

**PRELIMINARY SITE ASSESSMENT
DUKE ENERGY SUBSTATION
OLD SOUTH MAIN STREET AND EAST "A" AVENUE
SALISBURY, ROWAN COUNTY, NORTH CAROLINA
NCDOT PROJECT: U-3459
WBS ELEMENT: 34951.1.1**

**Prepared for:
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GeoEnvironmental Section
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Solutions-IES Project No. 3210.06A3.NDOT

August 25, 2006

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1.0 INTRODUCTION

The North Carolina Department of Transportation (NCDOT) is considering shifting the alignment of Klumac Road (NC SR-2541) located in Salisbury, Rowan County, North Carolina to the west of its present location. If the alignment of Klumac Road is shifted, it will be necessary for the NCDOT to acquire properties located within the new proposed right-of-way. On May 24, 2006, Solutions-IES submitted a proposal to conduct limited Preliminary Site Assessments (PSAs) for five parcels of land located within the proposed right-of-way that are of concern to the NCDOT. This report summarizes the results of field activities conducted during the PSA for a portion of the property identified by NCDOT as the Duke Energy Substation (**Figure 1**). The right-of-way portion of this site (Study Area) is more clearly identified on **Figure 2**. The property itself is presently owned by Duke Energy Corporation. The scope of work executed at the site was performed in general accordance with Solutions-IES proposal NC06527P dated May 24, 2006 (proposal), and was initiated based on a Notice to Proceed issued by the NCDOT Geotechnical Engineering Unit on June 20, 2006 under contract 7000007053, dated June 5, 2006.

2.0 BACKGROUND AND SITE DESCRIPTION

The subject property is located on the northwest corner of Old South Main Street and East "A" Avenue within the City Limits of Salisbury, Rowan County, North Carolina (site). According to field observations, the substation is located on the western portion of the site, while the Study Area is situated along East "A" Avenue in the eastern portion of the site. The surface of the site is covered with a mixture of gravel and grass, and is surrounded by a chain link fence. A photograph of the Study Area at the site is presented in **Appendix A**.

Solutions-IES reviewed information documented in a variety of websites to assist in identifying potential contaminants of interest (COIs) that could impact the right-of-way or easement for each of the properties investigated. Section 6.0 provides a summary of the websites utilized in this information review. Poly-chlorinated biphenyls (PCBs) and mineral spirits are typical contaminants from the operation of an electric power substation, and therefore there is a possibility that these constituents may have been released from this site to the subsurface in the vicinity of the proposed right-of-way. Volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs) were also included in the COI list to identify potential impacts from other industrial activities that may have occurred at the site. Based on this

information, Solutions-IES selected analytical parameters that would be representative of these possible COIs from a typical power substation (Section 6.0, References 2, 3, 4, 5, 6, 7, 17 and 18).

3.0 FIELD ACTIVITIES

Prior to mobilizing to the site to conduct subsurface sampling, Solutions-IES contacted North Carolina One Call and the City of Salisbury Public Utilities Department to locate underground utilities in the Study Area of the site. Pyramid Environmental & Engineering, P.C. (Pyramid) was contracted to perform an electromagnetic survey of the subsurface in the proposed right-of-way and easement area. Pyramid surveyed the Study Area on June 26 and June 29, 2006. The electromagnetic survey equipment (EM61) identified various magnetic anomalies within the Study Area, and Pyramid returned to the Study Area to perform a ground penetrating radar (GPR) survey utilizing a “Geophysical Survey Systems SIR 2000” instrument. Results of the surveys confirmed the locations of miscellaneous metal debris and fencing, but did not suggest the presence of buried metallic underground storage tanks (USTs). The EM61 images and GPR survey line locations are included in **Appendix B**, Figures 3, 4 and 5.

After reviewing the geophysical report, Solutions-IES mobilized to the site and obtained soil samples from various locations within the Study Area. These activities were conducted on July 19, 2006. A total of seven soil borings (borings DUKEB1 through DUKEB7) were collected from the Study Area from the locations depicted on **Figure 3**. The borings were labeled “DUKE” to designate the current property owner. All seven soil borings were advanced with a truck-mounted Geoprobe® to a total depth of eight feet below ground surface (ft bgs). Borings DUKEB1 through DUKEB7 were generally spaced between 13.5 and 20 feet apart on the north-south axis of the Study Area parallel to East “A” Avenue. Borings DUKEB1 and DUKEB2 were located approximately 27 feet from the edge of East “A” Avenue, while borings DUKEB3 through DUKEB7 were located approximately 13 feet from the edge of East “A” Avenue (**Figure 3**).

Soil samples were obtained from each boring using a MacroCore® sampler fitted with single-use, disposable polyvinyl chloride liners. Each liner was 4 feet in length. Upon retrieval, each soil sample was split into two aliquots of 2 feet in length. The aliquots were placed in separate resealable plastic bags. One bag was placed on ice for possible laboratory analysis, and the remaining bag was sealed and placed at ambient temperature for field screening with a flame ionization detector (FID).

VOCs were allowed to accumulate in the headspace of each bag for approximately 20 minutes, after which time each sealed bag was scanned with the FID. The FID readings were entered on the boring logs along with the soil description and indications of notable staining or odors, if present. Logs for each boring are presented in **Appendix C**. Soils from the borings at the Duke Energy Substation Study Area generally consisted of sandy or clayey silt (ML) and mottled silty clay (CL).

Headspace screening revealed no volatile vapors in the soil samples screened with the FID. No distinguishable odors were noted in these soil samples.

Soil samples for laboratory analysis were retained from each boring obtained from the 6 to 8 ft bgs depth interval. The samples were placed in laboratory-supplied containers and stored on ice pending shipment to Pace Analytical Services, Inc. in Huntersville, NC. Sample information was recorded on the chain-of-custody and the samples were submitted for chemical analysis VOCs by EPA Method 5035/8260, SVOCs by EPA Method 3545/8270, organochlorine PCBs by EPA Method 3545/8082, and mineral spirits.

4.0 SAMPLING RESULTS

The analytical data did not indicate the presence of VOCs, SVOCs, organochlorine PCBs, or mineral spirits in concentrations above the laboratory reporting limits. Laboratory reports associated with these samples are presented in **Appendix D**.

5.0 DISCUSSION AND CONCLUSIONS

The geophysical survey conducted at the site did not reveal buried metallic USTs within the Study Area. The survey did suggest metallic anomalies consistent with the presence of buried utility lines or conduits, metal fencing, and miscellaneous metal debris.

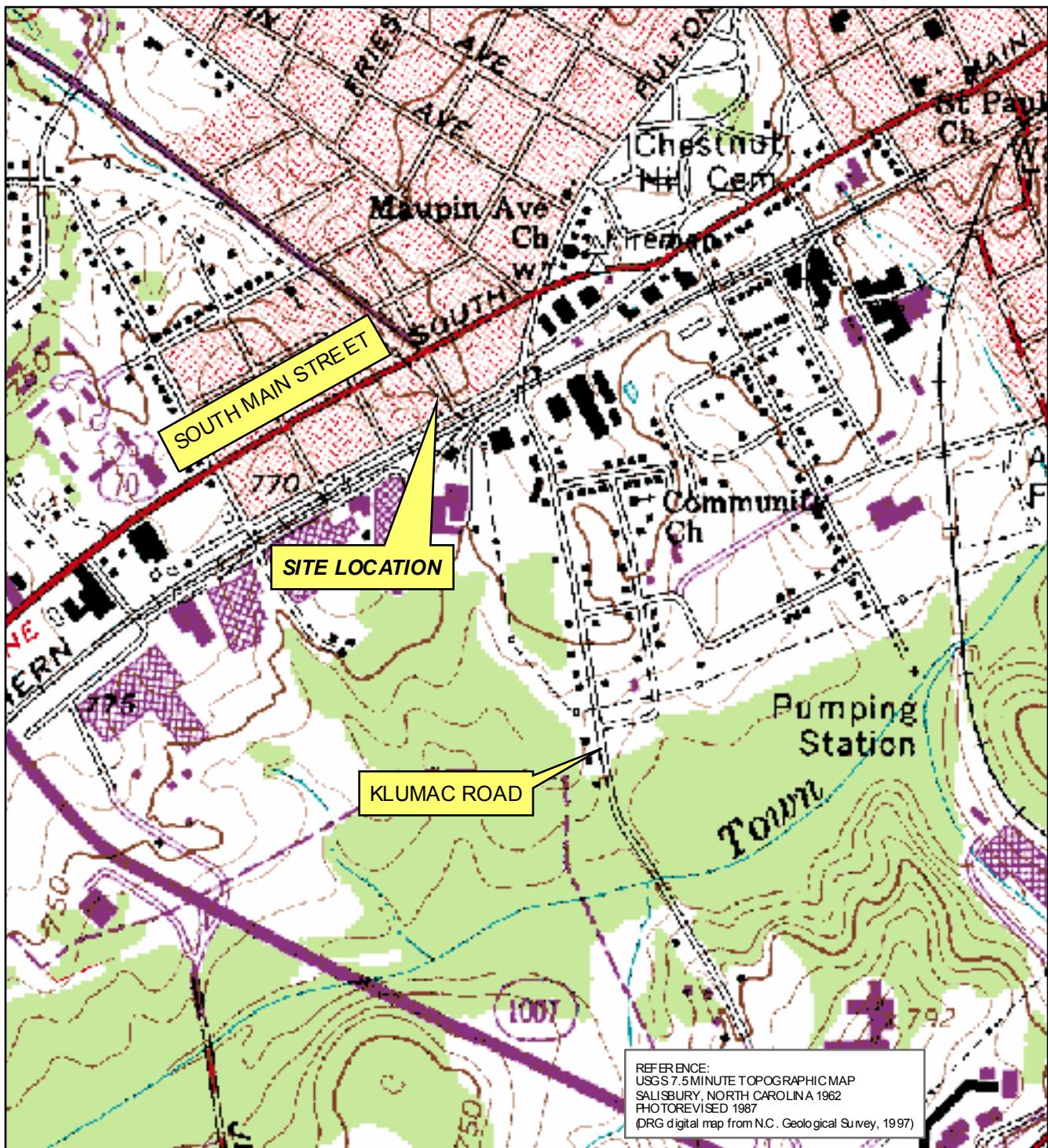
Solutions-IES advanced seven soil borings to determine the presence or absence of COIs in the Study Area on the parcel, as well as document soil conditions. Soil samples obtained from the borings and screened with an FID revealed no volatile vapors in any of the samples. Correspondingly, the analytical data for soil samples submitted for chemical analysis showed no detected constituents above the

laboratory reporting limits. Based on observations and results obtained during this PSA, additional assessment does not appear warranted at this time.

6.0 WEBSITE REFERENCES

- 1) <http://arcims.webgis.net/nc/rowan/default.asp>
- 2) <http://ust.enr.state.nc.us/database.html>
- 3) <http://h2o.enr.state.nc.us/aps/gpu.htm>
- 4) <http://www.wastenotnc.org/sfhome/ihnbrnch.htm>
- 5) http://h2o.enr.state.nc.us/su/State_SW_Mngt_Program.htm
- 6) <http://www.epa.gov/epaoswer/osw/hazwaste.htm>
- 7) <http://www.epa.gov/superfund/sites/cursites/index.htm>
- 8) http://oaspub.epa.gov/enviro/multisys2.get_list_tri?tri_fac_id=47201NTNDR8251S
- 9) <http://www.epa.gov/compliance/resources/publications/assistance/sectors/notebooks/stclglsn.pdf>
- 10) <http://matse1.mse.uiuc.edu/concrete/prin.html>
- 11) <http://www.lib.ncsu.edu:2420/knovel2/Toc.jsp?BookID=356&VerticalID=0>
- 12) http://cementamericas.com/mag/cement_cement_concrete_environment/index.html
- 13) <https://www.esa.doc.gov/comments%20dept%20of%20commerce%20on%20gas%20prices%20impact%20-%20may%2016%20-%20ez.doc>
- 14) <http://www.esa.org/science/Issues/FileEnglish/issue3.pdf>
- 15) <http://pirg.uwaterloo.ca/download/docs/rubber.html>
- 16) www.sbcfire.org/hazmat/env_terms.asp
- 17) http://www.atsdr.cdc.gov/HAC/PHA/trent/tre_p1.html
- 18) http://www.cpuc.ca.gov/Environment/info/esa/corona/corona_hazards.

FIGURES



1:10,000

SITE LOCATION MAP

DUKE SUBSTATION

GRADE SEPARATION AT KLUMAC ROAD

KLUMAC ROAD

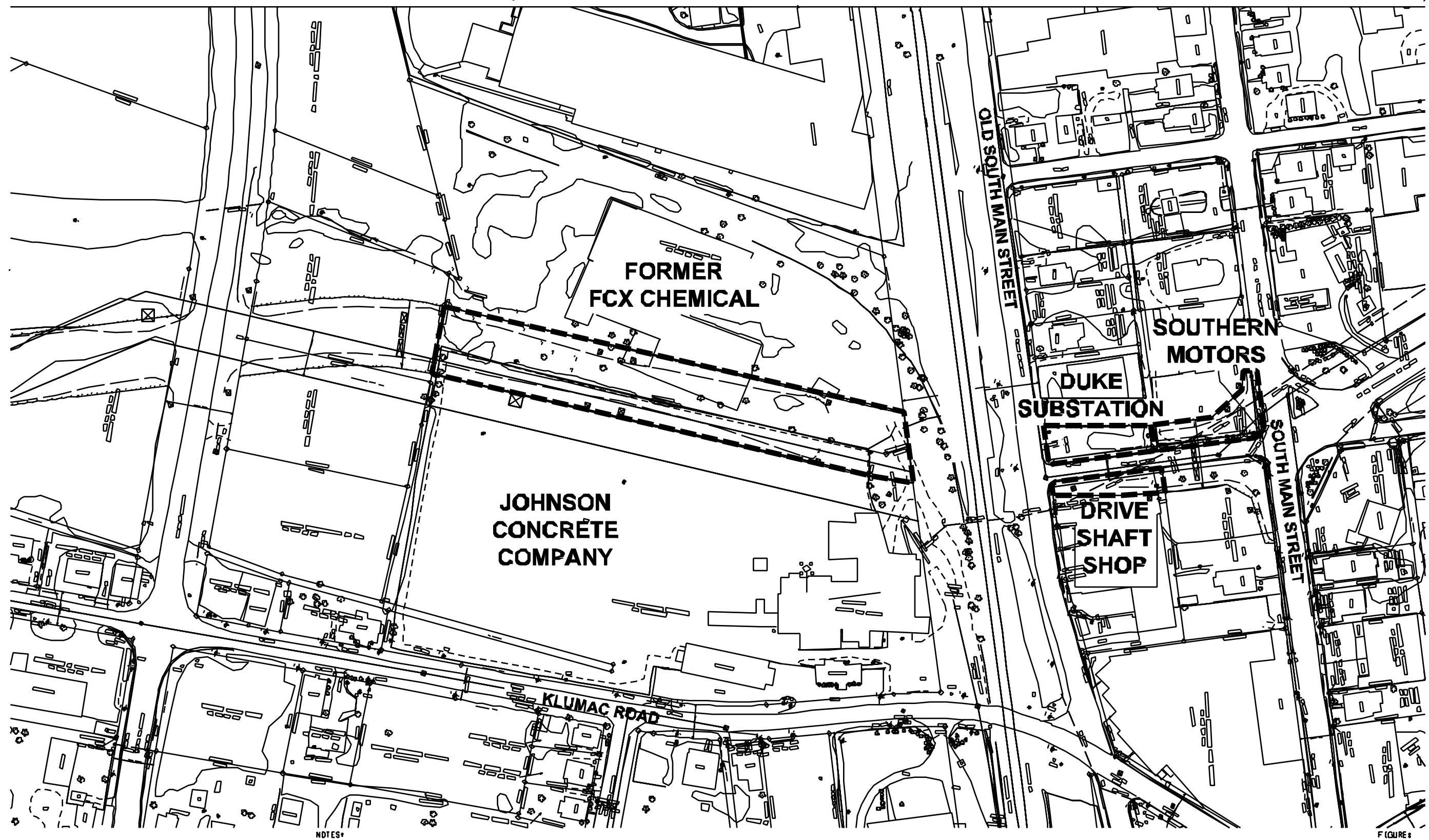
SALISBURY, ROWAN COUNTY, NC

WBS ELEMENT 31951.1.1; STATE PROJECT U-3459



1101 Nowell Road, Raleigh, NC 27609 Phone (919) 873-1060, Fax (919) 873-1074	
Created by: RT	Project: 3210.06A3NDOT
Checked by: SK	Date: AUGUST 2006
File: Figure 1.mxd	
Software: ESRI ArcMap 9.1	FIGURE 1

FILE FIG2.DGN
DATE AUGUST 2006 PROJECT NUMBER SK
PROJECT MANAGER CHECKED BY DRAFTER AT
PROJECT NUMBER 3210.0613.N001



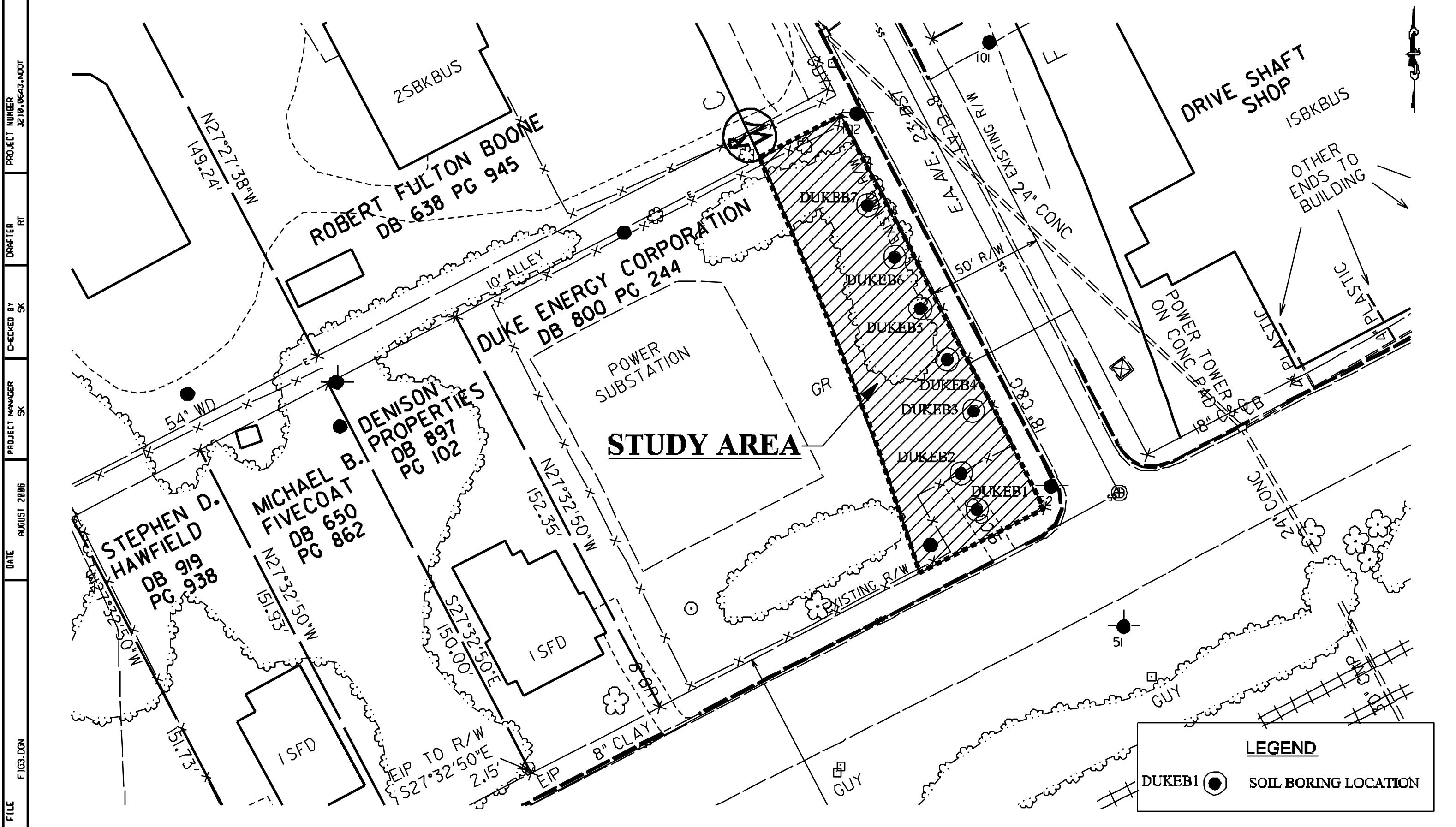
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DUKE SUBSTATION
GRADE SEPARATION AT KLUMAC ROAD
SALISBURY, ROWAN COUNTY, NC
WBS ELEMENT 31951.1.1: STATE PROJECT U-3459

SITE MAP

FIGURE: 2



APPENDIX A
PHOTOGRAPH



Photograph 1– View from east to west along Old South Main Street. Study Area along northeastern edge of road.

APPENDIX B

GEOPHYSICAL INVESTIGATION

Pyramid Project # 2006-176

GEOPHYSICAL INVESTIGATION REPORT

GEOPHYSICAL SURVEYS FOR THE DETECTION OF METALLIC UST'S

Klumac Road Realignment Project

Salisbury, North Carolina

State Project Number 34951.1.1 (TIP # U3459)

July 14, 2006

Report prepared for: Sheri Knox, PE
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GEOPHYSICAL SURVEYS FOR THE DETECTION OF METALLIC UST'S
Klumac Road Realignment Project
State Project Number 34951.1.1 (TIP # U3459)

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Figure 2 Geophysical Equipment

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Figure 4 East "A" Avenue Sites – EM61 Bottom Coil Results

Figure 5 East "A" Avenue Sites – EM61 Differential Results

Figure 6 Johnson Concrete & FCX Chemical Sites – Geophysical Survey Line Locations

Figure 7 Johnson Concrete & FCX Chemical Sites – EM61 Metal Detection Results

1.0 INTRODUCTION

Pyramid Environmental & Engineering, P.C. conducted geophysical investigations for Solutions Industrial & Environmental Services, Inc. during the period of June 26 through July 7, 2006, within the proposed Right-of-Way (ROW) areas at five sites along the proposed Klumac Road realignment project area in Salisbury, North Carolina. The work was done as part of the North Carolina Department of Transportation (NCDOT) road-widening project under State Project WBS Element 34951.1.1 (TIP # U-3459). The five sites are located along or adjacent to the intersection of Old South Main Street and East “A” Avenue in Salisbury.

Geophysical investigations were conducted across the eastern edges of the Southern Motors and the Duke Power substation properties located along the west side of East “A” Avenue. Investigations were also conducted along the western edge of The Drive Shaftshop property located along the east side of East “A” Avenue. The western edge of the former FCX Chemical site and the eastern portion of the Johnson Concrete facility, located south of Old Main Street, were also included in the geophysical investigation. The geophysical surveys were conducted to determine if unknown metallic underground storage tanks (USTs) were present beneath the proposed ROW area of each site.

Solutions Industrial and Environmental Services representative, Ms. Sheri Knox, PE, provided maps to Pyramid Environmental during the week of May 22, 2006 that outlined the geophysical survey area of each site. A site map and photographs showing the geophysical survey areas of the five sites are presented in **Figure 1**.

2.0 FIELD METHODOLOGY

Prior to conducting the geophysical investigations, a 10-foot by 20-foot survey grid was established across the proposed ROW areas of the five sites using water-based marking paint and pin flags. These 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 investigations consisted of electromagnetic (EM) induction-metal detection surveys and ground penetrating radar (GPR) surveys. The EM surveys were performed using a Geonics EM61-MK1 metal detection instrument. According to the manufacturer's specifications, the EM61 can detect a metal drum down to a maximum depth of approximately 8 feet. The EM61 data were digitally collected at each site along parallel northerly-southerly trending survey lines spaced five feet apart. The data were downloaded to a computer and reviewed in the office using the Geonics DAT61W and Surfer for Windows Version 7.0 software programs.

Contour plots of the EM61 bottom coil results and the EM61 differential results for each site are included in this report. 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 drums and USTs and ignore the smaller insignificant metal objects.

GPR surveys were conducted across selected EM61 differential anomalies and steel-reinforced concrete using a GSSI SIR-2000 unit equipped with a 400 MHz antenna. GPR data were digitally collected in a continuous mode along X and/or Y survey lines, spaced two to five feet apart using a vertical scan of 512 samples, at a rate of 48 scans per second. An 80 MHz high pass filter and an 800 MHz low pass filter were used during data acquisition with the 400 MHz antenna. GPR data were collected down to a maximum depth of approximately five feet, based on an estimated two-way travel time of 10 nanoseconds per foot.

The GPR data were downloaded to a field computer and later reviewed in the office using Radprint software. The locations of GPR survey areas or individual GPR survey lines are shown as dashed, purple rectangles or solid purple lines, respectively on the EM61 differential contour plots. Photos of

the EM61 and GPR instruments are shown in **Figure 2**. During the weeks of June 26 and July 10, 2006, preliminary contour plots of the EM61 bottom coil and the differential results were emailed to Ms. Knox and Ms. Heather Markell.

3.0 DISCUSSION OF RESULTS

3.1 East Avenue “A” Sites

The East Avenue “A” sites consist of the geophysical survey areas across portions of the Southern Motors, Duke Power substation, and The Driveshaft Shop properties. **Figure 3** shows the geophysical survey area and the geophysical survey lines across the above three properties. The red dots on the plot represent the approximate locations of the EM61 metal detection survey lines. Each dot represents a data point location. The purple lines represent the approximate locations of the GPR survey lines that were acquired across selected EM61 anomalies and areas containing steel reinforced concrete.

The bottom coil results and the differential results are presented in **Figures 4 and 5**, respectively. The linear EM61bottom coil anomalies intersecting grid coordinates X=40 Y=88, X=40 Y=380, X=60 Y=62, X=60 Y=120, X=64 Y=360, X=70 Y=250, X=70 Y=287, and X=120 Y=114, are probably in response to buried utility lines or conduits. The linear anomaly intersecting grid coordinates X=45 Y=180, is probably in response to the metal fence that surrounds the Duke Power substation property. The majority of the remaining bottom coil anomalies are probably in response to known cultural features such as manhole covers, storm sewer grates, and steel reinforced concrete.

GPR surveys conducted across the differential anomalies centered near grid coordinates X=5 Y=202, X=40 Y=237, and X=73 Y=390, suggest the anomalies are in response to miscellaneous metal debris or conduits. GPR surveys conducted across the concrete pavement centered near grid coordinates X=15 Y=410, and X=115 Y=160, suggest the metal detection anomalies recorded at these areas are probably in response to steel reinforcement in the concrete. The geophysical

investigation did not detect the presence of buried metallic USTs within the surveyed areas of the Southern Motors, The Driveshaft Shop and the Duke Power substation properties.

3.2 Johnson Concrete & Former FCX Chemical Sites

Figure 6 shows the geophysical survey area across the western portion of the Johnson Concrete facility and the eastern edge of the former FCX Chemical property. Similar to Figure 3, the red dots on the plot represent the approximate locations of the EM61 metal detection survey lines. Each dot represents a data point location. The purple lines represent the approximate locations of the GPR survey lines that were acquired across selected EM61 anomalies and areas containing steel reinforced concrete. The plot shows that nearly half of the proposed ROW area on the Johnson Concrete property contains concrete culverts, equipment and other supplies that obstructed the geophysical investigation.

The bottom coil results and the differential results for the Johnson Concrete and former FCX Chemical properties are presented in **Figure 7**. The linear EM61bottom coil anomaly intersecting grid coordinates X=80 Y=750, is probably in response to a buried utility line or conduit. The numerous bottom coil anomalies located around X=20 Y=270, and X=90 Y=680, are probably in response to buried, miscellaneous, metal debris or objects. The remaining anomalies are probably in response to adjacent supplies, surface equipment or steel reinforced concrete.

GPR surveys conducted across the large steel reinforced concrete slab and the adjacent concrete footing centered near grid coordinates X=25 Y=380, and X=17 Y=530, respectively, suggest that these two areas do not contain metallic USTs. GPR surveys conducted across the EM61 differential anomalies centered near grid coordinates X=67 Y=385, X=85 Y=690, and X=102 Y=270, suggest that the metal detection anomalies are probably in response to miscellaneous metal debris. The

geophysical investigation results suggest the surveyed portions of the Johnson Concrete facility and the former FCX Chemical property do not contain buried metallic USTs.

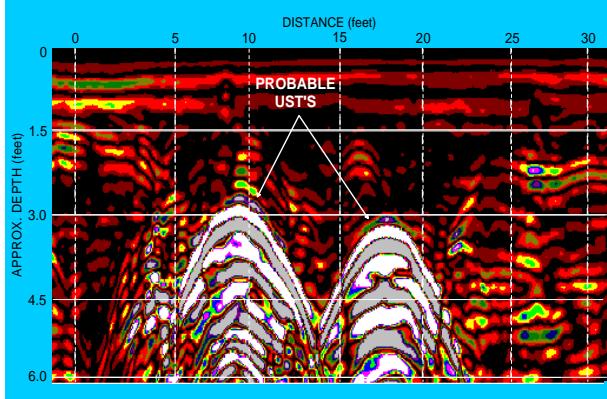
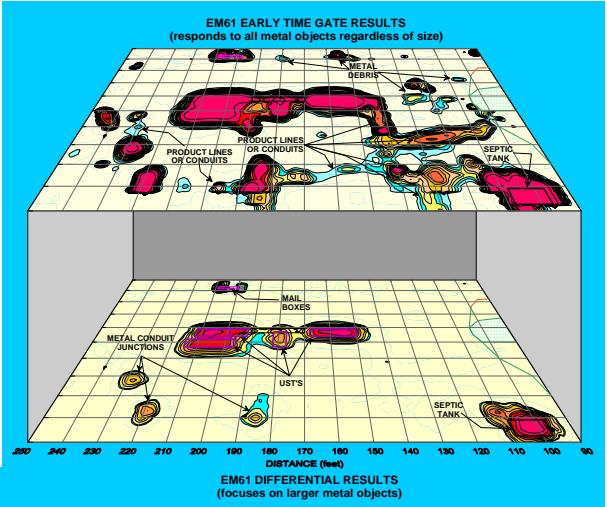
4.0 SUMMARY & CONCLUSIONS

Our evaluation of the EM61 and GPR data collected across the proposed ROW areas at the Klumac Road Realignment site located along Old South Main Street and East “A” Avenue in Salisbury, North Carolina provides the following summary and conclusions:

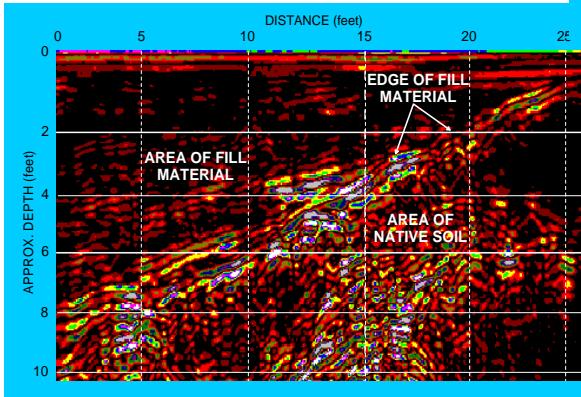
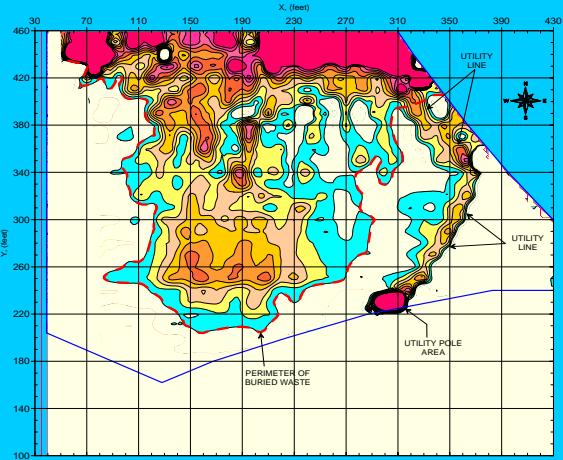
- The EM61 and GPR surveys provided reliable results for the detection of metallic USTs within the surveyed portions of the Southern Motors, Duke Power substation, The Driveshaft Shop, Johnson Concrete, and the former FCX Chemical properties.
- GPR surveys were conducted across selected EM61 differential anomalies and across areas containing steel reinforced concrete.
- At the East “A” Avenue sites, the linear EM61 anomalies intersecting grid coordinates X=40 Y=88, X=40 Y=380, X=60 Y=62, X=60 Y=120, X=64 Y=360, X=70 Y=250, X=70 Y=287, and X=120 Y=114, are probably in response to buried utility lines or conduits. The remaining metal detection anomalies are probably in response to known cultural features or to buried miscellaneous metal debris.
- The linear EM61 anomaly intersecting grid coordinates X=80 Y=750, at the Johnson Concrete property is probably in response to a buried utility line or conduit. The remaining metal detection anomalies recorded at the Johnson Concrete and the former FCX Chemical properties are probably in response to adjacent surface equipment, steel reinforced concrete, or buried miscellaneous metal debris.
- The geophysical investigations results did not detect the presence of metallic USTs within the surveyed portions of the five properties.

5.0 LIMITATIONS

EM61 and GPR surveys have been performed and this report prepared for Solutions Industrial & Environmental Services, Inc. in accordance with generally accepted guidelines for EM61 and GPR surveys. It is generally recognized that the results of the EM61 and GPR are non-unique and may not represent actual subsurface conditions. The EM61 and GPR results obtained for this project do not conclusively determine that metallic USTs are not present across the surveyed portions of the five sites but only suggest that none were detected. Some anomalies may be attributed to other surface or subsurface conditions or cultural interference.



