-Dichloropropene	ug/kg	ND	5.4	12/01/13 11:41	
Trichloroethene	ug/kg	ND	5.4	12/01/13 11:41	
Trichlorofluoromethane	ug/kg	ND	5.4	12/01/13 11:41	
Vinyl acetate	ug/kg	ND	53.9	12/01/13 11:41	
Vinyl chloride	ug/kg	ND	10.8	12/01/13 11:41	
Xylene (Total)	ug/kg	ND	10.8	12/01/13 11:41	
1,2-Dichloroethane-d4 (S)	%	101	70-132	12/01/13 11:41	
4-Bromofluorobenzene (S)	%	100	70-130	12/01/13 11:41	
Toluene-d8 (S)	%	101	70-130	12/01/13 11:41	

LABORATORY CONTROL SAMPLE: 1096502

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	53.2	59.9	113	70-131	
1,1,1-Trichloroethane	ug/kg	53.2	59.1	111	70-141	
1,1,2,2-Tetrachloroethane	ug/kg	53.2	57.6	108	70-130	
1,1,2-Trichloroethane	ug/kg	53.2	60.0	113	70-132	
1,1-Dichloroethane	ug/kg	53.2	60.4	114	70-143	
1,1-Dichloroethene	ug/kg	53.2	59.8	112	70-137	
1,1-Dichloropropene	ug/kg	53.2	63.8	120	70-135	
1,2,3-Trichlorobenzene	ug/kg	53.2	56.3	106	69-153	
1,2,3-Trichloropropane	ug/kg	53.2	56.4	106	70-130	
1,2,4-Trichlorobenzene	ug/kg	53.2	57.4	108	55-171	
1,2,4-Trimethylbenzene	ug/kg	53.2	58.9	111	70-149	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

LABORATORY CONTROL SAMPLE: 1096502

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromo-3-chloropropane	ug/kg	53.2	54.4	102	68-141	
1,2-Dibromoethane (EDB)	ug/kg	53.2	55.6	105	70-130	
1,2-Dichlorobenzene	ug/kg	53.2	55.3	104	70-140	
1,2-Dichloroethane	ug/kg	53.2	56.3	106	70-137	
1,2-Dichloropropane	ug/kg	53.2	61.7	116	70-133	
1,3,5-Trimethylbenzene	ug/kg	53.2	58.7	110	70-143	
1,3-Dichlorobenzene	ug/kg	53.2	54.1	102	70-144	
1,3-Dichloropropane	ug/kg	53.2	60.3	113	70-132	
1,4-Dichlorobenzene	ug/kg	53.2	55.2	104	70-142	
2,2-Dichloropropane	ug/kg	53.2	62.2	117	68-152	
2-Butanone (MEK)	ug/kg	106	120	113	70-149	
2-Chlorotoluene	ug/kg	53.2	57.1	107	70-141	
2-Hexanone	ug/kg	106	123	116	70-149	
4-Chlorotoluene	ug/kg	53.2	58.7	110	70-149	
4-Methyl-2-pentanone (MIBK)	ug/kg	106	119	112	70-153	
Acetone	ug/kg	106	108	102	70-157	
Benzene	ug/kg	53.2	61.7	116	70-130	
Bromobenzene	ug/kg	53.2	56.6	106	70-141	
Bromochloromethane	ug/kg	53.2	55.9	105	70-149	
Bromodichloromethane	ug/kg	53.2	58.0	109	70-130	
Bromoform	ug/kg	53.2	57.6	108	70-131	
Bromomethane	ug/kg	53.2	65.0	122	64-136	F3
Carbon tetrachloride	ug/kg	53.2	56.2	106	70-154	
Chlorobenzene	ug/kg	53.2	58.5	110	70-135	
Chloroethane	ug/kg	53.2	63.5	119	68-151	
Chloroform	ug/kg	53.2	57.1	107	70-130	
Chloromethane	ug/kg	53.2	68.6	129	70-132	
cis-1,2-Dichloroethene	ug/kg	53.2	58.5	110	70-140	
cis-1,3-Dichloropropene	ug/kg	53.2	61.8	116	70-137	
Dibromochloromethane	ug/kg	53.2	58.8	111	70-130	
Dibromomethane	ug/kg	53.2	55.0	103	70-136	
Dichlorodifluoromethane	ug/kg	53.2	66.5	125	36-148	
Diisopropyl ether	ug/kg	53.2	66.2	124	70-139	
Ethylbenzene	ug/kg	53.2	61.1	115	70-137	
Hexachloro-1,3-butadiene	ug/kg	53.2	60.0	113	70-145	
Isopropylbenzene (Cumene)	ug/kg	53.2	62.2	117	70-141	
m&p-Xylene	ug/kg	106	124	117	70-140	
Methyl-tert-butyl ether	ug/kg	53.2	60.6	114	45-150	
Methylene Chloride	ug/kg	53.2	62.1	117	70-133	
n-Butylbenzene	ug/kg	53.2	60.5	114	65-155	
n-Propylbenzene	ug/kg	53.2	60.9	114	70-148	
Naphthalene	ug/kg	53.2	54.9	103	70-148	
o-Xylene	ug/kg	53.2	60.6	114	70-141	
p-Isopropyltoluene	ug/kg	53.2	61.4	115	70-148	
sec-Butylbenzene	ug/kg	53.2	59.4	112	70-145	
Styrene	ug/kg	53.2	62.0	116	70-138	
tert-Butylbenzene	ug/kg	53.2	58.8	111	70-143	
Tetrachloroethene	ug/kg	53.2	65.8	124	70-140	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

