PRELIMINARY SITE ASSESSMENT
FORMER FCX CHEMICAL PLANT
OLD SOUTH MAIN STREET
SALISBURY, ROWAN COUNTY, NORTH CAROLINA
NCDOT PROJECT: U-3459
WBS ELEMENT: 34951.1.1

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

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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 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 Former FCX Chemical Plant (**Figure 1**). The portion of the right-of-way or Study Area for this site is located west of the fence line separating the Former FCX Chemical Plant from the Johnson Concrete Company (**Figure 2).** The property itself is presently owned by Enkay Properties, LLC. The scope of work executed at the site was performed in general accordance with Solutions-IES proposal NC06527P dated May 24, 2006, 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 south side of Old Main Street between East "A" Avenue and East "B" Avenue within the City Limits of Salisbury, Rowan County, North Carolina (site). Aerial photographs taken in 1972 provided by the NCDOT show the locations of facility buildings, as well as probable storage vessels and uncovered storage areas. A subsequent NCDOT aerial photograph from 1986 shows that several buildings, as well as the suspected storage vessels, have been removed from the site. The 1986 photograph also suggests that the uncovered storage areas have been removed as well. According to recent information provided by the NCDOT, the structures that were historically part of the FCX Chemical plant have been razed, with only the concrete building foundations left in place. Currently, the surface of the site is covered with a mixture of concrete and grass. A photograph of the Study Area at the site is presented in **Appendix A**. A concrete manufacturing facility (Johnson Concrete Company) is directly adjacent to the eastern portion of the site, while an operating industrial facility (operating as Carolina Rubber Hose) is adjacent to the western boundary of the site.

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. COIs including fertilizer constituents such as nitrate and metals, pesticides, and herbicides, are expected to be associated with agricultural manufacturing processes, 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. Additionally, the property located west of the site (operating as Carolina Rubber Hose) was identified as having generated or stored hazardous waste in the past. Methyl ethyl ketone was identified as a potential COI from this operation, and was therefore included as a COI for this PSA. The property directly adjacent to the eastern edge of the site was the location of a concrete manufacturing facility (Johnson Concrete Company), where petroleum fuels were stored in underground storage tank(s) (USTs) and used during facility operations. In order to identify potential impacts resulting from the Johnson Concrete Company, volatile and semi-volatile petroleum constituents were included as COIs. Based on this information, Solution-IES selected analytical parameters that would be representative of potential COIs from a typical agricultural chemical manufacturing facility, as well as parameters that would identify impacts related to the facilities that border the site on the eastern and western edges (see Section 6.0, References 2, 3, 4, 5, 6, 7, 9, 10, 11, 12, 13, 14, 15 and 16).

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, 29, and July 7, 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 suggested the locations of buried utilities along the northern portion of the site, but did not indicate the presence of buried metallic USTs. The EM61 images are included in **Appendix B,** Figures 6 and 7. EM61 and GPR survey line locations are also included on Figure 6.

After reviewing the geophysical report, Solutions-IES mobilized to the site and obtained soil samples from various locations previously identified by NCDOT within the Study Area. Additionally, a

groundwater sample was obtained from a temporary well that was installed within the Study Area. These activities were conducted on July 17 through July 19, 2006. A total of five soil borings (borings FCXB1 through FCXB5) were collected from the Study Area locations depicted on **Figure 3**. These borings were labeled "FCX" to represent the Former FCX Chemical Plant. Borings were not advanced on the most southern portion of the Study Area due to low-lying areas containing standing water. Soil boring FCXB1 was advanced to a total depth of 16 feet below ground surface (ft bgs), while soil boring FCXB2 was advanced to a total depth of 12 ft bgs. Soil moisture in borings FCXB1 and FCXB2 suggested a depth to groundwater between 8 and 10 ft bgs, so subsequent soil borings were terminated at the estimated depth to groundwater. One temporary groundwater monitoring well (TMW-1) was installed to a total depth of 16 ft bgs. The borings and the temporary monitoring well were advanced with a truck-mounted Geoprobe®. Borings FCXB1 through FCXB5 were spaced approximately 100 feet apart on the north-south axis of the site parallel to the property boundary shared with the Johnson Concrete Company property **(Figure 3)**. When combined with the locations of soil borings completed on the Johnson Concrete Company property (which were also installed at approximately 100 foot intervals east of the property line), the final sampling scheme provided coverage approximately every 50 feet along the proposed easement. FCX Chemical Plant borings were located between 12.5 and 35 feet west of the Johnson Concrete Company property line **(Figure 3)**.

Soil samples were obtained from each boring using a MacroCore® sampler fitted with single-use, disposable polyvinyl chloride (PVC) liners. Each liner was four feet in length. Upon retrieval, each soil sample was split into two aliquots of two 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).

Volatile organic compounds (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 former FCX Chemical Plant Study Area generally consisted of clayey silt (ML) and silty clay (CL). Headspace screening of these soil samples did not measurable concentrations of volatile vapors. No distinguishable odors were noted in these soil samples.

Soil samples for laboratory analysis were taken from the 6 – 8 ft bgs interval of each boring. 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 soil samples submitted for chemical analysis of select metals (arsenic, barium, cadmium, chromium, lead, selenium, and silver) by EPA Method 6010, mercury by EPA Method 7471, ammonia by Modified EPA Method 350.1, nitrate by Modified EPA Method 353.2, pH by EPA Method 9045, VOCs by EPA Method 8260, semi-volatile organic compounds (SVOCs) by EPA Method 8270, organochlorine pesticides by EPA Method 8081, formaldehyde by EPA Method 8315A, and chlorinated herbicides by EPA Method 8151A. Results from the soils analyses are summarized in **Table 1**.

To determine depth to groundwater, and to obtain a groundwater sample for chemical analysis, a temporary well was installed at the northeast corner of the concrete building foundation, approximately 8 feet from the property boundary shared with Johnson Concrete Company. The temporary monitoring well location is provided on **Figure 3**. Because groundwater was encountered in borings FCXB1 though FCXB3 at approximately 6.5 to 9 ft bgs, the temporary well was advanced with a truck-mounted Geoprobe® to a depth of 16 ft bgs. Upon completion of the boring, a 10-foot section of 1-inch diameter PVC slotted well screen, joined with an approximate 6-foot section of 1-inch diameter PVC riser, was introduced into the boring. Washed #2 well sand was introduced into the annulus of the boring, forming a sand pack around the screen from the base of the temporary well to within 1.5-foot of surface grade. The stabilized water level was measured at 7.6 ft bgs.

The well was then sampled with a peristaltic pump, utilizing 3/8-inch diameter disposable polyethylene tubing. Sample information was recorded on the chain-of-custody and the groundwater samples submitted for chemical analysis of select metals (arsenic, barium, cadmium, chromium, lead, selenium, and silver) by EPA Method 6010, mercury by EPA Method 7470, ammonia by EPA Method 350.1, nitrite and nitrate by EPA Method 353.2, SVOCs by EPA Method 8270, VOCs by EPA Method 8260, extractable petroleum hydrocarbons (EPH), volatile petroleum hydrocarbons (VPH), formaldehyde, organochlorine pesticides by EPA Method 8081, and chlorinated herbicides by EPA Method 8151A. Results of the groundwater analysis are shown in **Table 2**.