FIGURES

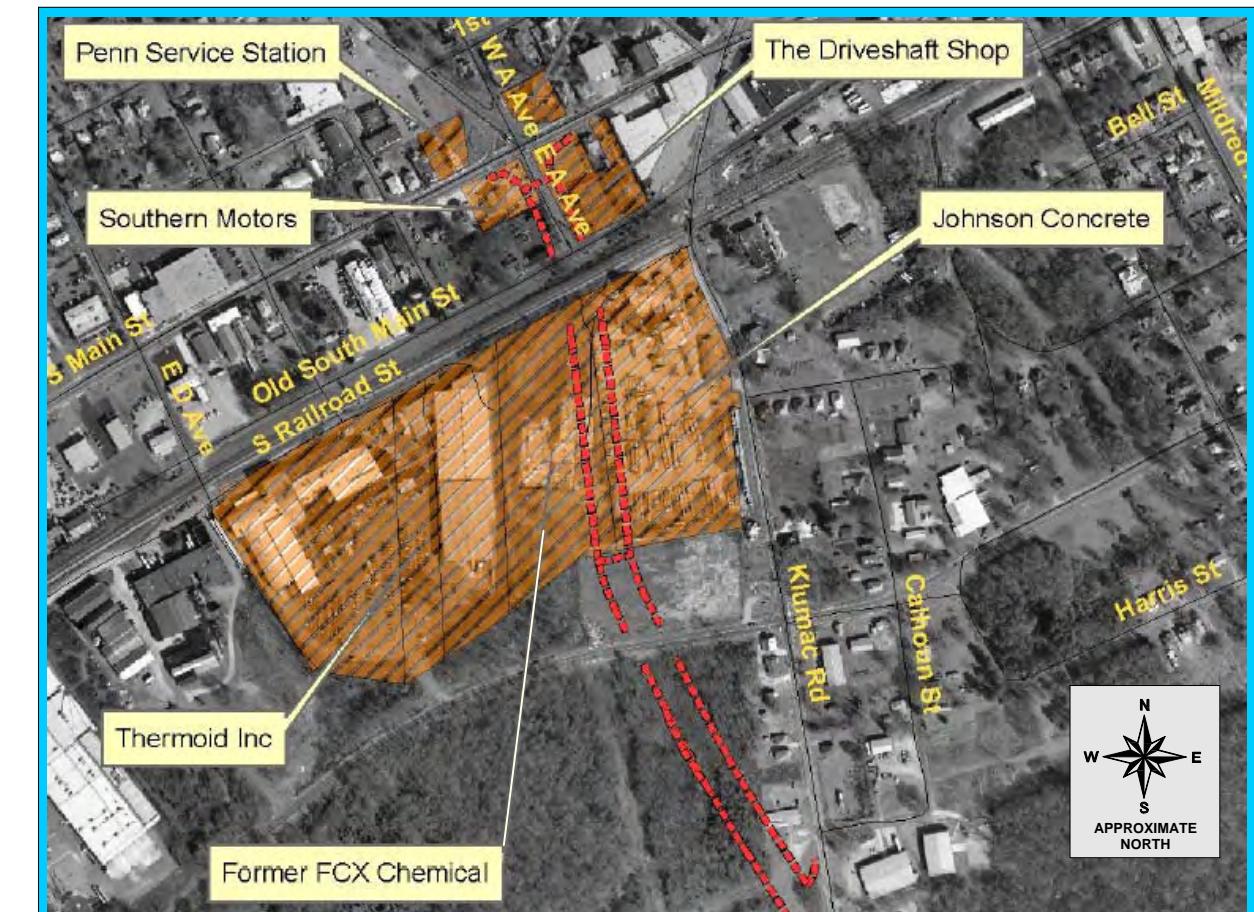




The photo shows the geophysical survey area across portions of the Southern Motors, The Driveshaft Shop and the Duke Power substation properties located along East "A" Avenue. The photo is viewed in a northerly direction.



The photo shows the geophysical survey area across the western edge of the Johnson Concrete facility. The photo is viewed in a northerly direction.



The photo shows the locations of the Southern Motors, Duke Power substation, The Driveshaft Shop, Johnson Concrete, and the former FCX Chemical properties where geophysical investigations were conducted. The map was obtained from Solutions-IES/NCDOT.



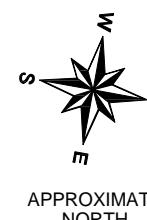
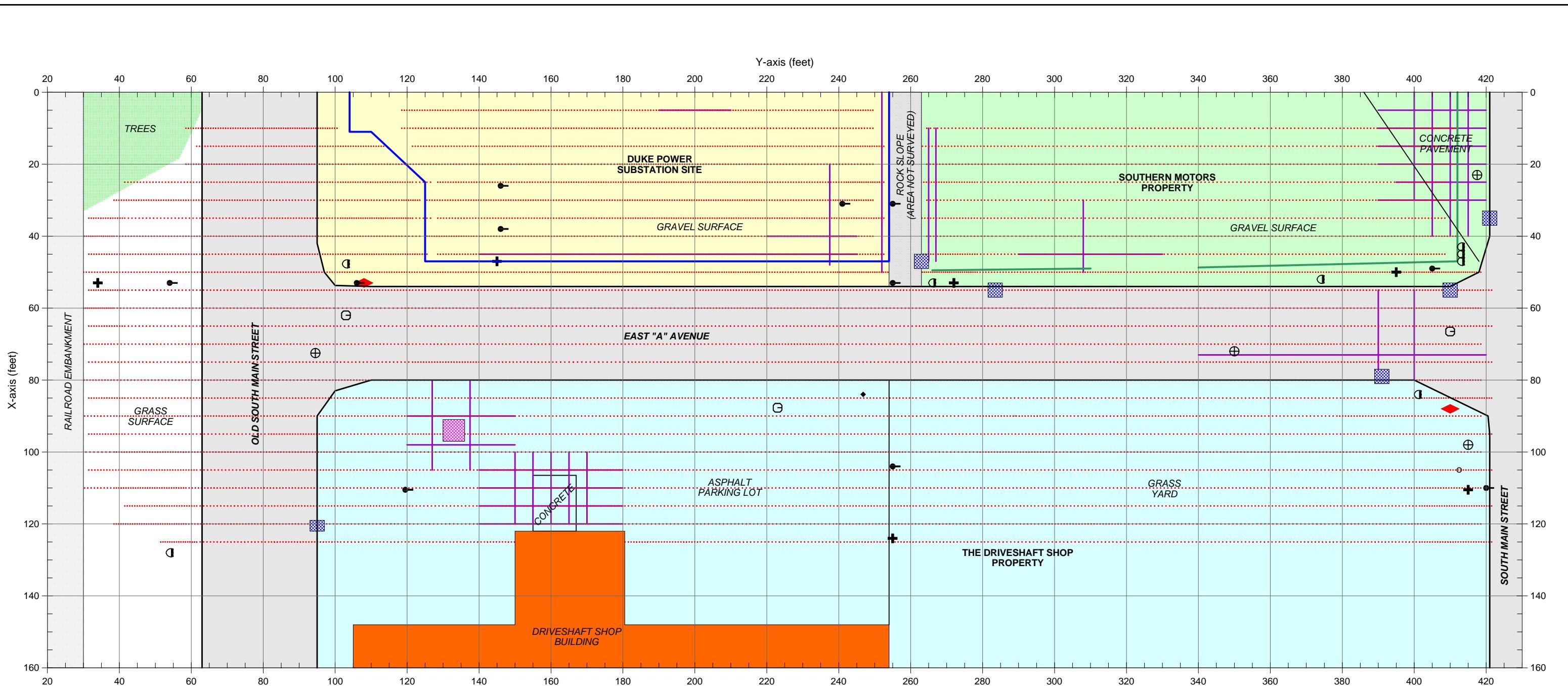
The photo shows the geophysical survey area across the eastern edge of the Former FCX Chemical site located contingent to the Johnson Concrete facility shown above. The photo is viewed in a northerly direction.



The photo shows the Geonics EM61 metal detector that was used to conduct the metal detection survey at the Old South Main Street and East "A" Avenue sites in Salisbury, North Carolina on June 26, 27, and July 7, 2006. The instrument has a maximum investigating depth of approximately 8 feet.



The photos show the SIR-2000 GPR system equipped with a 400 MHz antenna that were used to conduct the ground penetrating radar investigation at the Old South Main Street and East "A" Avenue sites in Salisbury, North Carolina on June 29 & July 7, 2006.



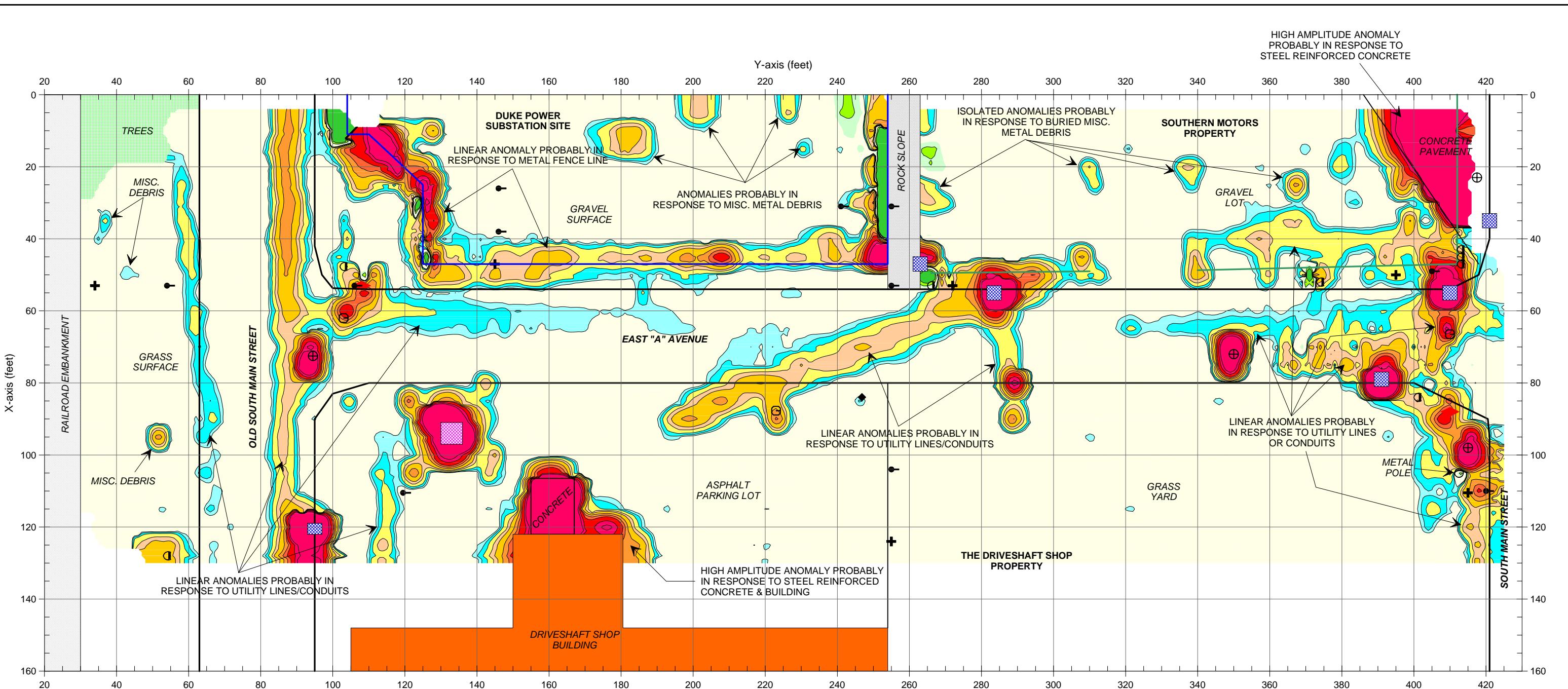
Note: The map shows the geophysical survey area along East "A" Avenue. The red dots represent the EM61 survey lines that were acquired on June 26, 2006 using a Geonics EM61 metal detection instrument. The purple lines represent the ground penetrating radar (GPR) survey lines that were acquired on June 29, 2006 using a Geophysical Survey Systems SIR 2000 instrument with a 400 MHz antenna.



CLIENT	SOLUTIONS INDUSTRIAL & ENVIRONMENTAL		
SITE	EAST "A" AVENUE SITES	DW	MJD
CITY	SALISBURY	CHRD	
STATE	NORTH CAROLINA		
TITLE	GEOPHYSICAL RESULTS		
SHO	2006-176	FIGURE	
GRAPHIC SCALE IN METERS			

EM61 & GPR
SURVEY LINE LOCATIONS

FIGURE 3



Note: The contour plot shows the bottom coil (most sensitive) response of the EM61 instrument in millivolts (mV). The bottom coil response shows buried metallic objects regardless of size. The EM metal detection data were collected on June 26, 2006 using a Geonics EM61 instrument. Ground penetrating radar (GPR) data were acquired on June 29, 2006 using a Geophysical Survey Systems SIR 2000 instrument with a 400 MHz antenna.

The majority of linear EM61 bottom coil anomalies shown above, are probably in response to buried utility lines or conduits. Negative EM anomalies (shaded in green) are probably in response to metallic surface objects. The geophysical investigation suggests that the survey area does not contain metallic USTs.

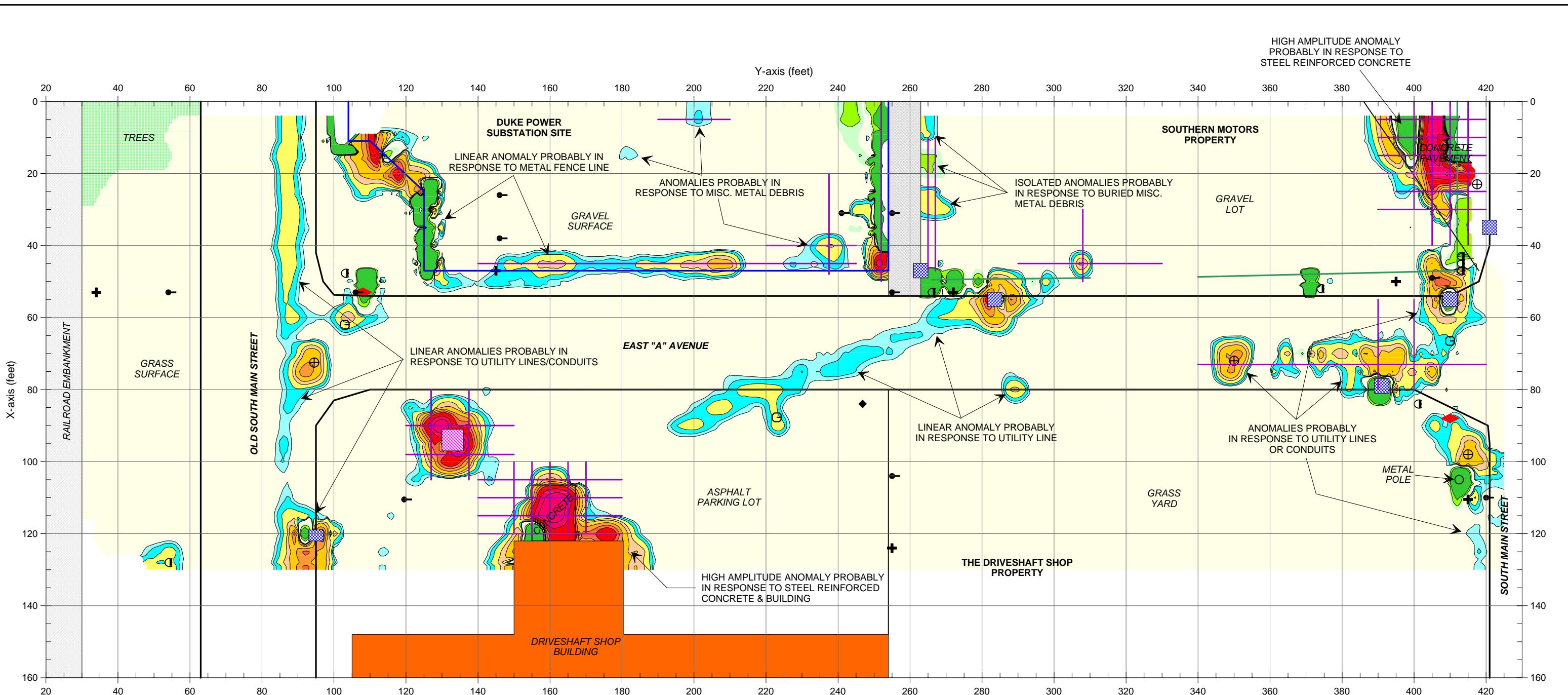


SOLUTIONS INDUSTRIAL & ENVIRONMENTAL
EAST "A" AVENUE SITES
CITY: SALISBURY STATE: NORTH CAROLINA
TITLE: GEOPHYSICAL RESULTS

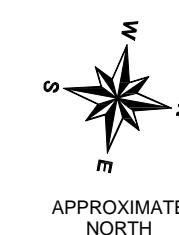
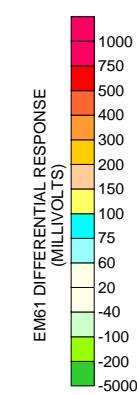
CLIENT	DATE	07/14/06	DW	MJD
SITE	LAY		CHRD	
CITY	STATE	NORTH CAROLINA	DW	
TITLE	S.H.O.	2006-176	FIGURE	GRAPHIC SCALE IN METERS

**EM61
BOTTOM COIL
RESULTS**

FIGURE 4



LEGEND	
EM61 SURVEY AREA: EM DATA ACQUIRED ALONG NORTHERLY-SOUTHERLY TRENDING LINES SPACED 5 FEET APART	VENT/FILL PORT
⊕ MANHOLE COVERS	◆ FIRE HYDRANT
⊖ WATER METER OR VALVE COVER	■ ELECTRICAL TOWER
✚ GUY WIRE	— METAL FENCE LINE
● UTILITY POLE	— CHAIN FENCE
○ TRAFFIC SIGN	— GPR SURVEY LINE
■ STORM SEWER GRATE	



Note: The contour plot shows the differential results of the EM61 metal detection survey in millivolts (mV). The differential response focuses on larger, buried metallic objects such as drums and USTs and ignores smaller miscellaneous, buried, metal debris. The EM metal detection data were collected on June 26, 2006 using a Geonics EM61 instrument. Ground penetrating radar (GPR) data were acquired on June 29, 2006 using a Geophysical Survey Systems SIR 2000 instrument with a 400 MHz antenna.

The majority of linear EM61 bottom coil anomalies shown above, are probably in response to buried utility lines or conduits. Negative EM anomalies (shaded in green) are probably in response to metallic surface objects. The geophysical investigation suggests that the survey area does not contain metallic USTs.

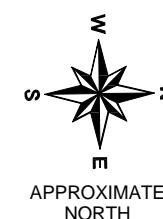
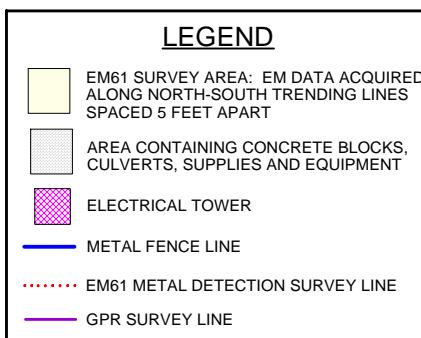
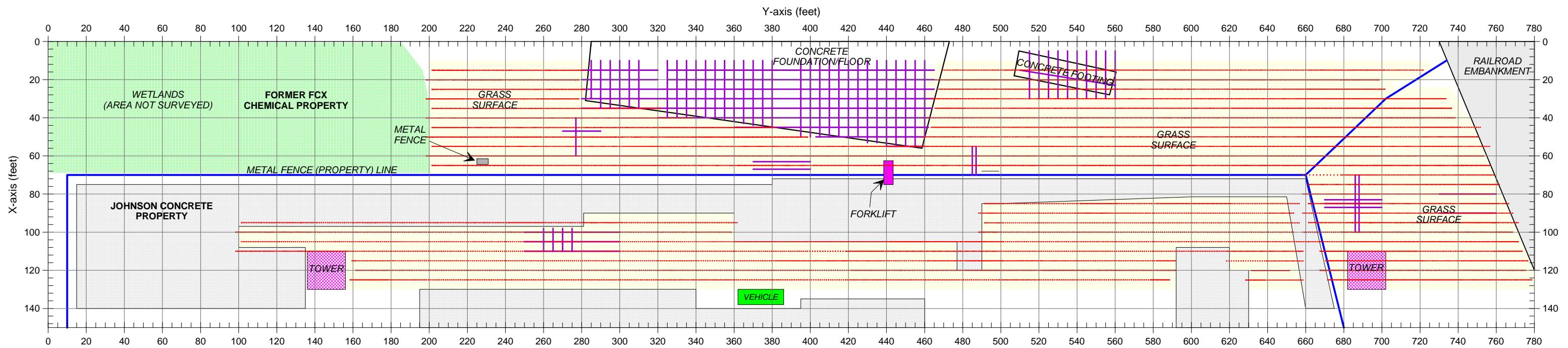


SOLUTIONS INDUSTRIAL & ENVIRONMENTAL
EAST "A" AVENUE SITES
CITY: SALISBURY STATE: NORTH CAROLINA
TITLE: GEOPHYSICAL RESULTS

DATE: 07/14/06 D/W MJD
SITE: LAY: C/H/D
CITY: D/W
TITLE: S.H.O.: 2006-176 FIGURE: GRAPHIC SCALE IN METERS

EM61
DIFFERENTIAL
RESULTS

FIGURE 5

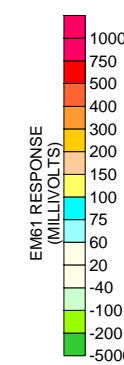
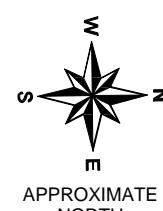
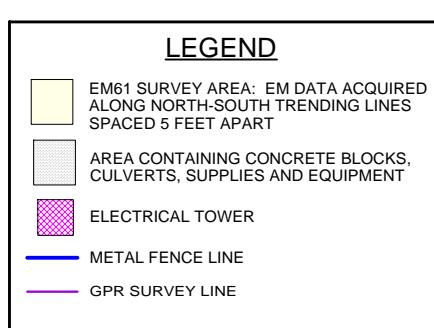
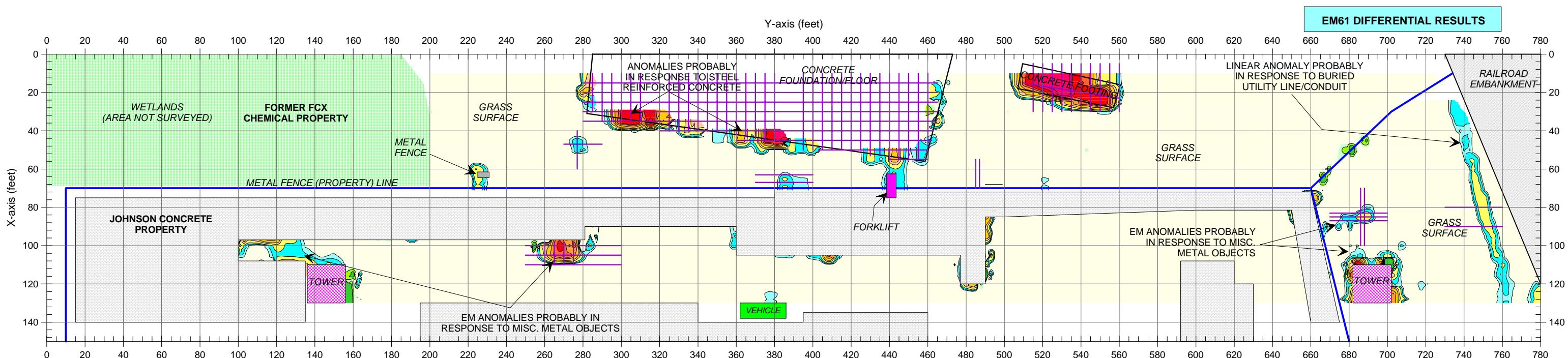
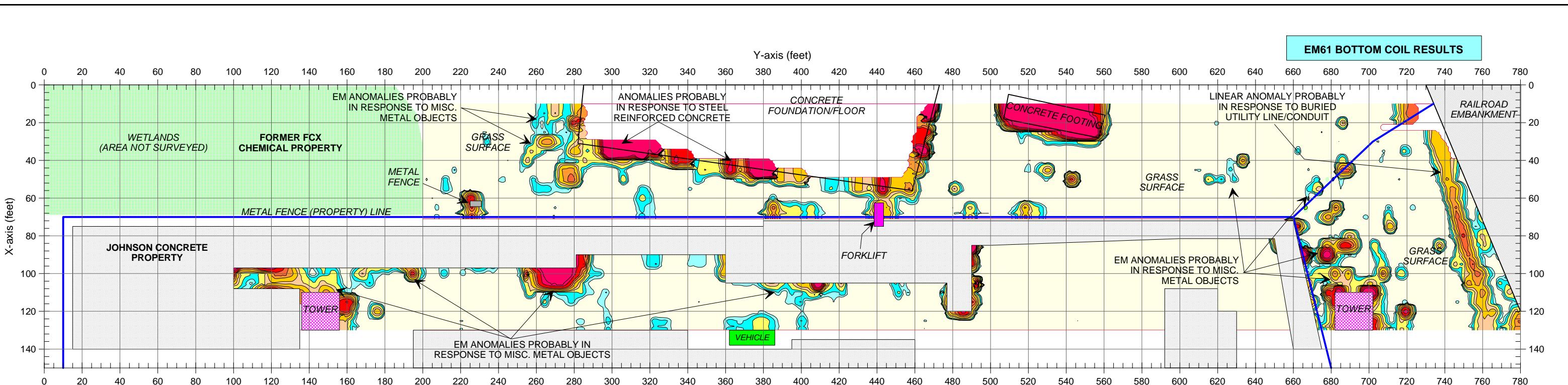


Note: The map shows the geophysical survey area along the western portion of the Johnson Concrete facility and the eastern edge of the former FCX Chemical property. The red dots represent the EM61 survey lines that were acquired on July 7, 2006 using a Geonics EM61 metal detection instrument. The purple lines represent the ground penetrating radar (GPR) survey lines that were also acquired on July 7, 2006 using a Geophysical Survey Systems SIR 2000 instrument with a 400 MHz antenna.

CUST	SOLUTIONS INDUSTRIAL & ENVIRONMENTAL	DATE	07/14/06	DW	MJD
SITE	JOHNSON CONCRETE & FORMER FCX CHEMICAL SITES	LAY		CHRD	
CITY	SALISBURY	STATE	NORTH CAROLINA	DWG	
TITLE	GEOPHYSICAL RESULTS	SHO	2006-176	FIGURE	

EM61 & GPR
SURVEY LINE LOCATIONS

FIGURE 6



Note: The contour plots show the bottom coil (most sensitive) response and the differential response 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 UST's and ignores smaller miscellaneous, buried, metal debris. The EM metal detection data were collected on June 26 & July 7, 2006 using a Geonics EM61 instrument. Ground penetrating radar (GPR) data were acquired on June 29 & July 7, 2006 using a Geophysical Survey Systems SIR 2000 instrument with a 400 MHz antenna.

CLIENT	SOLUTIONS INDUSTRIAL & ENVIRONMENTAL		
SITE	JOHNSON CONCRETE & FORMER FCX CHEMICAL SITES	DATE	07/14/06
CITY	SALISBURY	LAY	
STATE	NORTH CAROLINA		
TITLE	GEOPHYSICAL RESULTS		
D-N-O	2006-176	FIGURE	
GRAPHIC SCALE IN METERS			

EM61
RESULTS

FIGURE 7

APPENDIX C
BORING LOGS

Log of Soil Boring:DUKEB1

Project: Klumac Rd. Project

Solutions-IES Project No.: 3210.06A3.NDOT

Boring Number: DUKEB1

Client: NCDOT

WBS # 34951.1.1

City: Salisbury

Initial Water Level: NA

State Project # U-3459

County: Rowan

Stabilized Water Level: NA

Drilling Method: Direct Push

Boring Date: 7/19/06

Cave In Depth: NA

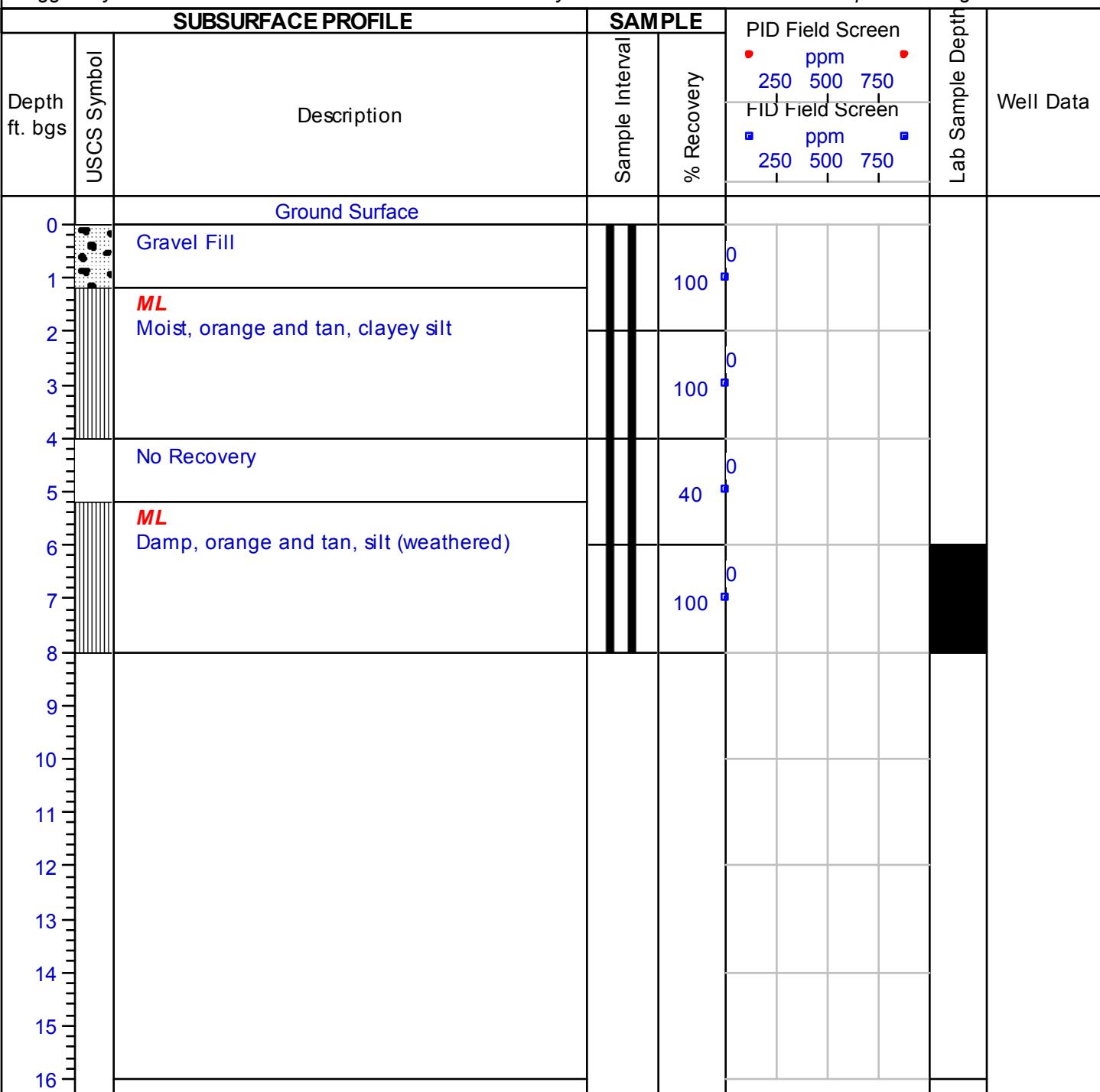
Sampler Type: Macro Core

Site: Duke Energy

Total Depth of Boring: 8'