LABORATORY CONTROL SAMPLE: 1096502

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Toluene	ug/kg	53.2	59.7	112	70-130	
trans-1,2-Dichloroethene	ug/kg	53.2	60.0	113	70-136	
trans-1,3-Dichloropropene	ug/kg	53.2	62.3	117	70-138	
Trichloroethene	ug/kg	53.2	58.0	109	70-132	
Trichlorofluoromethane	ug/kg	53.2	59.5	112	69-134	
Vinyl acetate	ug/kg	106	166	156	24-161	
Vinyl chloride	ug/kg	53.2	65.2	123	55-140	
Xylene (Total)	ug/kg	160	185	116	70-141	
1,2-Dichloroethane-d4 (S)	%			103	70-132	
4-Bromofluorobenzene (S)	%			100	70-130	
Toluene-d8 (S)	%			102	70-130	

MATRIX SPIKE SAMPLE: 1096619

Parameter	Units	92180232008 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/kg	ND	43	44.8	104	49-180	
Benzene	ug/kg	ND	43	43.7	102	50-166	
Chlorobenzene	ug/kg	ND	43	40.2	94	43-169	
Toluene	ug/kg	ND	43	40.5	94	52-163	
Trichloroethene	ug/kg	ND	43	37.9	88	49-167	
1,2-Dichloroethane-d4 (S)	%				106	70-132	
4-Bromofluorobenzene (S)	%				92	70-130	
Toluene-d8 (S)	%				101	70-130	

SAMPLE DUPLICATE: 1096618

Parameter	Units	92180232007 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		

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QUALITY CONTROL DATA

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

SAMPLE DUPLICATE: 1096618

Parameter	Units	92180232007 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	16.6J		
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	299	191	44	A+,R1
Benzene	ug/kg	ND	ND		
Bromobenzene	ug/kg	ND	ND		
Bromochloromethane	ug/kg	ND	ND		
Bromodichloromethane	ug/kg	ND	ND		
Bromoform	ug/kg	ND	ND		
Bromomethane	ug/kg	ND	ND		
Carbon tetrachloride	ug/kg	ND	ND		
Chlorobenzene	ug/kg	ND	ND		
Chloroethane	ug/kg	ND	ND		
Chloroform	ug/kg	ND	ND		
Chloromethane	ug/kg	ND	ND		
cis-1,2-Dichloroethene	ug/kg	ND	ND		
cis-1,3-Dichloropropene	ug/kg	ND	ND		
Dibromochloromethane	ug/kg	ND	ND		
Dibromomethane	ug/kg	ND	ND		
Dichlorodifluoromethane	ug/kg	ND	ND		
Diisopropyl ether	ug/kg	ND	ND		
Ethylbenzene	ug/kg	ND	ND		
Hexachloro-1,3-butadiene	ug/kg	ND	ND		
Isopropylbenzene (Cumene)	ug/kg	ND	ND		
m&p-Xylene	ug/kg	ND	ND		
Methyl-tert-butyl ether	ug/kg	ND	ND		
Methylene Chloride	ug/kg	ND	2.9J		
n-Butylbenzene	ug/kg	ND	ND		
n-Propylbenzene	ug/kg	ND	ND		
Naphthalene	ug/kg	ND	ND		
o-Xylene	ug/kg	ND	ND		
p-Isopropyltoluene	ug/kg	ND	ND		
sec-Butylbenzene	ug/kg	ND	ND		
Styrene	ug/kg	ND	ND		
tert-Butylbenzene	ug/kg	ND	ND		
Tetrachloroethene	ug/kg	ND	ND		
Toluene	ug/kg	ND	ND		
trans-1,2-Dichloroethene	ug/kg	ND	ND		
trans-1,3-Dichloropropene	ug/kg	ND	ND		
Trichloroethene	ug/kg	ND	ND		
Trichlorofluoromethane	ug/kg	ND	ND		
Vinyl acetate	ug/kg	ND	ND		
Vinyl chloride	ug/kg	ND	ND		