4.0 SAMPLING RESULTS

The soil analytical data indicate the presence of metals, including arsenic, barium, chromium, lead and mercury, in concentrations above the laboratory reporting limit. Total chromium is present in concentrations exceeding the North Carolina Department of Environment and Natural Resources (NCDENR) Soil-to-Groundwater Maximum Soil Contamination Concentrations (MSCCs) in the samples from borings FCSB2, FCXB3, and FCXB5. Nitrate was detected in four of the five soil samples (FCXB1, FCXB3, FCXB4 and FCXB5) at concentrations ranging from 7.6 to 40 mg/kg. Ammonia was detected in three of the five soil samples in concentrations ranging from 39 to 61 mg/kg. The pesticide dieldrin was also detected in soil sample FCXB4 (6-8) at a concentration of 1.8 µg/kg. An MSCC is not available for dieldrin. Analytical data for the remaining soil samples revealed no VOCs, SVOCs, herbicides, or formaldehyde in concentrations above the laboratory reporting limits. The pH measurements for the five samples indicated that the soil is generally acidic. These analytical data are summarized in **Table 1**. Laboratory reports associated with these samples are presented in **Appendix D**.

The analytical data for the groundwater sample indicate the presence of metals, including barium, chromium, lead and selenium in concentrations above the laboratory reporting limit, but below the applicable 15A NCAC 2L .0202 Groundwater Standards (2L Standards). Nitrite and ammonia were present in concentrations above the laboratory limit, but also below the 2L Standards. Nitrate was detected at a concentration of 83 mg/L, which exceeds the 2L Standard of 10 mg/L. The analytical data revealed no VOCs, SVOCs, herbicides, pesticides, formaldehyde, EPH or VPH in concentrations above the laboratory reporting limits. These analytical data are summarized in **Table 2**. Laboratory reports associated with these samples are presented in **Appendix E**.

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 in locations consistent with the presence of buried utility lines or conduits and miscellaneous metal objects.

Solutions-IES advanced five soil borings at the site to determine the presence or absence of COIs in the Study Area, as well as document soil conditions. Soil samples obtained from the borings and screened

with an FID revealed no volatile vapors in the samples. Analytical data for soil samples submitted for chemical analysis showed that VOCs, SVOCs, and herbicides were not detected. The analytical data for the pesticide analysis identified the presence of dieldrin in soil sample FCXB4 (6-8) at a concentration of 1.8 µg/kg. An MSCC is not available for dieldrin. However, it is important to recognize that an MSCC is the contaminant concentration designed to protect groundwater from contaminants that may leach from the soil, and dieldrin was not detected in the groundwater sample collected within the Study Area**.** A follow up sampling event is planned for September 2006 to collect additional soil samples and evaluate possible impacts from pesticides, herbicides and metals in shallow soil. After review of the new analytical data, the results from this sampling event will be provided in a separate letter report.

Nitrate was detected above the laboratory reporting limit in four of the five soil samples collected from the Study Area in concentrations ranging from 7.6 to 40 mg/kg. Ammonia was also detected above the laboratory reporting limit in three of the five samples in concentrations ranging from 39 to 61 mg/kg. Neither of these parameters have MSCCs. Additionally, the pH of all soil samples collected was acidic, with pH values ranging from 3.85 (FCXB4) to 4.6 (FCXB2). Formaldehyde was not detected in the soil samples collected within the Study Area. However, the samples exceeded their holding time for the formaldehyde analytical method.

The soil sample results revealed the presence of select metals, with chromium detected at concentrations exceeding the MSCC standard in three of the five samples submitted for analysis. The analytical method utilized for the chromium analyses did not speciate trivalent and hexavalent chromium. Regardless, these results do not exceed the North Carolina Industrial/Commercial Soil Cleanup Level for chromium, which is 613,200 mg/kg for trivalent chromium, and 1,226 mg/kg for hexavalent chromium, as provided in the North Carolina Underground Storage Tank Section "Guidelines for Assessment and Corrective Action" (UST Guidelines) (April 2001). Data collected from other Study Areas along the Grade Separation at Klumac Road suggest that the range of chromium detected in the Former FCX Chemical Plan area is similar to chromium concentrations detected in surrounding properties. Chromium analyses were also performed on soil borings collected from the Drive Shaft Shop Study Area and the Johnson Concrete Company Study Areas. These properties are located north and east of the Former FCX Chemical Plant **(Figure 2)**. **Table 3** provides a summary of data from these three locations. Given the range of chromium concentrations (14 to 74 mg/kg) and average concentration (34 +/- 17 mg/kg) across the area soils, it is likely that the chromium results for Former FCX Chemical Plant reflect background

concentrations naturally present in area soils. Only the chromium concentration in FCXB2 (6-8) (52 mg/kg) appears slightly higher than the typical chromium concentrations found across the site. However, additional investigation may be necessary to confirm the background concentrations of chromium.

Barium and lead were also detected in soil samples collected within the Study Area. However, concentrations did not exceed their respective MSCCs. Arsenic and mercury were detected, but these metals have no MSCCs.

A groundwater sample collected from temporary well TMW-1 indicated the presence of barium, chromium, lead and selenium, but the detected concentrations did not exceed their respective 2L Standards. SVOCs, VOCs, herbicides, pesticides, formaldehyde, EPH or VPH were not detected in the groundwater sample, indicating that these constituents have not likely adversely impacted groundwater in the Study Area.

Although arsenic, mercury, and ammonia were detected in soil samples, arsenic and mercury were not detected in the groundwater sample. However, ammonia was present in the groundwater sample at a concentration of 38 mg/L. A groundwater standard does not exist for these three constituents. The groundwater sample from TMW-1 also contained nitrate at a concentration of 83 mg/L. This concentration exceeds the 2L Standard for nitrate of 10 mg/L. Based on the analytical results obtained from the temporary well, groundwater may have been impacted by the agricultural processes that historically operated at the site. Additional assessment would be necessary to evaluate the vertical and lateral extent of groundwater impacts attributed to the presence of ammonia and nitrate in the groundwater.

Results and conclusions for the soil assessment portion of this report are similar to those discussed within the Johnson Concrete Company PSA report also submitted as part of the Klumac Road realignment project. See the Johnson Concrete Company PSA Report for additional details regarding soil sampling and analyses performed at this property.

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/ihsbrnch.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.htm

TABLES

TABLE 1
Summary of Laboratory Analytical Results - Soil
Former FCX Chemical Plant
Salisbury, Rowan County, NC
WBS Element: 34951.1.1, TIP #: U-3459
Solutions-IES Project No. 3210.06A3.NDOT

LOCATION			FORMER FCX CHEMICAL PLANT				
Sample ID			**FCXB1 14-16**	**FCXB2 6-8**	**FCXB3 6-8**	**FCXB4 6-8**	**FCXB5 6-8**
Depth (ft bgs)			**6-8**	**6-8**	**6-8**	**6-8**	**6-8**
Date Collected			**7/17/2006**	**7/17/2006**	**7/17/2006**	**7/17/2006**	**7/17/2006**
Parameter	**Regulatory Limit[1]**	**Units**					
SVOCs (EPA Method 3545 / 8270)							
All results less than laboratory reporting limit							
Herbicides (EPA Method 3550/8151A)							
All results less than laboratory reporting limit							
Pesticides (EPA Method 3545/8081)							
Dieldrin	NS	ug/kg	<1.4	<1.5	<1.4	**1.8**	<1.3
VOCs (EPA Method 5035 / 8260)							
All results less than laboratory reporting limit							
METALS (EPA Method 7471 for Mercuy, EPA Method 3050 / 6010 for all others)							
Arsenic	NS	mg/kg	<0.75	**1.3**	**1.7**	**1.7**	**2.8**
Barium	848	mg/kg	**85**	**14**	**13**	**14**	**19**
Chromium	27	mg/kg	**16**	**52**	**42**	**24**	**42**
Lead	270	mg/kg	**7.6**	**13**	**10**	**8.4**	**13**
Mercury	NS	mg/kg	**0.035**	**0.009**	**0.009**	**0.029**	**0.044**
OTHER ANALYSES							
Formaldehyde	NS	mg/kg	<1.0 H	<1.0 H	<1.0 H	<1.0 H	<1.0 H
Nitrogen, Ammonia	NS	mg/kg	<11	<14	**39**	**61**	**47**
Nitrogen, Nitrate	NS	mg/kg	**29**	<7.9	**24**	**40**	**7.6**
pH	NS	units	3.95	4.6	4.1	3.85	4.03