Logged By: KB

Checked By: JM



Log of Soil Boring:DUKEB2

Project: Klumac Rd. Project

Solutions-IES Project No.: 3210.06A3.NDOT

Boring Number: DUKEB2

Client: NCDOT

WBS # 34951.1.1

City: Salisbury

Initial Water Level: NA

State Project # U-3459

County: Rowan

Stabilized Water Level: NA

Drilling Method: Direct Push

Boring Date: 7/19/06

Cave In Depth: NA

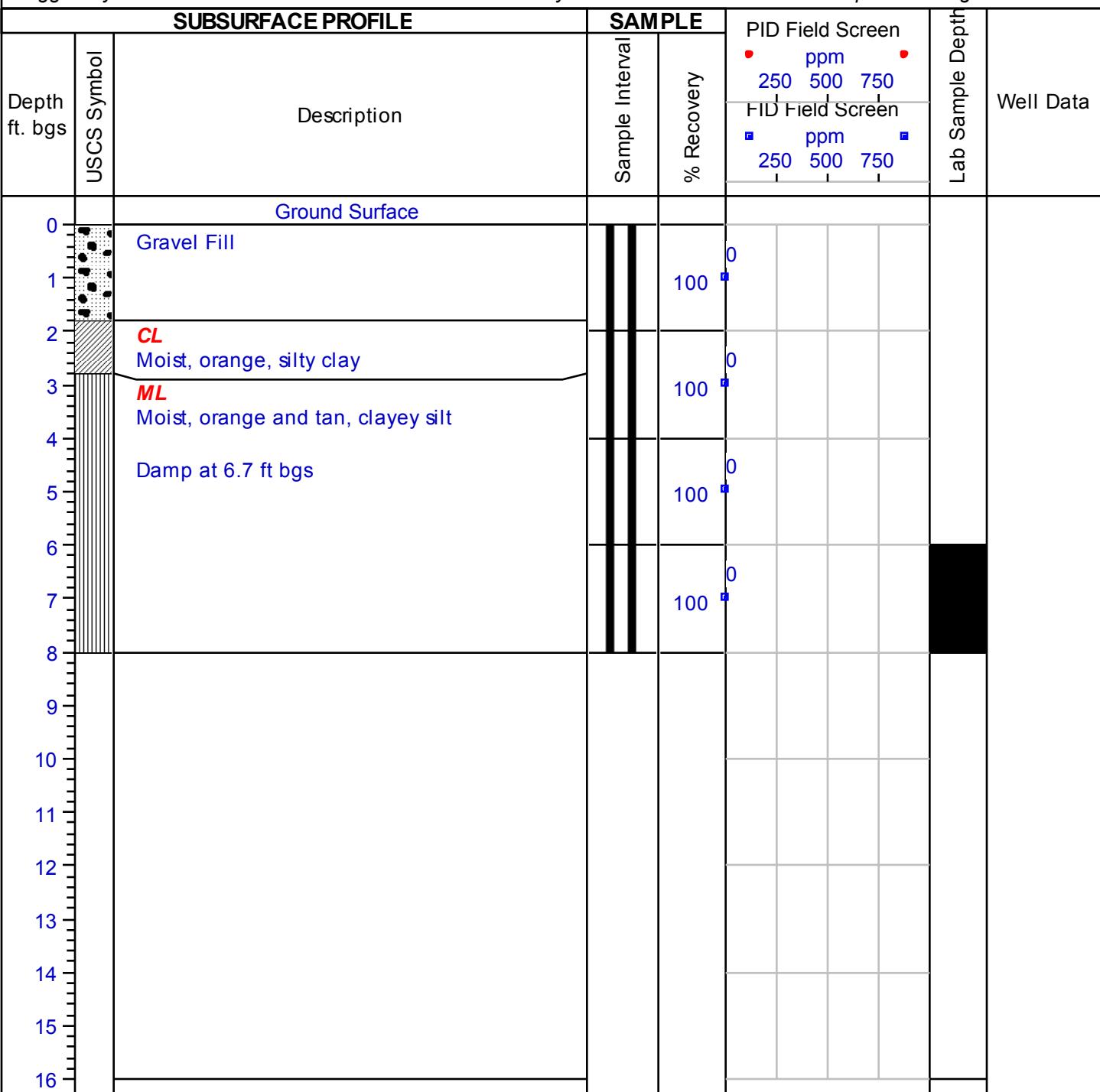
Sampler Type: Macro Core

Site: Duke Energy

Total Depth of Boring: 8'

Logged By: KB

Checked By: JM



Solutions-IES, Inc.
1101 Nowell Road
Raleigh, NC 27607
(919) 873-1060



Log of Soil Boring:DUKEB3

Project: Klumac Rd. Project

Solutions-IES Project No.: 3210.06A3.NDOT Boring Number: DUKEB3

Client: NCDOT

WBS # 34951.1.1

State Project # U-3459

Drilling Method: Direct Push

Sampler Type: Macro Core

Logged By: KB

City: Salisbury

County: Rowan

Boring Date: 7/19/06

Site: Duke Energy

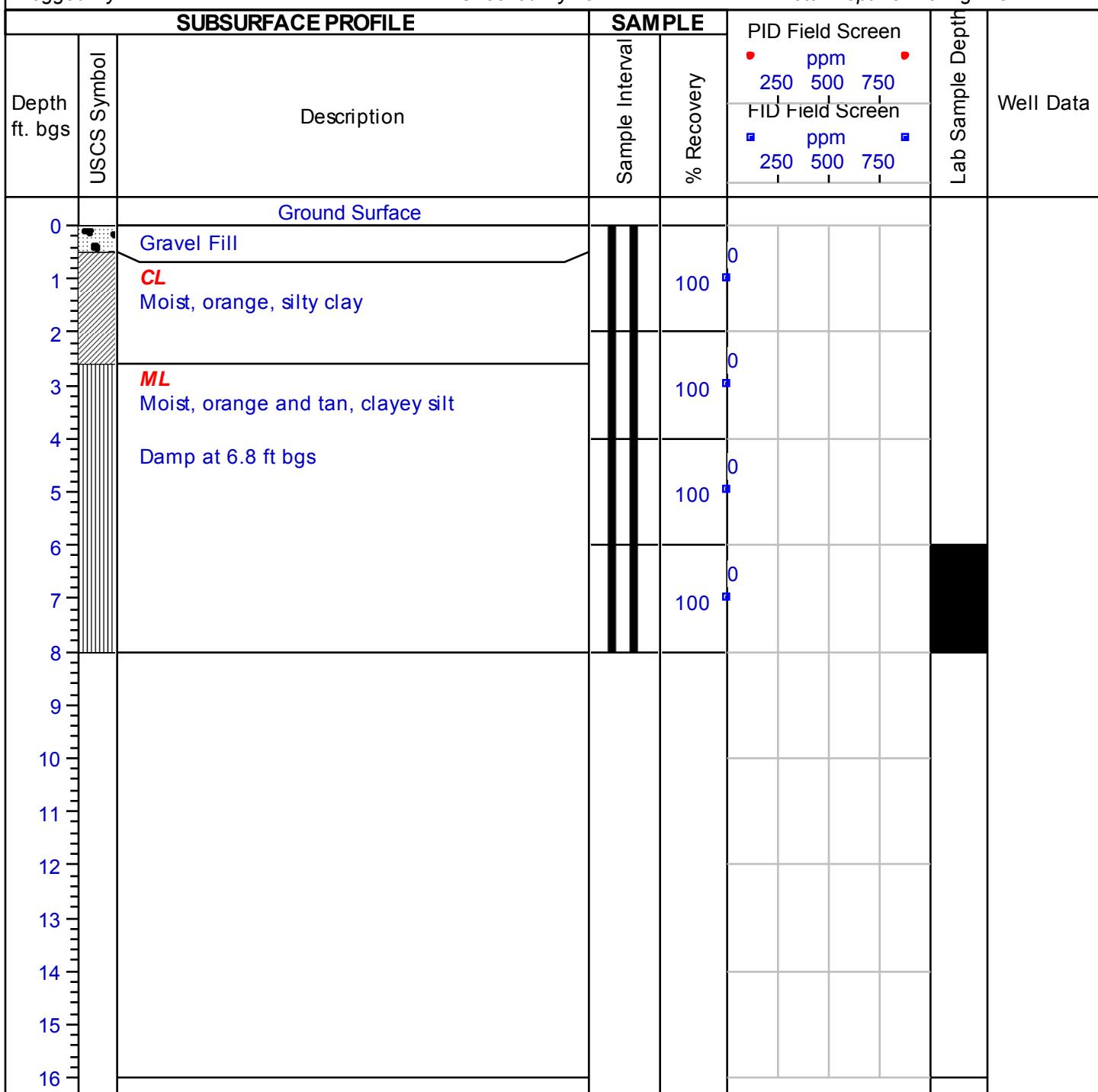
Checked By: JM

Initial Water Level: NA

Stabilized Water Level: NA

Cave In Depth: NA

Total Depth of Boring: 8'



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Raleigh, NC 27607
(919) 873-1060



Log of Soil Boring:DUKEB4

Project: Klumac Rd. Project

Solutions-IES Project No.: 3210.06A3.NDOT

Boring Number: DUKEB4

Client: NCDOT

WBS # 34951.1.1

City: Salisbury

Initial Water Level: NA

State Project # U-3459

County: Rowan

Stabilized Water Level: NA

Drilling Method: Direct Push

Boring Date: 7/19/06

Cave In Depth: NA

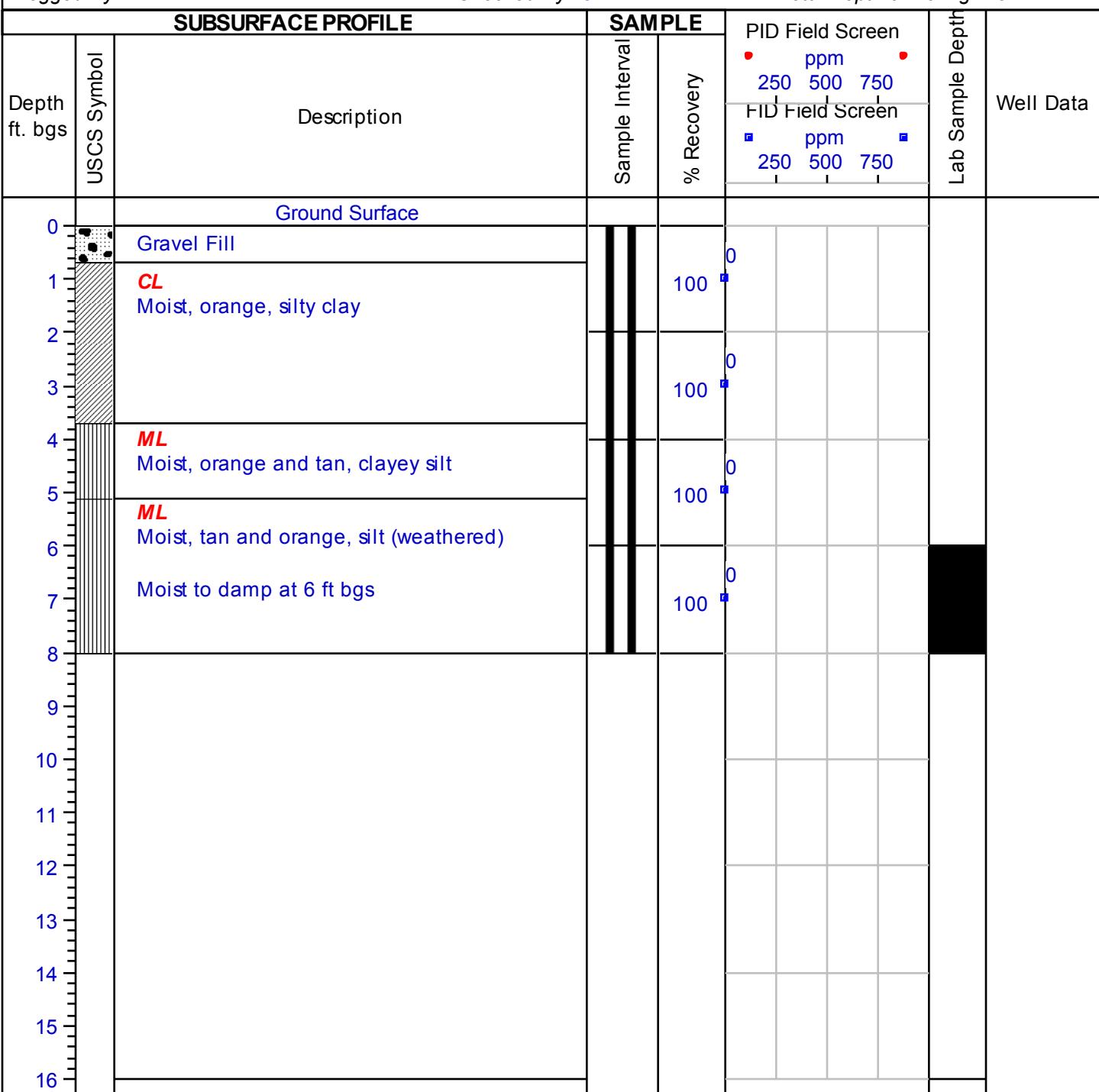
Sampler Type: Macro Core

Site: Duke Energy

Total Depth of Boring: 8'

Logged By: KB

Checked By: JM



Log of Soil Boring:DUKEB5

Project: Klumac Rd. Project

Solutions-IES Project No.: 3210.06A3.NDOT

Boring Number: DUKEB5

Client: NCDOT

WBS # 34951.1.1

City: Salisbury

Initial Water Level: NA

State Project # U-3459

County: Rowan

Stabilized Water Level: NA

Drilling Method: Direct Push

Boring Date: 7/19/06

Cave In Depth: NA

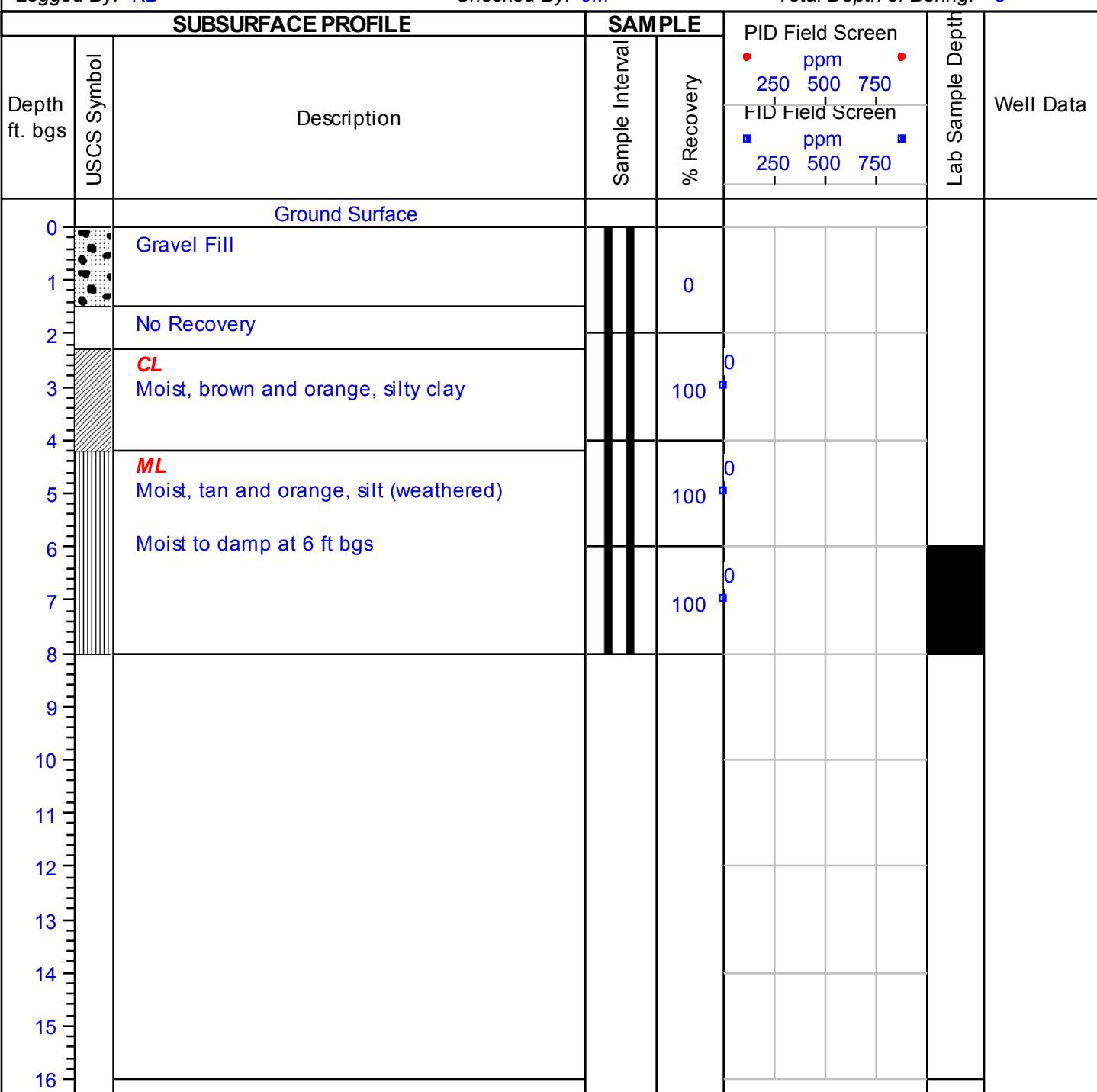
Sampler Type: Macro Core

Site: Duke Energy

Total Depth of Boring: 8'

Logged By: KB

Checked By: JM



Solutions-IES, Inc.
1101 Nowell Road
Raleigh, NC 27607
(919) 873-1060



Log of Soil Boring:DUKEB6

Project: Klumac Rd. Project

Solutions-IES Project No.: 3210.06A3.NDOT

Boring Number: DUKEB6

Client: NCDOT

WBS # 34951.1.1

City: Salisbury

Initial Water Level: NA

State Project # U-3459

County: Rowan

Stabilized Water Level: NA

Drilling Method: Direct Push

Boring Date: 7/19/06

Cave In Depth: NA

Sampler Type: Macro Core

Site: Duke Energy

Total Depth of Boring: 8'

Logged By: KB

Checked By: JM

SUBSURFACE PROFILE		SAMPLE		Well Data	
Depth ft. bgs	USCS Symbol	Description	Sample Interval	% Recovery	
0		Ground Surface			
0		Gravel Fill			
1	CL	Moist, brown and orange, silty clay		0	
2	ML	Moist, tan and orange, clayey silt		0	
4	ML	Moist, orange and tan, silt (weathered)		0	
6	ML	Moist to damp, tan, white and orange, silt (weathered)		0	
8				100	
9					
10					
11					
12					
13					
14					
15					
16					

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Log of Soil Boring:DUKEB7

Project: Klumac Rd. Project

Solutions-IES Project No.: 3210.06A3.NDOT

Boring Number: DUKEB7

Client: NCDOT

WBS # 34951.1.1

City: Salisbury

Initial Water Level: NA

State Project # U-3459

County: Rowan

Stabilized Water Level: NA

Drilling Method: Direct Push

Boring Date: 7/19/06

Cave In Depth: NA

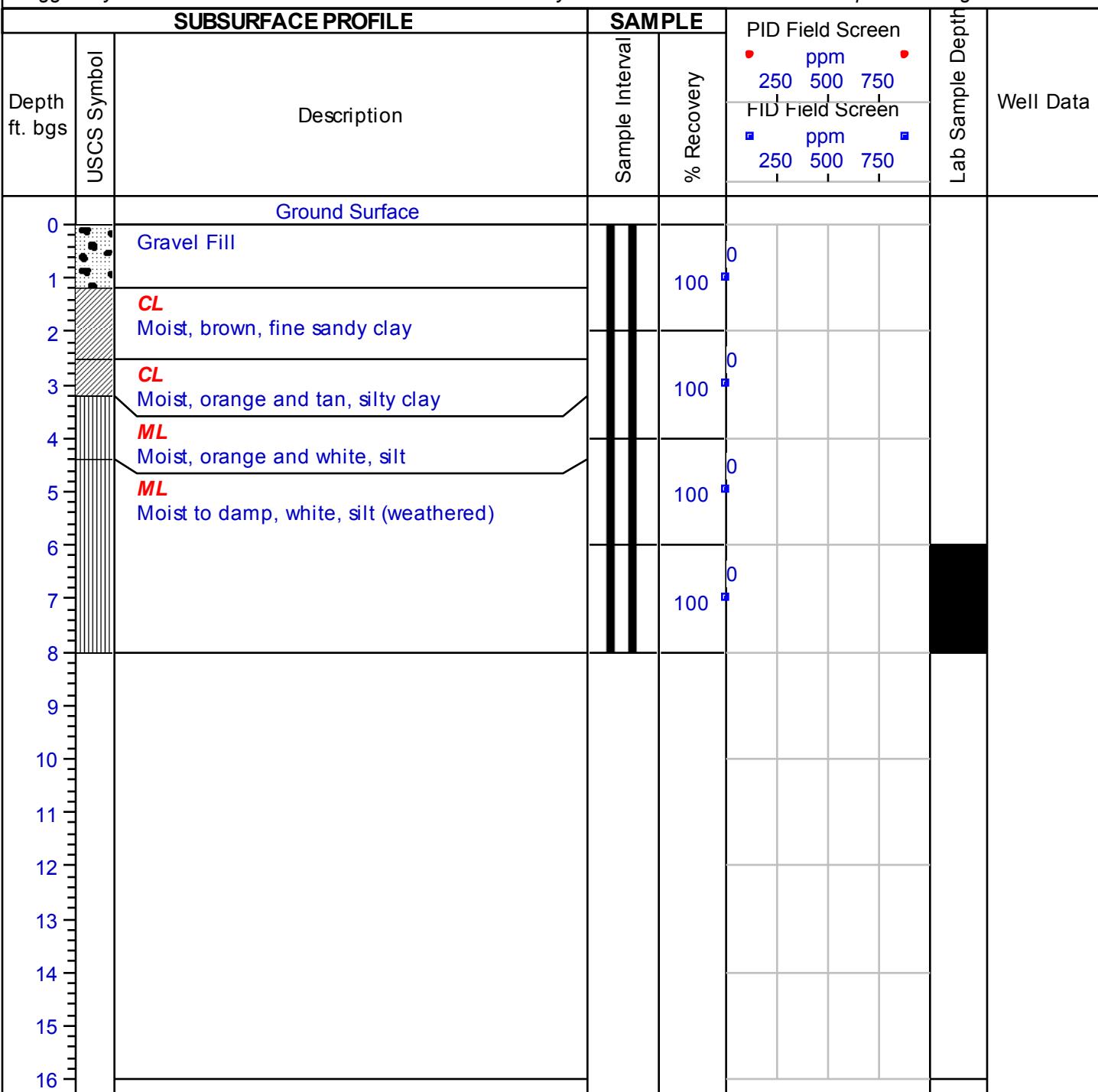
Sampler Type: Macro Core

Site: Duke Energy

Total Depth of Boring: 8'

Logged By: KB

Checked By: JM



Solutions-IES, Inc.
1101 Nowell Road
Raleigh, NC 27607
(919) 873-1060



APPENDIX D
LABORATORY ANALYTICAL REPORTS



Pace Analytical™

www.pacelabs.com

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Phone: 704.875.9092
Fax: 704.875.9091

Pace Analytical Services, Inc.
2225 Riverside Drive
Asheville, NC 28804
Phone: 828.254.7176
Fax: 828.252.4618

August 07, 2006

Mr. Christopher A. Peoples
NC DOT
Materials & Test Unit
1801 Blue Ridge Road
Raleigh, NC 27607

RE: Lab Project Number: 92123772
Client Project ID: NCDOT 34951.1.1 Duke

Dear Mr. Peoples:

Enclosed are the analytical results for sample(s) received by the laboratory on July 21, 2006. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

Inorganic Wet Chemistry and Metals Analyses were performed at our Pace Asheville laboratory and Organic testing was performed at our Pace Charlotte laboratory unless otherwise footnoted.

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

Sincerely,

Bonnie McKee
bonnie.mckee@pacelabs.com
(704) 875-9092 ext. 234
Project Manager

Enclosures

Asheville Certification IDs
NC Wastewater 40
NC Drinking Water 37712
SC Environmental 99030
FL NELAP E87648

REPORT OF LABORATORY ANALYSIS

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Charlotte Certification IDs
NC Wastewater 12
NC Drinking Water 37706
SC 99006
FL NELAP E87627



Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Phone: 704.875.9092
Fax: 704.875.9091

Pace Analytical Services, Inc.
2225 Riverside Drive
Asheville, NC 28804
Phone: 828.254.7176
Fax: 828.252.4618

Lab Project Number: 92123772
Client Project ID: NCDOT 34951.1.1 Duke

***ALL QC IS NOT COMPLETE FOR QC SAMPLE(S):
ESN 927272344 BATCH 164227

Asheville Certification IDs
NC Wastewater 40
NC Drinking Water 37712
SC Environmental 99030
FL NELAP E87648

REPORT OF LABORATORY ANALYSIS

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Charlotte Certification IDs
NC Wastewater 12
NC Drinking Water 37706
SC 99006
FL NELAP E87627

Lab Project Number: 92123772

Client Project ID: NCDOT 34951.1.1 Duke

Solid results are reported on a dry weight basis

Lab Sample No: 927224907	Project Sample Number: 92123772-001	Date Collected: 07/19/06 08:30
Client Sample ID: DUKEB1	Matrix: Soil	Date Received: 07/21/06 15:05

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
------------	---------	-------	--------------	-------------	---------	------	--------

Wet Chemistry

Percent Moisture	Method: % Moisture
Percent Moisture	30.8 %

07/21/06 18:55 KDF

GC/MS Semivolatiles

Semivolatile Organics	Prep/Method:	EPA 3545 / EPA 8270					
Acenaphthene	ND	ug/kg	480	07/26/06 14:46 BET	83-32-9		
Acenaphthylene	ND	ug/kg	480	07/26/06 14:46 BET	208-96-8		
Anthracene	ND	ug/kg	480	07/26/06 14:46 BET	120-12-7		
Benzo(k)fluoranthene	ND	ug/kg	480	07/26/06 14:46 BET	207-08-9		
Benzo(b)fluoranthene	ND	ug/kg	480	07/26/06 14:46 BET	205-99-2		
Benzo(a)anthracene	ND	ug/kg	480	07/26/06 14:46 BET	56-55-3		
Benzoic acid	ND	ug/kg	2400	07/26/06 14:46 BET	65-85-0		
Benzo(g,h,i)perylene	ND	ug/kg	480	07/26/06 14:46 BET	191-24-2		
Benzyl alcohol	ND	ug/kg	950	07/26/06 14:46 BET	100-51-6		
Benzo(a)pyrene	ND	ug/kg	480	07/26/06 14:46 BET	50-32-8		
4-Bromophenylphenyl ether	ND	ug/kg	480	07/26/06 14:46 BET	101-55-3		
Butylbenzylphthalate	ND	ug/kg	480	07/26/06 14:46 BET	85-68-7		
4-Chloro-3-methylphenol	ND	ug/kg	950	07/26/06 14:46 BET	59-50-7		
4-Chloroaniline	ND	ug/kg	950	07/26/06 14:46 BET	106-47-8		
bis(2-Chloroethoxy)methane	ND	ug/kg	480	07/26/06 14:46 BET	111-91-1		
bis(2-Chloroethyl) ether	ND	ug/kg	480	07/26/06 14:46 BET	111-44-4		
bis(2-Chloroisopropyl) ether	ND	ug/kg	480	07/26/06 14:46 BET	39638-32-9		
2-Chloronaphthalene	ND	ug/kg	480	07/26/06 14:46 BET	91-58-7		
2-Chlorophenol	ND	ug/kg	480	07/26/06 14:46 BET	95-57-8		
4-Chlorophenylphenyl ether	ND	ug/kg	480	07/26/06 14:46 BET	7005-72-3		
Chrysene	ND	ug/kg	480	07/26/06 14:46 BET	218-01-9		
Dibenz(a,h)anthracene	ND	ug/kg	480	07/26/06 14:46 BET	53-70-3		
Dibenzofuran	ND	ug/kg	480	07/26/06 14:46 BET	132-64-9		
1,2-Dichlorobenzene	ND	ug/kg	480	07/26/06 14:46 BET	95-50-1		
1,3-Dichlorobenzene	ND	ug/kg	480	07/26/06 14:46 BET	541-73-1		
1,4-Dichlorobenzene	ND	ug/kg	480	07/26/06 14:46 BET	106-46-7		
3,3'-Dichlorobenzidine	ND	ug/kg	950	07/26/06 14:46 BET	91-94-1		
2,4-Dichlorophenol	ND	ug/kg	480	07/26/06 14:46 BET	120-83-2		
Diethylphthalate	ND	ug/kg	480	07/26/06 14:46 BET	84-66-2		
2,4-Dimethylphenol	ND	ug/kg	480	07/26/06 14:46 BET	105-67-9		
Dimethylphthalate	ND	ug/kg	480	07/26/06 14:46 BET	131-11-3		
Di-n-butylphthalate	ND	ug/kg	480	07/26/06 14:46 BET	84-74-2		

REPORT OF LABORATORY ANALYSIS

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Lab Project Number: 92123772

Client Project ID: NCDOT 34951.1.1 Duke

Lab Sample No: 927224907	Project Sample Number: 92123772-001	Date Collected: 07/19/06 08:30
Client Sample ID: DUKEB1	Matrix: Soil	Date Received: 07/21/06 15:05

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
4,6-Dinitro-2-methylphenol	ND	ug/kg	480	07/26/06 14:46 BET	534-52-1		
2,4-Dinitrophenol	ND	ug/kg	2400	07/26/06 14:46 BET	51-28-5		
2,4-Dinitrotoluene	ND	ug/kg	480	07/26/06 14:46 BET	121-14-2		
2,6-Dinitrotoluene	ND	ug/kg	480	07/26/06 14:46 BET	606-20-2		
Di-n-octylphthalate	ND	ug/kg	480	07/26/06 14:46 BET	117-84-0		
1,2-Diphenylhydrazine	ND	ug/kg	480	07/26/06 14:46 BET	122-66-7		
bis(2-Ethylhexyl)phthalate	ND	ug/kg	480	07/26/06 14:46 BET	117-81-7		
Fluoranthene	ND	ug/kg	480	07/26/06 14:46 BET	206-44-0		
Fluorene	ND	ug/kg	480	07/26/06 14:46 BET	86-73-7		
Hexachloro-1,3-butadiene	ND	ug/kg	480	07/26/06 14:46 BET	87-68-3		
Hexachlorobenzene	ND	ug/kg	480	07/26/06 14:46 BET	118-74-1		
Hexachlorocyclopentadiene	ND	ug/kg	480	07/26/06 14:46 BET	77-47-4		
Hexachloroethane	ND	ug/kg	480	07/26/06 14:46 BET	67-72-1		
Indeno(1,2,3-cd)pyrene	ND	ug/kg	480	07/26/06 14:46 BET	193-39-5		
Isophorone	ND	ug/kg	480	07/26/06 14:46 BET	78-59-1		
1-Methylnaphthalene	ND	ug/kg	480	07/26/06 14:46 BET	90-12-0		
2-Methylnaphthalene	ND	ug/kg	480	07/26/06 14:46 BET	91-57-6		
2-Methylphenol (o-Cresol)	ND	ug/kg	480	07/26/06 14:46 BET	95-48-7		
3&4-Methylphenol	ND	ug/kg	480	07/26/06 14:46 BET			
Naphthalene	ND	ug/kg	480	07/26/06 14:46 BET	91-20-3		
2-Nitroaniline	ND	ug/kg	2400	07/26/06 14:46 BET	88-74-4		
3-Nitroaniline	ND	ug/kg	2400	07/26/06 14:46 BET	99-09-2		
4-Nitroaniline	ND	ug/kg	2400	07/26/06 14:46 BET	100-01-6		
Nitrobenzene	ND	ug/kg	480	07/26/06 14:46 BET	98-95-3		
2-Nitrophenol	ND	ug/kg	480	07/26/06 14:46 BET	88-75-5		
4-Nitrophenol	ND	ug/kg	2400	07/26/06 14:46 BET	100-02-7		
N-Nitroso-di-n-propylamine	ND	ug/kg	480	07/26/06 14:46 BET	621-64-7		
N-Nitrosodiphenylamine	ND	ug/kg	480	07/26/06 14:46 BET	86-30-6		
Pentachlorophenol	ND	ug/kg	2400	07/26/06 14:46 BET	87-86-5		
Phenanthrene	ND	ug/kg	480	07/26/06 14:46 BET	85-01-8		
Phenol	ND	ug/kg	480	07/26/06 14:46 BET	108-95-2		
Pyrene	ND	ug/kg	480	07/26/06 14:46 BET	129-00-0		
1,2,4-Trichlorobenzene	ND	ug/kg	480	07/26/06 14:46 BET	120-82-1		
2,4,5-Trichlorophenol	ND	ug/kg	480	07/26/06 14:46 BET	95-95-4		
2,4,6-Trichlorophenol	ND	ug/kg	480	07/26/06 14:46 BET	88-06-2		
Nitrobenzene-d5 (S)	42	%		07/26/06 14:46 BET	4165-60-0		
2-Fluorobiphenyl (S)	48	%		07/26/06 14:46 BET	321-60-8		
Terphenyl-d14 (S)	67	%		07/26/06 14:46 BET	1718-51-0		
Phenol-d5 (S)	47	%		07/26/06 14:46 BET	4165-62-2		

REPORT OF LABORATORY ANALYSIS

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Lab Project Number: 92123772

Client Project ID: NCDOT 34951.1.1 Duke

Lab Sample No: 927224907	Project Sample Number: 92123772-001	Date Collected: 07/19/06 08:30
Client Sample ID: DUKEB1	Matrix: Soil	Date Received: 07/21/06 15:05

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
2-Fluorophenol (S)	48	%		07/26/06 14:46 BET	367-12-4		
2,4,6-Tribromophenol (S)	79	%		07/26/06 14:46 BET	118-79-6		
Date Extracted	07/22/06			07/22/06			

GC Semivolatiles

Organochlorine PCBs	Prep/Method: EPA 3545 / EPA 8082				
PCB-1016 (Aroclor 1016)	ND	ug/kg	48.	08/01/06 07:50 JEM	12674-11-2
PCB-1221 (Aroclor 1221)	ND	ug/kg	48.	08/01/06 07:50 JEM	11104-28-2
PCB-1232 (Aroclor 1232)	ND	ug/kg	48.	08/01/06 07:50 JEM	11141-16-5
PCB-1242 (Aroclor 1242)	ND	ug/kg	48.	08/01/06 07:50 JEM	53469-21-9
PCB-1248 (Aroclor 1248)	ND	ug/kg	48.	08/01/06 07:50 JEM	12672-29-6
PCB-1254 (Aroclor 1254)	ND	ug/kg	48.	08/01/06 07:50 JEM	11097-69-1
PCB-1260 (Aroclor 1260)	ND	ug/kg	48.	08/01/06 07:50 JEM	11096-82-5
Decachlorobiphenyl (S)	42	%		08/01/06 07:50 JEM	2051-24-3
Date Extracted	07/25/06			07/25/06	