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QUALITY CONTROL DATA

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

SAMPLE DUPLICATE: 1096618

Parameter	Units	92180232007 Result	Dup Result	RPD	Qualifiers
Xylene (Total)	ug/kg	ND	ND		
1,2-Dichloroethane-d4 (S)	%	100	105	13	
4-Bromofluorobenzene (S)	%	94	87	2	
Toluene-d8 (S)	%	102	101	7	

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QUALITY CONTROL DATA

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

QC Batch: OEXT/24935 Analysis Method: EPA 8270
QC Batch Method: EPA 3546 Analysis Description: 8270 Solid MSSV Microwave
Associated Lab Samples: 92180232001, 92180232002, 92180232003, 92180232004, 92180232005, 92180232006, 92180232007, 92180232008, 92180232009, 92180232010, 92180232011

METHOD BLANK: 1094339 Matrix: Solid
Associated Lab Samples: 92180232001, 92180232002, 92180232003, 92180232004, 92180232005, 92180232006, 92180232007, 92180232008, 92180232009, 92180232010, 92180232011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	ND	330	11/27/13 08:53	
1,2-Dichlorobenzene	ug/kg	ND	330	11/27/13 08:53	
1,3-Dichlorobenzene	ug/kg	ND	330	11/27/13 08:53	
1,4-Dichlorobenzene	ug/kg	ND	330	11/27/13 08:53	
1-Methylnaphthalene	ug/kg	ND	330	11/27/13 08:53	
2,4,5-Trichlorophenol	ug/kg	ND	330	11/27/13 08:53	
2,4,6-Trichlorophenol	ug/kg	ND	330	11/27/13 08:53	
2,4-Dichlorophenol	ug/kg	ND	330	11/27/13 08:53	
2,4-Dimethylphenol	ug/kg	ND	330	11/27/13 08:53	
2,4-Dinitrophenol	ug/kg	ND	1650	11/27/13 08:53	
2,4-Dinitrotoluene	ug/kg	ND	330	11/27/13 08:53	
2,6-Dinitrotoluene	ug/kg	ND	330	11/27/13 08:53	
2-Chloronaphthalene	ug/kg	ND	330	11/27/13 08:53	
2-Chlorophenol	ug/kg	ND	330	11/27/13 08:53	
2-Methylnaphthalene	ug/kg	ND	330	11/27/13 08:53	
2-Methylphenol(o-Cresol)	ug/kg	ND	330	11/27/13 08:53	
2-Nitroaniline	ug/kg	ND	1650	11/27/13 08:53	
2-Nitrophenol	ug/kg	ND	330	11/27/13 08:53	
3&4-Methylphenol(m&p Cresol)	ug/kg	ND	330	11/27/13 08:53	
3,3'-Dichlorobenzidine	ug/kg	ND	1650	11/27/13 08:53	
3-Nitroaniline	ug/kg	ND	1650	11/27/13 08:53	
4,6-Dinitro-2-methylphenol	ug/kg	ND	660	11/27/13 08:53	
4-Bromophenylphenyl ether	ug/kg	ND	330	11/27/13 08:53	
4-Chloro-3-methylphenol	ug/kg	ND	660	11/27/13 08:53	
4-Chloroaniline	ug/kg	ND	1650	11/27/13 08:53	
4-Chlorophenylphenyl ether	ug/kg	ND	330	11/27/13 08:53	
4-Nitroaniline	ug/kg	ND	660	11/27/13 08:53	
4-Nitrophenol	ug/kg	ND	1650	11/27/13 08:53	
Acenaphthene	ug/kg	ND	330	11/27/13 08:53	
Acenaphthylene	ug/kg	ND	330	11/27/13 08:53	
Aniline	ug/kg	ND	330	11/27/13 08:53	
Anthracene	ug/kg	ND	330	11/27/13 08:53	
Benzo(a)anthracene	ug/kg	ND	330	11/27/13 08:53	
Benzo(a)pyrene	ug/kg	ND	330	11/27/13 08:53	
Benzo(b)fluoranthene	ug/kg	ND	330	11/27/13 08:53	
Benzo(g,h,i)perylene	ug/kg	ND	330	11/27/13 08:53	
Benzo(k)fluoranthene	ug/kg	ND	330	11/27/13 08:53	
Benzoic Acid	ug/kg	ND	1650	11/27/13 08:53	
Benzyl alcohol	ug/kg	ND	660	11/27/13 08:53	
bis(2-Chloroethoxy)methane	ug/kg	ND	330	11/27/13 08:53	
bis(2-Chloroethyl) ether	ug/kg	ND	330	11/27/13 08:53	