NOTES:
Bold values indicate detected concentrations
ft bgs = feet below ground surface
H = holding time for preparation or analysis exceeded
mg/kg = milligrams per kilogram
MSCCs = Soil-to-Groundwater Maximum Soil Contaminant Concentrations
NS = No standard
Shaded values exceed Regulatory Limits
SVOCs = Semi Volatile Organic Compounds
VOCs = Volatile Organic Compounds

[1]Regulatory limit for toluene and inorganic compounds is the MSCC from "Guidelines for Assessment and Corrective Action", North Carolina Underground Storage Tank Section, State of North Carolina Department of Environment and Natural Resources [NCDENR] Division of Waste Management, April 2001. Regulatory Limit for TPH DRO and TPH GRO is "TPH Action Level" from NCDENR "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater", July 2000.

TABLE 2
Summary of Laboratory Analytical Results - Groundwater
Former FCX Chemical Plant
Salisbury, Rowan County, NC
WBS Element: 34951.1.1, TIP #: U-3459
Solutions-IES Project No. 3210.06A3.NDOT

Sample ID			**TMW-1**
Well Location			**FCX**
Date Collected			**7/19/2006**
Depth to Groundwater (ft bgs)			**7.6**
Parameter	**Regulatory Limit[1]**	**Units**	
SVOCs (EPA Method 3510 / 8270)			
All results less than laboratory reporting limit			
Herbicides (EPA Method 3550/8151A)			
All results less than laboratory reporting limit			
Pesticides (EPA Method 3535/8081)			
All results less than laboratory reporting limit			
VOCs (EPA Method 8260)			
All results less than laboratory reporting limit			
EPH (EPA Method 3510)			
All results less than laboratory reporting limit			
VPH			
All results less than laboratory reporting limit			
METALS (EPA Method 7470 for Mercury, EPA Method 6010 for all others)			
Barium	2	mg/L	**0.038**
Chromium	0.05	mg/L	**0.0046**
Lead	0.015	mg/L	**0.007**
Selenium	0.05	mg/L	**0.0059**
OTHER ANALYSES			
Formaldehyde	NS	mg/L	<0.125
Nitrogen, Ammonia	NS	mg/L	**38**
Nitrogen, Nitrate	10	mg/L	**83**
Nitrogen, Nitrite	1.0	mg/L	**0.91**
pH (field measurement)	NS	units	**6.3**

NOTES:
Bold values indicate detected concentrations
EPH = extractable petroleum hydrocarbons
mg/L = milligrams per liter
NS = No standard
Shaded values exceed Regulatory Limits
SVOCs = semi volatile organic compounds
VPH = volatile petroleum hydrocarbons
VOCs = volatile organic compounds

[1]Regulatory limits for groundwater are standards established in 15A NCAC 2L .0202, "Classifications and Water Quality Standards Applicable to The Groundwaters of North Carolina".

TABLE 3
Comparison of Area Chromium Soil Concentrations
Salisbury, Rowan County, NC
WBS Element: 34951.1.1, TIP #: U-3459
Solutions-IES Project No. 3210.06A3.NDOT

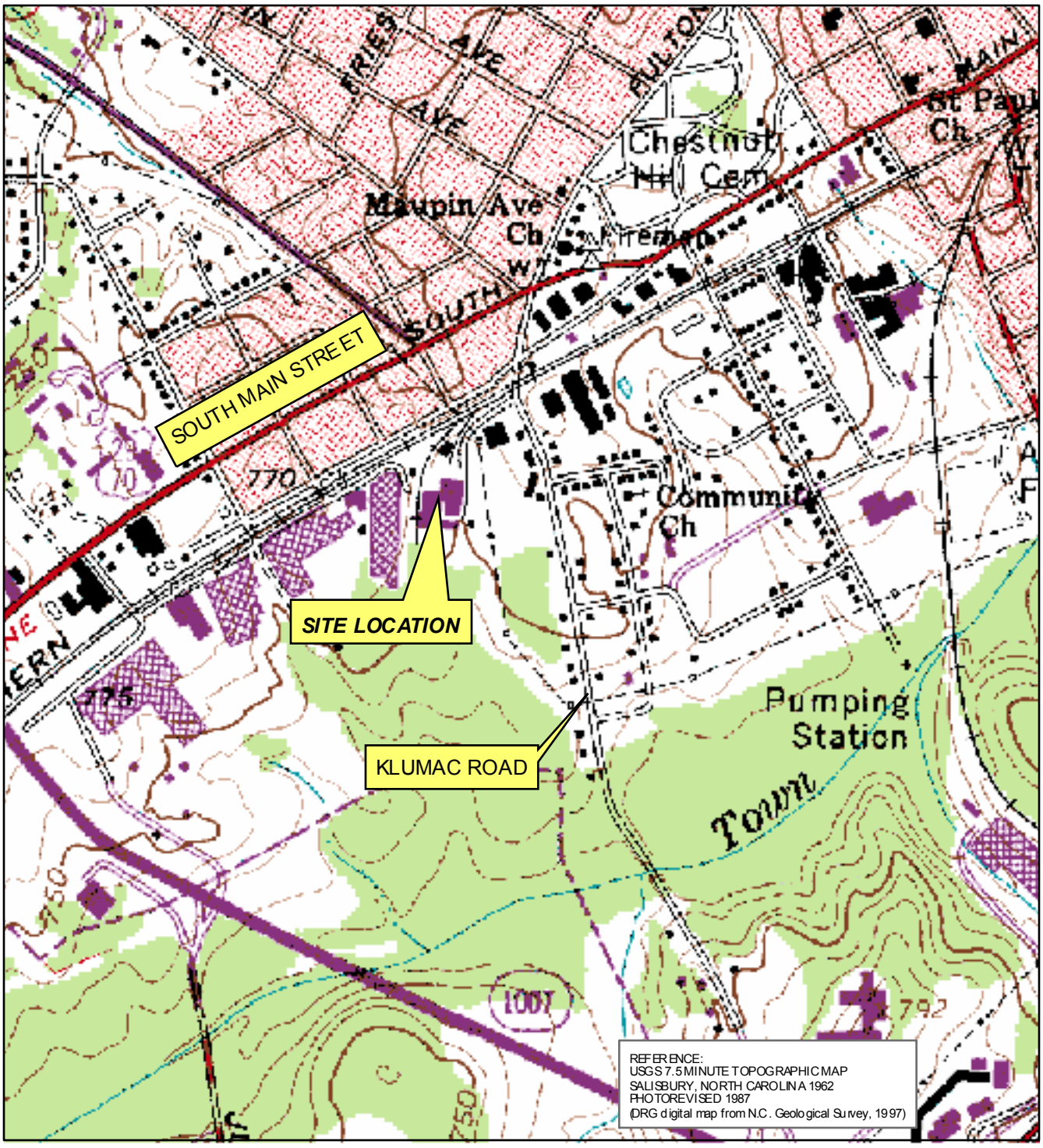
Study Area Location	Sample Date	Sample ID	Sample Depth	Chromium Concentrations	Residential Clean up Levels, Total Chromium[1]	Industrial /Commercial Clean up Levels, Total Chromium[1]	Residential Clean up Levels, Trivalent Chromium[1]	Industrial /Commercial Clean up Levels, Trivalent Chromium[1]	Residential Clean up Levels, Hexavalent Chromium[1]	Industrial/ Commercial Clean up Levels, Hexavalent Chromium[1]
			ft bgs	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Drive Shaft Shop	7/17/2006	INDB1 6-8	6 - 8	**61**	47	1226	23460	613200	47	1226
Drive Shaft Shop	7/17/2006	INDB2 6-8	6 - 8	**46**	47	1226	23460	613200	47	1226
Drive Shaft Shop	7/17/2006	INDB3 4-6	4 - 6	**27**	47	1226	23460	613200	47	1226
Drive Shaft Shop	7/17/2006	INDB4 4-6	4 - 6	**31**	47	1226	23460	613200	47	1226
Drive Shaft Shop	7/17/2006	INDB5 4-6	4 - 6	**23**	47	1226	23460	613200	47	1226
Drive Shaft Shop	7/17/2006	INDB6 4-6	4 - 6	**43**	47	1226	23460	613200	47	1226
Drive Shaft Shop	7/17/2006	INDB7 6-8	6 - 8	**24**	47	1226	23460	613200	47	1226
Johnson Concrete Plant	7/17/2006	JOHNB1 14-16	14 - 16	**14**	47	1226	23460	613200	47	1226
Johnson Concrete Plant	7/17/2006	JOHNB2 6-8	6 - 8	**27**	47	1226	23460	613200	47	1226
Johnson Concrete Plant	7/18/2006	JOHNB3 6-8	6 - 8	**8.2**	47	1226	23460	613200	47	1226
Johnson Concrete Plant	7/18/2006	JOHNB4 6-8	6 - 8	**74**	47	1226	23460	613200	47	1226
Johnson Concrete Plant	7/18/2006	JOHNB5 6-8	6 - 8	**13**	47	1226	23460	613200	47	1226
Johnson Concrete Plant	7/18/2006	JOHNB6 4-6	4 - 6	**23**	47	1226	23460	613200	47	1226
Johnson Concrete Plant	7/18/2006	JOHNB7 6-8	6 - 8	**44**	47	1226	23460	613200	47	1226
Johnson Concrete Plant	7/18/2006	JOHNB8 4-6	4 - 6	**51**	47	1226	23460	613200	47	1226
Former FCX Chemical Plant	7/17/2006	FCXB1 6-8	6 - 8	**16**	47	1226	23460	613200	47	1226
Former FCX Chemical Plant	7/17/2006	FCXB2 6-8	6 - 8	**52**	47	1226	23460	613200	47	1226
Former FCX Chemical Plant	7/17/2006	FCXB3 6-8	6 - 8	**42**	47	1226	23460	613200	47	1226
Former FCX Chemical Plant	7/17/2006	FCXB4 6-8	6 - 8	**24**	47	1226	23460	613200	47	1226
Former FCX Chemical Plant	7/17/2006	FCXB5 6-8	6 - 8	**42**	47	1226	23460	613200	47	1226