GC/MS Volatiles

GC/MS VOCs 5035/8260 low level	Method: EPA 8260				
Acetone	ND	ug/kg	120	07/29/06 10:47 DLK	67-64-1
Benzene	ND	ug/kg	6.1	07/29/06 10:47 DLK	71-43-2
Bromobenzene	ND	ug/kg	6.1	07/29/06 10:47 DLK	108-86-1
Bromochloromethane	ND	ug/kg	6.1	07/29/06 10:47 DLK	74-97-5
Bromodichloromethane	ND	ug/kg	6.1	07/29/06 10:47 DLK	75-27-4
Bromoform	ND	ug/kg	6.1	07/29/06 10:47 DLK	75-25-2
Bromomethane	ND	ug/kg	12.	07/29/06 10:47 DLK	74-83-9
2-Butanone (MEK)	ND	ug/kg	120	07/29/06 10:47 DLK	78-93-3
n-Butylbenzene	ND	ug/kg	6.1	07/29/06 10:47 DLK	104-51-8
sec-Butylbenzene	ND	ug/kg	6.1	07/29/06 10:47 DLK	135-98-8
tert-Butylbenzene	ND	ug/kg	6.1	07/29/06 10:47 DLK	98-06-6
Carbon tetrachloride	ND	ug/kg	6.1	07/29/06 10:47 DLK	56-23-5
Chlorobenzene	ND	ug/kg	6.1	07/29/06 10:47 DLK	108-90-7
Chloroethane	ND	ug/kg	12.	07/29/06 10:47 DLK	75-00-3
Chloroform	ND	ug/kg	6.1	07/29/06 10:47 DLK	67-66-3
Chloromethane	ND	ug/kg	12.	07/29/06 10:47 DLK	74-87-3
2-Chlorotoluene	ND	ug/kg	6.1	07/29/06 10:47 DLK	95-49-8
4-Chlorotoluene	ND	ug/kg	6.1	07/29/06 10:47 DLK	106-43-4
1,2-Dibromo-3-chloropropane	ND	ug/kg	6.1	07/29/06 10:47 DLK	96-12-8
Dibromochloromethane	ND	ug/kg	6.1	07/29/06 10:47 DLK	124-48-1
1,2-Dibromoethane (EDB)	ND	ug/kg	6.1	07/29/06 10:47 DLK	106-93-4

Lab Project Number: 92123772

Client Project ID: NCDOT 34951.1.1 Duke

Lab Sample No:	927224907	Project Sample Number:	92123772-001	Date Collected:	07/19/06 08:30
Client Sample ID:	DUKEB1	Matrix:	Soil	Date Received:	07/21/06 15:05

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
Dibromomethane	ND	ug/kg	6.1	07/29/06 10:47 DLK	74-95-3		
1,2-Dichlorobenzene	ND	ug/kg	6.1	07/29/06 10:47 DLK	95-50-1		
1,3-Dichlorobenzene	ND	ug/kg	6.1	07/29/06 10:47 DLK	541-73-1		
1,4-Dichlorobenzene	ND	ug/kg	6.1	07/29/06 10:47 DLK	106-46-7		
Dichlorodifluoromethane	ND	ug/kg	12.	07/29/06 10:47 DLK	75-71-8		
1,1-Dichloroethane	ND	ug/kg	6.1	07/29/06 10:47 DLK	75-34-3		
1,2-Dichloroethane	ND	ug/kg	6.1	07/29/06 10:47 DLK	107-06-2		
1,1-Dichloroethene	ND	ug/kg	6.1	07/29/06 10:47 DLK	75-35-4		
cis-1,2-Dichloroethene	ND	ug/kg	6.1	07/29/06 10:47 DLK	156-59-2		
trans-1,2-Dichloroethene	ND	ug/kg	6.1	07/29/06 10:47 DLK	156-60-5		
1,2-Dichloropropane	ND	ug/kg	6.1	07/29/06 10:47 DLK	78-87-5		
1,3-Dichloropropane	ND	ug/kg	6.1	07/29/06 10:47 DLK	142-28-9		
2,2-Dichloropropane	ND	ug/kg	6.1	07/29/06 10:47 DLK	594-20-7		
1,1-Dichloropropene	ND	ug/kg	6.1	07/29/06 10:47 DLK	563-58-6		
cis-1,3-Dichloropropene	ND	ug/kg	6.1	07/29/06 10:47 DLK	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/kg	6.1	07/29/06 10:47 DLK	10061-02-6		
Diisopropyl ether	ND	ug/kg	6.1	07/29/06 10:47 DLK	108-20-3		
Ethylbenzene	ND	ug/kg	6.1	07/29/06 10:47 DLK	100-41-4		
Hexachloro-1,3-butadiene	ND	ug/kg	6.1	07/29/06 10:47 DLK	87-68-3		
2-Hexanone	ND	ug/kg	61.	07/29/06 10:47 DLK	591-78-6		
Isopropylbenzene (Cumene)	ND	ug/kg	6.1	07/29/06 10:47 DLK	98-82-8		
p-Isopropyltoluene	ND	ug/kg	6.1	07/29/06 10:47 DLK	99-87-6		
Methylene chloride	ND	ug/kg	12.	07/29/06 10:47 DLK	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	61.	07/29/06 10:47 DLK	108-10-1		
Methyl-tert-butyl ether	ND	ug/kg	6.1	07/29/06 10:47 DLK	1634-04-4		
Naphthalene	ND	ug/kg	6.1	07/29/06 10:47 DLK	91-20-3		
n-Propylbenzene	ND	ug/kg	6.1	07/29/06 10:47 DLK	103-65-1		
Styrene	ND	ug/kg	6.1	07/29/06 10:47 DLK	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/kg	6.1	07/29/06 10:47 DLK	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/kg	6.1	07/29/06 10:47 DLK	79-34-5		
Tetrachloroethene	ND	ug/kg	6.1	07/29/06 10:47 DLK	127-18-4		
Toluene	ND	ug/kg	6.1	07/29/06 10:47 DLK	108-88-3		
1,2,3-Trichlorobenzene	ND	ug/kg	6.1	07/29/06 10:47 DLK	87-61-6		
1,2,4-Trichlorobenzene	ND	ug/kg	6.1	07/29/06 10:47 DLK	120-82-1		
1,1,1-Trichloroethane	ND	ug/kg	6.1	07/29/06 10:47 DLK	71-55-6		
1,1,2-Trichloroethane	ND	ug/kg	6.1	07/29/06 10:47 DLK	79-00-5		
Trichloroethene	ND	ug/kg	6.1	07/29/06 10:47 DLK	79-01-6		
Trichlorofluoromethane	ND	ug/kg	6.1	07/29/06 10:47 DLK	75-69-4		
1,2,3-Trichloropropane	ND	ug/kg	6.1	07/29/06 10:47 DLK	96-18-4		

REPORT OF LABORATORY ANALYSIS

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Lab Project Number: 92123772

Client Project ID: NCDOT 34951.1.1 Duke

Lab Sample No: 927224907	Project Sample Number: 92123772-001	Date Collected: 07/19/06 08:30
Client Sample ID: DUKEB1	Matrix: Soil	Date Received: 07/21/06 15:05

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
1,2,4-Trimethylbenzene	ND	ug/kg	6.1	07/29/06 10:47 DLK	95-63-6		
1,3,5-Trimethylbenzene	ND	ug/kg	6.1	07/29/06 10:47 DLK	108-67-8		
Vinyl acetate	ND	ug/kg	61.	07/29/06 10:47 DLK	108-05-4		
Vinyl chloride	ND	ug/kg	12.	07/29/06 10:47 DLK	75-01-4		
Xylene (Total)	ND	ug/kg	6.1	07/29/06 10:47 DLK	1330-20-7		
m&p-Xylene	ND	ug/kg	12.	07/29/06 10:47 DLK			
o-Xylene	ND	ug/kg	6.1	07/29/06 10:47 DLK	95-47-6		
Toluene-d8 (S)	106	%		07/29/06 10:47 DLK	2037-26-5		
4-Bromofluorobenzene (S)	91	%		07/29/06 10:47 DLK	460-00-4		
Dibromofluoromethane (S)	92	%		07/29/06 10:47 DLK	1868-53-7		
1,2-Dichloroethane-d4 (S)	80	%		07/29/06 10:47 DLK	17060-07-0		

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Lab Project Number: 92123772
 Client Project ID: NCDOT 34951.1.1 Duke

Lab Sample No: 927224915	Project Sample Number: 92123772-002	Date Collected: 07/19/06 09:20
Client Sample ID: DUKEB2	Matrix: Soil	Date Received: 07/21/06 15:05

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
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Wet Chemistry

Percent Moisture	Method: % Moisture		
Percent Moisture	30.9	%	07/21/06 18:55 KDF

GC/MS Semivolatiles
Semivolatile Organics

Prep/Method: EPA 3545 / EPA 8270

Acenaphthene	ND	ug/kg	480	07/26/06 15:08 BET	83-32-9
Acenaphthylene	ND	ug/kg	480	07/26/06 15:08 BET	208-96-8
Anthracene	ND	ug/kg	480	07/26/06 15:08 BET	120-12-7
Benzo(k)fluoranthene	ND	ug/kg	480	07/26/06 15:08 BET	207-08-9
Benzo(b)fluoranthene	ND	ug/kg	480	07/26/06 15:08 BET	205-99-2
Benzo(a)anthracene	ND	ug/kg	480	07/26/06 15:08 BET	56-55-3
Benzoic acid	ND	ug/kg	2400	07/26/06 15:08 BET	65-85-0
Benzo(g,h,i)perylene	ND	ug/kg	480	07/26/06 15:08 BET	191-24-2
Benzyl alcohol	ND	ug/kg	960	07/26/06 15:08 BET	100-51-6
Benzo(a)pyrene	ND	ug/kg	480	07/26/06 15:08 BET	50-32-8
4-Bromophenylphenyl ether	ND	ug/kg	480	07/26/06 15:08 BET	101-55-3
Butylbenzylphthalate	ND	ug/kg	480	07/26/06 15:08 BET	85-68-7
4-Chloro-3-methylphenol	ND	ug/kg	960	07/26/06 15:08 BET	59-50-7
4-Chloroaniline	ND	ug/kg	960	07/26/06 15:08 BET	106-47-8
bis(2-Chloroethoxy)methane	ND	ug/kg	480	07/26/06 15:08 BET	111-91-1
bis(2-Chloroethyl) ether	ND	ug/kg	480	07/26/06 15:08 BET	111-44-4
bis(2-Chloroisopropyl) ether	ND	ug/kg	480	07/26/06 15:08 BET	39638-32-9
2-Chloronaphthalene	ND	ug/kg	480	07/26/06 15:08 BET	91-58-7
2-Chlorophenol	ND	ug/kg	480	07/26/06 15:08 BET	95-57-8
4-Chlorophenylphenyl ether	ND	ug/kg	480	07/26/06 15:08 BET	7005-72-3
Chrysene	ND	ug/kg	480	07/26/06 15:08 BET	218-01-9
Dibenz(a,h)anthracene	ND	ug/kg	480	07/26/06 15:08 BET	53-70-3
Dibenzofuran	ND	ug/kg	480	07/26/06 15:08 BET	132-64-9
1,2-Dichlorobenzene	ND	ug/kg	480	07/26/06 15:08 BET	95-50-1
1,3-Dichlorobenzene	ND	ug/kg	480	07/26/06 15:08 BET	541-73-1
1,4-Dichlorobenzene	ND	ug/kg	480	07/26/06 15:08 BET	106-46-7
3,3'-Dichlorobenzidine	ND	ug/kg	960	07/26/06 15:08 BET	91-94-1
2,4-Dichlorophenol	ND	ug/kg	480	07/26/06 15:08 BET	120-83-2
Diethylphthalate	ND	ug/kg	480	07/26/06 15:08 BET	84-66-2
2,4-Dimethylphenol	ND	ug/kg	480	07/26/06 15:08 BET	105-67-9
Dimethylphthalate	ND	ug/kg	480	07/26/06 15:08 BET	131-11-3
Di-n-butylphthalate	ND	ug/kg	480	07/26/06 15:08 BET	84-74-2
4,6-Dinitro-2-methylphenol	ND	ug/kg	480	07/26/06 15:08 BET	534-52-1

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Lab Project Number: 92123772

Client Project ID: NCDOT 34951.1.1 Duke

Lab Sample No:	927224915	Project Sample Number:	92123772-002	Date Collected:	07/19/06 09:20
Client Sample ID:	DUKEB2	Matrix:	Soil	Date Received:	07/21/06 15:05

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
2,4-Dinitrophenol	ND	ug/kg	2400	07/26/06 15:08 BET	51-28-5		
2,4-Dinitrotoluene	ND	ug/kg	480	07/26/06 15:08 BET	121-14-2		
2,6-Dinitrotoluene	ND	ug/kg	480	07/26/06 15:08 BET	606-20-2		
Di-n-octylphthalate	ND	ug/kg	480	07/26/06 15:08 BET	117-84-0		
1,2-Diphenylhydrazine	ND	ug/kg	480	07/26/06 15:08 BET	122-66-7		
bis(2-Ethylhexyl)phthalate	ND	ug/kg	480	07/26/06 15:08 BET	117-81-7		
Fluoranthene	ND	ug/kg	480	07/26/06 15:08 BET	206-44-0		
Fluorene	ND	ug/kg	480	07/26/06 15:08 BET	86-73-7		
Hexachloro-1,3-butadiene	ND	ug/kg	480	07/26/06 15:08 BET	87-68-3		
Hexachlorobenzene	ND	ug/kg	480	07/26/06 15:08 BET	118-74-1		
Hexachlorocyclopentadiene	ND	ug/kg	480	07/26/06 15:08 BET	77-47-4		
Hexachloroethane	ND	ug/kg	480	07/26/06 15:08 BET	67-72-1		
Indeno(1,2,3-cd)pyrene	ND	ug/kg	480	07/26/06 15:08 BET	193-39-5		
Isophorone	ND	ug/kg	480	07/26/06 15:08 BET	78-59-1		
1-Methylnaphthalene	ND	ug/kg	480	07/26/06 15:08 BET	90-12-0		
2-Methylnaphthalene	ND	ug/kg	480	07/26/06 15:08 BET	91-57-6		
2-Methylphenol (o-Cresol)	ND	ug/kg	480	07/26/06 15:08 BET	95-48-7		
3&4-Methylphenol	ND	ug/kg	480	07/26/06 15:08 BET			
Naphthalene	ND	ug/kg	480	07/26/06 15:08 BET	91-20-3		
2-Nitroaniline	ND	ug/kg	2400	07/26/06 15:08 BET	88-74-4		
3-Nitroaniline	ND	ug/kg	2400	07/26/06 15:08 BET	99-09-2		
4-Nitroaniline	ND	ug/kg	2400	07/26/06 15:08 BET	100-01-6		
Nitrobenzene	ND	ug/kg	480	07/26/06 15:08 BET	98-95-3		
2-Nitrophenol	ND	ug/kg	480	07/26/06 15:08 BET	88-75-5		
4-Nitrophenol	ND	ug/kg	2400	07/26/06 15:08 BET	100-02-7		
N-Nitroso-di-n-propylamine	ND	ug/kg	480	07/26/06 15:08 BET	621-64-7		
N-Nitrosodiphenylamine	ND	ug/kg	480	07/26/06 15:08 BET	86-30-6		
Pentachlorophenol	ND	ug/kg	2400	07/26/06 15:08 BET	87-86-5		
Phenanthrene	ND	ug/kg	480	07/26/06 15:08 BET	85-01-8		
Phenol	ND	ug/kg	480	07/26/06 15:08 BET	108-95-2		
Pyrene	ND	ug/kg	480	07/26/06 15:08 BET	129-00-0		
1,2,4-Trichlorobenzene	ND	ug/kg	480	07/26/06 15:08 BET	120-82-1		
2,4,5-Trichlorophenol	ND	ug/kg	480	07/26/06 15:08 BET	95-95-4		
2,4,6-Trichlorophenol	ND	ug/kg	480	07/26/06 15:08 BET	88-06-2		
Nitrobenzene-d5 (S)	45	%		07/26/06 15:08 BET	4165-60-0		
2-Fluorobiphenyl (S)	57	%		07/26/06 15:08 BET	321-60-8		
Terphenyl-d14 (S)	66	%		07/26/06 15:08 BET	1718-51-0		
Phenol-d5 (S)	50	%		07/26/06 15:08 BET	4165-62-2		
2-Fluorophenol (S)	52	%		07/26/06 15:08 BET	367-12-4		

REPORT OF LABORATORY ANALYSIS

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Lab Project Number: 92123772

Client Project ID: NCDOT 34951.1.1 Duke

Lab Sample No: 927224915	Project Sample Number: 92123772-002	Date Collected: 07/19/06 09:20
Client Sample ID: DUKEB2	Matrix: Soil	Date Received: 07/21/06 15:05

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
2,4,6-Tribromophenol (S)	86	%		07/26/06 15:08 BET	118-79-6		
Date Extracted	07/22/06			07/22/06			

GC Semivolatiles

Organochlorine PCBs	Prep/Method: EPA 3545 / EPA 8082
PCB-1016 (Aroclor 1016)	ND ug/kg 48. 08/01/06 08:09 JEM 12674-11-2
PCB-1221 (Aroclor 1221)	ND ug/kg 48. 08/01/06 08:09 JEM 11104-28-2
PCB-1232 (Aroclor 1232)	ND ug/kg 48. 08/01/06 08:09 JEM 11141-16-5
PCB-1242 (Aroclor 1242)	ND ug/kg 48. 08/01/06 08:09 JEM 53469-21-9
PCB-1248 (Aroclor 1248)	ND ug/kg 48. 08/01/06 08:09 JEM 12672-29-6
PCB-1254 (Aroclor 1254)	ND ug/kg 48. 08/01/06 08:09 JEM 11097-69-1
PCB-1260 (Aroclor 1260)	ND ug/kg 48. 08/01/06 08:09 JEM 11096-82-5
Decachlorobiphenyl (S)	37 % 08/01/06 08:09 JEM 2051-24-3
Date Extracted	07/25/06 07/25/06

GC/MS Volatiles

GC/MS VOCs 5035/8260 low level	Method: EPA 8260
Acetone	ND ug/kg 120 07/29/06 11:05 DLK 67-64-1
Benzene	ND ug/kg 6.0 07/29/06 11:05 DLK 71-43-2
Bromobenzene	ND ug/kg 6.0 07/29/06 11:05 DLK 108-86-1
Bromochloromethane	ND ug/kg 6.0 07/29/06 11:05 DLK 74-97-5
Bromodichloromethane	ND ug/kg 6.0 07/29/06 11:05 DLK 75-27-4
Bromoform	ND ug/kg 6.0 07/29/06 11:05 DLK 75-25-2
Bromomethane	ND ug/kg 12. 07/29/06 11:05 DLK 74-83-9
2-Butanone (MEK)	ND ug/kg 120 07/29/06 11:05 DLK 78-93-3
n-Butylbenzene	ND ug/kg 6.0 07/29/06 11:05 DLK 104-51-8
sec-Butylbenzene	ND ug/kg 6.0 07/29/06 11:05 DLK 135-98-8
tert-Butylbenzene	ND ug/kg 6.0 07/29/06 11:05 DLK 98-06-6
Carbon tetrachloride	ND ug/kg 6.0 07/29/06 11:05 DLK 56-23-5
Chlorobenzene	ND ug/kg 6.0 07/29/06 11:05 DLK 108-90-7
Chloroethane	ND ug/kg 12. 07/29/06 11:05 DLK 75-00-3
Chloroform	ND ug/kg 6.0 07/29/06 11:05 DLK 67-66-3
Chloromethane	ND ug/kg 12. 07/29/06 11:05 DLK 74-87-3
2-Chlorotoluene	ND ug/kg 6.0 07/29/06 11:05 DLK 95-49-8
4-Chlorotoluene	ND ug/kg 6.0 07/29/06 11:05 DLK 106-43-4
1,2-Dibromo-3-chloropropane	ND ug/kg 6.0 07/29/06 11:05 DLK 96-12-8
Dibromochloromethane	ND ug/kg 6.0 07/29/06 11:05 DLK 124-48-1
1,2-Dibromoethane (EDB)	ND ug/kg 6.0 07/29/06 11:05 DLK 106-93-4
Dibromomethane	ND ug/kg 6.0 07/29/06 11:05 DLK 74-95-3

Lab Project Number: 92123772

Client Project ID: NCDOT 34951.1.1 Duke

Lab Sample No: 927224915	Project Sample Number: 92123772-002	Date Collected: 07/19/06 09:20
Client Sample ID: DUKEB2	Matrix: Soil	Date Received: 07/21/06 15:05

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
1,2-Dichlorobenzene	ND	ug/kg	6.0	07/29/06 11:05 DLK	95-50-1		
1,3-Dichlorobenzene	ND	ug/kg	6.0	07/29/06 11:05 DLK	541-73-1		
1,4-Dichlorobenzene	ND	ug/kg	6.0	07/29/06 11:05 DLK	106-46-7		
Dichlorodifluoromethane	ND	ug/kg	12.	07/29/06 11:05 DLK	75-71-8		
1,1-Dichloroethane	ND	ug/kg	6.0	07/29/06 11:05 DLK	75-34-3		
1,2-Dichloroethane	ND	ug/kg	6.0	07/29/06 11:05 DLK	107-06-2		
1,1-Dichloroethene	ND	ug/kg	6.0	07/29/06 11:05 DLK	75-35-4		
cis-1,2-Dichloroethene	ND	ug/kg	6.0	07/29/06 11:05 DLK	156-59-2		
trans-1,2-Dichloroethene	ND	ug/kg	6.0	07/29/06 11:05 DLK	156-60-5		
1,2-Dichloropropane	ND	ug/kg	6.0	07/29/06 11:05 DLK	78-87-5		
1,3-Dichloropropane	ND	ug/kg	6.0	07/29/06 11:05 DLK	142-28-9		
2,2-Dichloropropane	ND	ug/kg	6.0	07/29/06 11:05 DLK	594-20-7		
1,1-Dichloropropene	ND	ug/kg	6.0	07/29/06 11:05 DLK	563-58-6		
cis-1,3-Dichloropropene	ND	ug/kg	6.0	07/29/06 11:05 DLK	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/kg	6.0	07/29/06 11:05 DLK	10061-02-6		
Diisopropyl ether	ND	ug/kg	6.0	07/29/06 11:05 DLK	108-20-3		
Ethylbenzene	ND	ug/kg	6.0	07/29/06 11:05 DLK	100-41-4		
Hexachloro-1,3-butadiene	ND	ug/kg	6.0	07/29/06 11:05 DLK	87-68-3		
2-Hexanone	ND	ug/kg	60.	07/29/06 11:05 DLK	591-78-6		
Isopropylbenzene (Cumene)	ND	ug/kg	6.0	07/29/06 11:05 DLK	98-82-8		
p-Isopropyltoluene	ND	ug/kg	6.0	07/29/06 11:05 DLK	99-87-6		
Methylene chloride	ND	ug/kg	12.	07/29/06 11:05 DLK	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	60.	07/29/06 11:05 DLK	108-10-1		
Methyl-tert-butyl ether	ND	ug/kg	6.0	07/29/06 11:05 DLK	1634-04-4		
Naphthalene	ND	ug/kg	6.0	07/29/06 11:05 DLK	91-20-3		
n-Propylbenzene	ND	ug/kg	6.0	07/29/06 11:05 DLK	103-65-1		
Styrene	ND	ug/kg	6.0	07/29/06 11:05 DLK	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/kg	6.0	07/29/06 11:05 DLK	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/kg	6.0	07/29/06 11:05 DLK	79-34-5		
Tetrachloroethene	ND	ug/kg	6.0	07/29/06 11:05 DLK	127-18-4		
Toluene	ND	ug/kg	6.0	07/29/06 11:05 DLK	108-88-3		
1,2,3-Trichlorobenzene	ND	ug/kg	6.0	07/29/06 11:05 DLK	87-61-6		
1,2,4-Trichlorobenzene	ND	ug/kg	6.0	07/29/06 11:05 DLK	120-82-1		
1,1,1-Trichloroethane	ND	ug/kg	6.0	07/29/06 11:05 DLK	71-55-6		
1,1,2-Trichloroethane	ND	ug/kg	6.0	07/29/06 11:05 DLK	79-00-5		
Trichloroethene	ND	ug/kg	6.0	07/29/06 11:05 DLK	79-01-6		
Trichlorofluoromethane	ND	ug/kg	6.0	07/29/06 11:05 DLK	75-69-4		
1,2,3-Trichloropropane	ND	ug/kg	6.0	07/29/06 11:05 DLK	96-18-4		
1,2,4-Trimethylbenzene	ND	ug/kg	6.0	07/29/06 11:05 DLK	95-63-6		

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Lab Project Number: 92123772

Client Project ID: NCDOT 34951.1.1 Duke

Lab Sample No: 927224915	Project Sample Number: 92123772-002	Date Collected: 07/19/06 09:20
Client Sample ID: DUKEB2	Matrix: Soil	Date Received: 07/21/06 15:05

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
1,3,5-Trimethylbenzene	ND	ug/kg	6.0	07/29/06 11:05 DLK	108-67-8		
Vinyl acetate	ND	ug/kg	60.	07/29/06 11:05 DLK	108-05-4		
Vinyl chloride	ND	ug/kg	12.	07/29/06 11:05 DLK	75-01-4		
Xylene (Total)	ND	ug/kg	6.0	07/29/06 11:05 DLK	1330-20-7		
m&p-Xylene	ND	ug/kg	12.	07/29/06 11:05 DLK			
o-Xylene	ND	ug/kg	6.0	07/29/06 11:05 DLK	95-47-6		
Toluene-d8 (S)	104	%		07/29/06 11:05 DLK	2037-26-5		
4-Bromofluorobenzene (S)	96	%		07/29/06 11:05 DLK	460-00-4		
Dibromofluoromethane (S)	98	%		07/29/06 11:05 DLK	1868-53-7		
1,2-Dichloroethane-d4 (S)	93	%		07/29/06 11:05 DLK	17060-07-0		

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Lab Project Number: 92123772

Client Project ID: NCDOT 34951.1.1 Duke

Lab Sample No: 927224931	Project Sample Number: 92123772-003	Date Collected: 07/19/06 11:30
Client Sample ID: DUKEB3	Matrix: Soil	Date Received: 07/21/06 15:05

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
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Wet Chemistry

Percent Moisture	Method: % Moisture		
Percent Moisture	30.1	%	07/21/06 18:56 KDF

GC/MS Semivolatiles

Semivolatile Organics

Prep/Method: EPA 3545 / EPA 8270

Acenaphthene	ND	ug/kg	470	07/26/06 15:30 BET	83-32-9
Acenaphthylene	ND	ug/kg	470	07/26/06 15:30 BET	208-96-8
Anthracene	ND	ug/kg	470	07/26/06 15:30 BET	120-12-7
Benzo(k)fluoranthene	ND	ug/kg	470	07/26/06 15:30 BET	207-08-9
Benzo(b)fluoranthene	ND	ug/kg	470	07/26/06 15:30 BET	205-99-2
Benzo(a)anthracene	ND	ug/kg	470	07/26/06 15:30 BET	56-55-3
Benzoic acid	ND	ug/kg	2400	07/26/06 15:30 BET	65-85-0
Benzo(g,h,i)perylene	ND	ug/kg	470	07/26/06 15:30 BET	191-24-2
Benzyl alcohol	ND	ug/kg	940	07/26/06 15:30 BET	100-51-6
Benzo(a)pyrene	ND	ug/kg	470	07/26/06 15:30 BET	50-32-8
4-Bromophenylphenyl ether	ND	ug/kg	470	07/26/06 15:30 BET	101-55-3
Butylbenzylphthalate	ND	ug/kg	470	07/26/06 15:30 BET	85-68-7
4-Chloro-3-methylphenol	ND	ug/kg	940	07/26/06 15:30 BET	59-50-7
4-Chloroaniline	ND	ug/kg	940	07/26/06 15:30 BET	106-47-8
bis(2-Chloroethoxy)methane	ND	ug/kg	470	07/26/06 15:30 BET	111-91-1
bis(2-Chloroethyl) ether	ND	ug/kg	470	07/26/06 15:30 BET	111-44-4
bis(2-Chloroisopropyl) ether	ND	ug/kg	470	07/26/06 15:30 BET	39638-32-9
2-Chloronaphthalene	ND	ug/kg	470	07/26/06 15:30 BET	91-58-7
2-Chlorophenol	ND	ug/kg	470	07/26/06 15:30 BET	95-57-8
4-Chlorophenylphenyl ether	ND	ug/kg	470	07/26/06 15:30 BET	7005-72-3
Chrysene	ND	ug/kg	470	07/26/06 15:30 BET	218-01-9
Dibenz(a,h)anthracene	ND	ug/kg	470	07/26/06 15:30 BET	53-70-3
Dibenzofuran	ND	ug/kg	470	07/26/06 15:30 BET	132-64-9
1,2-Dichlorobenzene	ND	ug/kg	470	07/26/06 15:30 BET	95-50-1
1,3-Dichlorobenzene	ND	ug/kg	470	07/26/06 15:30 BET	541-73-1
1,4-Dichlorobenzene	ND	ug/kg	470	07/26/06 15:30 BET	106-46-7
3,3'-Dichlorobenzidine	ND	ug/kg	940	07/26/06 15:30 BET	91-94-1
2,4-Dichlorophenol	ND	ug/kg	470	07/26/06 15:30 BET	120-83-2
Diethylphthalate	ND	ug/kg	470	07/26/06 15:30 BET	84-66-2
2,4-Dimethylphenol	ND	ug/kg	470	07/26/06 15:30 BET	105-67-9
Dimethylphthalate	ND	ug/kg	470	07/26/06 15:30 BET	131-11-3
Di-n-butylphthalate	ND	ug/kg	470	07/26/06 15:30 BET	84-74-2
4,6-Dinitro-2-methylphenol	ND	ug/kg	470	07/26/06 15:30 BET	534-52-1

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Lab Project Number: 92123772

Client Project ID: NCDOT 34951.1.1 Duke

Lab Sample No:	927224931	Project Sample Number:	92123772-003	Date Collected:	07/19/06 11:30
Client Sample ID:	DUKEB3	Matrix:	Soil	Date Received:	07/21/06 15:05

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
2,4-Dinitrophenol	ND	ug/kg	2400	07/26/06 15:30 BET	51-28-5		
2,4-Dinitrotoluene	ND	ug/kg	470	07/26/06 15:30 BET	121-14-2		
2,6-Dinitrotoluene	ND	ug/kg	470	07/26/06 15:30 BET	606-20-2		
Di-n-octylphthalate	ND	ug/kg	470	07/26/06 15:30 BET	117-84-0		
1,2-Diphenylhydrazine	ND	ug/kg	470	07/26/06 15:30 BET	122-66-7		
bis(2-Ethylhexyl)phthalate	ND	ug/kg	470	07/26/06 15:30 BET	117-81-7		
Fluoranthene	ND	ug/kg	470	07/26/06 15:30 BET	206-44-0		
Fluorene	ND	ug/kg	470	07/26/06 15:30 BET	86-73-7		
Hexachloro-1,3-butadiene	ND	ug/kg	470	07/26/06 15:30 BET	87-68-3		
Hexachlorobenzene	ND	ug/kg	470	07/26/06 15:30 BET	118-74-1		
Hexachlorocyclopentadiene	ND	ug/kg	470	07/26/06 15:30 BET	77-47-4		
Hexachloroethane	ND	ug/kg	470	07/26/06 15:30 BET	67-72-1		
Indeno(1,2,3-cd)pyrene	ND	ug/kg	470	07/26/06 15:30 BET	193-39-5		
Isophorone	ND	ug/kg	470	07/26/06 15:30 BET	78-59-1		
1-Methylnaphthalene	ND	ug/kg	470	07/26/06 15:30 BET	90-12-0		
2-Methylnaphthalene	ND	ug/kg	470	07/26/06 15:30 BET	91-57-6		
2-Methylphenol (o-Cresol)	ND	ug/kg	470	07/26/06 15:30 BET	95-48-7		
3&4-Methylphenol	ND	ug/kg	470	07/26/06 15:30 BET			
Naphthalene	ND	ug/kg	470	07/26/06 15:30 BET	91-20-3		
2-Nitroaniline	ND	ug/kg	2400	07/26/06 15:30 BET	88-74-4		
3-Nitroaniline	ND	ug/kg	2400	07/26/06 15:30 BET	99-09-2		
4-Nitroaniline	ND	ug/kg	2400	07/26/06 15:30 BET	100-01-6		
Nitrobenzene	ND	ug/kg	470	07/26/06 15:30 BET	98-95-3		
2-Nitrophenol	ND	ug/kg	470	07/26/06 15:30 BET	88-75-5		
4-Nitrophenol	ND	ug/kg	2400	07/26/06 15:30 BET	100-02-7		
N-Nitroso-di-n-propylamine	ND	ug/kg	470	07/26/06 15:30 BET	621-64-7		
N-Nitrosodiphenylamine	ND	ug/kg	470	07/26/06 15:30 BET	86-30-6		
Pentachlorophenol	ND	ug/kg	2400	07/26/06 15:30 BET	87-86-5		
Phenanthrene	ND	ug/kg	470	07/26/06 15:30 BET	85-01-8		
Phenol	ND	ug/kg	470	07/26/06 15:30 BET	108-95-2		
Pyrene	ND	ug/kg	470	07/26/06 15:30 BET	129-00-0		
1,2,4-Trichlorobenzene	ND	ug/kg	470	07/26/06 15:30 BET	120-82-1		
2,4,5-Trichlorophenol	ND	ug/kg	470	07/26/06 15:30 BET	95-95-4		
2,4,6-Trichlorophenol	ND	ug/kg	470	07/26/06 15:30 BET	88-06-2		
Nitrobenzene-d5 (S)	18	%		07/26/06 15:30 BET	4165-60-0		
2-Fluorobiphenyl (S)	22	%		07/26/06 15:30 BET	321-60-8		
Terphenyl-d14 (S)	38	%		07/26/06 15:30 BET	1718-51-0		
Phenol-d5 (S)	16	%		07/26/06 15:30 BET	4165-62-2	1	
2-Fluorophenol (S)	15	%		07/26/06 15:30 BET	367-12-4		