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QUALITY CONTROL DATA

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

METHOD BLANK: 1094339 Matrix: Solid

Associated Lab Samples: 92180232001, 92180232002, 92180232003, 92180232004, 92180232005, 92180232006, 92180232007, 92180232008, 92180232009, 92180232010, 92180232011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
bis(2-Chloroisopropyl) ether	ug/kg	ND	330	11/27/13 08:53	
bis(2-Ethylhexyl)phthalate	ug/kg	ND	330	11/27/13 08:53	
Butylbenzylphthalate	ug/kg	ND	330	11/27/13 08:53	
Chrysene	ug/kg	ND	330	11/27/13 08:53	
Di-n-butylphthalate	ug/kg	ND	330	11/27/13 08:53	
Di-n-octylphthalate	ug/kg	ND	330	11/27/13 08:53	
Dibenz(a,h)anthracene	ug/kg	ND	330	11/27/13 08:53	
Dibenzofuran	ug/kg	ND	330	11/27/13 08:53	
Diethylphthalate	ug/kg	ND	330	11/27/13 08:53	
Dimethylphthalate	ug/kg	ND	330	11/27/13 08:53	
Fluoranthene	ug/kg	ND	330	11/27/13 08:53	
Fluorene	ug/kg	ND	330	11/27/13 08:53	
Hexachloro-1,3-butadiene	ug/kg	ND	330	11/27/13 08:53	
Hexachlorobenzene	ug/kg	ND	330	11/27/13 08:53	
Hexachlorocyclopentadiene	ug/kg	ND	330	11/27/13 08:53	
Hexachloroethane	ug/kg	ND	330	11/27/13 08:53	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	330	11/27/13 08:53	
Isophorone	ug/kg	ND	330	11/27/13 08:53	
N-Nitroso-di-n-propylamine	ug/kg	ND	330	11/27/13 08:53	
N-Nitrosodimethylamine	ug/kg	ND	330	11/27/13 08:53	
N-Nitrosodiphenylamine	ug/kg	ND	330	11/27/13 08:53	
Naphthalene	ug/kg	ND	330	11/27/13 08:53	
Nitrobenzene	ug/kg	ND	330	11/27/13 08:53	
Pentachlorophenol	ug/kg	ND	1650	11/27/13 08:53	
Phenanthrene	ug/kg	ND	330	11/27/13 08:53	
Phenol	ug/kg	ND	330	11/27/13 08:53	
Pyrene	ug/kg	ND	330	11/27/13 08:53	
2,4,6-Tribromophenol (S)	%	89	27-110	11/27/13 08:53	
2-Fluorobiphenyl (S)	%	78	30-110	11/27/13 08:53	
2-Fluorophenol (S)	%	71	13-110	11/27/13 08:53	
Nitrobenzene-d5 (S)	%	71	23-110	11/27/13 08:53	
Phenol-d6 (S)	%	67	22-110	11/27/13 08:53	
Terphenyl-d14 (S)	%	88	28-110	11/27/13 08:53	

LABORATORY CONTROL SAMPLE: 1094340

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	1670	1200	72	39-101	
1,2-Dichlorobenzene	ug/kg	1670	1110	67	36-110	
1,3-Dichlorobenzene	ug/kg	1670	1080	65	35-110	
1,4-Dichlorobenzene	ug/kg	1670	1130	68	35-110	
1-Methylnaphthalene	ug/kg	1670	1260	76	45-105	
2,4,5-Trichlorophenol	ug/kg	1670	1430	86	48-109	
2,4,6-Trichlorophenol	ug/kg	1670	1350	81	45-111	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