Average chromium concentration = (mg/kg)	**34**
Standard deviation	**17**

NOTES:
Bold values indicate detected concentrations
ft bgs = feet below ground surface
mg/kg = milligrams per kilogram

[1] Residential and Industrial/Commercial soil clean up levels from Table 4 of "Guidelines for Assessment and Corrective Action", North Carolina Underground Storage Tank Section, State of North Carolina Department of Environment and Natural Resources Division of Waste Management, April 2001.

FIGURES



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SITE LOCATION MAP

FORMER FCX CHEMICAL PLANT
GRADE SEPARATION AT KLUMAC ROAD
KLUMAC ROAD
SALISBURY, ROWAN COUNTY, NC
WBS ELEMENT 31951.1.1; STATE PROJECT U-3459

Solutions-IES
Industrial & Environmental Services

1101 Nowell Road, Raleigh, NC 27609
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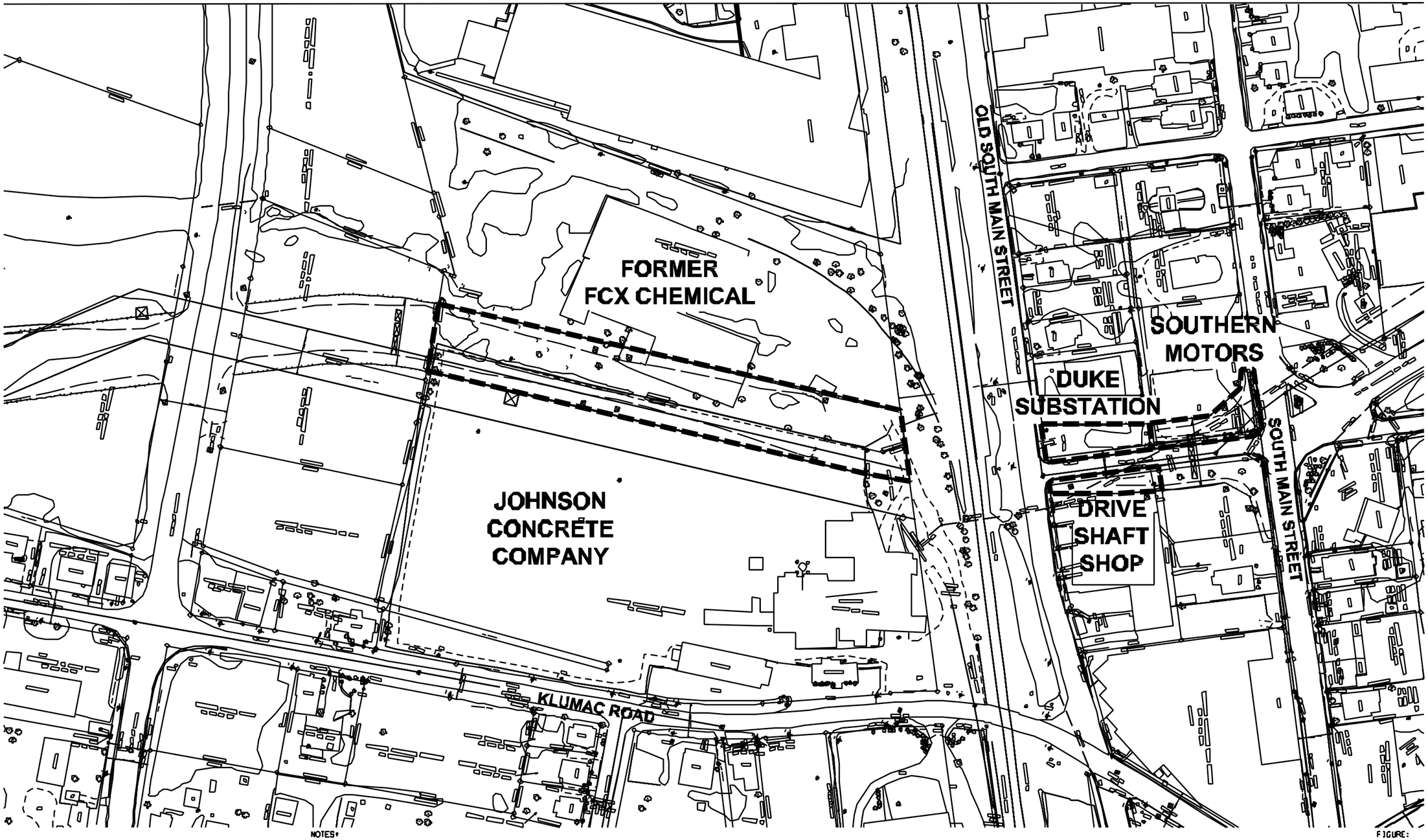
Created by:	RT	Project:	3210.06A3.NDOT
Checked by:	SK	Date:	AUGUST 2006
File:	Figure 1.mxd		
Software:	ESRI ArcMap 9.1	FIGURE	1