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Lab Project Number: 92123772
 Client Project ID: NCDOT 34951.1.1 Duke

Lab Sample No: 927224931	Project Sample Number: 92123772-003	Date Collected: 07/19/06 11:30
Client Sample ID: DUKEB3	Matrix: Soil	Date Received: 07/21/06 15:05

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
2,4,6-Tribromophenol (S)	20	%		07/26/06 15:30 BET	118-79-6		
Date Extracted	07/22/06			07/22/06			

GC Semivolatiles

Organochlorine PCBs	Prep/Method: EPA 3545 / EPA 8082	
PCB-1016 (Aroclor 1016)	ND ug/kg 47.	08/01/06 08:28 JEM 12674-11-2
PCB-1221 (Aroclor 1221)	ND ug/kg 47.	08/01/06 08:28 JEM 11104-28-2
PCB-1232 (Aroclor 1232)	ND ug/kg 47.	08/01/06 08:28 JEM 11141-16-5
PCB-1242 (Aroclor 1242)	ND ug/kg 47.	08/01/06 08:28 JEM 53469-21-9
PCB-1248 (Aroclor 1248)	ND ug/kg 47.	08/01/06 08:28 JEM 12672-29-6
PCB-1254 (Aroclor 1254)	ND ug/kg 47.	08/01/06 08:28 JEM 11097-69-1
PCB-1260 (Aroclor 1260)	ND ug/kg 47.	08/01/06 08:28 JEM 11096-82-5
Decachlorobiphenyl (S)	61 %	08/01/06 08:28 JEM 2051-24-3
Date Extracted	07/25/06	07/25/06

GC/MS Volatiles

GC/MS VOCs 5035/8260 low level	Method: EPA 8260	
Acetone	ND ug/kg 120	07/29/06 11:23 DLK 67-64-1
Benzene	ND ug/kg 6.0	07/29/06 11:23 DLK 71-43-2
Bromobenzene	ND ug/kg 6.0	07/29/06 11:23 DLK 108-86-1
Bromochloromethane	ND ug/kg 6.0	07/29/06 11:23 DLK 74-97-5
Bromodichloromethane	ND ug/kg 6.0	07/29/06 11:23 DLK 75-27-4
Bromoform	ND ug/kg 6.0	07/29/06 11:23 DLK 75-25-2
Bromomethane	ND ug/kg 12.	07/29/06 11:23 DLK 74-83-9
2-Butanone (MEK)	ND ug/kg 120	07/29/06 11:23 DLK 78-93-3
n-Butylbenzene	ND ug/kg 6.0	07/29/06 11:23 DLK 104-51-8
sec-Butylbenzene	ND ug/kg 6.0	07/29/06 11:23 DLK 135-98-8
tert-Butylbenzene	ND ug/kg 6.0	07/29/06 11:23 DLK 98-06-6
Carbon tetrachloride	ND ug/kg 6.0	07/29/06 11:23 DLK 56-23-5
Chlorobenzene	ND ug/kg 6.0	07/29/06 11:23 DLK 108-90-7
Chloroethane	ND ug/kg 12.	07/29/06 11:23 DLK 75-00-3
Chloroform	ND ug/kg 6.0	07/29/06 11:23 DLK 67-66-3
Chloromethane	ND ug/kg 12.	07/29/06 11:23 DLK 74-87-3
2-Chlorotoluene	ND ug/kg 6.0	07/29/06 11:23 DLK 95-49-8
4-Chlorotoluene	ND ug/kg 6.0	07/29/06 11:23 DLK 106-43-4
1,2-Dibromo-3-chloropropane	ND ug/kg 6.0	07/29/06 11:23 DLK 96-12-8
Dibromochloromethane	ND ug/kg 6.0	07/29/06 11:23 DLK 124-48-1
1,2-Dibromoethane (EDB)	ND ug/kg 6.0	07/29/06 11:23 DLK 106-93-4
Dibromomethane	ND ug/kg 6.0	07/29/06 11:23 DLK 74-95-3

Date: 08/07/06

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Asheville Certification IDs
 NC Wastewater 40
 NC Drinking Water 37712
 SC Environmental 99030
 FL NELAP E87648

REPORT OF LABORATORY ANALYSIS

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Charlotte Certification IDs
 NC Wastewater 12
 NC Drinking Water 37706
 SC 99006
 FL NELAP E87627

Lab Project Number: 92123772

Client Project ID: NCDOT 34951.1.1 Duke

Lab Sample No: 927224931	Project Sample Number: 92123772-003	Date Collected: 07/19/06 11:30
Client Sample ID: DUKEB3	Matrix: Soil	Date Received: 07/21/06 15:05

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
1,2-Dichlorobenzene	ND	ug/kg	6.0	07/29/06 11:23 DLK	95-50-1		
1,3-Dichlorobenzene	ND	ug/kg	6.0	07/29/06 11:23 DLK	541-73-1		
1,4-Dichlorobenzene	ND	ug/kg	6.0	07/29/06 11:23 DLK	106-46-7		
Dichlorodifluoromethane	ND	ug/kg	12.	07/29/06 11:23 DLK	75-71-8		
1,1-Dichloroethane	ND	ug/kg	6.0	07/29/06 11:23 DLK	75-34-3		
1,2-Dichloroethane	ND	ug/kg	6.0	07/29/06 11:23 DLK	107-06-2		
1,1-Dichloroethene	ND	ug/kg	6.0	07/29/06 11:23 DLK	75-35-4		
cis-1,2-Dichloroethene	ND	ug/kg	6.0	07/29/06 11:23 DLK	156-59-2		
trans-1,2-Dichloroethene	ND	ug/kg	6.0	07/29/06 11:23 DLK	156-60-5		
1,2-Dichloropropane	ND	ug/kg	6.0	07/29/06 11:23 DLK	78-87-5		
1,3-Dichloropropane	ND	ug/kg	6.0	07/29/06 11:23 DLK	142-28-9		
2,2-Dichloropropane	ND	ug/kg	6.0	07/29/06 11:23 DLK	594-20-7		
1,1-Dichloropropene	ND	ug/kg	6.0	07/29/06 11:23 DLK	563-58-6		
cis-1,3-Dichloropropene	ND	ug/kg	6.0	07/29/06 11:23 DLK	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/kg	6.0	07/29/06 11:23 DLK	10061-02-6		
Diisopropyl ether	ND	ug/kg	6.0	07/29/06 11:23 DLK	108-20-3		
Ethylbenzene	ND	ug/kg	6.0	07/29/06 11:23 DLK	100-41-4		
Hexachloro-1,3-butadiene	ND	ug/kg	6.0	07/29/06 11:23 DLK	87-68-3		
2-Hexanone	ND	ug/kg	60.	07/29/06 11:23 DLK	591-78-6		
Isopropylbenzene (Cumene)	ND	ug/kg	6.0	07/29/06 11:23 DLK	98-82-8		
p-Isopropyltoluene	ND	ug/kg	6.0	07/29/06 11:23 DLK	99-87-6		
Methylene chloride	ND	ug/kg	12.	07/29/06 11:23 DLK	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	60.	07/29/06 11:23 DLK	108-10-1		
Methyl-tert-butyl ether	ND	ug/kg	6.0	07/29/06 11:23 DLK	1634-04-4		
Naphthalene	ND	ug/kg	6.0	07/29/06 11:23 DLK	91-20-3		
n-Propylbenzene	ND	ug/kg	6.0	07/29/06 11:23 DLK	103-65-1		
Styrene	ND	ug/kg	6.0	07/29/06 11:23 DLK	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/kg	6.0	07/29/06 11:23 DLK	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/kg	6.0	07/29/06 11:23 DLK	79-34-5		
Tetrachloroethene	ND	ug/kg	6.0	07/29/06 11:23 DLK	127-18-4		
Toluene	ND	ug/kg	6.0	07/29/06 11:23 DLK	108-88-3		
1,2,3-Trichlorobenzene	ND	ug/kg	6.0	07/29/06 11:23 DLK	87-61-6		
1,2,4-Trichlorobenzene	ND	ug/kg	6.0	07/29/06 11:23 DLK	120-82-1		
1,1,1-Trichloroethane	ND	ug/kg	6.0	07/29/06 11:23 DLK	71-55-6		
1,1,2-Trichloroethane	ND	ug/kg	6.0	07/29/06 11:23 DLK	79-00-5		
Trichloroethene	ND	ug/kg	6.0	07/29/06 11:23 DLK	79-01-6		
Trichlorofluoromethane	ND	ug/kg	6.0	07/29/06 11:23 DLK	75-69-4		
1,2,3-Trichloropropane	ND	ug/kg	6.0	07/29/06 11:23 DLK	96-18-4		
1,2,4-Trimethylbenzene	ND	ug/kg	6.0	07/29/06 11:23 DLK	95-63-6		

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Lab Project Number: 92123772

Client Project ID: NCDOT 34951.1.1 Duke

Lab Sample No: 927224931	Project Sample Number: 92123772-003	Date Collected: 07/19/06 11:30
Client Sample ID: DUKEB3	Matrix: Soil	Date Received: 07/21/06 15:05

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
1,3,5-Trimethylbenzene	ND	ug/kg	6.0	07/29/06 11:23 DLK	108-67-8		
Vinyl acetate	ND	ug/kg	60.	07/29/06 11:23 DLK	108-05-4		
Vinyl chloride	ND	ug/kg	12.	07/29/06 11:23 DLK	75-01-4		
Xylene (Total)	ND	ug/kg	6.0	07/29/06 11:23 DLK	1330-20-7		
m&p-Xylene	ND	ug/kg	12.	07/29/06 11:23 DLK			
o-Xylene	ND	ug/kg	6.0	07/29/06 11:23 DLK	95-47-6		
Toluene-d8 (S)	105	%		07/29/06 11:23 DLK	2037-26-5		
4-Bromofluorobenzene (S)	99	%		07/29/06 11:23 DLK	460-00-4		
Dibromofluoromethane (S)	100	%		07/29/06 11:23 DLK	1868-53-7		
1,2-Dichloroethane-d4 (S)	90	%		07/29/06 11:23 DLK	17060-07-0		

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Lab Project Number: 92123772

Client Project ID: NCDOT 34951.1.1 Duke

Lab Sample No: 927224972	Project Sample Number: 92123772-004	Date Collected: 07/19/06 12:00
Client Sample ID: DUKEB4	Matrix: Soil	Date Received: 07/21/06 15:05

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
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Wet Chemistry

Percent Moisture	Method: % Moisture		
Percent Moisture	31.4	%	07/21/06 18:56 KDF

GC/MS Semivolatiles

Semivolatile Organics

Prep/Method: EPA 3545 / EPA 8270

Acenaphthene	ND	ug/kg	480	07/26/06 15:52 BET	83-32-9
Acenaphthylene	ND	ug/kg	480	07/26/06 15:52 BET	208-96-8
Anthracene	ND	ug/kg	480	07/26/06 15:52 BET	120-12-7
Benzo(k)fluoranthene	ND	ug/kg	480	07/26/06 15:52 BET	207-08-9
Benzo(b)fluoranthene	ND	ug/kg	480	07/26/06 15:52 BET	205-99-2
Benzo(a)anthracene	ND	ug/kg	480	07/26/06 15:52 BET	56-55-3
Benzoic acid	ND	ug/kg	2400	07/26/06 15:52 BET	65-85-0
Benzo(g,h,i)perylene	ND	ug/kg	480	07/26/06 15:52 BET	191-24-2
Benzyl alcohol	ND	ug/kg	960	07/26/06 15:52 BET	100-51-6
Benzo(a)pyrene	ND	ug/kg	480	07/26/06 15:52 BET	50-32-8
4-Bromophenylphenyl ether	ND	ug/kg	480	07/26/06 15:52 BET	101-55-3
Butylbenzylphthalate	ND	ug/kg	480	07/26/06 15:52 BET	85-68-7
4-Chloro-3-methylphenol	ND	ug/kg	960	07/26/06 15:52 BET	59-50-7
4-Chloroaniline	ND	ug/kg	960	07/26/06 15:52 BET	106-47-8
bis(2-Chloroethoxy)methane	ND	ug/kg	480	07/26/06 15:52 BET	111-91-1
bis(2-Chloroethyl) ether	ND	ug/kg	480	07/26/06 15:52 BET	111-44-4
bis(2-Chloroisopropyl) ether	ND	ug/kg	480	07/26/06 15:52 BET	39638-32-9
2-Chloronaphthalene	ND	ug/kg	480	07/26/06 15:52 BET	91-58-7
2-Chlorophenol	ND	ug/kg	480	07/26/06 15:52 BET	95-57-8
4-Chlorophenylphenyl ether	ND	ug/kg	480	07/26/06 15:52 BET	7005-72-3
Chrysene	ND	ug/kg	480	07/26/06 15:52 BET	218-01-9
Dibenz(a,h)anthracene	ND	ug/kg	480	07/26/06 15:52 BET	53-70-3
Dibenzofuran	ND	ug/kg	480	07/26/06 15:52 BET	132-64-9
1,2-Dichlorobenzene	ND	ug/kg	480	07/26/06 15:52 BET	95-50-1
1,3-Dichlorobenzene	ND	ug/kg	480	07/26/06 15:52 BET	541-73-1
1,4-Dichlorobenzene	ND	ug/kg	480	07/26/06 15:52 BET	106-46-7
3,3'-Dichlorobenzidine	ND	ug/kg	960	07/26/06 15:52 BET	91-94-1
2,4-Dichlorophenol	ND	ug/kg	480	07/26/06 15:52 BET	120-83-2
Diethylphthalate	ND	ug/kg	480	07/26/06 15:52 BET	84-66-2
2,4-Dimethylphenol	ND	ug/kg	480	07/26/06 15:52 BET	105-67-9
Dimethylphthalate	ND	ug/kg	480	07/26/06 15:52 BET	131-11-3
Di-n-butylphthalate	ND	ug/kg	480	07/26/06 15:52 BET	84-74-2
4,6-Dinitro-2-methylphenol	ND	ug/kg	480	07/26/06 15:52 BET	534-52-1

REPORT OF LABORATORY ANALYSIS

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Lab Project Number: 92123772

Client Project ID: NCDOT 34951.1.1 Duke

Lab Sample No:	927224972	Project Sample Number:	92123772-004	Date Collected:	07/19/06 12:00
Client Sample ID:	DUKEB4	Matrix:	Soil	Date Received:	07/21/06 15:05

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
2,4-Dinitrophenol	ND	ug/kg	2400	07/26/06 15:52 BET	51-28-5		
2,4-Dinitrotoluene	ND	ug/kg	480	07/26/06 15:52 BET	121-14-2		
2,6-Dinitrotoluene	ND	ug/kg	480	07/26/06 15:52 BET	606-20-2		
Di-n-octylphthalate	ND	ug/kg	480	07/26/06 15:52 BET	117-84-0		
1,2-Diphenylhydrazine	ND	ug/kg	480	07/26/06 15:52 BET	122-66-7		
bis(2-Ethylhexyl)phthalate	ND	ug/kg	480	07/26/06 15:52 BET	117-81-7		
Fluoranthene	ND	ug/kg	480	07/26/06 15:52 BET	206-44-0		
Fluorene	ND	ug/kg	480	07/26/06 15:52 BET	86-73-7		
Hexachloro-1,3-butadiene	ND	ug/kg	480	07/26/06 15:52 BET	87-68-3		
Hexachlorobenzene	ND	ug/kg	480	07/26/06 15:52 BET	118-74-1		
Hexachlorocyclopentadiene	ND	ug/kg	480	07/26/06 15:52 BET	77-47-4		
Hexachloroethane	ND	ug/kg	480	07/26/06 15:52 BET	67-72-1		
Indeno(1,2,3-cd)pyrene	ND	ug/kg	480	07/26/06 15:52 BET	193-39-5		
Isophorone	ND	ug/kg	480	07/26/06 15:52 BET	78-59-1		
1-Methylnaphthalene	ND	ug/kg	480	07/26/06 15:52 BET	90-12-0		
2-Methylnaphthalene	ND	ug/kg	480	07/26/06 15:52 BET	91-57-6		
2-Methylphenol (o-Cresol)	ND	ug/kg	480	07/26/06 15:52 BET	95-48-7		
3&4-Methylphenol	ND	ug/kg	480	07/26/06 15:52 BET			
Naphthalene	ND	ug/kg	480	07/26/06 15:52 BET	91-20-3		
2-Nitroaniline	ND	ug/kg	2400	07/26/06 15:52 BET	88-74-4		
3-Nitroaniline	ND	ug/kg	2400	07/26/06 15:52 BET	99-09-2		
4-Nitroaniline	ND	ug/kg	2400	07/26/06 15:52 BET	100-01-6		
Nitrobenzene	ND	ug/kg	480	07/26/06 15:52 BET	98-95-3		
2-Nitrophenol	ND	ug/kg	480	07/26/06 15:52 BET	88-75-5		
4-Nitrophenol	ND	ug/kg	2400	07/26/06 15:52 BET	100-02-7		
N-Nitroso-di-n-propylamine	ND	ug/kg	480	07/26/06 15:52 BET	621-64-7		
N-Nitrosodiphenylamine	ND	ug/kg	480	07/26/06 15:52 BET	86-30-6		
Pentachlorophenol	ND	ug/kg	2400	07/26/06 15:52 BET	87-86-5		
Phenanthrene	ND	ug/kg	480	07/26/06 15:52 BET	85-01-8		
Phenol	ND	ug/kg	480	07/26/06 15:52 BET	108-95-2		
Pyrene	ND	ug/kg	480	07/26/06 15:52 BET	129-00-0		
1,2,4-Trichlorobenzene	ND	ug/kg	480	07/26/06 15:52 BET	120-82-1		
2,4,5-Trichlorophenol	ND	ug/kg	480	07/26/06 15:52 BET	95-95-4		
2,4,6-Trichlorophenol	ND	ug/kg	480	07/26/06 15:52 BET	88-06-2		
Nitrobenzene-d5 (S)	48	%		07/26/06 15:52 BET	4165-60-0		
2-Fluorobiphenyl (S)	53	%		07/26/06 15:52 BET	321-60-8		
Terphenyl-d14 (S)	79	%		07/26/06 15:52 BET	1718-51-0		
Phenol-d5 (S)	45	%		07/26/06 15:52 BET	4165-62-2		
2-Fluorophenol (S)	40	%		07/26/06 15:52 BET	367-12-4		

REPORT OF LABORATORY ANALYSIS

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Lab Project Number: 92123772

Client Project ID: NCDOT 34951.1.1 Duke

Lab Sample No: 927224972	Project Sample Number: 92123772-004	Date Collected: 07/19/06 12:00
Client Sample ID: DUKEB4	Matrix: Soil	Date Received: 07/21/06 15:05

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
2,4,6-Tribromophenol (S)	47	%		07/26/06 15:52 BET	118-79-6		
Date Extracted	07/22/06			07/22/06			

GC Semivolatiles

Organochlorine PCBs	Prep/Method: EPA 3545 / EPA 8082					
PCB-1016 (Aroclor 1016)	ND	ug/kg	48.	08/01/06 09:24 JEM	12674-11-2	
PCB-1221 (Aroclor 1221)	ND	ug/kg	48.	08/01/06 09:24 JEM	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/kg	48.	08/01/06 09:24 JEM	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/kg	48.	08/01/06 09:24 JEM	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/kg	48.	08/01/06 09:24 JEM	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/kg	48.	08/01/06 09:24 JEM	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/kg	48.	08/01/06 09:24 JEM	11096-82-5	
Decachlorobiphenyl (S)	35	%		08/01/06 09:24 JEM	2051-24-3	
Date Extracted	07/25/06			07/25/06		

GC/MS Volatiles

GC/MS VOCs 5035/8260 low level	Method: EPA 8260					
Acetone	ND	ug/kg	140	07/29/06 11:42 DLK	67-64-1	
Benzene	ND	ug/kg	6.9	07/29/06 11:42 DLK	71-43-2	
Bromobenzene	ND	ug/kg	6.9	07/29/06 11:42 DLK	108-86-1	
Bromochloromethane	ND	ug/kg	6.9	07/29/06 11:42 DLK	74-97-5	
Bromodichloromethane	ND	ug/kg	6.9	07/29/06 11:42 DLK	75-27-4	
Bromoform	ND	ug/kg	6.9	07/29/06 11:42 DLK	75-25-2	
Bromomethane	ND	ug/kg	14.	07/29/06 11:42 DLK	74-83-9	
2-Butanone (MEK)	ND	ug/kg	140	07/29/06 11:42 DLK	78-93-3	
n-Butylbenzene	ND	ug/kg	6.9	07/29/06 11:42 DLK	104-51-8	
sec-Butylbenzene	ND	ug/kg	6.9	07/29/06 11:42 DLK	135-98-8	
tert-Butylbenzene	ND	ug/kg	6.9	07/29/06 11:42 DLK	98-06-6	
Carbon tetrachloride	ND	ug/kg	6.9	07/29/06 11:42 DLK	56-23-5	
Chlorobenzene	ND	ug/kg	6.9	07/29/06 11:42 DLK	108-90-7	
Chloroethane	ND	ug/kg	14.	07/29/06 11:42 DLK	75-00-3	
Chloroform	ND	ug/kg	6.9	07/29/06 11:42 DLK	67-66-3	
Chloromethane	ND	ug/kg	14.	07/29/06 11:42 DLK	74-87-3	
2-Chlorotoluene	ND	ug/kg	6.9	07/29/06 11:42 DLK	95-49-8	
4-Chlorotoluene	ND	ug/kg	6.9	07/29/06 11:42 DLK	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	6.9	07/29/06 11:42 DLK	96-12-8	
Dibromochloromethane	ND	ug/kg	6.9	07/29/06 11:42 DLK	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	6.9	07/29/06 11:42 DLK	106-93-4	
Dibromomethane	ND	ug/kg	6.9	07/29/06 11:42 DLK	74-95-3	

Date: 08/07/06

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Asheville Certification IDs
 NC Wastewater 40
 NC Drinking Water 37712
 SC Environmental 99030
 FL NELAP E87648

REPORT OF LABORATORY ANALYSIS

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Charlotte Certification IDs
 NC Wastewater 12
 NC Drinking Water 37706
 SC 99006
 FL NELAP E87627

Lab Project Number: 92123772

Client Project ID: NCDOT 34951.1.1 Duke

Lab Sample No: 927224972	Project Sample Number: 92123772-004	Date Collected: 07/19/06 12:00
Client Sample ID: DUKEB4	Matrix: Soil	Date Received: 07/21/06 15:05

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
1,2-Dichlorobenzene	ND	ug/kg	6.9	07/29/06 11:42 DLK	95-50-1		
1,3-Dichlorobenzene	ND	ug/kg	6.9	07/29/06 11:42 DLK	541-73-1		
1,4-Dichlorobenzene	ND	ug/kg	6.9	07/29/06 11:42 DLK	106-46-7		
Dichlorodifluoromethane	ND	ug/kg	14.	07/29/06 11:42 DLK	75-71-8		
1,1-Dichloroethane	ND	ug/kg	6.9	07/29/06 11:42 DLK	75-34-3		
1,2-Dichloroethane	ND	ug/kg	6.9	07/29/06 11:42 DLK	107-06-2		
1,1-Dichloroethene	ND	ug/kg	6.9	07/29/06 11:42 DLK	75-35-4		
cis-1,2-Dichloroethene	ND	ug/kg	6.9	07/29/06 11:42 DLK	156-59-2		
trans-1,2-Dichloroethene	ND	ug/kg	6.9	07/29/06 11:42 DLK	156-60-5		
1,2-Dichloropropane	ND	ug/kg	6.9	07/29/06 11:42 DLK	78-87-5		
1,3-Dichloropropane	ND	ug/kg	6.9	07/29/06 11:42 DLK	142-28-9		
2,2-Dichloropropane	ND	ug/kg	6.9	07/29/06 11:42 DLK	594-20-7		
1,1-Dichloropropene	ND	ug/kg	6.9	07/29/06 11:42 DLK	563-58-6		
cis-1,3-Dichloropropene	ND	ug/kg	6.9	07/29/06 11:42 DLK	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/kg	6.9	07/29/06 11:42 DLK	10061-02-6		
Diisopropyl ether	ND	ug/kg	6.9	07/29/06 11:42 DLK	108-20-3		
Ethylbenzene	ND	ug/kg	6.9	07/29/06 11:42 DLK	100-41-4		
Hexachloro-1,3-butadiene	ND	ug/kg	6.9	07/29/06 11:42 DLK	87-68-3		
2-Hexanone	ND	ug/kg	69.	07/29/06 11:42 DLK	591-78-6		
Isopropylbenzene (Cumene)	ND	ug/kg	6.9	07/29/06 11:42 DLK	98-82-8		
p-Isopropyltoluene	ND	ug/kg	6.9	07/29/06 11:42 DLK	99-87-6		
Methylene chloride	ND	ug/kg	14.	07/29/06 11:42 DLK	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	69.	07/29/06 11:42 DLK	108-10-1		
Methyl-tert-butyl ether	ND	ug/kg	6.9	07/29/06 11:42 DLK	1634-04-4		
Naphthalene	ND	ug/kg	6.9	07/29/06 11:42 DLK	91-20-3		
n-Propylbenzene	ND	ug/kg	6.9	07/29/06 11:42 DLK	103-65-1		
Styrene	ND	ug/kg	6.9	07/29/06 11:42 DLK	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/kg	6.9	07/29/06 11:42 DLK	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/kg	6.9	07/29/06 11:42 DLK	79-34-5		
Tetrachloroethene	ND	ug/kg	6.9	07/29/06 11:42 DLK	127-18-4		
Toluene	ND	ug/kg	6.9	07/29/06 11:42 DLK	108-88-3		
1,2,3-Trichlorobenzene	ND	ug/kg	6.9	07/29/06 11:42 DLK	87-61-6		
1,2,4-Trichlorobenzene	ND	ug/kg	6.9	07/29/06 11:42 DLK	120-82-1		
1,1,1-Trichloroethane	ND	ug/kg	6.9	07/29/06 11:42 DLK	71-55-6		
1,1,2-Trichloroethane	ND	ug/kg	6.9	07/29/06 11:42 DLK	79-00-5		
Trichloroethene	ND	ug/kg	6.9	07/29/06 11:42 DLK	79-01-6		
Trichlorofluoromethane	ND	ug/kg	6.9	07/29/06 11:42 DLK	75-69-4		
1,2,3-Trichloropropane	ND	ug/kg	6.9	07/29/06 11:42 DLK	96-18-4		
1,2,4-Trimethylbenzene	ND	ug/kg	6.9	07/29/06 11:42 DLK	95-63-6		

REPORT OF LABORATORY ANALYSIS

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Lab Project Number: 92123772

Client Project ID: NCDOT 34951.1.1 Duke

Lab Sample No: 927224972	Project Sample Number: 92123772-004	Date Collected: 07/19/06 12:00
Client Sample ID: DUKEB4	Matrix: Soil	Date Received: 07/21/06 15:05

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
1,3,5-Trimethylbenzene	ND	ug/kg	6.9	07/29/06 11:42 DLK	108-67-8		
Vinyl acetate	ND	ug/kg	69.	07/29/06 11:42 DLK	108-05-4		
Vinyl chloride	ND	ug/kg	14.	07/29/06 11:42 DLK	75-01-4		
Xylene (Total)	ND	ug/kg	6.9	07/29/06 11:42 DLK	1330-20-7		
m&p-Xylene	ND	ug/kg	14.	07/29/06 11:42 DLK			
o-Xylene	ND	ug/kg	6.9	07/29/06 11:42 DLK	95-47-6		
Toluene-d8 (S)	101	%		07/29/06 11:42 DLK	2037-26-5		
4-Bromofluorobenzene (S)	96	%		07/29/06 11:42 DLK	460-00-4		
Dibromofluoromethane (S)	99	%		07/29/06 11:42 DLK	1868-53-7		
1,2-Dichloroethane-d4 (S)	86	%		07/29/06 11:42 DLK	17060-07-0		

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Lab Project Number: 92123772
 Client Project ID: NCDOT 34951.1.1 Duke

Lab Sample No: 927224980	Project Sample Number: 92123772-005	Date Collected: 07/19/06 11:00
Client Sample ID: DUKEB5	Matrix: Soil	Date Received: 07/21/06 15:05

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
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Wet Chemistry

Percent Moisture	Method: % Moisture		
Percent Moisture	30.8	%	07/21/06 18:56 KDF

GC/MS Semivolatiles
Semivolatile Organics

Prep/Method: EPA 3545 / EPA 8270

Acenaphthene	ND	ug/kg	480	07/26/06 16:14 BET	83-32-9
Acenaphthylene	ND	ug/kg	480	07/26/06 16:14 BET	208-96-8
Anthracene	ND	ug/kg	480	07/26/06 16:14 BET	120-12-7
Benzo(k)fluoranthene	ND	ug/kg	480	07/26/06 16:14 BET	207-08-9
Benzo(b)fluoranthene	ND	ug/kg	480	07/26/06 16:14 BET	205-99-2
Benzo(a)anthracene	ND	ug/kg	480	07/26/06 16:14 BET	56-55-3
Benzoic acid	ND	ug/kg	2400	07/26/06 16:14 BET	65-85-0
Benzo(g,h,i)perylene	ND	ug/kg	480	07/26/06 16:14 BET	191-24-2
Benzyl alcohol	ND	ug/kg	950	07/26/06 16:14 BET	100-51-6
Benzo(a)pyrene	ND	ug/kg	480	07/26/06 16:14 BET	50-32-8
4-Bromophenylphenyl ether	ND	ug/kg	480	07/26/06 16:14 BET	101-55-3
Butylbenzylphthalate	ND	ug/kg	480	07/26/06 16:14 BET	85-68-7
4-Chloro-3-methylphenol	ND	ug/kg	950	07/26/06 16:14 BET	59-50-7
4-Chloroaniline	ND	ug/kg	950	07/26/06 16:14 BET	106-47-8
bis(2-Chloroethoxy)methane	ND	ug/kg	480	07/26/06 16:14 BET	111-91-1
bis(2-Chloroethyl) ether	ND	ug/kg	480	07/26/06 16:14 BET	111-44-4
bis(2-Chloroisopropyl) ether	ND	ug/kg	480	07/26/06 16:14 BET	39638-32-9
2-Chloronaphthalene	ND	ug/kg	480	07/26/06 16:14 BET	91-58-7
2-Chlorophenol	ND	ug/kg	480	07/26/06 16:14 BET	95-57-8
4-Chlorophenylphenyl ether	ND	ug/kg	480	07/26/06 16:14 BET	7005-72-3
Chrysene	ND	ug/kg	480	07/26/06 16:14 BET	218-01-9
Dibenz(a,h)anthracene	ND	ug/kg	480	07/26/06 16:14 BET	53-70-3
Dibenzofuran	ND	ug/kg	480	07/26/06 16:14 BET	132-64-9
1,2-Dichlorobenzene	ND	ug/kg	480	07/26/06 16:14 BET	95-50-1
1,3-Dichlorobenzene	ND	ug/kg	480	07/26/06 16:14 BET	541-73-1
1,4-Dichlorobenzene	ND	ug/kg	480	07/26/06 16:14 BET	106-46-7
3,3'-Dichlorobenzidine	ND	ug/kg	950	07/26/06 16:14 BET	91-94-1
2,4-Dichlorophenol	ND	ug/kg	480	07/26/06 16:14 BET	120-83-2
Diethylphthalate	ND	ug/kg	480	07/26/06 16:14 BET	84-66-2
2,4-Dimethylphenol	ND	ug/kg	480	07/26/06 16:14 BET	105-67-9
Dimethylphthalate	ND	ug/kg	480	07/26/06 16:14 BET	131-11-3
Di-n-butylphthalate	ND	ug/kg	480	07/26/06 16:14 BET	84-74-2
4,6-Dinitro-2-methylphenol	ND	ug/kg	480	07/26/06 16:14 BET	534-52-1

REPORT OF LABORATORY ANALYSIS

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Lab Project Number: 92123772

Client Project ID: NCDOT 34951.1.1 Duke

Lab Sample No:	927224980	Project Sample Number:	92123772-005	Date Collected:	07/19/06 11:00
Client Sample ID:	DUKEB5	Matrix:	Soil	Date Received:	07/21/06 15:05