LABORATORY CONTROL SAMPLE: 1094340

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,4-Dichlorophenol	ug/kg	1670	1290	77	51-116	
2,4-Dimethylphenol	ug/kg	1670	1320	79	42-103	
2,4-Dinitrophenol	ug/kg	8330	6650	80	28-103	
2,4-Dinitrotoluene	ug/kg	1670	1570	94	46-114	
2,6-Dinitrotoluene	ug/kg	1670	1600	96	48-112	
2-Chloronaphthalene	ug/kg	1670	1110	66	44-105	
2-Chlorophenol	ug/kg	1670	1260	75	36-110	
2-Methylnaphthalene	ug/kg	1670	1330	80	39-112	
2-Methylphenol(o-Cresol)	ug/kg	1670	1300	78	39-101	
2-Nitroaniline	ug/kg	3330	2720	82	44-111	
2-Nitrophenol	ug/kg	1670	1500	90	41-100	
3&4-Methylphenol(m&p Cresol)	ug/kg	1670	1190	71	43-103	
3,3'-Dichlorobenzidine	ug/kg	3330	2910	87	10-150	
3-Nitroaniline	ug/kg	3330	2810	84	35-110	
4,6-Dinitro-2-methylphenol	ug/kg	3330	2790	84	38-118	
4-Bromophenylphenyl ether	ug/kg	1670	1800	108	47-115	
4-Chloro-3-methylphenol	ug/kg	3330	2590	78	43-127	
4-Chloroaniline	ug/kg	3330	2600	78	34-109	
4-Chlorophenylphenyl ether	ug/kg	1670	1610	97	44-115	
4-Nitroaniline	ug/kg	3330	2890	87	37-111	
4-Nitrophenol	ug/kg	8330	5760	69	21-152	
Acenaphthene	ug/kg	1670	1420	85	38-117	
Acenaphthylene	ug/kg	1670	1380	83	46-107	
Aniline	ug/kg	1670	1040	63	29-110	
Anthracene	ug/kg	1670	1590	95	50-110	
Benzo(a)anthracene	ug/kg	1670	1570	94	47-116	
Benzo(a)pyrene	ug/kg	1670	1740	104	47-106	
Benzo(b)fluoranthene	ug/kg	1670	1640	99	47-109	
Benzo(g,h,i)perylene	ug/kg	1670	1700	102	39-115	
Benzo(k)fluoranthene	ug/kg	1670	1550	93	45-117	
Benzoic Acid	ug/kg	8330	5290	63	16-110	
Benzyl alcohol	ug/kg	3330	2150	64	38-105	
bis(2-Chloroethoxy)methane	ug/kg	1670	1210	73	39-110	
bis(2-Chloroethyl) ether	ug/kg	1670	1330	80	19-119	
bis(2-Chloroisopropyl) ether	ug/kg	1670	919	55	21-110	
bis(2-Ethylhexyl)phthalate	ug/kg	1670	1310	79	35-116	
Butylbenzylphthalate	ug/kg	1670	1330	80	38-110	
Chrysene	ug/kg	1670	1640	98	49-110	
Di-n-butylphthalate	ug/kg	1670	1330	80	43-109	
Di-n-octylphthalate	ug/kg	1670	1200	72	37-109	
Dibenz(a,h)anthracene	ug/kg	1670	1760	106	43-116	
Dibenzofuran	ug/kg	1670	1240	74	45-106	
Diethylphthalate	ug/kg	1670	1320	79	41-114	
Dimethylphthalate	ug/kg	1670	1330	80	43-110	
Fluoranthene	ug/kg	1670	1640	98	50-114	
Fluorene	ug/kg	1670	1540	93	46-114	
Hexachloro-1,3-butadiene	ug/kg	1670	1220	73	28-111	
Hexachlorobenzene	ug/kg	1670	1450	87	46-120	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

LABORATORY CONTROL SAMPLE: 1094340

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Hexachlorocyclopentadiene	ug/kg	1670	1420	85	18-119	
Hexachloroethane	ug/kg	1670	1040	62	33-110	
Indeno(1,2,3-cd)pyrene	ug/kg	1670	1750	105	42-115	
Isophorone	ug/kg	1670	1250	75	44-109	
N-Nitroso-di-n-propylamine	ug/kg	1670	916	55	43-104	
N-Nitrosodimethylamine	ug/kg	1670	967	58	29-110	
N-Nitrosodiphenylamine	ug/kg	1670	1230	74	48-113	
Naphthalene	ug/kg	1670	1320	79	41-110	
Nitrobenzene	ug/kg	1670	1220	73	38-110	
Pentachlorophenol	ug/kg	3330	2940	88	32-128	
Phenanthrene	ug/kg	1670	1620	97	50-110	
Phenol	ug/kg	1670	1270	76	28-106	
Pyrene	ug/kg	1670	1560	94	45-114	
2,4,6-Tribromophenol (S)	%			110	27-110	
2-Fluorobiphenyl (S)	%			76	30-110	
2-Fluorophenol (S)	%			73	13-110	
Nitrobenzene-d5 (S)	%			69	23-110	
Phenol-d6 (S)	%			73	22-110	
Terphenyl-d14 (S)	%			89	28-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1094344 1094345