DATE: AUGUST 2006 | PROJECT MANAGER: SK | CHECKED BY: SK | DRAFTER: RT | PROJECT NUMBER: 3210.0643.NDOT

FILE: FIG2.DGN

Solutions-IES
Industrial & Environmental Services
1101 NOWELL ROAD
RALEIGH, NORTH CAROLINA 27607
TEL.: (919) 873-1060 FAX.: (919) 873-1074

NOTES:

0 150 300

SCALE IN FEET

FORMER FCX CHEMICAL
GRADE SEPARATION AT KLUMAC ROAD
SALISBURY, ROWAN COUNTY, NC
WBS ELEMENT 31951.1.1; STATE PROJECT U-3459

SITE MAP

FIGURE:

2

PROJECT NUMBER 3210.0803.NDOT | DRAFTER RT | CHECKED BY SK | PROJECT MANAGER SK | DATE AUGUST 2006 | FILE FIG3.DGN

ENKAY PROPERTIES, LLC
DB 834 PG 330

FORMER FCX CHEMICAL PLANT

CSMC

STUDY AREA

FCXB1
FCXB2
FCXB3
FCXB4
FCXB5
TMW-1

PROP. 100' R/W

POWER TOWER

CONVEYOR BRIDGE

JOHNSON CONCRETE

LEGEND

FCXB1 — SOIL BORING LOCATION

TMW-1 — TEMPORARY MONITORING WELL LOCATION

Solutions-IES
Industrial & Environmental Services
1101 NOWELL ROAD
RALEIGH, NORTH CAROLINA 27607
TEL.: (919) 873-1060 FAX.: (919) 873-1074

0 60 120
SCALE IN FEET

FORMER FCX CHEMICAL PLANT
GRADE SEPARATION AT KLUMAC ROAD
SALISBURY, ROWAN COUNTY, NC
WBS ELEMENT 31951.1.1; STATE PROJECT U-3459
LOCATION 3

SOIL BORING LOCATIONS

FIGURE: 3

APPENDIX A

PHOTOGRAPH

Photograph 1– View from south to north along Johnson Concrete / FCX property line.

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**
Solutions Industrial & Environmental Services Inc.
1101 Nowell Rd.
Raleigh, NC 27607

Prepared by: Doug Canavello
Douglas Canavello, PG

PYRAMID ENVIRONMENTAL & ENGINEERING, P.C.
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(336) 335-3174

Solutions Industrial & Environmental Services Inc.
GEOPHYSICAL SURVEYS FOR THE DETECTION OF METALLIC UST'S
Klumac Road Realignment Project
State Project Number 34951.1.1 (TIP # U3459)

TABLE OF CONTENTS

FIGURES

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.

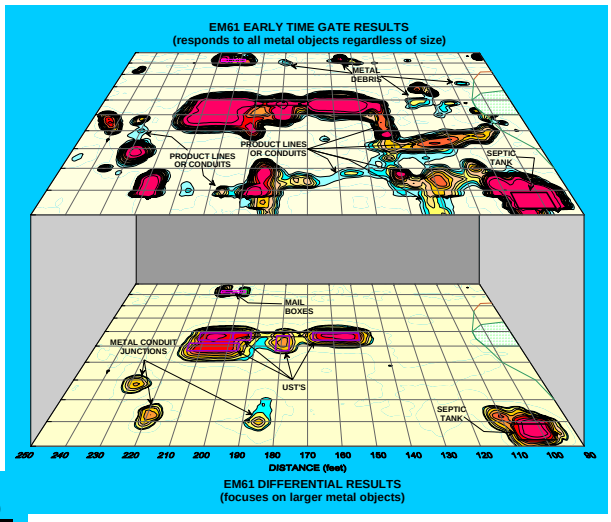
- At the East "A" Avenue sites, the linear EM61 anomalies intersecting grid coordinates X=40 Y=88, X=40 Y=380, X=60 Y=62, X=60 Y=120, X=64 Y=360, X=70 Y=250, X=70 Y=287, and X=120 Y=114, are probably in response to buried utility lines or conduits. The remaining metal detection anomalies are probably in response to known cultural features or to buried miscellaneous metal debris.

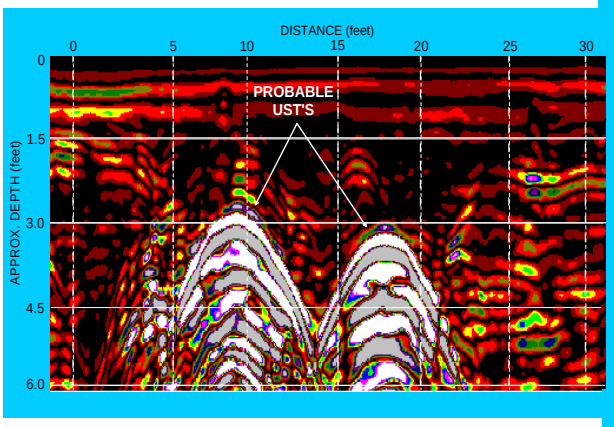
- The linear EM61 anomaly intersecting grid coordinates X=80 Y=750, at the Johnson Concrete property is probably in response to a buried utility line or conduit. The remaining metal detection anomalies recorded at the Johnson Concrete and the former FCX Chemical properties are probably in response to 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.

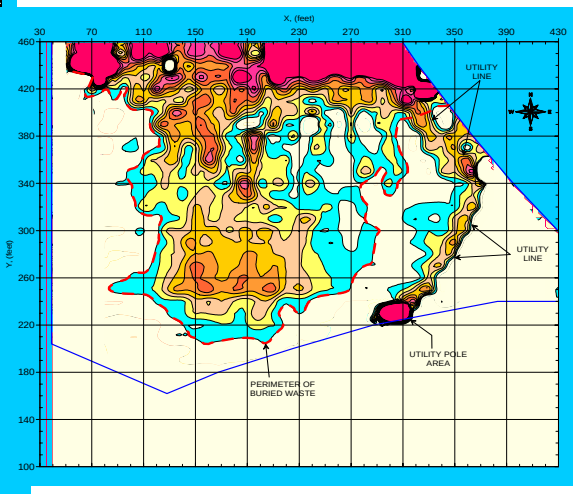
5.0 LIMITATIONS

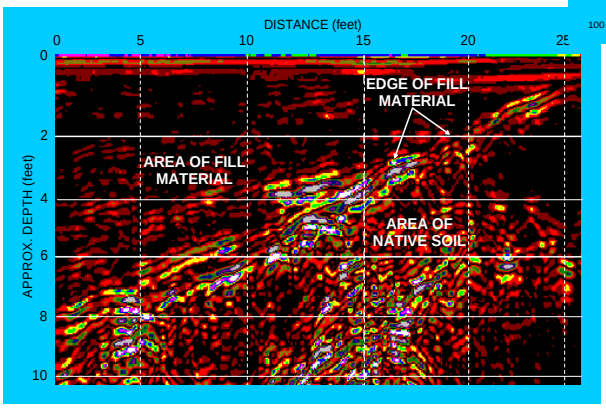
EM61 and GPR surveys have been performed and this report prepared for Solutions Industrial & Environmental Services, Inc. in accordance with generally accepted guidelines for EM61 and GPR surveys. It is generally recognized that the results of the EM61 and GPR are non-unique and may not represent actual 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.