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
2,4-Dinitrophenol	ND	ug/kg	2400	07/26/06 16:14 BET	51-28-5		
2,4-Dinitrotoluene	ND	ug/kg	480	07/26/06 16:14 BET	121-14-2		
2,6-Dinitrotoluene	ND	ug/kg	480	07/26/06 16:14 BET	606-20-2		
Di-n-octylphthalate	ND	ug/kg	480	07/26/06 16:14 BET	117-84-0		
1,2-Diphenylhydrazine	ND	ug/kg	480	07/26/06 16:14 BET	122-66-7		
bis(2-Ethylhexyl)phthalate	ND	ug/kg	480	07/26/06 16:14 BET	117-81-7		
Fluoranthene	ND	ug/kg	480	07/26/06 16:14 BET	206-44-0		
Fluorene	ND	ug/kg	480	07/26/06 16:14 BET	86-73-7		
Hexachloro-1,3-butadiene	ND	ug/kg	480	07/26/06 16:14 BET	87-68-3		
Hexachlorobenzene	ND	ug/kg	480	07/26/06 16:14 BET	118-74-1		
Hexachlorocyclopentadiene	ND	ug/kg	480	07/26/06 16:14 BET	77-47-4		
Hexachloroethane	ND	ug/kg	480	07/26/06 16:14 BET	67-72-1		
Indeno(1,2,3-cd)pyrene	ND	ug/kg	480	07/26/06 16:14 BET	193-39-5		
Isophorone	ND	ug/kg	480	07/26/06 16:14 BET	78-59-1		
1-Methylnaphthalene	ND	ug/kg	480	07/26/06 16:14 BET	90-12-0		
2-Methylnaphthalene	ND	ug/kg	480	07/26/06 16:14 BET	91-57-6		
2-Methylphenol (o-Cresol)	ND	ug/kg	480	07/26/06 16:14 BET	95-48-7		
3&4-Methylphenol	ND	ug/kg	480	07/26/06 16:14 BET			
Naphthalene	ND	ug/kg	480	07/26/06 16:14 BET	91-20-3		
2-Nitroaniline	ND	ug/kg	2400	07/26/06 16:14 BET	88-74-4		
3-Nitroaniline	ND	ug/kg	2400	07/26/06 16:14 BET	99-09-2		
4-Nitroaniline	ND	ug/kg	2400	07/26/06 16:14 BET	100-01-6		
Nitrobenzene	ND	ug/kg	480	07/26/06 16:14 BET	98-95-3		
2-Nitrophenol	ND	ug/kg	480	07/26/06 16:14 BET	88-75-5		
4-Nitrophenol	ND	ug/kg	2400	07/26/06 16:14 BET	100-02-7		
N-Nitroso-di-n-propylamine	ND	ug/kg	480	07/26/06 16:14 BET	621-64-7		
N-Nitrosodiphenylamine	ND	ug/kg	480	07/26/06 16:14 BET	86-30-6		
Pentachlorophenol	ND	ug/kg	2400	07/26/06 16:14 BET	87-86-5		
Phenanthrene	ND	ug/kg	480	07/26/06 16:14 BET	85-01-8		
Phenol	ND	ug/kg	480	07/26/06 16:14 BET	108-95-2		
Pyrene	ND	ug/kg	480	07/26/06 16:14 BET	129-00-0		
1,2,4-Trichlorobenzene	ND	ug/kg	480	07/26/06 16:14 BET	120-82-1		
2,4,5-Trichlorophenol	ND	ug/kg	480	07/26/06 16:14 BET	95-95-4		
2,4,6-Trichlorophenol	ND	ug/kg	480	07/26/06 16:14 BET	88-06-2		
Nitrobenzene-d5 (S)	24	%		07/26/06 16:14 BET	4165-60-0		
2-Fluorobiphenyl (S)	31	%		07/26/06 16:14 BET	321-60-8		
Terphenyl-d14 (S)	46	%		07/26/06 16:14 BET	1718-51-0		
Phenol-d5 (S)	24	%		07/26/06 16:14 BET	4165-62-2	1	
2-Fluorophenol (S)	23	%		07/26/06 16:14 BET	367-12-4		

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Lab Project Number: 92123772

Client Project ID: NCDOT 34951.1.1 Duke

Lab Sample No:	927224980	Project Sample Number:	92123772-005	Date Collected:	07/19/06 11:00
Client Sample ID:	DUKEB5	Matrix:	Soil	Date Received:	07/21/06 15:05

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
2,4,6-Tribromophenol (S)	33	%		07/26/06 16:14 BET	118-79-6		
Date Extracted	07/22/06			07/22/06			

GC Semivolatiles

Organochlorine PCBs	Prep/Method: EPA 3545 / EPA 8082					
PCB-1016 (Aroclor 1016)	ND	ug/kg	48.	08/01/06 09:44 JEM	12674-11-2	
PCB-1221 (Aroclor 1221)	ND	ug/kg	48.	08/01/06 09:44 JEM	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/kg	48.	08/01/06 09:44 JEM	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/kg	48.	08/01/06 09:44 JEM	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/kg	48.	08/01/06 09:44 JEM	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/kg	48.	08/01/06 09:44 JEM	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/kg	48.	08/01/06 09:44 JEM	11096-82-5	
Decachlorobiphenyl (S)	45	%		08/01/06 09:44 JEM	2051-24-3	
Date Extracted	07/25/06			07/25/06		

GC/MS Volatiles

GC/MS VOCs 5035/8260 low level	Method: EPA 8260					
Acetone	ND	ug/kg	120	07/29/06 12:00 DLK	67-64-1	
Benzene	ND	ug/kg	6.1	07/29/06 12:00 DLK	71-43-2	
Bromobenzene	ND	ug/kg	6.1	07/29/06 12:00 DLK	108-86-1	
Bromochloromethane	ND	ug/kg	6.1	07/29/06 12:00 DLK	74-97-5	
Bromodichloromethane	ND	ug/kg	6.1	07/29/06 12:00 DLK	75-27-4	
Bromoform	ND	ug/kg	6.1	07/29/06 12:00 DLK	75-25-2	
Bromomethane	ND	ug/kg	12.	07/29/06 12:00 DLK	74-83-9	
2-Butanone (MEK)	ND	ug/kg	120	07/29/06 12:00 DLK	78-93-3	
n-Butylbenzene	ND	ug/kg	6.1	07/29/06 12:00 DLK	104-51-8	
sec-Butylbenzene	ND	ug/kg	6.1	07/29/06 12:00 DLK	135-98-8	
tert-Butylbenzene	ND	ug/kg	6.1	07/29/06 12:00 DLK	98-06-6	
Carbon tetrachloride	ND	ug/kg	6.1	07/29/06 12:00 DLK	56-23-5	
Chlorobenzene	ND	ug/kg	6.1	07/29/06 12:00 DLK	108-90-7	
Chloroethane	ND	ug/kg	12.	07/29/06 12:00 DLK	75-00-3	
Chloroform	ND	ug/kg	6.1	07/29/06 12:00 DLK	67-66-3	
Chloromethane	ND	ug/kg	12.	07/29/06 12:00 DLK	74-87-3	
2-Chlorotoluene	ND	ug/kg	6.1	07/29/06 12:00 DLK	95-49-8	
4-Chlorotoluene	ND	ug/kg	6.1	07/29/06 12:00 DLK	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	6.1	07/29/06 12:00 DLK	96-12-8	
Dibromochloromethane	ND	ug/kg	6.1	07/29/06 12:00 DLK	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	6.1	07/29/06 12:00 DLK	106-93-4	
Dibromomethane	ND	ug/kg	6.1	07/29/06 12:00 DLK	74-95-3	

Date: 08/07/06

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Asheville Certification IDs
 NC Wastewater 40
 NC Drinking Water 37712
 SC Environmental 99030
 FL NELAP E87648

REPORT OF LABORATORY ANALYSIS

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Charlotte Certification IDs
 NC Wastewater 12
 NC Drinking Water 37706
 SC 99006
 FL NELAP E87627

Lab Project Number: 92123772

Client Project ID: NCDOT 34951.1.1 Duke

Lab Sample No:	927224980	Project Sample Number:	92123772-005	Date Collected:	07/19/06 11:00
Client Sample ID:	DUKEB5	Matrix:	Soil	Date Received:	07/21/06 15:05

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
1,2-Dichlorobenzene	ND	ug/kg	6.1	07/29/06 12:00 DLK	95-50-1		
1,3-Dichlorobenzene	ND	ug/kg	6.1	07/29/06 12:00 DLK	541-73-1		
1,4-Dichlorobenzene	ND	ug/kg	6.1	07/29/06 12:00 DLK	106-46-7		
Dichlorodifluoromethane	ND	ug/kg	12.	07/29/06 12:00 DLK	75-71-8		
1,1-Dichloroethane	ND	ug/kg	6.1	07/29/06 12:00 DLK	75-34-3		
1,2-Dichloroethane	ND	ug/kg	6.1	07/29/06 12:00 DLK	107-06-2		
1,1-Dichloroethene	ND	ug/kg	6.1	07/29/06 12:00 DLK	75-35-4		
cis-1,2-Dichloroethene	ND	ug/kg	6.1	07/29/06 12:00 DLK	156-59-2		
trans-1,2-Dichloroethene	ND	ug/kg	6.1	07/29/06 12:00 DLK	156-60-5		
1,2-Dichloropropane	ND	ug/kg	6.1	07/29/06 12:00 DLK	78-87-5		
1,3-Dichloropropane	ND	ug/kg	6.1	07/29/06 12:00 DLK	142-28-9		
2,2-Dichloropropane	ND	ug/kg	6.1	07/29/06 12:00 DLK	594-20-7		
1,1-Dichloropropene	ND	ug/kg	6.1	07/29/06 12:00 DLK	563-58-6		
cis-1,3-Dichloropropene	ND	ug/kg	6.1	07/29/06 12:00 DLK	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/kg	6.1	07/29/06 12:00 DLK	10061-02-6		
Diisopropyl ether	ND	ug/kg	6.1	07/29/06 12:00 DLK	108-20-3		
Ethylbenzene	ND	ug/kg	6.1	07/29/06 12:00 DLK	100-41-4		
Hexachloro-1,3-butadiene	ND	ug/kg	6.1	07/29/06 12:00 DLK	87-68-3		
2-Hexanone	ND	ug/kg	61.	07/29/06 12:00 DLK	591-78-6		
Isopropylbenzene (Cumene)	ND	ug/kg	6.1	07/29/06 12:00 DLK	98-82-8		
p-Isopropyltoluene	ND	ug/kg	6.1	07/29/06 12:00 DLK	99-87-6		
Methylene chloride	ND	ug/kg	12.	07/29/06 12:00 DLK	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	61.	07/29/06 12:00 DLK	108-10-1		
Methyl-tert-butyl ether	ND	ug/kg	6.1	07/29/06 12:00 DLK	1634-04-4		
Naphthalene	ND	ug/kg	6.1	07/29/06 12:00 DLK	91-20-3		
n-Propylbenzene	ND	ug/kg	6.1	07/29/06 12:00 DLK	103-65-1		
Styrene	ND	ug/kg	6.1	07/29/06 12:00 DLK	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/kg	6.1	07/29/06 12:00 DLK	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/kg	6.1	07/29/06 12:00 DLK	79-34-5		
Tetrachloroethene	ND	ug/kg	6.1	07/29/06 12:00 DLK	127-18-4		
Toluene	ND	ug/kg	6.1	07/29/06 12:00 DLK	108-88-3		
1,2,3-Trichlorobenzene	ND	ug/kg	6.1	07/29/06 12:00 DLK	87-61-6		
1,2,4-Trichlorobenzene	ND	ug/kg	6.1	07/29/06 12:00 DLK	120-82-1		
1,1,1-Trichloroethane	ND	ug/kg	6.1	07/29/06 12:00 DLK	71-55-6		
1,1,2-Trichloroethane	ND	ug/kg	6.1	07/29/06 12:00 DLK	79-00-5		
Trichloroethene	ND	ug/kg	6.1	07/29/06 12:00 DLK	79-01-6		
Trichlorofluoromethane	ND	ug/kg	6.1	07/29/06 12:00 DLK	75-69-4		
1,2,3-Trichloropropane	ND	ug/kg	6.1	07/29/06 12:00 DLK	96-18-4		
1,2,4-Trimethylbenzene	ND	ug/kg	6.1	07/29/06 12:00 DLK	95-63-6		

REPORT OF LABORATORY ANALYSIS

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Lab Project Number: 92123772

Client Project ID: NCDOT 34951.1.1 Duke

Lab Sample No: 927224980	Project Sample Number: 92123772-005	Date Collected: 07/19/06 11:00
Client Sample ID: DUKEB5	Matrix: Soil	Date Received: 07/21/06 15:05

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
1,3,5-Trimethylbenzene	ND	ug/kg	6.1	07/29/06 12:00 DLK	108-67-8		
Vinyl acetate	ND	ug/kg	61.	07/29/06 12:00 DLK	108-05-4		
Vinyl chloride	ND	ug/kg	12.	07/29/06 12:00 DLK	75-01-4		
Xylene (Total)	ND	ug/kg	6.1	07/29/06 12:00 DLK	1330-20-7		
m&p-Xylene	ND	ug/kg	12.	07/29/06 12:00 DLK			
o-Xylene	ND	ug/kg	6.1	07/29/06 12:00 DLK	95-47-6		
Toluene-d8 (S)	103	%		07/29/06 12:00 DLK	2037-26-5		
4-Bromofluorobenzene (S)	96	%		07/29/06 12:00 DLK	460-00-4		
Dibromofluoromethane (S)	94	%		07/29/06 12:00 DLK	1868-53-7		
1,2-Dichloroethane-d4 (S)	85	%		07/29/06 12:00 DLK	17060-07-0		

REPORT OF LABORATORY ANALYSIS

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Lab Project Number: 92123772
Client Project ID: NCDOT 34951.1.1 Duke

Lab Sample No: 927224998	Project Sample Number: 92123772-006	Date Collected: 07/19/06 10:00
Client Sample ID: DUKEB6	Matrix: Soil	Date Received: 07/21/06 15:05

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
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Wet Chemistry

Percent Moisture	Method: % Moisture		
Percent Moisture	26.8	%	07/21/06 18:56 KDF

GC/MS Semivolatiles

Semivolatile Organics

Prep/Method: EPA 3545 / EPA 8270

Acenaphthene	ND	ug/kg	450	07/26/06 16:36 BET	83-32-9
Acenaphthylene	ND	ug/kg	450	07/26/06 16:36 BET	208-96-8
Anthracene	ND	ug/kg	450	07/26/06 16:36 BET	120-12-7
Benzo(k)fluoranthene	ND	ug/kg	450	07/26/06 16:36 BET	207-08-9
Benzo(b)fluoranthene	ND	ug/kg	450	07/26/06 16:36 BET	205-99-2
Benzo(a)anthracene	ND	ug/kg	450	07/26/06 16:36 BET	56-55-3
Benzoic acid	ND	ug/kg	2300	07/26/06 16:36 BET	65-85-0
Benzo(g,h,i)perylene	ND	ug/kg	450	07/26/06 16:36 BET	191-24-2
Benzyl alcohol	ND	ug/kg	900	07/26/06 16:36 BET	100-51-6
Benzo(a)pyrene	ND	ug/kg	450	07/26/06 16:36 BET	50-32-8
4-Bromophenylphenyl ether	ND	ug/kg	450	07/26/06 16:36 BET	101-55-3
Butylbenzylphthalate	ND	ug/kg	450	07/26/06 16:36 BET	85-68-7
4-Chloro-3-methylphenol	ND	ug/kg	900	07/26/06 16:36 BET	59-50-7
4-Chloroaniline	ND	ug/kg	900	07/26/06 16:36 BET	106-47-8
bis(2-Chloroethoxy)methane	ND	ug/kg	450	07/26/06 16:36 BET	111-91-1
bis(2-Chloroethyl) ether	ND	ug/kg	450	07/26/06 16:36 BET	111-44-4
bis(2-Chloroisopropyl) ether	ND	ug/kg	450	07/26/06 16:36 BET	39638-32-9
2-Chloronaphthalene	ND	ug/kg	450	07/26/06 16:36 BET	91-58-7
2-Chlorophenol	ND	ug/kg	450	07/26/06 16:36 BET	95-57-8
4-Chlorophenylphenyl ether	ND	ug/kg	450	07/26/06 16:36 BET	7005-72-3
Chrysene	ND	ug/kg	450	07/26/06 16:36 BET	218-01-9
Dibenz(a,h)anthracene	ND	ug/kg	450	07/26/06 16:36 BET	53-70-3
Dibenzofuran	ND	ug/kg	450	07/26/06 16:36 BET	132-64-9
1,2-Dichlorobenzene	ND	ug/kg	450	07/26/06 16:36 BET	95-50-1
1,3-Dichlorobenzene	ND	ug/kg	450	07/26/06 16:36 BET	541-73-1
1,4-Dichlorobenzene	ND	ug/kg	450	07/26/06 16:36 BET	106-46-7
3,3'-Dichlorobenzidine	ND	ug/kg	900	07/26/06 16:36 BET	91-94-1
2,4-Dichlorophenol	ND	ug/kg	450	07/26/06 16:36 BET	120-83-2
Diethylphthalate	ND	ug/kg	450	07/26/06 16:36 BET	84-66-2
2,4-Dimethylphenol	ND	ug/kg	450	07/26/06 16:36 BET	105-67-9
Dimethylphthalate	ND	ug/kg	450	07/26/06 16:36 BET	131-11-3
Di-n-butylphthalate	ND	ug/kg	450	07/26/06 16:36 BET	84-74-2
4,6-Dinitro-2-methylphenol	ND	ug/kg	450	07/26/06 16:36 BET	534-52-1

REPORT OF LABORATORY ANALYSIS

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Lab Project Number: 92123772

Client Project ID: NCDOT 34951.1.1 Duke

Lab Sample No:	927224998	Project Sample Number:	92123772-006	Date Collected:	07/19/06 10:00
Client Sample ID:	DUKEB6	Matrix:	Soil	Date Received:	07/21/06 15:05

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
2,4-Dinitrophenol	ND	ug/kg	2300	07/26/06 16:36 BET	51-28-5		
2,4-Dinitrotoluene	ND	ug/kg	450	07/26/06 16:36 BET	121-14-2		
2,6-Dinitrotoluene	ND	ug/kg	450	07/26/06 16:36 BET	606-20-2		
Di-n-octylphthalate	ND	ug/kg	450	07/26/06 16:36 BET	117-84-0		
1,2-Diphenylhydrazine	ND	ug/kg	450	07/26/06 16:36 BET	122-66-7		
bis(2-Ethylhexyl)phthalate	ND	ug/kg	450	07/26/06 16:36 BET	117-81-7		
Fluoranthene	ND	ug/kg	450	07/26/06 16:36 BET	206-44-0		
Fluorene	ND	ug/kg	450	07/26/06 16:36 BET	86-73-7		
Hexachloro-1,3-butadiene	ND	ug/kg	450	07/26/06 16:36 BET	87-68-3		
Hexachlorobenzene	ND	ug/kg	450	07/26/06 16:36 BET	118-74-1		
Hexachlorocyclopentadiene	ND	ug/kg	450	07/26/06 16:36 BET	77-47-4		
Hexachloroethane	ND	ug/kg	450	07/26/06 16:36 BET	67-72-1		
Indeno(1,2,3-cd)pyrene	ND	ug/kg	450	07/26/06 16:36 BET	193-39-5		
Isophorone	ND	ug/kg	450	07/26/06 16:36 BET	78-59-1		
1-Methylnaphthalene	ND	ug/kg	450	07/26/06 16:36 BET	90-12-0		
2-Methylnaphthalene	ND	ug/kg	450	07/26/06 16:36 BET	91-57-6		
2-Methylphenol (o-Cresol)	ND	ug/kg	450	07/26/06 16:36 BET	95-48-7		
3&4-Methylphenol	ND	ug/kg	450	07/26/06 16:36 BET			
Naphthalene	ND	ug/kg	450	07/26/06 16:36 BET	91-20-3		
2-Nitroaniline	ND	ug/kg	2300	07/26/06 16:36 BET	88-74-4		
3-Nitroaniline	ND	ug/kg	2300	07/26/06 16:36 BET	99-09-2		
4-Nitroaniline	ND	ug/kg	2300	07/26/06 16:36 BET	100-01-6		
Nitrobenzene	ND	ug/kg	450	07/26/06 16:36 BET	98-95-3		
2-Nitrophenol	ND	ug/kg	450	07/26/06 16:36 BET	88-75-5		
4-Nitrophenol	ND	ug/kg	2300	07/26/06 16:36 BET	100-02-7		
N-Nitroso-di-n-propylamine	ND	ug/kg	450	07/26/06 16:36 BET	621-64-7		
N-Nitrosodiphenylamine	ND	ug/kg	450	07/26/06 16:36 BET	86-30-6		
Pentachlorophenol	ND	ug/kg	2300	07/26/06 16:36 BET	87-86-5		
Phenanthrene	ND	ug/kg	450	07/26/06 16:36 BET	85-01-8		
Phenol	ND	ug/kg	450	07/26/06 16:36 BET	108-95-2		
Pyrene	ND	ug/kg	450	07/26/06 16:36 BET	129-00-0		
1,2,4-Trichlorobenzene	ND	ug/kg	450	07/26/06 16:36 BET	120-82-1		
2,4,5-Trichlorophenol	ND	ug/kg	450	07/26/06 16:36 BET	95-95-4		
2,4,6-Trichlorophenol	ND	ug/kg	450	07/26/06 16:36 BET	88-06-2		
Nitrobenzene-d5 (S)	39	%		07/26/06 16:36 BET	4165-60-0		
2-Fluorobiphenyl (S)	44	%		07/26/06 16:36 BET	321-60-8		
Terphenyl-d14 (S)	57	%		07/26/06 16:36 BET	1718-51-0		
Phenol-d5 (S)	44	%		07/26/06 16:36 BET	4165-62-2		
2-Fluorophenol (S)	45	%		07/26/06 16:36 BET	367-12-4		

REPORT OF LABORATORY ANALYSIS

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Lab Project Number: 92123772
Client Project ID: NCDOT 34951.1.1 Duke

Lab Sample No: 927224998	Project Sample Number: 92123772-006	Date Collected: 07/19/06 10:00
Client Sample ID: DUKEB6	Matrix: Soil	Date Received: 07/21/06 15:05

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
2,4,6-Tribromophenol (S)	66	%		07/26/06 16:36 BET	118-79-6		
Date Extracted	07/22/06			07/22/06			

GC Semivolatiles

Organochlorine PCBs	Prep/Method: EPA 3545 / EPA 8082					
PCB-1016 (Aroclor 1016)	ND	ug/kg	45.	08/01/06 10:03 JEM	12674-11-2	
PCB-1221 (Aroclor 1221)	ND	ug/kg	45.	08/01/06 10:03 JEM	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/kg	45.	08/01/06 10:03 JEM	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/kg	45.	08/01/06 10:03 JEM	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/kg	45.	08/01/06 10:03 JEM	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/kg	45.	08/01/06 10:03 JEM	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/kg	45.	08/01/06 10:03 JEM	11096-82-5	
Decachlorobiphenyl (S)	47	%		08/01/06 10:03 JEM	2051-24-3	
Date Extracted	07/25/06			07/25/06		

GC/MS Volatiles

GC/MS VOCs 5035/8260 low level	Method: EPA 8260					
Acetone	ND	ug/kg	120	07/29/06 12:18 DLK	67-64-1	
Benzene	ND	ug/kg	5.8	07/29/06 12:18 DLK	71-43-2	
Bromobenzene	ND	ug/kg	5.8	07/29/06 12:18 DLK	108-86-1	
Bromochloromethane	ND	ug/kg	5.8	07/29/06 12:18 DLK	74-97-5	
Bromodichloromethane	ND	ug/kg	5.8	07/29/06 12:18 DLK	75-27-4	
Bromoform	ND	ug/kg	5.8	07/29/06 12:18 DLK	75-25-2	
Bromomethane	ND	ug/kg	12.	07/29/06 12:18 DLK	74-83-9	
2-Butanone (MEK)	ND	ug/kg	120	07/29/06 12:18 DLK	78-93-3	
n-Butylbenzene	ND	ug/kg	5.8	07/29/06 12:18 DLK	104-51-8	
sec-Butylbenzene	ND	ug/kg	5.8	07/29/06 12:18 DLK	135-98-8	
tert-Butylbenzene	ND	ug/kg	5.8	07/29/06 12:18 DLK	98-06-6	
Carbon tetrachloride	ND	ug/kg	5.8	07/29/06 12:18 DLK	56-23-5	
Chlorobenzene	ND	ug/kg	5.8	07/29/06 12:18 DLK	108-90-7	
Chloroethane	ND	ug/kg	12.	07/29/06 12:18 DLK	75-00-3	
Chloroform	ND	ug/kg	5.8	07/29/06 12:18 DLK	67-66-3	
Chloromethane	ND	ug/kg	12.	07/29/06 12:18 DLK	74-87-3	
2-Chlorotoluene	ND	ug/kg	5.8	07/29/06 12:18 DLK	95-49-8	
4-Chlorotoluene	ND	ug/kg	5.8	07/29/06 12:18 DLK	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	5.8	07/29/06 12:18 DLK	96-12-8	
Dibromochloromethane	ND	ug/kg	5.8	07/29/06 12:18 DLK	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	5.8	07/29/06 12:18 DLK	106-93-4	
Dibromomethane	ND	ug/kg	5.8	07/29/06 12:18 DLK	74-95-3	

Date: 08/07/06

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Asheville Certification IDs
 NC Wastewater 40
 NC Drinking Water 37712
 SC Environmental 99030
 FL NELAP E87648

REPORT OF LABORATORY ANALYSIS

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Charlotte Certification IDs
 NC Wastewater 12
 NC Drinking Water 37706
 SC 99006
 FL NELAP E87627

Lab Project Number: 92123772

Client Project ID: NCDOT 34951.1.1 Duke

Lab Sample No:	927224998	Project Sample Number:	92123772-006	Date Collected:	07/19/06 10:00
Client Sample ID:	DUKEB6	Matrix:	Soil	Date Received:	07/21/06 15:05

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
1,2-Dichlorobenzene	ND	ug/kg	5.8	07/29/06 12:18 DLK	95-50-1		
1,3-Dichlorobenzene	ND	ug/kg	5.8	07/29/06 12:18 DLK	541-73-1		
1,4-Dichlorobenzene	ND	ug/kg	5.8	07/29/06 12:18 DLK	106-46-7		
Dichlorodifluoromethane	ND	ug/kg	12.	07/29/06 12:18 DLK	75-71-8		
1,1-Dichloroethane	ND	ug/kg	5.8	07/29/06 12:18 DLK	75-34-3		
1,2-Dichloroethane	ND	ug/kg	5.8	07/29/06 12:18 DLK	107-06-2		
1,1-Dichloroethene	ND	ug/kg	5.8	07/29/06 12:18 DLK	75-35-4		
cis-1,2-Dichloroethene	ND	ug/kg	5.8	07/29/06 12:18 DLK	156-59-2		
trans-1,2-Dichloroethene	ND	ug/kg	5.8	07/29/06 12:18 DLK	156-60-5		
1,2-Dichloropropane	ND	ug/kg	5.8	07/29/06 12:18 DLK	78-87-5		
1,3-Dichloropropane	ND	ug/kg	5.8	07/29/06 12:18 DLK	142-28-9		
2,2-Dichloropropane	ND	ug/kg	5.8	07/29/06 12:18 DLK	594-20-7		
1,1-Dichloropropene	ND	ug/kg	5.8	07/29/06 12:18 DLK	563-58-6		
cis-1,3-Dichloropropene	ND	ug/kg	5.8	07/29/06 12:18 DLK	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/kg	5.8	07/29/06 12:18 DLK	10061-02-6		
Diisopropyl ether	ND	ug/kg	5.8	07/29/06 12:18 DLK	108-20-3		
Ethylbenzene	ND	ug/kg	5.8	07/29/06 12:18 DLK	100-41-4		
Hexachloro-1,3-butadiene	ND	ug/kg	5.8	07/29/06 12:18 DLK	87-68-3		
2-Hexanone	ND	ug/kg	58.	07/29/06 12:18 DLK	591-78-6		
Isopropylbenzene (Cumene)	ND	ug/kg	5.8	07/29/06 12:18 DLK	98-82-8		
p-Isopropyltoluene	ND	ug/kg	5.8	07/29/06 12:18 DLK	99-87-6		
Methylene chloride	ND	ug/kg	12.	07/29/06 12:18 DLK	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	58.	07/29/06 12:18 DLK	108-10-1		
Methyl-tert-butyl ether	ND	ug/kg	5.8	07/29/06 12:18 DLK	1634-04-4		
Naphthalene	ND	ug/kg	5.8	07/29/06 12:18 DLK	91-20-3		
n-Propylbenzene	ND	ug/kg	5.8	07/29/06 12:18 DLK	103-65-1		
Styrene	ND	ug/kg	5.8	07/29/06 12:18 DLK	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/kg	5.8	07/29/06 12:18 DLK	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/kg	5.8	07/29/06 12:18 DLK	79-34-5		
Tetrachloroethene	ND	ug/kg	5.8	07/29/06 12:18 DLK	127-18-4		
Toluene	ND	ug/kg	5.8	07/29/06 12:18 DLK	108-88-3		
1,2,3-Trichlorobenzene	ND	ug/kg	5.8	07/29/06 12:18 DLK	87-61-6		
1,2,4-Trichlorobenzene	ND	ug/kg	5.8	07/29/06 12:18 DLK	120-82-1		
1,1,1-Trichloroethane	ND	ug/kg	5.8	07/29/06 12:18 DLK	71-55-6		
1,1,2-Trichloroethane	ND	ug/kg	5.8	07/29/06 12:18 DLK	79-00-5		
Trichloroethene	ND	ug/kg	5.8	07/29/06 12:18 DLK	79-01-6		
Trichlorofluoromethane	ND	ug/kg	5.8	07/29/06 12:18 DLK	75-69-4		
1,2,3-Trichloropropane	ND	ug/kg	5.8	07/29/06 12:18 DLK	96-18-4		
1,2,4-Trimethylbenzene	ND	ug/kg	5.8	07/29/06 12:18 DLK	95-63-6		

REPORT OF LABORATORY ANALYSIS

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Lab Project Number: 92123772

Client Project ID: NCDOT 34951.1.1 Duke

Lab Sample No: 927224998	Project Sample Number: 92123772-006	Date Collected: 07/19/06 10:00
Client Sample ID: DUKEB6	Matrix: Soil	Date Received: 07/21/06 15:05

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
1,3,5-Trimethylbenzene	ND	ug/kg	5.8	07/29/06 12:18 DLK	108-67-8		
Vinyl acetate	ND	ug/kg	58.	07/29/06 12:18 DLK	108-05-4		
Vinyl chloride	ND	ug/kg	12.	07/29/06 12:18 DLK	75-01-4		
Xylene (Total)	ND	ug/kg	5.8	07/29/06 12:18 DLK	1330-20-7		
m&p-Xylene	ND	ug/kg	12.	07/29/06 12:18 DLK			
o-Xylene	ND	ug/kg	5.8	07/29/06 12:18 DLK	95-47-6		
Toluene-d8 (S)	101	%		07/29/06 12:18 DLK	2037-26-5		
4-Bromofluorobenzene (S)	94	%		07/29/06 12:18 DLK	460-00-4		
Dibromofluoromethane (S)	97	%		07/29/06 12:18 DLK	1868-53-7		
1,2-Dichloroethane-d4 (S)	87	%		07/29/06 12:18 DLK	17060-07-0		

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Lab Project Number: 92123772
 Client Project ID: NCDOT 34951.1.1 Duke

Lab Sample No: 927225003	Project Sample Number: 92123772-007	Date Collected: 07/19/06 10:30
Client Sample ID: DUKEB7	Matrix: Soil	Date Received: 07/21/06 15:05

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
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Wet Chemistry

Percent Moisture	Method: % Moisture
Percent Moisture	27.8 %

07/26/06 08:43 TNM

GC/MS Semivolatiles
Semivolatile Organics

Prep/Method: EPA 3545 / EPA 8270

Acenaphthene	ND	ug/kg	460	07/26/06 16:58 BET	83-32-9
Acenaphthylene	ND	ug/kg	460	07/26/06 16:58 BET	208-96-8
Anthracene	ND	ug/kg	460	07/26/06 16:58 BET	120-12-7
Benzo(k)fluoranthene	ND	ug/kg	460	07/26/06 16:58 BET	207-08-9
Benzo(b)fluoranthene	ND	ug/kg	460	07/26/06 16:58 BET	205-99-2
Benzo(a)anthracene	ND	ug/kg	460	07/26/06 16:58 BET	56-55-3
Benzoic acid	ND	ug/kg	2300	07/26/06 16:58 BET	65-85-0
Benzo(g,h,i)perylene	ND	ug/kg	460	07/26/06 16:58 BET	191-24-2
Benzyl alcohol	ND	ug/kg	910	07/26/06 16:58 BET	100-51-6
Benzo(a)pyrene	ND	ug/kg	460	07/26/06 16:58 BET	50-32-8
4-Bromophenylphenyl ether	ND	ug/kg	460	07/26/06 16:58 BET	101-55-3
Butylbenzylphthalate	ND	ug/kg	460	07/26/06 16:58 BET	85-68-7
4-Chloro-3-methylphenol	ND	ug/kg	910	07/26/06 16:58 BET	59-50-7
4-Chloroaniline	ND	ug/kg	910	07/26/06 16:58 BET	106-47-8
bis(2-Chloroethoxy)methane	ND	ug/kg	460	07/26/06 16:58 BET	111-91-1
bis(2-Chloroethyl) ether	ND	ug/kg	460	07/26/06 16:58 BET	111-44-4
bis(2-Chloroisopropyl) ether	ND	ug/kg	460	07/26/06 16:58 BET	39638-32-9
2-Chloronaphthalene	ND	ug/kg	460	07/26/06 16:58 BET	91-58-7
2-Chlorophenol	ND	ug/kg	460	07/26/06 16:58 BET	95-57-8
4-Chlorophenylphenyl ether	ND	ug/kg	460	07/26/06 16:58 BET	7005-72-3
Chrysene	ND	ug/kg	460	07/26/06 16:58 BET	218-01-9
Dibenz(a,h)anthracene	ND	ug/kg	460	07/26/06 16:58 BET	53-70-3
Dibenzofuran	ND	ug/kg	460	07/26/06 16:58 BET	132-64-9
1,2-Dichlorobenzene	ND	ug/kg	460	07/26/06 16:58 BET	95-50-1
1,3-Dichlorobenzene	ND	ug/kg	460	07/26/06 16:58 BET	541-73-1
1,4-Dichlorobenzene	ND	ug/kg	460	07/26/06 16:58 BET	106-46-7
3,3'-Dichlorobenzidine	ND	ug/kg	910	07/26/06 16:58 BET	91-94-1
2,4-Dichlorophenol	ND	ug/kg	460	07/26/06 16:58 BET	120-83-2
Diethylphthalate	ND	ug/kg	460	07/26/06 16:58 BET	84-66-2
2,4-Dimethylphenol	ND	ug/kg	460	07/26/06 16:58 BET	105-67-9
Dimethylphthalate	ND	ug/kg	460	07/26/06 16:58 BET	131-11-3
Di-n-butylphthalate	ND	ug/kg	460	07/26/06 16:58 BET	84-74-2
4,6-Dinitro-2-methylphenol	ND	ug/kg	460	07/26/06 16:58 BET	534-52-1