Parameter	Units	92180232003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
1,2,4-Trichlorobenzene	ug/kg	ND	2060	2060	1360	1010	66	49	18-119	30	
1,2-Dichlorobenzene	ug/kg	ND	2060	2060	1400	934	68	45	50-110	40	M1
1,3-Dichlorobenzene	ug/kg	ND	2060	2060	1350	925	66	45	27-110	37	
1,4-Dichlorobenzene	ug/kg	ND	2060	2060	1390	942	68	46	28-110	38	
1-Methylnaphthalene	ug/kg	ND	2060	2060	1490	1020	72	50	24-116	37	
2,4,5-Trichlorophenol	ug/kg	ND	2060	2060	1700	1110	83	54	28-110	42	
2,4,6-Trichlorophenol	ug/kg	ND	2060	2060	1570	1080	76	53	17-117	37	
2,4-Dichlorophenol	ug/kg	ND	2060	2060	1550	1040	75	51	21-128	40	
2,4-Dimethylphenol	ug/kg	ND	2060	2060	1500	1050	73	51	10-120	35	
2,4-Dinitrophenol	ug/kg	ND	10300	10300	9880	5790	96	56	10-107	52	
2,4-Dinitrotoluene	ug/kg	ND	2060	2060	1920	1390	93	68	36-109	32	
2,6-Dinitrotoluene	ug/kg	ND	2060	2060	1900	1260	92	61	32-110	40	
2-Chloronaphthalene	ug/kg	ND	2060	2060	1270	949	62	46	30-107	29	
2-Chlorophenol	ug/kg	ND	2060	2060	1640	1050	80	51	14-106	43	
2-Methylnaphthalene	ug/kg	ND	2060	2060	1550	1080	76	53	10-135	36	
2-Methylphenol(o-Cresol)	ug/kg	ND	2060	2060	1730	1050	84	51	10-124	49	
2-Nitroaniline	ug/kg	ND	4110	4110	3210	2100	78	51	26-116	42	
2-Nitrophenol	ug/kg	ND	2060	2060	1840	1270	89	62	28-103	36	
3&4-Methylphenol(m&p Cresol)	ug/kg	ND	2060	2060	1580	951	77	46	10-109	50	
3,3'-Dichlorobenzidine	ug/kg	ND	4110	4110	3270	2750	80	67	10-150	17	
3-Nitroaniline	ug/kg	ND	4110	4110	3450	2350	84	57	22-110	38	
4,6-Dinitro-2-methylphenol	ug/kg	ND	4110	4110	3610	2870	88	70	13-121	23	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1094344 1094345

Parameter	Units	92180232003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
4-Bromophenylphenyl ether	ug/kg	ND	2060	2060	1820	1480	89	72	31-109	21	
4-Chloro-3-methylphenol	ug/kg	ND	4110	4110	3100	1960	75	48	13-128	45	
4-Chloroaniline	ug/kg	ND	4110	4110	3080	2100	75	51	18-102	38	
4-Chlorophenylphenyl ether	ug/kg	ND	2060	2060	1740	1270	85	62	29-112	32	
4-Nitroaniline	ug/kg	ND	4110	4110	3710	2470	90	60	16-111	40	
4-Nitrophenol	ug/kg	ND	10300	10300	7460	4760	73	46	14-135	44	
Acenaphthene	ug/kg	ND	2060	2060	1570	1140	76	55	26-114	32	
Acenaphthylene	ug/kg	ND	2060	2060	1580	1110	77	54	32-108	35	
Aniline	ug/kg	ND	2060	2060	1140	727	56	35	10-107	45	
Anthracene	ug/kg	ND	2060	2060	1700	1440	83	70	32-111	16	
Benzo(a)anthracene	ug/kg	ND	2060	2060	1660	1500	81	73	25-117	11	
Benzo(a)pyrene	ug/kg	ND	2060	2060	1790	1750	87	85	25-106	2	
Benzo(b)fluoranthene	ug/kg	ND	2060	2060	1720	1610	84	78	24-110	6	
Benzo(g,h,i)perylene	ug/kg	ND	2060	2060	1760	1800	86	88	19-112	2	
Benzo(k)fluoranthene	ug/kg	ND	2060	2060	1590	1590	77	77	24-114	0	
Benzoic Acid	ug/kg	ND	10300	10300	4540	3160	44	31	10-110	36	
Benzyl alcohol	ug/kg	ND	4110	4110	2860	1730	70	42	24-106	49	
bis(2-Chloroethoxy)methane	ug/kg	ND	2060	2060	1470	989	72	48	13-119	39	
bis(2-Chloroethyl) ether	ug/kg	ND	2060	2060	1660	1100	81	53	10-134	41	
bis(2-Chloroisopropyl) ether	ug/kg	ND	2060	2060	1190	764	58	37	10-113	44	
bis(2-Ethylhexyl)phthalate	ug/kg	ND	2060	2060	1410	1190	68	58	10-125	17	
Butylbenzylphthalate	ug/kg	ND	2060	2060	1390	1220	68	59	18-110	13	
Chrysene	ug/kg	ND	2060	2060	1730	1580	84	77	30-110	9	
Di-n-butylphthalate	ug/kg	ND	2060	2060	1390	1260	67	61	19-112	10	
Di-n-octylphthalate	ug/kg	ND	2060	2060	1290	1120	63	54	17-105	15	
Dibenz(a,h)anthracene	ug/kg	ND	2060	2060	1850	1810	90	88	23-111	2	
Dibenzofuran	ug/kg	ND	2060	2060	1360	969	66	47	35-103	33	
Diethylphthalate	ug/kg	ND	2060	2060	1500	1170	73	57	27-113	25	
Dimethylphthalate	ug/kg	ND	2060	2060	1540	1090	75	53	26-111	34	
Fluoranthene	ug/kg	ND	2060	2060	1760	1500	86	73	33-109	16	
Fluorene	ug/kg	ND	2060	2060	1710	1220	83	59	32-113	33	
Hexachloro-1,3-butadiene	ug/kg	ND	2060	2060	1340	1040	65	51	16-116	25	
Hexachlorobenzene	ug/kg	ND	2060	2060	1470	1300	72	63	27-120	12	
Hexachlorocyclopentadiene	ug/kg	ND	2060	2060	1640	1170	80	57	10-108	33	
Hexachloroethane	ug/kg	ND	2060	2060	1250	865	61	42	10-117	36	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	2060	2060	1790	1790	87	87	10-122	0	
Isophorone	ug/kg	ND	2060	2060	1490	968	72	47	28-114	42	
N-Nitroso-di-n-propylamine	ug/kg	ND	2060	2060	1230	718	60	35	27-113	52	
N-Nitrosodimethylamine	ug/kg	ND	2060	2060	1120	793	54	39	10-109	34	
N-Nitrosodiphenylamine	ug/kg	ND	2060	2060	1340	1060	65	52	10-128	23	
Naphthalene	ug/kg	ND	2060	2060	1590	1130	78	55	25-110	34	
Nitrobenzene	ug/kg	ND	2060	2060	1460	1040	71	51	18-114	34	
Pentachlorophenol	ug/kg	ND	4110	4110	3740	2580	91	63	10-122	37	
Phenanthrene	ug/kg	ND	2060	2060	1720	1480	84	72	30-114	15	
Phenol	ug/kg	ND	2060	2060	1590	1010	77	49	11-102	44	2g,R1
Pyrene	ug/kg	ND	2060	2060	1600	1470	78	71	25-116	9	
2,4,6-Tribromophenol (S)	%						96	75	27-110		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1094344 1094345