EM61 EARLY TIME GATE RESULTS
(responds to all metal objects regardless of size)
METAL DEBRIS
PRODUCT LINES OR CONDUITS
PRODUCT LINES OR CONDUITS
SEPTIC TANK
MAIL BOXES
METAL CONDUIT JUNCTIONS
UST'S
SEPTIC TANK
DISTANCE (feet)
EM61 DIFFERENTIAL RESULTS
(focuses on larger metal objects)


DISTANCE (feet)
APPROX. DEPTH (feet)
PROBABLE UST'S

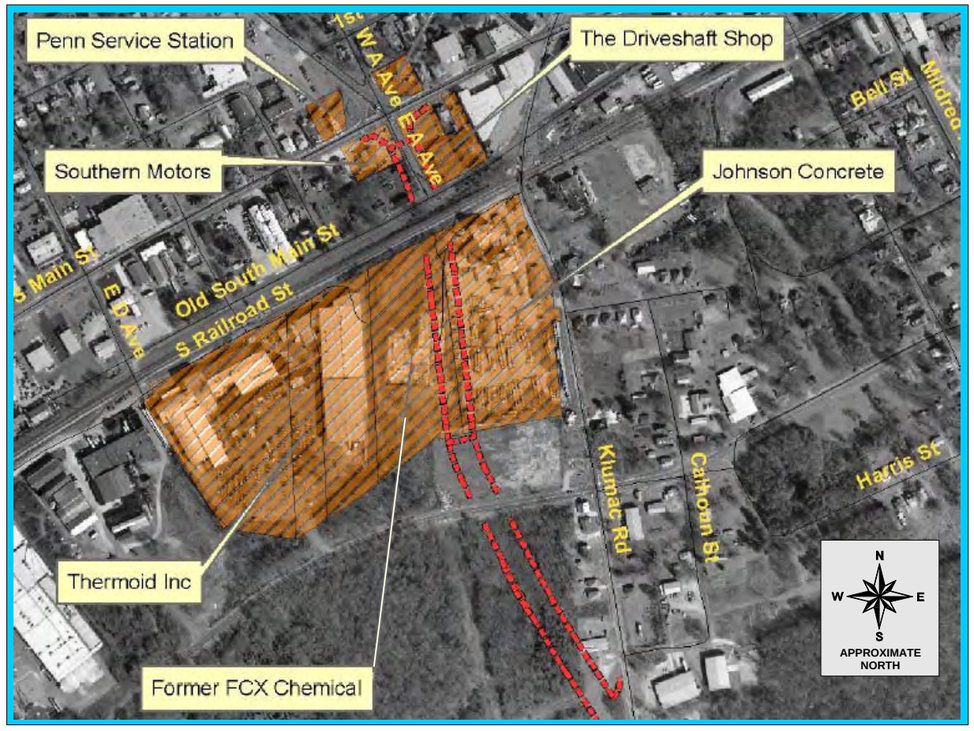
FIGURES


X, (feet)
Y, (feet)
UTILITY LINE
UTILITY LINE
UTILITY POLE AREA
PERIMETER OF BURIED WASTE


DISTANCE (feet)
APPROX. DEPTH (feet)
EDGE OF FILL MATERIAL
AREA OF FILL MATERIAL
AREA OF NATIVE SOIL

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 veiwed in a northerly direction.

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

PYRAMID
ENVIRONMENTAL & ENGINEERING, P.C.

CLIENT	SOLUTIONS INDUSTRIAL & ENVIRONMENTAL			DATE	07/14/06	DRWN	MJD
SITE	KLUMAC ROAD REALIGNMENT PROJECT			LAY		CHKD	
CITY	SALISBURY	STATE	NORTH CAROLINA	DWG			
TITLE	GEOPHYSICAL RESULTS			J.NO.	2006-176	FIGURE	

GRAPHIC SCALE IN METERS

SITE MAP
AND PHOTOGRAPHS

FIGURE 1

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.

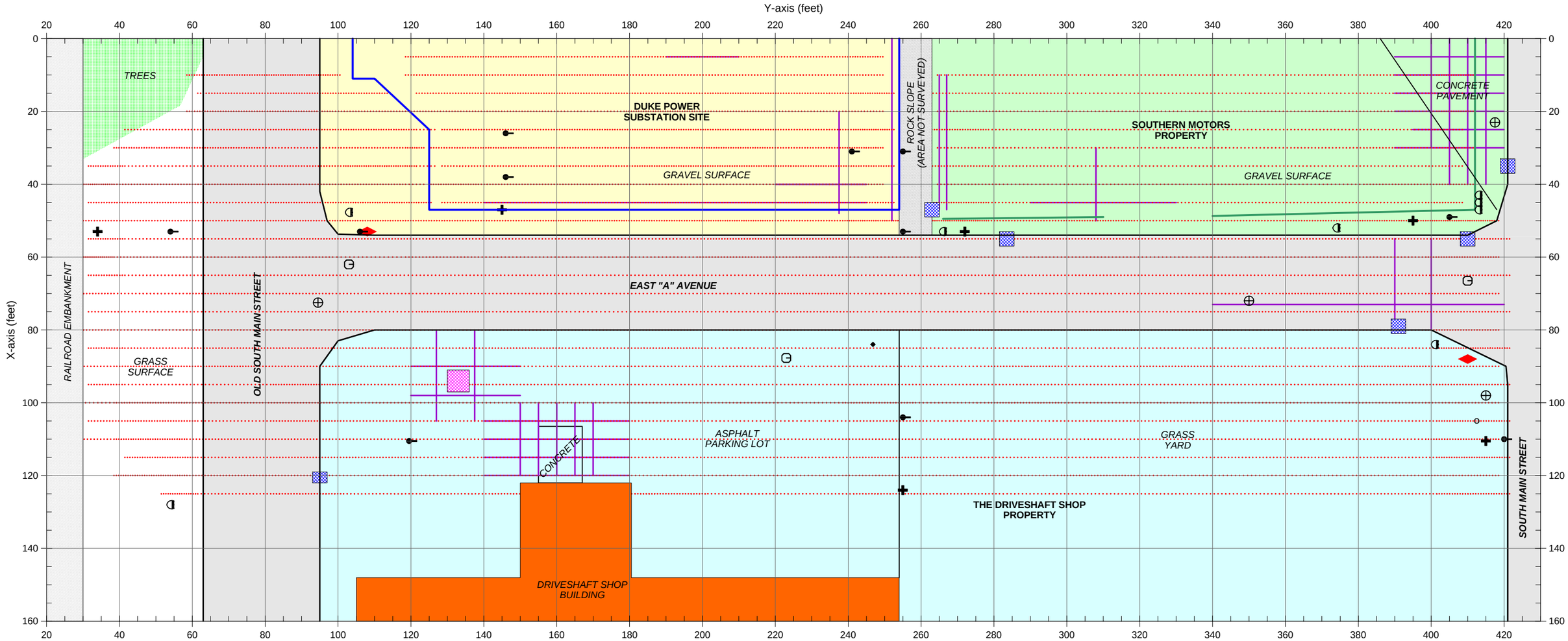
PYRAMID
ENVIRONMENTAL & ENGINEERING, P.C.