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Lab Project Number: 92123772

Client Project ID: NCDOT 34951.1.1 Duke

Lab Sample No: 927225003	Project Sample Number: 92123772-007	Date Collected: 07/19/06 10:30
Client Sample ID: DUKEB7	Matrix: Soil	Date Received: 07/21/06 15:05

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
2,4-Dinitrophenol	ND	ug/kg	2300	07/26/06 16:58 BET	51-28-5		
2,4-Dinitrotoluene	ND	ug/kg	460	07/26/06 16:58 BET	121-14-2		
2,6-Dinitrotoluene	ND	ug/kg	460	07/26/06 16:58 BET	606-20-2		
Di-n-octylphthalate	ND	ug/kg	460	07/26/06 16:58 BET	117-84-0		
1,2-Diphenylhydrazine	ND	ug/kg	460	07/26/06 16:58 BET	122-66-7		
bis(2-Ethylhexyl)phthalate	ND	ug/kg	460	07/26/06 16:58 BET	117-81-7		
Fluoranthene	ND	ug/kg	460	07/26/06 16:58 BET	206-44-0		
Fluorene	ND	ug/kg	460	07/26/06 16:58 BET	86-73-7		
Hexachloro-1,3-butadiene	ND	ug/kg	460	07/26/06 16:58 BET	87-68-3		
Hexachlorobenzene	ND	ug/kg	460	07/26/06 16:58 BET	118-74-1		
Hexachlorocyclopentadiene	ND	ug/kg	460	07/26/06 16:58 BET	77-47-4		
Hexachloroethane	ND	ug/kg	460	07/26/06 16:58 BET	67-72-1		
Indeno(1,2,3-cd)pyrene	ND	ug/kg	460	07/26/06 16:58 BET	193-39-5		
Isophorone	ND	ug/kg	460	07/26/06 16:58 BET	78-59-1		
1-Methylnaphthalene	ND	ug/kg	460	07/26/06 16:58 BET	90-12-0		
2-Methylnaphthalene	ND	ug/kg	460	07/26/06 16:58 BET	91-57-6		
2-Methylphenol (o-Cresol)	ND	ug/kg	460	07/26/06 16:58 BET	95-48-7		
3&4-Methylphenol	ND	ug/kg	460	07/26/06 16:58 BET			
Naphthalene	ND	ug/kg	460	07/26/06 16:58 BET	91-20-3		
2-Nitroaniline	ND	ug/kg	2300	07/26/06 16:58 BET	88-74-4		
3-Nitroaniline	ND	ug/kg	2300	07/26/06 16:58 BET	99-09-2		
4-Nitroaniline	ND	ug/kg	2300	07/26/06 16:58 BET	100-01-6		
Nitrobenzene	ND	ug/kg	460	07/26/06 16:58 BET	98-95-3		
2-Nitrophenol	ND	ug/kg	460	07/26/06 16:58 BET	88-75-5		
4-Nitrophenol	ND	ug/kg	2300	07/26/06 16:58 BET	100-02-7		
N-Nitroso-di-n-propylamine	ND	ug/kg	460	07/26/06 16:58 BET	621-64-7		
N-Nitrosodiphenylamine	ND	ug/kg	460	07/26/06 16:58 BET	86-30-6		
Pentachlorophenol	ND	ug/kg	2300	07/26/06 16:58 BET	87-86-5		
Phenanthrene	ND	ug/kg	460	07/26/06 16:58 BET	85-01-8		
Phenol	ND	ug/kg	460	07/26/06 16:58 BET	108-95-2		
Pyrene	ND	ug/kg	460	07/26/06 16:58 BET	129-00-0		
1,2,4-Trichlorobenzene	ND	ug/kg	460	07/26/06 16:58 BET	120-82-1		
2,4,5-Trichlorophenol	ND	ug/kg	460	07/26/06 16:58 BET	95-95-4		
2,4,6-Trichlorophenol	ND	ug/kg	460	07/26/06 16:58 BET	88-06-2		
Nitrobenzene-d5 (S)	39	%		07/26/06 16:58 BET	4165-60-0		
2-Fluorobiphenyl (S)	49	%		07/26/06 16:58 BET	321-60-8		
Terphenyl-d14 (S)	38	%		07/26/06 16:58 BET	1718-51-0		
Phenol-d5 (S)	45	%		07/26/06 16:58 BET	4165-62-2		
2-Fluorophenol (S)	49	%		07/26/06 16:58 BET	367-12-4		

REPORT OF LABORATORY ANALYSIS

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Lab Project Number: 92123772

Client Project ID: NCDOT 34951.1.1 Duke

Lab Sample No: 927225003	Project Sample Number: 92123772-007	Date Collected: 07/19/06 10:30
Client Sample ID: DUKEB7	Matrix: Soil	Date Received: 07/21/06 15:05

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
2,4,6-Tribromophenol (S)	78	%		07/26/06 16:58 BET	118-79-6		
Date Extracted	07/22/06			07/22/06			

GC Semivolatiles

Organochlorine PCBs	Prep/Method: EPA 3545 / EPA 8082
PCB-1016 (Aroclor 1016)	ND ug/kg 46. 08/02/06 18:16 JEM 12674-11-2
PCB-1221 (Aroclor 1221)	ND ug/kg 46. 08/02/06 18:16 JEM 11104-28-2
PCB-1232 (Aroclor 1232)	ND ug/kg 46. 08/02/06 18:16 JEM 11141-16-5
PCB-1242 (Aroclor 1242)	ND ug/kg 46. 08/02/06 18:16 JEM 53469-21-9
PCB-1248 (Aroclor 1248)	ND ug/kg 46. 08/02/06 18:16 JEM 12672-29-6
PCB-1254 (Aroclor 1254)	ND ug/kg 46. 08/02/06 18:16 JEM 11097-69-1
PCB-1260 (Aroclor 1260)	ND ug/kg 46. 08/02/06 18:16 JEM 11096-82-5
Decachlorobiphenyl (S)	46 % 08/02/06 18:16 JEM 2051-24-3
Date Extracted	08/01/06 08/01/06

GC/MS Volatiles

GC/MS VOCs 5035/8260 low level	Method: EPA 8260
Acetone	ND ug/kg 120 07/29/06 12:36 DLK 67-64-1
Benzene	ND ug/kg 5.9 07/29/06 12:36 DLK 71-43-2
Bromobenzene	ND ug/kg 5.9 07/29/06 12:36 DLK 108-86-1
Bromochloromethane	ND ug/kg 5.9 07/29/06 12:36 DLK 74-97-5
Bromodichloromethane	ND ug/kg 5.9 07/29/06 12:36 DLK 75-27-4
Bromoform	ND ug/kg 5.9 07/29/06 12:36 DLK 75-25-2
Bromomethane	ND ug/kg 12. 07/29/06 12:36 DLK 74-83-9
2-Butanone (MEK)	ND ug/kg 120 07/29/06 12:36 DLK 78-93-3
n-Butylbenzene	ND ug/kg 5.9 07/29/06 12:36 DLK 104-51-8
sec-Butylbenzene	ND ug/kg 5.9 07/29/06 12:36 DLK 135-98-8
tert-Butylbenzene	ND ug/kg 5.9 07/29/06 12:36 DLK 98-06-6
Carbon tetrachloride	ND ug/kg 5.9 07/29/06 12:36 DLK 56-23-5
Chlorobenzene	ND ug/kg 5.9 07/29/06 12:36 DLK 108-90-7
Chloroethane	ND ug/kg 12. 07/29/06 12:36 DLK 75-00-3
Chloroform	ND ug/kg 5.9 07/29/06 12:36 DLK 67-66-3
Chloromethane	ND ug/kg 12. 07/29/06 12:36 DLK 74-87-3
2-Chlorotoluene	ND ug/kg 5.9 07/29/06 12:36 DLK 95-49-8
4-Chlorotoluene	ND ug/kg 5.9 07/29/06 12:36 DLK 106-43-4
1,2-Dibromo-3-chloropropane	ND ug/kg 5.9 07/29/06 12:36 DLK 96-12-8
Dibromochloromethane	ND ug/kg 5.9 07/29/06 12:36 DLK 124-48-1
1,2-Dibromoethane (EDB)	ND ug/kg 5.9 07/29/06 12:36 DLK 106-93-4
Dibromomethane	ND ug/kg 5.9 07/29/06 12:36 DLK 74-95-3

Date: 08/07/06

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Asheville Certification IDs
 NC Wastewater 40
 NC Drinking Water 37712
 SC Environmental 99030
 FL NELAP E87648

REPORT OF LABORATORY ANALYSIS

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Charlotte Certification IDs
 NC Wastewater 12
 NC Drinking Water 37706
 SC 99006
 FL NELAP E87627

Lab Project Number: 92123772

Client Project ID: NCDOT 34951.1.1 Duke

Lab Sample No: 927225003	Project Sample Number: 92123772-007	Date Collected: 07/19/06 10:30
Client Sample ID: DUKEB7	Matrix: Soil	Date Received: 07/21/06 15:05

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
1,2-Dichlorobenzene	ND	ug/kg	5.9	07/29/06 12:36 DLK	95-50-1		
1,3-Dichlorobenzene	ND	ug/kg	5.9	07/29/06 12:36 DLK	541-73-1		
1,4-Dichlorobenzene	ND	ug/kg	5.9	07/29/06 12:36 DLK	106-46-7		
Dichlorodifluoromethane	ND	ug/kg	12.	07/29/06 12:36 DLK	75-71-8		
1,1-Dichloroethane	ND	ug/kg	5.9	07/29/06 12:36 DLK	75-34-3		
1,2-Dichloroethane	ND	ug/kg	5.9	07/29/06 12:36 DLK	107-06-2		
1,1-Dichloroethene	ND	ug/kg	5.9	07/29/06 12:36 DLK	75-35-4		
cis-1,2-Dichloroethene	ND	ug/kg	5.9	07/29/06 12:36 DLK	156-59-2		
trans-1,2-Dichloroethene	ND	ug/kg	5.9	07/29/06 12:36 DLK	156-60-5		
1,2-Dichloropropane	ND	ug/kg	5.9	07/29/06 12:36 DLK	78-87-5		
1,3-Dichloropropane	ND	ug/kg	5.9	07/29/06 12:36 DLK	142-28-9		
2,2-Dichloropropane	ND	ug/kg	5.9	07/29/06 12:36 DLK	594-20-7		
1,1-Dichloropropene	ND	ug/kg	5.9	07/29/06 12:36 DLK	563-58-6		
cis-1,3-Dichloropropene	ND	ug/kg	5.9	07/29/06 12:36 DLK	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/kg	5.9	07/29/06 12:36 DLK	10061-02-6		
Diisopropyl ether	ND	ug/kg	5.9	07/29/06 12:36 DLK	108-20-3		
Ethylbenzene	ND	ug/kg	5.9	07/29/06 12:36 DLK	100-41-4		
Hexachloro-1,3-butadiene	ND	ug/kg	5.9	07/29/06 12:36 DLK	87-68-3		
2-Hexanone	ND	ug/kg	59.	07/29/06 12:36 DLK	591-78-6		
Isopropylbenzene (Cumene)	ND	ug/kg	5.9	07/29/06 12:36 DLK	98-82-8		
p-Isopropyltoluene	ND	ug/kg	5.9	07/29/06 12:36 DLK	99-87-6		
Methylene chloride	ND	ug/kg	12.	07/29/06 12:36 DLK	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	59.	07/29/06 12:36 DLK	108-10-1		
Methyl-tert-butyl ether	ND	ug/kg	5.9	07/29/06 12:36 DLK	1634-04-4		
Naphthalene	ND	ug/kg	5.9	07/29/06 12:36 DLK	91-20-3		
n-Propylbenzene	ND	ug/kg	5.9	07/29/06 12:36 DLK	103-65-1		
Styrene	ND	ug/kg	5.9	07/29/06 12:36 DLK	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/kg	5.9	07/29/06 12:36 DLK	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/kg	5.9	07/29/06 12:36 DLK	79-34-5		
Tetrachloroethene	ND	ug/kg	5.9	07/29/06 12:36 DLK	127-18-4		
Toluene	ND	ug/kg	5.9	07/29/06 12:36 DLK	108-88-3		
1,2,3-Trichlorobenzene	ND	ug/kg	5.9	07/29/06 12:36 DLK	87-61-6		
1,2,4-Trichlorobenzene	ND	ug/kg	5.9	07/29/06 12:36 DLK	120-82-1		
1,1,1-Trichloroethane	ND	ug/kg	5.9	07/29/06 12:36 DLK	71-55-6		
1,1,2-Trichloroethane	ND	ug/kg	5.9	07/29/06 12:36 DLK	79-00-5		
Trichloroethene	ND	ug/kg	5.9	07/29/06 12:36 DLK	79-01-6		
Trichlorofluoromethane	ND	ug/kg	5.9	07/29/06 12:36 DLK	75-69-4		
1,2,3-Trichloropropane	ND	ug/kg	5.9	07/29/06 12:36 DLK	96-18-4		
1,2,4-Trimethylbenzene	ND	ug/kg	5.9	07/29/06 12:36 DLK	95-63-6		

REPORT OF LABORATORY ANALYSIS

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Lab Project Number: 92123772

Client Project ID: NCDOT 34951.1.1 Duke

Lab Sample No: 927225003	Project Sample Number: 92123772-007	Date Collected: 07/19/06 10:30
Client Sample ID: DUKEB7	Matrix: Soil	Date Received: 07/21/06 15:05

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
1,3,5-Trimethylbenzene	ND	ug/kg	5.9	07/29/06 12:36 DLK	108-67-8		
Vinyl acetate	ND	ug/kg	59.	07/29/06 12:36 DLK	108-05-4		
Vinyl chloride	ND	ug/kg	12.	07/29/06 12:36 DLK	75-01-4		
Xylene (Total)	ND	ug/kg	5.9	07/29/06 12:36 DLK	1330-20-7		
m&p-Xylene	ND	ug/kg	12.	07/29/06 12:36 DLK			
o-Xylene	ND	ug/kg	5.9	07/29/06 12:36 DLK	95-47-6		
Toluene-d8 (S)	102	%		07/29/06 12:36 DLK	2037-26-5		
4-Bromofluorobenzene (S)	98	%		07/29/06 12:36 DLK	460-00-4		
Dibromofluoromethane (S)	97	%		07/29/06 12:36 DLK	1868-53-7		
1,2-Dichloroethane-d4 (S)	83	%		07/29/06 12:36 DLK	17060-07-0		

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Lab Project Number: 92123772
Client Project ID: NCDOT 34951.1.1 Duke

PARAMETER FOOTNOTES

Method 9071B modified to use ASE.

All pH, Free Chlorine, Total Chlorine and Ferrous Iron analyses conducted outside of EPA recommended immediate hold time.

Depending on the moisture content the PRLs can be elevated for all soil samples reported on a dry weight basis.

2-Chloroethyl vinyl ether has been shown to degrade in the presence of acid.

ND	Not detected at or above adjusted reporting limit
NC	Not Calculable
J	Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit
MDL	Adjusted Method Detection Limit
(S)	Surrogate
[1]	Acid surrogate recovery outside of control limits. The data was accepted based on valid recovery of the two remaining acid surrogates.

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 NC Wastewater 12
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QUALITY CONTROL DATA

Lab Project Number: 92123772
Client Project ID: NCDOT 34951.1.1 Duke

QC Batch: 163061	Analysis Method: EPA 8082
QC Batch Method: EPA 3545	Analysis Description: Organochlorine PCBs
Associated Lab Samples:	927224907 927224915 927224931 927224972 927224980 927224998 927225003

METHOD BLANK: 927232512							
Associated Lab Samples:	927224907 927224915 927224931 927224972 927224980 927224998 927225003						

<u>Parameter</u>	<u>Units</u>	Blank		Reporting	
		<u>Result</u>	<u>Limit</u>	<u>Footnotes</u>	
PCB-1016 (Aroclor 1016)	ug/kg	ND	33.		
PCB-1221 (Aroclor 1221)	ug/kg	ND	33.		
PCB-1232 (Aroclor 1232)	ug/kg	ND	33.		
PCB-1242 (Aroclor 1242)	ug/kg	ND	33.		
PCB-1248 (Aroclor 1248)	ug/kg	ND	33.		
PCB-1254 (Aroclor 1254)	ug/kg	ND	33.		
PCB-1260 (Aroclor 1260)	ug/kg	ND	33.		
Decachlorobiphenyl (S)	%	75			

LABORATORY CONTROL SAMPLE: 927232520

<u>Parameter</u>	<u>Units</u>	Spike			LCS		LCS	
		<u>Conc.</u>	<u>Result</u>	<u>% Rec</u>	<u>Footnotes</u>			
PCB-1016 (Aroclor 1016)	ug/kg	166.70	123.0	74				
PCB-1260 (Aroclor 1260)	ug/kg	166.70	128.4	77				
Decachlorobiphenyl (S)				60				

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 927232538 927232546

<u>Parameter</u>	<u>Units</u>	927224931		Spike		MS		MSD		MS		MSD	
		<u>Result</u>	<u>Conc.</u>	<u>Result</u>	<u>Conc.</u>	<u>Result</u>	<u>Result</u>	<u>% Rec</u>	<u>% Rec</u>	<u>RPD</u>	<u>Footnotes</u>		
PCB-1016 (Aroclor 1016)	ug/kg	0	238.40	163.1	183.9	68	77	12					
PCB-1260 (Aroclor 1260)	ug/kg	1.458	238.40	176.3	227.4	73	95	25					
Decachlorobiphenyl (S)						55	74						

QUALITY CONTROL DATA

Lab Project Number: 92123772
Client Project ID: NCDOT 34951.1.1 Duke

QC Batch: 162409	Analysis Method: EPA 8270
QC Batch Method: EPA 3545	Analysis Description: Semivolatile Organics
Associated Lab Samples:	927224907 927224915 927224931 927224972 927224980
	927224998 927225003

METHOD BLANK: 927226209						
Associated Lab Samples:	927224907	927224915	927224931	927224972	927224980	927224998
						927225003

<u>Parameter</u>	<u>Units</u>	<u>Blank</u>	<u>Reporting</u>	<u>Footnotes</u>
		<u>Result</u>	<u>Limit</u>	
Acenaphthene	ug/kg	ND	330	
Acenaphthylene	ug/kg	ND	330	
Anthracene	ug/kg	ND	330	
Benzo(k)fluoranthene	ug/kg	ND	330	
Benzo(b)fluoranthene	ug/kg	ND	330	
Benzo(a)anthracene	ug/kg	ND	330	
Benzoic acid	ug/kg	ND	1600	
Benzo(g,h,i)perylene	ug/kg	ND	330	
Benzyl alcohol	ug/kg	ND	660	
Benzo(a)pyrene	ug/kg	ND	330	
4-Bromophenylphenyl ether	ug/kg	ND	330	
Butylbenzylphthalate	ug/kg	ND	330	
4-Chloro-3-methylphenol	ug/kg	ND	660	
4-Chloroaniline	ug/kg	ND	660	
bis(2-Chloroethoxy)methane	ug/kg	ND	330	
bis(2-Chloroethyl) ether	ug/kg	ND	330	
bis(2-Chloroisopropyl) ether	ug/kg	ND	330	
2-Chloronaphthalene	ug/kg	ND	330	
2-Chlorophenol	ug/kg	ND	330	
4-Chlorophenylphenyl ether	ug/kg	ND	330	
Chrysene	ug/kg	ND	330	
Dibenz(a,h)anthracene	ug/kg	ND	330	
Dibenzofuran	ug/kg	ND	330	
1,2-Dichlorobenzene	ug/kg	ND	330	
1,3-Dichlorobenzene	ug/kg	ND	330	
1,4-Dichlorobenzene	ug/kg	ND	330	
3,3'-Dichlorobenzidine	ug/kg	ND	660	
2,4-Dichlorophenol	ug/kg	ND	330	
Diethylphthalate	ug/kg	ND	330	
2,4-Dimethylphenol	ug/kg	ND	330	

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QUALITY CONTROL DATA

Lab Project Number: 92123772
Client Project ID: NCDOT 34951.1.1 Duke

METHOD BLANK: 927226209

Associated Lab Samples: 927224907 927224915 927224931 927224972 927224980 927224998 927225003

<u>Parameter</u>	<u>Units</u>	<u>Blank</u>	<u>Reporting</u>	<u>Footnotes</u>
		<u>Result</u>	<u>Limit</u>	
Dimethylphthalate	ug/kg	ND	330	
Di-n-butylphthalate	ug/kg	ND	330	
4,6-Dinitro-2-methylphenol	ug/kg	ND	330	
2,4-Dinitrophenol	ug/kg	ND	1600	
2,4-Dinitrotoluene	ug/kg	ND	330	
2,6-Dinitrotoluene	ug/kg	ND	330	
Di-n-octylphthalate	ug/kg	ND	330	
1,2-Diphenylhydrazine	ug/kg	ND	330	
bis(2-Ethylhexyl)phthalate	ug/kg	ND	330	
Fluoranthene	ug/kg	ND	330	
Fluorene	ug/kg	ND	330	
Hexachloro-1,3-butadiene	ug/kg	ND	330	
Hexachlorobenzene	ug/kg	ND	330	
Hexachlorocyclopentadiene	ug/kg	ND	330	
Hexachloroethane	ug/kg	ND	330	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	330	
Isophorone	ug/kg	ND	330	
1-Methylnaphthalene	ug/kg	ND	330	
2-Methylnaphthalene	ug/kg	ND	330	
2-Methylphenol (o-Cresol)	ug/kg	ND	330	
3&4-Methylphenol	ug/kg	ND	330	
Naphthalene	ug/kg	ND	330	
2-Nitroaniline	ug/kg	ND	1600	
3-Nitroaniline	ug/kg	ND	1600	
4-Nitroaniline	ug/kg	ND	1600	
Nitrobenzene	ug/kg	ND	330	
2-Nitrophenol	ug/kg	ND	330	
4-Nitrophenol	ug/kg	ND	1600	
N-Nitroso-di-n-propylamine	ug/kg	ND	330	
N-Nitrosodiphenylamine	ug/kg	ND	330	
Pentachlorophenol	ug/kg	ND	1600	
Phenanthrone	ug/kg	ND	330	
Phenol	ug/kg	ND	330	
Pyrene	ug/kg	ND	330	
1,2,4-Trichlorobenzene	ug/kg	ND	330	
2,4,5-Trichlorophenol	ug/kg	ND	330	

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QUALITY CONTROL DATA

Lab Project Number: 92123772
Client Project ID: NCDOT 34951.1.1 Duke

METHOD BLANK: 927226209

Associated Lab Samples: 927224907 927224915 927224931 927224972 927224980 927224998 927225003

<u>Parameter</u>	<u>Units</u>	<u>Blank</u>	<u>Reporting</u>		<u>Footnotes</u>
		<u>Result</u>	<u>Limit</u>		
2,4,6-Trichlorophenol	ug/kg	ND	330		
Nitrobenzene-d5 (S)	%	59			
2-Fluorobiphenyl (S)	%	62			
Terphenyl-d14 (S)	%	81			
Phenol-d5 (S)	%	58			
2-Fluorophenol (S)	%	63			
2,4,6-Tribromophenol (S)	%	64			

LABORATORY CONTROL SAMPLE: 927207209

<u>Parameter</u>	<u>Units</u>	<u>Spike</u>	<u>LCS</u>	<u>LCS</u>	<u>Footnotes</u>
		<u>Conc.</u>	<u>Result</u>	<u>% Rec</u>	
Acenaphthene	ug/kg	1667.00	1094	66	
Acenaphthylene	ug/kg	1667.00	1102	66	
Anthracene	ug/kg	1667.00	1201	72	
Benzo(k)fluoranthene	ug/kg	1667.00	1091	65	
Benzo(b)fluoranthene	ug/kg	1667.00	970.9	58	
Benzo(a)anthracene	ug/kg	1667.00	1165	70	
Benzo(g,h,i)perylene	ug/kg	1667.00	1147	69	
Benzyl alcohol	ug/kg	1667.00	1295	78	
Benzo(a)pyrene	ug/kg	1667.00	1235	74	
4-Bromophenylphenyl ether	ug/kg	1667.00	1211	73	
Butylbenzylphthalate	ug/kg	1667.00	1059	64	
4-Chloroaniline	ug/kg	1667.00	1351	81	
bis(2-Chloroethoxy)methane	ug/kg	1667.00	1001	60	
bis(2-Chloroethyl) ether	ug/kg	1667.00	1175	70	
bis(2-Chloroisopropyl) ether	ug/kg	1667.00	1246	75	
2-Chloronaphthalene	ug/kg	1667.00	1187	71	
4-Chlorophenylphenyl ether	ug/kg	1667.00	1262	76	
Chrysene	ug/kg	1667.00	1130	68	
Dibenz(a,h)anthracene	ug/kg	1667.00	1158	70	
Dibenzofuran	ug/kg	1667.00	1205	72	
1,2-Dichlorobenzene	ug/kg	1667.00	1169	70	
1,3-Dichlorobenzene	ug/kg	1667.00	1112	67	
1,4-Dichlorobenzene	ug/kg	1667.00	1190	71	

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QUALITY CONTROL DATA

Lab Project Number: 92123772
Client Project ID: NCDOT 34951.1.1 Duke

LABORATORY CONTROL SAMPLE: 927207209

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
3,3'-Dichlorobenzidine	ug/kg	3333.00	829.6	25	
Diethylphthalate	ug/kg	1667.00	1070	64	
Dimethylphthalate	ug/kg	1667.00	1137	68	
Di-n-butylphthalate	ug/kg	1667.00	1034	62	
2,4-Dinitrotoluene	ug/kg	1667.00	1200	72	
2,6-Dinitrotoluene	ug/kg	1667.00	1207	72	
Di-n-octylphthalate	ug/kg	1667.00	1021	61	
1,2-Diphenylhydrazine	ug/kg	1667.00	951.7	57	
bis(2-Ethylhexyl)phthalate	ug/kg	1667.00	978.0	59	
Fluoranthene	ug/kg	1667.00	1197	72	
Fluorene	ug/kg	1667.00	1123	67	
Hexachloro-1,3-butadiene	ug/kg	1667.00	1051	63	
Hexachlorobenzene	ug/kg	1667.00	1241	74	
Hexachlorocyclopentadiene	ug/kg	1667.00	1764	106	
Hexachloroethane	ug/kg	1667.00	1110	67	
Indeno(1,2,3-cd)pyrene	ug/kg	1667.00	1140	68	
Isophorone	ug/kg	1667.00	1778	107	
1-Methylnaphthalene	ug/kg	1667.00	969.6	58	
2-Methylnaphthalene	ug/kg	1667.00	1010	61	
Naphthalene	ug/kg	1667.00	946.6	57	
2-Nitroaniline	ug/kg	1667.00	1030	62	
3-Nitroaniline	ug/kg	1667.00	1093	66	
4-Nitroaniline	ug/kg	1667.00	1061	64	
Nitrobenzene	ug/kg	1667.00	1043	63	
N-Nitroso-di-n-propylamine	ug/kg	1667.00	1228	74	
N-Nitrosodiphenylamine	ug/kg	1667.00	1212	73	
Phenanthrene	ug/kg	1667.00	1144	69	
Pyrene	ug/kg	1667.00	1182	71	
1,2,4-Trichlorobenzene	ug/kg	1667.00	1077	65	
Nitrobenzene-d5 (S)				59	
2-Fluorobiphenyl (S)				71	
Terphenyl-d14 (S)				70	

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QUALITY CONTROL DATA

Lab Project Number: 92123772
Client Project ID: NCDOT 34951.1.1 Duke

LABORATORY CONTROL SAMPLE: 927226217

<u>Parameter</u>	<u>Units</u>	<u>Spike Conc.</u>	<u>LCS Result</u>	<u>LCS % Rec</u>	<u>Footnotes</u>
Acenaphthene	ug/kg	1667.00	1232	74	
Acenaphthylene	ug/kg	1667.00	1217	73	
Anthracene	ug/kg	1667.00	1350	81	
Benzo(k)fluoranthene	ug/kg	1667.00	1280	77	
Benzo(b)fluoranthene	ug/kg	1667.00	1318	79	
Benzo(a)anthracene	ug/kg	1667.00	1291	78	
Benzoic acid	ug/kg	1667.00	579.0	35	
Benzo(g,h,i)perylene	ug/kg	1667.00	1070	64	
Benzyl alcohol	ug/kg	1667.00	1076	64	
Benzo(a)pyrene	ug/kg	1667.00	1364	82	
4-Bromophenylphenyl ether	ug/kg	1667.00	1231	74	
Butylbenzylphthalate	ug/kg	1667.00	1473	88	
4-Chloro-3-methylphenol	ug/kg	1667.00	1329	80	
4-Chloroaniline	ug/kg	1667.00	1660	100	
bis(2-Chloroethoxy)methane	ug/kg	1667.00	1177	71	
bis(2-Chloroethyl) ether	ug/kg	1667.00	956.0	57	
bis(2-Chloroisopropyl) ether	ug/kg	1667.00	969.9	58	
2-Chloronaphthalene	ug/kg	1667.00	1182	71	
2-Chlorophenol	ug/kg	1667.00	979.8	59	
4-Chlorophenylphenyl ether	ug/kg	1667.00	1311	79	
Chrysene	ug/kg	1667.00	1291	78	
Dibenz(a,h)anthracene	ug/kg	1667.00	1099	66	
Dibenzofuran	ug/kg	1667.00	1312	79	
1,2-Dichlorobenzene	ug/kg	1667.00	922.8	55	
1,3-Dichlorobenzene	ug/kg	1667.00	873.9	52	
1,4-Dichlorobenzene	ug/kg	1667.00	947.0	57	
3,3'-Dichlorobenzidine	ug/kg	3333.00	769.6	23	
2,4-Dichlorophenol	ug/kg	1667.00	1185	71	
Diethylphthalate	ug/kg	1667.00	1412	85	
2,4-Dimethylphenol	ug/kg	1667.00	969.3	58	
Dimethylphthalate	ug/kg	1667.00	1300	78	
Di-n-butylphthalate	ug/kg	1667.00	1459	88	
4,6-Dinitro-2-methylphenol	ug/kg	1667.00	1186	71	
2,4-Dinitrophenol	ug/kg	1667.00	1020	61	
2,4-Dinitrotoluene	ug/kg	1667.00	1455	87	
2,6-Dinitrotoluene	ug/kg	1667.00	1375	82	
Di-n-octylphthalate	ug/kg	1667.00	1306	78	

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QUALITY CONTROL DATA

Lab Project Number: 92123772
Client Project ID: NCDOT 34951.1.1 Duke

LABORATORY CONTROL SAMPLE: 927226217

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
1,2-Diphenylhydrazine	ug/kg	1667.00	987.1	59	
bis(2-Ethylhexyl)phthalate	ug/kg	1667.00	1419	85	
Fluoranthene	ug/kg	1667.00	1365	82	
Fluorene	ug/kg	1667.00	1329	80	
Hexachloro-1,3-butadiene	ug/kg	1667.00	967.4	58	
Hexachlorobenzene	ug/kg	1667.00	1204	72	
Hexachlorocyclopentadiene	ug/kg	1667.00	406.0	24	
Hexachloroethane	ug/kg	1667.00	929.7	56	
Indeno(1,2,3-cd)pyrene	ug/kg	1667.00	1081	65	
Isophorone	ug/kg	1667.00	2052	123 1	
1-Methylnaphthalene	ug/kg	1667.00	1247	75	
2-Methylnaphthalene	ug/kg	1667.00	1219	73	
2-Methylphenol (o-Cresol)	ug/kg	1667.00	1072	64	
3&4-Methylphenol	ug/kg	1667.00	1152	69	
Naphthalene	ug/kg	1667.00	1056	63	
2-Nitroaniline	ug/kg	1667.00	1184	71	
3-Nitroaniline	ug/kg	1667.00	1180	71	
4-Nitroaniline	ug/kg	1667.00	1956	117	
Nitrobenzene	ug/kg	1667.00	1094	66	
2-Nitrophenol	ug/kg	1667.00	1120	67	
4-Nitrophenol	ug/kg	1667.00	1323	79	
N-Nitroso-di-n-propylamine	ug/kg	1667.00	1162	70	
N-Nitrosodiphenylamine	ug/kg	1667.00	1273	76	
Pentachlorophenol	ug/kg	1667.00	1141	68	
Phenanthrene	ug/kg	1667.00	1273	76	
Phenol	ug/kg	1667.00	999.7	60	
Pyrene	ug/kg	1667.00	1401	84	
1,2,4-Trichlorobenzene	ug/kg	1667.00	1024	61	
2,4,5-Trichlorophenol	ug/kg	1667.00	1159	70	
2,4,6-Trichlorophenol	ug/kg	1667.00	1159	70	
Nitrobenzene-d5 (S)				62	
2-Fluorobiphenyl (S)				68	
Terphenyl-d14 (S)				85	
Phenol-d5 (S)				60	
2-Fluorophenol (S)				56	
2,4,6-Tribromophenol (S)				79	