Parameter	Units	92180232003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
2-Fluorobiphenyl (S)	%						69	52	30-110		
2-Fluorophenol (S)	%						71	48	13-110		
Nitrobenzene-d5 (S)	%						68	47	23-110		
Phenol-d6 (S)	%						75	47	22-110		
Terphenyl-d14 (S)	%						78	68	28-110		

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QUALITY CONTROL DATA

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

QC Batch: PMST/6041
QC Batch Method: ASTM D2974-87
Analysis Method: ASTM D2974-87
Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 92180232001, 92180232002, 92180232003, 92180232004, 92180232005, 92180232006, 92180232007, 92180232008, 92180232009, 92180232010, 92180232011

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

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QUALIFIERS

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

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	The internal standard response is below criteria. No hits associated with this internal standard. Results unaffected by high bias.
2g	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.
F3	The recovery of the second source standard used to verify the initial calibration curve for this analyte is outside the laboratory's control limits. The result is estimated.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: NCDOT SUGAR CREEK 41141.1.1
Pace Project No.: 92180232

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92180232001	**AB9**	EPA 3546	OEXT/24935	EPA 8270	MSSV/8488
92180232002	**AB10**	EPA 3546	OEXT/24935	EPA 8270	MSSV/8488
92180232003	**AB8**	EPA 3546	OEXT/24935	EPA 8270	MSSV/8488
92180232004	**AB11**	EPA 3546	OEXT/24935	EPA 8270	MSSV/8488
92180232005	**AB7**	EPA 3546	OEXT/24935	EPA 8270	MSSV/8488
92180232006	**AB6**	EPA 3546	OEXT/24935	EPA 8270	MSSV/8488
92180232007	**AB5**	EPA 3546	OEXT/24935	EPA 8270	MSSV/8488
92180232008	**AB4**	EPA 3546	OEXT/24935	EPA 8270	MSSV/8488
92180232009	**AB3**	EPA 3546	OEXT/24935	EPA 8270	MSSV/8488
92180232010	**AB2**	EPA 3546	OEXT/24935	EPA 8270	MSSV/8488
92180232011	**AB1**	EPA 3546	OEXT/24935	EPA 8270	MSSV/8488
92180232001	**AB9**	EPA 8260	MSV/25059		
92180232002	**AB10**	EPA 8260	MSV/25086		
92180232003	**AB8**	EPA 8260	MSV/25095		
92180232004	**AB11**	EPA 8260	MSV/25095		
92180232005	**AB7**	EPA 8260	MSV/25095		
92180232006	**AB6**	EPA 8260	MSV/25095		
92180232007	**AB5**	EPA 8260	MSV/25095		
92180232008	**AB4**	EPA 8260	MSV/25095		
92180232009	**AB3**	EPA 8260	MSV/25095		
92180232010	**AB2**	EPA 8260	MSV/25095		
92180232011	**AB1**	EPA 8260	MSV/25095		
92180232001	**AB9**	ASTM D2974-87	PMST/6041		
92180232002	**AB10**	ASTM D2974-87	PMST/6041		
92180232003	**AB8**	ASTM D2974-87	PMST/6041		
92180232004	**AB11**	ASTM D2974-87	PMST/6041		
92180232005	**AB7**	ASTM D2974-87	PMST/6041		
92180232006	**AB6**	ASTM D2974-87	PMST/6041		
92180232007	**AB5**	ASTM D2974-87	PMST/6041		
92180232008	**AB4**	ASTM D2974-87	PMST/6041		
92180232009	**AB3**	ASTM D2974-87	PMST/6041		
92180232010	**AB2**	ASTM D2974-87	PMST/6041		
92180232011	**AB1**	ASTM D2974-87	PMST/6041		