CLIENT	SOLUTIONS INDUSTRIAL & ENVIRONMENTAL			DATE	07/14/06	DRWN	
SITE	KLUMAC ROAD REALIGNMENT PROJECT			LAY		CHKD	
CITY	SALISBURY	STATE	NORTH CAROLINA	DWG			
TITLE	GEOPHYSICAL RESULTS			JWO	2006-176	FIGURE	

GRAPHIC SCALE IN METERS

GEOPHYSICAL EQUIPMENT

FIGURE 2



LEGEND

- MANHOLE COVERS
- WATER METER OR VALVE COVER
- GUY WIRE
- UTILITY POLE
- TRAFFIC SIGN
- STORM SEWER GRATE
- VENT/FILL PORT
- FIRE HYDRANT
- ELECTRICAL TOWER
- METAL FENCE LINE
- CHAIN FENCE
- EM61 METAL DETECTION SURVEY LINE
- GPR SURVEY LINE

APPROXIMATE NORTH

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 EM61metal 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.

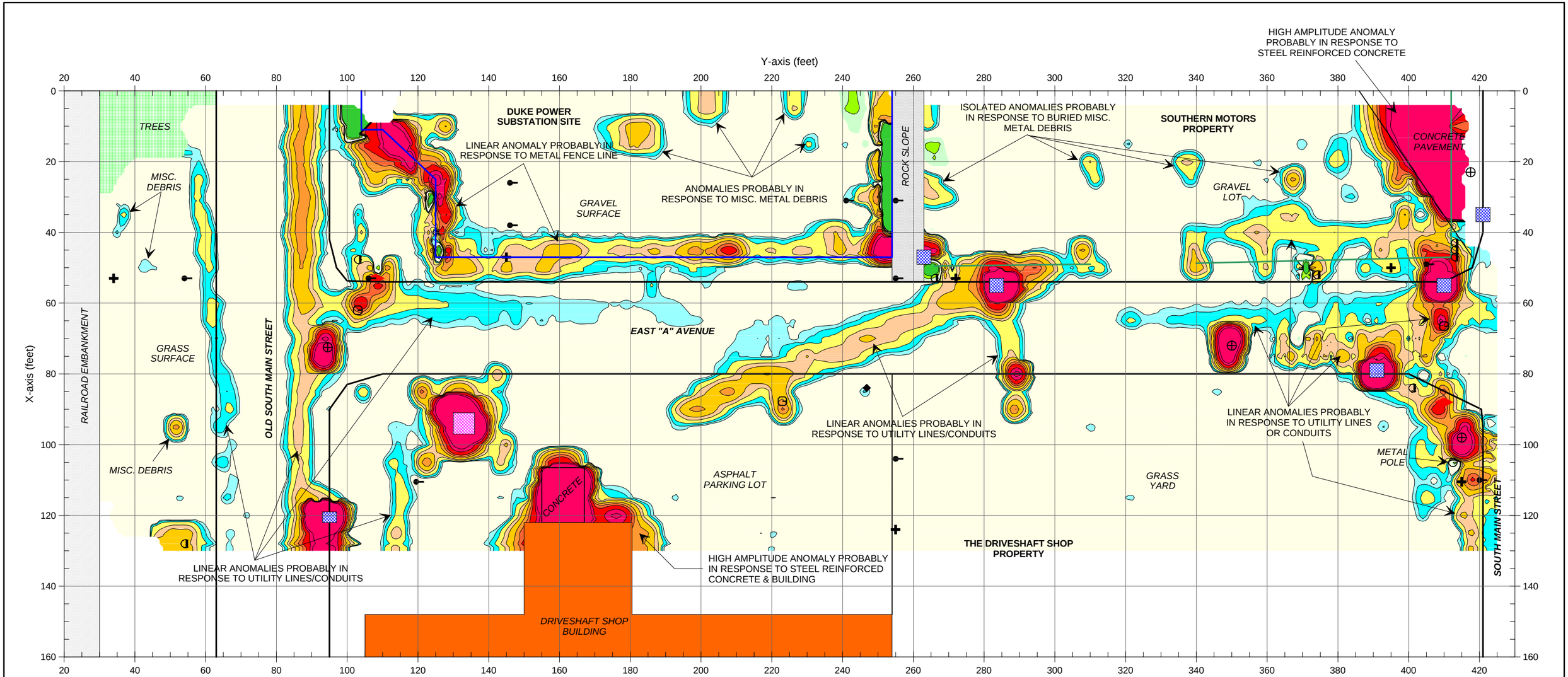
PYRAMID ENVIRONMENTAL & ENGINEERING, P.C.

CLIENT	SOLUTIONS INDUSTRIAL & ENVIRONMENTAL	DATE	07/14/06	DRWN	MJD
SITE	EAST "A" AVENUE SITES	LAY		CHKD	
CITY	SALISBURY	STATE	NORTH CAROLINA	DWG	
TITLE	GEOPHYSICAL RESULTS	J-NO.	2006-176	FIGURE	

GRAPHIC SCALE IN METERS

EM61 & GPR SURVEY LINE LOCATIONS

FIGURE 3



LEGEND

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

EM61 BOTTOM COIL RESPONSE (MILLIVOLTS): 1000, 750, 500, 400, 300, 200, 150, 100, 75, 60, 20, -40, -100, -200, -5000

APPROXIMATE NORTH

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.

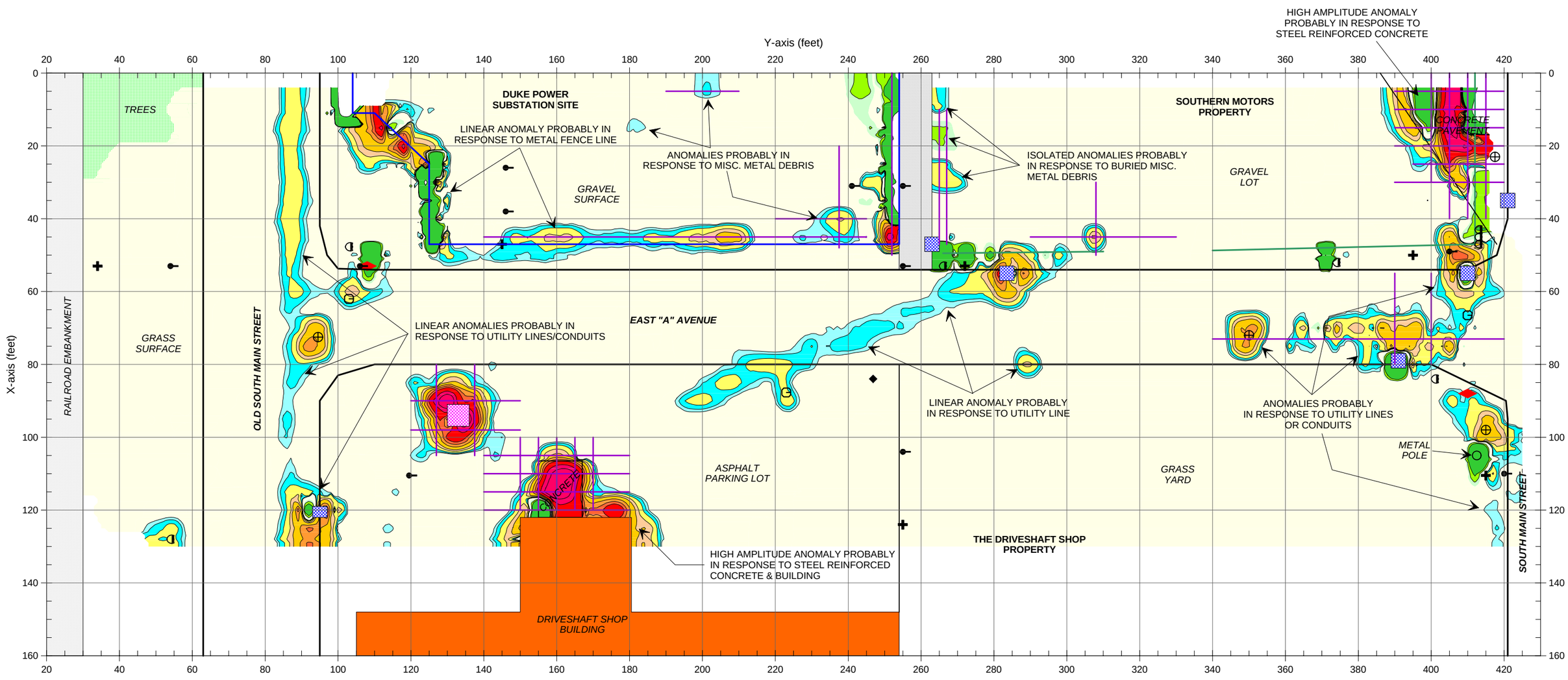
PYRAMID ENVIRONMENTAL & ENGINEERING, P.C.