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QUALITY CONTROL DATA

Lab Project Number: 92123772
Client Project ID: NCDOT 34951.1.1 Duke

MATRIX SPIKE: 927207217

Parameter	Units	927206870	Spike	MS	MS
			Conc.	Result	% Rec
Acenaphthene	ug/kg	0	1819.00	942.5	52
1,4-Dichlorobenzene	ug/kg	0	1819.00	949.3	52
2,4-Dinitrotoluene	ug/kg	0	1819.00	1008	55
N-Nitroso-di-n-propylamine	ug/kg	0	1819.00	1050	58
Pyrene	ug/kg	0	1819.00	1039	57
1,2,4-Trichlorobenzene	ug/kg	0	1819.00	939.8	52
Nitrobenzene-d5 (S)					44
2-Fluorobiphenyl (S)					54
Terphenyl-d14 (S)					55

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QUALITY CONTROL DATA

Lab Project Number: 92123772
Client Project ID: NCDOT 34951.1.1 Duke

QC Batch: 163516	Analysis Method: EPA 8260
QC Batch Method: EPA 8260	Analysis Description: GC/MS VOCs 5035/8260 low level
Associated Lab Samples:	927224907 927224915 927224931 927224972 927224980
	927224998 927225003

METHOD BLANK: 927249599	927224907	927224915	927224931	927224972	927224980	927224998	927225003
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<u>Parameter</u>	<u>Units</u>	<u>Blank</u>	<u>Reporting</u>	<u>Footnotes</u>
		<u>Result</u>	<u>Limit</u>	
Acetone	ug/kg	ND	100	
Benzene	ug/kg	ND	5.0	
Bromobenzene	ug/kg	ND	5.0	
Bromoform	ug/kg	ND	5.0	
Bromomethane	ug/kg	ND	10.	
2-Butanone (MEK)	ug/kg	ND	100	
n-Butylbenzene	ug/kg	ND	5.0	
sec-Butylbenzene	ug/kg	ND	5.0	
tert-Butylbenzene	ug/kg	ND	5.0	
Carbon tetrachloride	ug/kg	ND	5.0	
Chlorobenzene	ug/kg	ND	5.0	
Chloroethane	ug/kg	ND	10.	
Chloroform	ug/kg	ND	5.0	
Chloromethane	ug/kg	ND	10.	
2-Chlorotoluene	ug/kg	ND	5.0	
4-Chlorotoluene	ug/kg	ND	5.0	
1,2-Dibromo-3-chloropropane	ug/kg	ND	5.0	
Dibromochloromethane	ug/kg	ND	5.0	
1,2-Dibromoethane (EDB)	ug/kg	ND	5.0	
Dibromomethane	ug/kg	ND	5.0	
1,2-Dichlorobenzene	ug/kg	ND	5.0	
1,3-Dichlorobenzene	ug/kg	ND	5.0	
1,4-Dichlorobenzene	ug/kg	ND	5.0	
Dichlorodifluoromethane	ug/kg	ND	10.	
1,1-Dichloroethane	ug/kg	ND	5.0	
1,2-Dichloroethane	ug/kg	ND	5.0	
1,1-Dichloroethene	ug/kg	ND	5.0	
cis-1,2-Dichloroethene	ug/kg	ND	5.0	

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QUALITY CONTROL DATA

Lab Project Number: 92123772
Client Project ID: NCDOT 34951.1.1 Duke

METHOD BLANK: 927249599

Associated Lab Samples: 927224907 927224915 927224931 927224972 927224980 927224998 927225003

<u>Parameter</u>	<u>Units</u>	<u>Blank</u>	<u>Reporting</u>	<u>Footnotes</u>
		<u>Result</u>	<u>Limit</u>	
trans-1,2-Dichloroethene	ug/kg	ND	5.0	
1,2-Dichloropropane	ug/kg	ND	5.0	
1,3-Dichloropropane	ug/kg	ND	5.0	
2,2-Dichloropropane	ug/kg	ND	5.0	
1,1-Dichloropropene	ug/kg	ND	5.0	
cis-1,3-Dichloropropene	ug/kg	ND	5.0	
trans-1,3-Dichloropropene	ug/kg	ND	5.0	
Diisopropyl ether	ug/kg	ND	5.0	
Ethylbenzene	ug/kg	ND	5.0	
Hexachloro-1,3-butadiene	ug/kg	ND	5.0	
2-Hexanone	ug/kg	ND	50.	
Isopropylbenzene (Cumene)	ug/kg	ND	5.0	
p-Isopropyltoluene	ug/kg	ND	5.0	
Methylene chloride	ug/kg	ND	5.0	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	50.	
Methyl-tert-butyl ether	ug/kg	ND	5.0	
Naphthalene	ug/kg	ND	5.0	
n-Propylbenzene	ug/kg	ND	5.0	
Styrene	ug/kg	ND	5.0	
1,1,1,2-Tetrachloroethane	ug/kg	ND	5.0	
1,1,2,2-Tetrachloroethane	ug/kg	ND	5.0	
Tetrachloroethene	ug/kg	ND	5.0	
Toluene	ug/kg	ND	5.0	
1,2,3-Trichlorobenzene	ug/kg	ND	5.0	
1,2,4-Trichlorobenzene	ug/kg	ND	5.0	
1,1,1-Trichloroethane	ug/kg	ND	5.0	
1,1,2-Trichloroethane	ug/kg	ND	5.0	
Trichloroethene	ug/kg	ND	5.0	
Trichlorofluoromethane	ug/kg	ND	5.0	
1,2,3-Trichloropropane	ug/kg	ND	5.0	
1,2,4-Trimethylbenzene	ug/kg	ND	5.0	
1,3,5-Trimethylbenzene	ug/kg	ND	5.0	
Vinyl acetate	ug/kg	ND	50.	
Vinyl chloride	ug/kg	ND	10.	
Xylene (Total)	ug/kg	ND	5.0	
m&p-Xylene	ug/kg	ND	10.	

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QUALITY CONTROL DATA

Lab Project Number: 92123772
Client Project ID: NCDOT 34951.1.1 Duke

METHOD BLANK: 927249599

Associated Lab Samples: 927224907 927224915 927224931 927224972 927224980 927224998 927225003

<u>Parameter</u>	<u>Units</u>	<u>Blank</u>	<u>Reporting</u>		<u>Footnotes</u>
		<u>Result</u>	<u>Limit</u>		
o-Xylene	ug/kg	ND	5.0		
Toluene-d8 (S)	%	102			
4-Bromofluorobenzene (S)	%	109			
Dibromofluoromethane (S)	%	96			
1,2-Dichloroethane-d4 (S)	%	95			

LABORATORY CONTROL SAMPLE: 927249607

<u>Parameter</u>	<u>Units</u>	<u>Spike</u>	<u>LCS</u>	<u>LCS</u>	<u>Footnotes</u>
		<u>Conc.</u>	<u>Result</u>	<u>% Rec</u>	
Acetone	ug/kg	100.00	121.6	122	
Benzene	ug/kg	50.00	56.03	112	
Bromobenzene	ug/kg	50.00	55.85	112	
Bromochloromethane	ug/kg	50.00	53.80	108	
Bromodichloromethane	ug/kg	50.00	53.49	107	
Bromoform	ug/kg	50.00	47.78	96	
Bromomethane	ug/kg	50.00	69.54	139	
2-Butanone (MEK)	ug/kg	100.00	110.8	111	
n-Butylbenzene	ug/kg	50.00	51.51	103	
sec-Butylbenzene	ug/kg	50.00	54.49	109	
tert-Butylbenzene	ug/kg	50.00	52.95	106	
Carbon tetrachloride	ug/kg	50.00	56.25	113	
Chlorobenzene	ug/kg	50.00	49.95	100	
Chloroethane	ug/kg	50.00	57.54	115	
Chloroform	ug/kg	50.00	52.68	105	
Chloromethane	ug/kg	50.00	54.83	110	
2-Chlorotoluene	ug/kg	50.00	52.84	106	
4-Chlorotoluene	ug/kg	50.00	53.97	108	
1,2-Dibromo-3-chloropropane	ug/kg	50.00	55.83	112	
Dibromochloromethane	ug/kg	50.00	47.89	96	
1,2-Dibromoethane (EDB)	ug/kg	50.00	55.85	112	
Dibromomethane	ug/kg	50.00	56.40	113	
1,2-Dichlorobenzene	ug/kg	50.00	55.62	111	
1,3-Dichlorobenzene	ug/kg	50.00	54.82	110	
1,4-Dichlorobenzene	ug/kg	50.00	53.01	106	

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QUALITY CONTROL DATA

Lab Project Number: 92123772
Client Project ID: NCDOT 34951.1.1 Duke

LABORATORY CONTROL SAMPLE: 927249607

Parameter	Units	Spike Conc.	LCS Result	% Rec	Footnotes
Dichlorodifluoromethane	ug/kg	50.00	56.30	113	
1,1-Dichloroethane	ug/kg	50.00	55.15	110	
1,2-Dichloroethane	ug/kg	50.00	51.72	103	
1,1-Dichloroethene	ug/kg	50.00	61.78	124	
cis-1,2-Dichloroethene	ug/kg	50.00	57.52	115	
trans-1,2-Dichloroethene	ug/kg	50.00	57.13	114	
1,2-Dichloropropane	ug/kg	50.00	52.96	106	
1,3-Dichloropropane	ug/kg	50.00	52.27	105	
2,2-Dichloropropane	ug/kg	50.00	52.54	105	
1,1-Dichloropropene	ug/kg	50.00	52.02	104	
cis-1,3-Dichloropropene	ug/kg	50.00	49.88	100	
trans-1,3-Dichloropropene	ug/kg	50.00	49.04	98	
Diisopropyl ether	ug/kg	50.00	59.19	118	
Ethylbenzene	ug/kg	50.00	53.19	106	
Hexachloro-1,3-butadiene	ug/kg	50.00	58.39	117	
2-Hexanone	ug/kg	100.00	104.4	104	
Isopropylbenzene (Cumene)	ug/kg	50.00	51.53	103	
p-Isopropyltoluene	ug/kg	50.00	50.25	101	
Methylene chloride	ug/kg	50.00	53.70	107	
4-Methyl-2-pentanone (MIBK)	ug/kg	100.00	110.8	111	
Methyl-tert-butyl ether	ug/kg	50.00	57.10	114	
Naphthalene	ug/kg	50.00	51.17	102	
n-Propylbenzene	ug/kg	50.00	54.91	110	
Styrene	ug/kg	50.00	47.92	96	
1,1,1,2-Tetrachloroethane	ug/kg	50.00	48.81	98	
1,1,2,2-Tetrachloroethane	ug/kg	50.00	49.21	98	
Tetrachloroethene	ug/kg	50.00	51.03	102	
Toluene	ug/kg	50.00	55.22	110	
1,2,3-Trichlorobenzene	ug/kg	50.00	64.36	129	
1,2,4-Trichlorobenzene	ug/kg	50.00	59.61	119	
1,1,1-Trichloroethane	ug/kg	50.00	53.65	107	
1,1,2-Trichloroethane	ug/kg	50.00	53.35	107	
Trichloroethene	ug/kg	50.00	54.48	109	
Trichlorofluoromethane	ug/kg	50.00	53.64	107	
1,2,3-Trichloropropane	ug/kg	50.00	45.55	91	
1,2,4-Trimethylbenzene	ug/kg	50.00	50.03	100	
1,3,5-Trimethylbenzene	ug/kg	50.00	50.19	100	

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QUALITY CONTROL DATA

Lab Project Number: 92123772
Client Project ID: NCDOT 34951.1.1 Duke

LABORATORY CONTROL SAMPLE: 927249607

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Vinyl acetate	ug/kg	100.00	102.8	103	
Vinyl chloride	ug/kg	50.00	56.83	114	
Xylene (Total)	ug/kg	150.00	157.1	105	
m&p-Xylene	ug/kg	100.00	104.2	104	
o-Xylene	ug/kg	50.00	52.88	106	
Toluene-d8 (S)				101	
4-Bromofluorobenzene (S)				97	
Dibromofluoromethane (S)				104	
1,2-Dichloroethane-d4 (S)				104	

MATRIX SPIKE: 927251900

Parameter	Units	927216325 Result	Spike	MS	MS
			Conc.	Result	% Rec
Benzene	ug/kg	0	45.45	41.50	91
Chlorobenzene	ug/kg	0	45.45	45.89	101
1,1-Dichloroethene	ug/kg	0	45.45	33.77	74
Toluene	ug/kg	0	45.45	44.36	98
Trichloroethene	ug/kg	0	45.45	43.21	95
Toluene-d8 (S)					104
4-Bromofluorobenzene (S)					98
Dibromofluoromethane (S)					89
1,2-Dichloroethane-d4 (S)					78

SAMPLE DUPLICATE: 927251918

Parameter	Units	927224915		DUP	
		Result	Result	RPD	Footnotes
Acetone	ug/kg	ND	ND	NC	
Benzene	ug/kg	ND	ND	NC	
Bromobenzene	ug/kg	ND	ND	NC	
Bromochloromethane	ug/kg	ND	ND	NC	
Bromodichloromethane	ug/kg	ND	ND	NC	
Bromoform	ug/kg	ND	ND	NC	
Bromomethane	ug/kg	ND	ND	NC	

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QUALITY CONTROL DATA

Lab Project Number: 92123772
Client Project ID: NCDOT 34951.1.1 Duke

SAMPLE DUPLICATE: 927251918

Parameter	Units	927224915		RPD	Footnotes
		Result	DUP Result		
2-Butanone (MEK)	ug/kg	ND	ND	NC	
n-Butylbenzene	ug/kg	ND	ND	NC	
sec-Butylbenzene	ug/kg	ND	ND	NC	
tert-Butylbenzene	ug/kg	ND	ND	NC	
Carbon tetrachloride	ug/kg	ND	ND	NC	
Chlorobenzene	ug/kg	ND	ND	NC	
Chloroethane	ug/kg	ND	ND	NC	
Chloroform	ug/kg	ND	ND	NC	
Chloromethane	ug/kg	ND	ND	NC	
2-Chlorotoluene	ug/kg	ND	ND	NC	
4-Chlorotoluene	ug/kg	ND	ND	NC	
1,2-Dibromo-3-chloropropane	ug/kg	ND	ND	NC	
Dibromochloromethane	ug/kg	ND	ND	NC	
1,2-Dibromoethane (EDB)	ug/kg	ND	ND	NC	
Dibromomethane	ug/kg	ND	ND	NC	
1,2-Dichlorobenzene	ug/kg	ND	ND	NC	
1,3-Dichlorobenzene	ug/kg	ND	ND	NC	
1,4-Dichlorobenzene	ug/kg	ND	ND	NC	
Dichlorodifluoromethane	ug/kg	ND	ND	NC	
1,1-Dichloroethane	ug/kg	ND	ND	NC	
1,2-Dichloroethane	ug/kg	ND	ND	NC	
1,1-Dichloroethene	ug/kg	ND	ND	NC	
cis-1,2-Dichloroethene	ug/kg	ND	ND	NC	
trans-1,2-Dichloroethene	ug/kg	ND	ND	NC	
1,2-Dichloropropane	ug/kg	ND	ND	NC	
1,3-Dichloropropane	ug/kg	ND	ND	NC	
2,2-Dichloropropane	ug/kg	ND	ND	NC	
1,1-Dichloropropene	ug/kg	ND	ND	NC	
cis-1,3-Dichloropropene	ug/kg	ND	ND	NC	
trans-1,3-Dichloropropene	ug/kg	ND	ND	NC	
Diisopropyl ether	ug/kg	ND	ND	NC	
Ethylbenzene	ug/kg	ND	ND	NC	
Hexachloro-1,3-butadiene	ug/kg	ND	ND	NC	
2-Hexanone	ug/kg	ND	ND	NC	
Isopropylbenzene (Cumene)	ug/kg	ND	ND	NC	
p-Isopropyltoluene	ug/kg	ND	ND	NC	
Methylene chloride	ug/kg	ND	ND	NC	

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QUALITY CONTROL DATA

Lab Project Number: 92123772
Client Project ID: NCDOT 34951.1.1 Duke

SAMPLE DUPLICATE: 927251918

Parameter	Units	927224915		RPD	Footnotes
		Result	DUP Result		
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	ND	NC	
Methyl-tert-butyl ether	ug/kg	ND	ND	NC	
Naphthalene	ug/kg	ND	ND	NC	
n-Propylbenzene	ug/kg	ND	ND	NC	
Styrene	ug/kg	ND	ND	NC	
1,1,1,2-Tetrachloroethane	ug/kg	ND	ND	NC	
1,1,2,2-Tetrachloroethane	ug/kg	ND	ND	NC	
Tetrachloroethene	ug/kg	ND	ND	NC	
Toluene	ug/kg	ND	ND	NC	
1,2,3-Trichlorobenzene	ug/kg	ND	ND	NC	
1,2,4-Trichlorobenzene	ug/kg	ND	ND	NC	
1,1,1-Trichloroethane	ug/kg	ND	ND	NC	
1,1,2-Trichloroethane	ug/kg	ND	ND	NC	
Trichloroethene	ug/kg	ND	ND	NC	
Trichlorofluoromethane	ug/kg	ND	ND	NC	
1,2,3-Trichloropropane	ug/kg	ND	ND	NC	
1,2,4-Trimethylbenzene	ug/kg	ND	ND	NC	
1,3,5-Trimethylbenzene	ug/kg	ND	ND	NC	
Vinyl acetate	ug/kg	ND	ND	NC	
Vinyl chloride	ug/kg	ND	ND	NC	
Xylene (Total)	ug/kg	ND	ND	NC	
m&p-Xylene	ug/kg	ND	ND	NC	
o-Xylene	ug/kg	ND	ND	NC	
Toluene-d8 (S)	%	104	105		
4-Bromofluorobenzene (S)	%	96	101		
Dibromofluoromethane (S)	%	98	96		
1,2-Dichloroethane-d4 (S)	%	93	85		

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QUALITY CONTROL DATA

Lab Project Number: 92123772
Client Project ID: NCDOT 34951.1.1 Duke

QC Batch: 162833	Analysis Method: % Moisture
QC Batch Method:	Analysis Description: Percent Moisture
Associated Lab Samples:	927224907 927224915 927224931 927224972 927224980
	927224998

SAMPLE DUPLICATE: 927226019

<u>Parameter</u>	<u>Units</u>	927225565	DUP	<u>Footnotes</u>
		<u>Result</u>	<u>Result</u>	
Percent Moisture	%	22.60	21.90	3

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QUALITY CONTROL DATA

Lab Project Number: 92123772
Client Project ID: NCDOT 34951.1.1 Duke

QC Batch: 163170	Analysis Method: % Moisture
QC Batch Method:	Analysis Description: Percent Moisture
Associated Lab Samples:	927225003

SAMPLE DUPLICATE: 927235614

<u>Parameter</u>	<u>Units</u>	927233908	DUP			
	%	Result	Result	RPD	Footnotes	
Percent Moisture	%	13.80	13.70	1		

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Lab Project Number: 92123772
Client Project ID: NCDOT 34951.1.1 Duke

QUALITY CONTROL DATA PARAMETER FOOTNOTES

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

LCS(D) Laboratory Control Sample (Duplicate)
 MS(D) Matrix Spike (Duplicate)
 DUP Sample Duplicate
 ND Not detected at or above adjusted reporting limit
 NC Not Calculable
 J Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit
 MDL Adjusted Method Detection Limit
 RPD Relative Percent Difference
 (S) Surrogate
 [1] Recovery falls outside of QC limits, however, this compound is not found in the associated samples.

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August 02, 2006

Project Manager
Charlotte Laboratory
Pace Analytical Services
9800 Kincey Ave., Suite 100
Huntersville, NC 28078

RE: Project: NCDOT 34951.1.1 Duke
Pace Project No.: 6011301

Dear Project Manager:

Enclosed are the analytical results for sample(s) received by the laboratory on July 21, 2006. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

Angella Borum

Angella Borum

angella.borum@pacelabs.com
Project Coordinator

Arkansas Certification Number: 05-008-0
California Certification Number: 02109CA
Illinois Certification Number: 001191
Iowa Certification Number: 118
Kansas/NELAP Certification Number: E-10116
Louisiana Certification Number: 03055
Minnesota Certification Number: 020-999-394
Oklahoma Certification Number: 9205/9935
Utah Certification Number: 9135995665

Enclosures

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SAMPLE SUMMARY

Project: NCDOT 34951.1.1 Duke

Pace Project No.: 6011301

Lab ID	Sample ID	Matrix	Date Collected	Date Received
6011301001	DUKEB1	Solid	07/19/06 08:30	07/21/06 15:05
6011301002	DUKEB2	Solid	07/19/06 09:20	07/21/06 15:05
6011301003	DUKEB3	Solid	07/19/06 11:30	07/21/06 15:05
6011301004	DUKEB4	Solid	07/19/06 12:00	07/21/06 15:05
6011301005	DUKEB5	Solid	07/19/06 11:00	07/21/06 15:05
6011301006	DUKEB6	Solid	07/19/06 10:00	07/21/06 15:05
6011301007	DUKEB7	Solid	07/19/06 10:30	07/21/06 15:05

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Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
Phone: (913)599-5665
Fax: (913)599-1759

SAMPLE ANALYTE COUNT

Project: NCDOT 34951.1.1 Duke
Pace Project No.: 6011301

Lab ID	Sample ID	Method	Analytes Reported
6011301001	DUKEB1	ASTM D2974-87	1
		OA2	3
6011301002	DUKEB2	ASTM D2974-87	1
		OA2	3
6011301003	DUKEB3	ASTM D2974-87	1
		OA2	3
6011301004	DUKEB4	ASTM D2974-87	1
		OA2	3
6011301005	DUKEB5	ASTM D2974-87	1
		OA2	3
6011301006	DUKEB6	ASTM D2974-87	1
		OA2	3
6011301007	DUKEB7	ASTM D2974-87	1
		OA2	3

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ANALYTICAL RESULTS

Project: NCDOT 34951.1.1 Duke

Pace Project No.: 6011301

Sample: DUKEB1 Lab ID: 6011301001 Collected: 07/19/06 08:30 Received: 07/21/06 15:05 Matrix: Solid

Solid results reported on dry weight basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
OA2 GCS	Analytical Method: OA2 Preparation Method: OA2							
Mineral Spirits	ND mg/kg		14.4	1	07/26/06 00:00	07/27/06 12:19	8030-30-6	
n-Tetracosane (S)	104 %		72-126	1	07/26/06 00:00	07/27/06 12:19	646-31-1	
p-Terphenyl (S)	100 %		59-125	1	07/26/06 00:00	07/27/06 12:19	92-94-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	31.5 %		0.10	1		07/27/06 00:00		

Date: 08/02/2006 01:27 PM

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NCDOT 34951.1 Duke
Pace Project No.: 6011301

Sample: DUKEB2 Lab ID: 6011301002 Collected: 07/19/06 09:20 Received: 07/21/06 15:05 Matrix: Solid

Solid results reported on dry weight basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
OA2 GCS	Analytical Method: OA2 Preparation Method: OA2							
Mineral Spirits	ND mg/kg		14.0	1	07/26/06 00:00	07/27/06 12:39	8030-30-6	
n-Tetracosane (S)	104 %		72-126	1	07/26/06 00:00	07/27/06 12:39	646-31-1	
p-Terphenyl (S)	101 %		59-125	1	07/26/06 00:00	07/27/06 12:39	92-94-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	29.1 %		0.10	1		07/27/06 00:00		

ANALYTICAL RESULTS

Project: NCDOT 34951.1.1 Duke

Pace Project No.: 6011301

Sample: DUKEB3 Lab ID: 6011301003 Collected: 07/19/06 11:30 Received: 07/21/06 15:05 Matrix: Solid

Solid results reported on dry weight basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
OA2 GCS	Analytical Method: OA2 Preparation Method: OA2							
Mineral Spirits	ND	mg/kg	14.0	1	07/26/06 00:00	07/27/06 12:59	8030-30-6	
n-Tetracosane (S)	105	%	72-126	1	07/26/06 00:00	07/27/06 12:59	646-31-1	
p-Terphenyl (S)	101	%	59-125	1	07/26/06 00:00	07/27/06 12:59	92-94-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	29.2	%	0.10	1		07/27/06 00:00		

ANALYTICAL RESULTS

Project: NCDOT 34951.1.1 Duke

Pace Project No.: 6011301

Sample: DUKEB4 Lab ID: 6011301004 Collected: 07/19/06 12:00 Received: 07/21/06 15:05 Matrix: Solid

Solid results reported on dry weight basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
OA2 GCS	Analytical Method: OA2 Preparation Method: OA2							
Mineral Spirits	ND mg/kg		14.3	1	07/26/06 00:00	07/27/06 13:19	8030-30-6	
n-Tetracosane (S)	105 %		72-126	1	07/26/06 00:00	07/27/06 13:19	646-31-1	
p-Terphenyl (S)	101 %		59-125	1	07/26/06 00:00	07/27/06 13:19	92-94-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	31.2 %		0.10	1		07/27/06 00:00		

ANALYTICAL RESULTS

Project: NCDOT 34951.1.1 Duke
Pace Project No.: 6011301

Sample: DUKEB5 Lab ID: 6011301005 Collected: 07/19/06 11:00 Received: 07/21/06 15:05 Matrix: Solid

Solid results reported on dry weight basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
OA2 GCS	Analytical Method: OA2 Preparation Method: OA2							
Mineral Spirits	ND	mg/kg	14.0	1	07/26/06 00:00	07/27/06 14:19	8030-30-6	
n-Tetracosane (S)	104	%	72-126	1	07/26/06 00:00	07/27/06 14:19	646-31-1	
p-Terphenyl (S)	101	%	59-125	1	07/26/06 00:00	07/27/06 14:19	92-94-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	29.3	%	0.10	1		07/27/06 00:00		

ANALYTICAL RESULTS

Project: NCDOT 34951.1.1 Duke

Pace Project No.: 6011301

Sample: DUKEB6 Lab ID: 6011301006 Collected: 07/19/06 10:00 Received: 07/21/06 15:05 Matrix: Solid

Solid results reported on dry weight basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
OA2 GCS	Analytical Method: OA2 Preparation Method: OA2							
Mineral Spirits	ND	mg/kg	13.4	1	07/26/06 00:00	07/27/06 14:39	8030-30-6	
n-Tetracosane (S)	104	%	72-126	1	07/26/06 00:00	07/27/06 14:39	646-31-1	
p-Terphenyl (S)	100	%	59-125	1	07/26/06 00:00	07/27/06 14:39	92-94-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	26.0	%	0.10	1		07/27/06 00:00		

ANALYTICAL RESULTS

Project: NCDOT 34951.1.1 Duke

Pace Project No.: 6011301

Sample: DUKEB7 Lab ID: 6011301007 Collected: 07/19/06 10:30 Received: 07/21/06 15:05 Matrix: Solid

Solid results reported on dry weight basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
OA2 GCS	Analytical Method: OA2 Preparation Method: OA2							
Mineral Spirits	ND	mg/kg	12.8	1	07/26/06 00:00	07/27/06 15:00	8030-30-6	
n-Tetracosane (S)	104	%	72-126	1	07/26/06 00:00	07/27/06 15:00	646-31-1	
p-Terphenyl (S)	100	%	59-125	1	07/26/06 00:00	07/27/06 15:00	92-94-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	23.1	%	0.10	1		07/28/06 00:00		

Date: 08/02/2006 01:27 PM

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Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
Phone: (913)599-5665
Fax: (913)599-1759

QUALITY CONTROL DATA

Project: NCDOT 34951.1.1 Duke
Pace Project No.: 6011301

QC Batch: OEXT/3399 Analysis Method: OA2
QC Batch Method: OA2 Analysis Description: OA2 GCS EXT
Associated Lab Samples: 6011301001, 6011301002, 6011301003, 6011301004, 6011301005, 6011301006, 6011301007

METHOD BLANK: 89334

Associated Lab Samples: 6011301001, 6011301002, 6011301003, 6011301004, 6011301005, 6011301006, 6011301007

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mineral Spirits	mg/kg	ND	10.0	
n-Tetracosane (S)	%	103	72-126	
p-Terphenyl (S)	%	101	59-125	

LABORATORY CONTROL SAMPLE: 89335

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
n-Tetracosane (S)	%			105	72-126	
p-Terphenyl (S)	%			106	59-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 89336 89337

Parameter	Units	6011301001 Result	MS	MSD	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
			Spike Conc.	Spike Conc.								
n-Tetracosane (S)	%						109	107	72-126			
p-Terphenyl (S)	%						109	108	59-125			

QUALITY CONTROL DATA

Project: NCDOT 34951.1.1 Duke

Pace Project No.: 6011301

QC Batch:	PMST/1552	Analysis Method:	ASTM D2974-87
QC Batch Method:	ASTM D2974-87	Analysis Description:	Dry Weight/Percent Moisture
Associated Lab Samples:	6011301001, 6011301002, 6011301003, 6011301004, 6011301005, 6011301006		

METHOD BLANK: 89708

Associated Lab Samples: 6011301001, 6011301002, 6011301003, 6011301004, 6011301005, 6011301006

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Percent Moisture	%	ND	0.10	

SAMPLE DUPLICATE: 89709

Parameter	Units	6011210001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	8.6	9.7	12	20	

QUALITY CONTROL DATA

Project: NCDOT 34951.1.1 Duke
 Pace Project No.: 6011301

QC Batch:	PMST/1554	Analysis Method:	ASTM D2974-87
QC Batch Method:	ASTM D2974-87	Analysis Description:	Dry Weight/Percent Moisture
Associated Lab Samples:	6011301007		

METHOD BLANK: 90310

Associated Lab Samples: 6011301007

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Percent Moisture	%	ND	0.10	

SAMPLE DUPLICATE: 90311

Parameter	Units	6011301007 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	23.1	24.1	4	20	

QUALIFIERS

Project: NCDOT 34951.1.1 Duke
Pace Project No.: 6011301

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

REPORT OF LABORATORY ANALYSIS

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CHAIN-OF-CUSTODY / Analytical Request Document

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

Page:	of
1004581	

Section A

Required Client Information:

Company SOLUTIONS - NC	Report To: Jillie Fox	Attention: Thru Peoples
Address 1101 Nance Rd	Copy To:	Company Name: NC DOT APR 6/16/023
Raleigh NC 27607	WPSN 24951.1.1	Address:
Email To: SHNOX@Solutions-NC.com	Purchase Order No.: 9800006252 NC DOT	Pace Quote Reference:
Phone: 9198730860	Project Name: NC DOT - KIOWA RD.	Pace Project Manager: BLM
Fax: 9198731074	Project Number: 2210.0613.NDOT	Pace Profile #: 3869 - 8
Requested Due Date/TAT:		

Section B

Required Project Information:

Section C

Invoice Information:

REGULATORY AGENCY

- | | | |
|--------------------------------|---------------------------------------|---|
| <input type="checkbox"/> NPDES | <input type="checkbox"/> GROUND WATER | <input type="checkbox"/> DRINKING WATER |
| <input type="checkbox"/> UST | <input type="checkbox"/> RCRA | <input type="checkbox"/> Other _____ |

SITE LOCATION

- | | | | | | |
|-----------------------------|-----------------------------|-----------------------------|--------------------------------------|-----------------------------|--|
| <input type="checkbox"/> GA | <input type="checkbox"/> IL | <input type="checkbox"/> IN | <input type="checkbox"/> MI | <input type="checkbox"/> MN | <input checked="" type="checkbox"/> NC |
| <input type="checkbox"/> OH | <input type="checkbox"/> SC | <input type="checkbox"/> WI | <input type="checkbox"/> OTHER _____ | | |

Filtered (Y/N)

Requested Analysis:

Residual Chlorine (ppm)
11.772
Pace Project Number
Lab ID

Section D Required Client Information

SAMPLE ID

One Character per box.
(A-Z, 0-9, -)

Samples IDs MUST BE UNIQUE

Valid Matrix Codes
 MATRIX CODE
 DRINKING WATER DW
 WATER WT
 WASTE WATER WW
 PRODUCT P
 SOIL/SOLID SL
 OIL OL
 WIPE WP
 AIR AR
 OTHER OT
 TISSUE TS

MATRIX CODE

SAMPLE TYPE
G=GRAB C=COMP

COLLECTED

ITEM #	DATE	TIME	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							
							Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other
1	7/19/06	0820												
2	7/19/06	0920												
3	7/19/06	1120												
4	7/19/06	1200												
5	7/19/06	1100												
6	7/19/06	1000												
7	7/19/06	1020												
8														
9														
10														
11														
12														

Additional Comments:

DUKE ENERGY SITE

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITION
Jillie Fox	7/21/06	1425	Linda Peoples NC	7/21/06	1115	Y/N Y/N Y/N
Linda Peoples	7/21/06	1500				Y/N Y/N Y/N

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

Kevin Puckett

SIGNATURE of SAMPLER:

11

DATE Signed (MM/DD/YY): 7/21/06

Temp in °C	Received in Ice	Custody Sealed Cooler	Samples Intact

APPENDIX E
GPS COORDINATES

APPENDIX E
GPS Coordinates of Borings
Duke Power
Salisbury, Rowan County, North Carolina
WBS Element: 34951.1.1, TIP #: U-3459
Solutions-IES Project No. 3210.06A3.NDOT

Boring Number	Northing ⁽¹⁾	Easting ⁽¹⁾
DUKE1	35.65524682	-80.48976526
DUKE2	35.65525244	-80.48975319
DUKE3	35.65570037	-80.48987514
DUKE4	35.65541656	-80.48971907
DUKE5	35.65544531	-80.48974564
DUKE6	35.65551236	-80.48977942
DUKE7	35.65551915	-80.48978504

NOTES:

- (1) NAD84 GPS Coordinates
Borings located using field measurements.