Pace Analytical	Sample Condition Upon Receipt (SCUR)	Page 1 of 2
	Document Number: F-CHR-CS-03-rev.11	Issuing Authority: Pace Huntersville Quality Office

Client Name: Tetra Tech

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

Optional
Proj. Due Date:
Proj. Name:

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 **Comments:**

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

Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes ☑No ☐N/A	6.
Rush Turn Around Time Requested:	☐Yes ☑No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix:_____		
All containers needing preservation have been checked.	☐Yes ☐No ☑N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☑N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes ☑No	
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☑N/A	15.
Trip Blank Present:	☐Yes ☐No ☑N/A	16.
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Pace Trip Blank Lot # (if purchased):_____		

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted:_____ Date/Time:_____

Comments/ Resolution:_____

SCURF Review: KLH **Date:** 11/20/13

SRF Review: KLH **Date:** 11/21/13

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)

WO#: 92180232

92180232

(if no label available)

CHAIN-OF-CUSTODY / Analytical Request Document

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

Pace Analytical®
www.pacelabs.com

1732952

Section A Required Client Information:

Company:	TERRACON
Address:	
Email To:	clcorbitt@terracon.com
Phone:	Fax:
Requested Due Date/TAT:	STANDARD

Section B Required Project Information:

Report To:	Chris Corbitt
Copy To:	
Purchase Order No.:	
Project Name:	NCDOT SUGAR CRK
Project Number:	71137774

Section C Invoice Information:

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

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☒ OTHER _____

Site Location STATE: NC

Section D Required Client Information

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

Matrix Codes (MATRIX / CODE)

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

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N: 8260	8270	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	B7	SL	G			11/14/13	13:55		5	2					2	1		X	X		001
2	B6						14:00											X	X		002
3	B5						15:15											X	X		003
4	B4						15:20											X	X		004
5	B3						15:25											X	X		005
6	B2						15:35											X	X		
7	B1					↓	15:40											X	X		
8	AB9					11/19/13	10:00											X	X		
9	AB10						10:05											X	X		
10	AB8						10:10											X	X		
11	AB11						10:15											X	X		
12	AB7	↓	↓			↓	10:20		↓	↓					↓	↓		X	X		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
AB1 to AB-11, separate lab report; B-1 to B-19 separate lab report	[signature] / TERRACON	11/20/13	14:15	[signature]	11-20-13	14:15	1.2 / yes / — / yes

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: S. ALEX CHINERY

SIGNATURE of SAMPLER: [signature] 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)
1.2	yes	—	yes

3

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

Pace Analytical
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CHAIN-OF-CUSTODY / Analytical Request Document

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

1732953

Section A Required Client Information:

Company:	TERRACON
Address:	
Email To:	clcorbitt@terracon.com
Phone: 704.509.1777	Fax: 704.509.1888
Requested Due Date/TAT:	STANDARD

Section B Required Project Information:

Report To:	Chris Corbitt
Copy To:	
Purchase Order No.:	
Project Name:	NCDOT-SUGAR CRK
Project Number:	711377774

Section C Invoice Information:

Attention:	SAME
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	
Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☒ OTHER _____

Site Location STATE: NC

Section D Required Client Information

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

Matrix Codes MATRIX / CODE

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

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N: 8260	8270	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	AB 6	SL	G			11/19/13	11:20		5	2					2	1		X	X		006
2	AB 5						11:30											X	X		007
3	AB 4						11:35											X	X		008
4	AB 3						11:45											X	X		009
5	AB 2						11:50											X	X		010
6	AB 1						11:55											X	X		011
7																					
8																					
9																					
10																					
11																					
12																					

02180232

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[signature] TERRACON	11/20/13	14:15	Jogan Wick/Pace	11-20-13	14:15	1.0 SR — yr

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: S. ALEX CHANEY

SIGNATURE of SAMPLER: [signature]

DATE Signed (MM/DD/YY):

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

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

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