CLIENT	SOLUTIONS INDUSTRIAL & ENVIRONMENTAL	DATE	07/14/06	DRWN	MJD
SITE	EAST "A" AVENUE SITES	LAY		CHKD	
CITY	SALISBURY	STATE	NORTH CAROLINA	DWG	
TITLE	GEOPHYSICAL RESULTS	J.NO.	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
- MANHOLE COVERS
- WATER METER OR VALVE COVER
- GUY WIRE
- UTILITY POLE
- TRAFFIC SIGN
- STORM SEWER GRATE
- VENT/FILL PORT
- FIRE HYDRANT
- ELECTRICAL TOWER
- METAL FENCE LINE
- CHAIN FENCE
- GPR SURVEY LINE

EM61 DIFFERENTIAL RESPONSE (MILLIVOLTS)

1000
750
500
400
300
200
150
100
75
60
20
-40
-100
-200
-5000

APPROXIMATE NORTH

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.

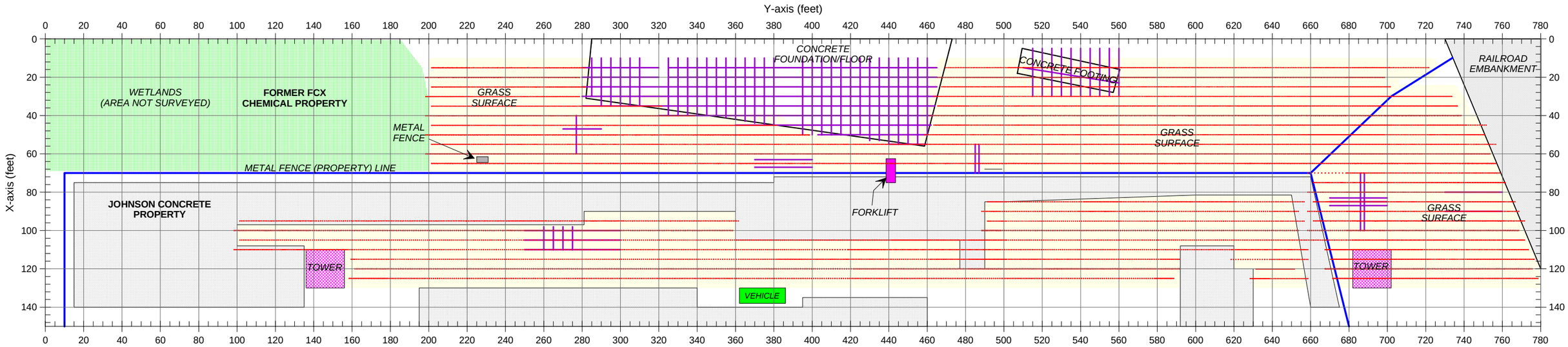
PYRAMID ENVIRONMENTAL & ENGINEERING, P.C.

CLIENT	SOLUTIONS INDUSTRIAL & ENVIRONMENTAL		DATE	07/14/06	DRWN MJD
SITE	EAST "A" AVENUE SITES		LAY		CHKD
CITY	SALISBURY	STATE NORTH CAROLINA	DWG		
TITLE	GEOPHYSICAL RESULTS		J.NO.	2006-176	FIGURE

GRAPHIC SCALE IN METERS

EM61 DIFFERENTIAL RESULTS

FIGURE 5



LEGEND

- EM61 SURVEY AREA: EM DATA ACQUIRED ALONG NORTH-SOUTH TRENDING LINES SPACED 5 FEET APART
- AREA CONTAINING CONCRETE BLOCKS, CULVERTS, SUPPLIES AND EQUIPMENT
- ELECTRICAL TOWER
- METAL FENCE LINE
- EM61 METAL DETECTION SURVEY LINE
- GPR SURVEY LINE

W S N E

APPROXIMATE
NORTH

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 EM61metal 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.

PYRAMID
ENVIRONMENTAL & ENGINEERING, P.C.

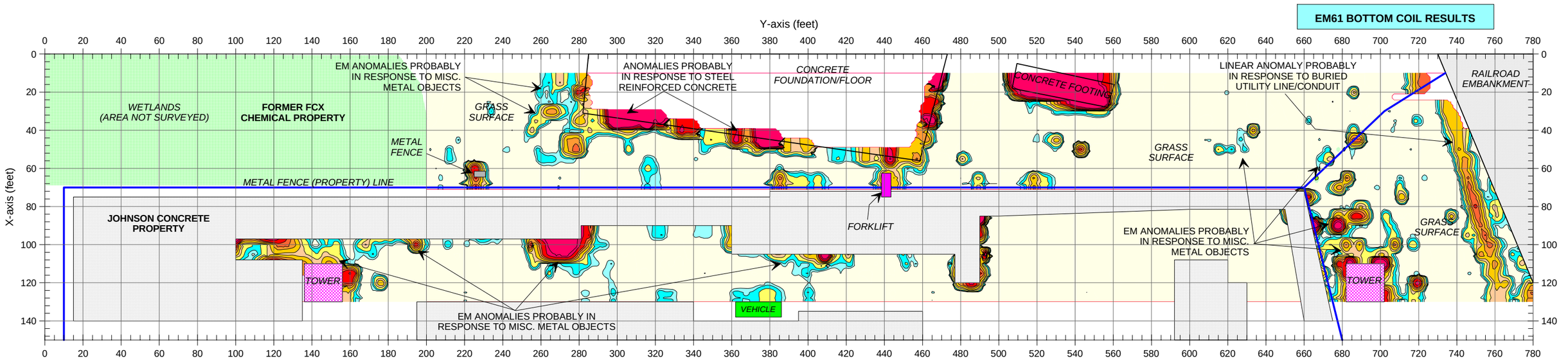
CLIENT	SOLUTIONS INDUSTRIAL & ENVIRONMENTAL	DATE	07/14/06	DRWN	MJD
SITE	JOHNSON CONCRETE & FORMER FCX CHEMICAL SITES	LAY		CHKD	
CITY	SALISBURY	STATE	NORTH CAROLINA	DWG	
TITLE	GEOPHYSICAL RESULTS	J-NO.	2006-176	FIGURE	

GRAPHIC SCALE IN METERS

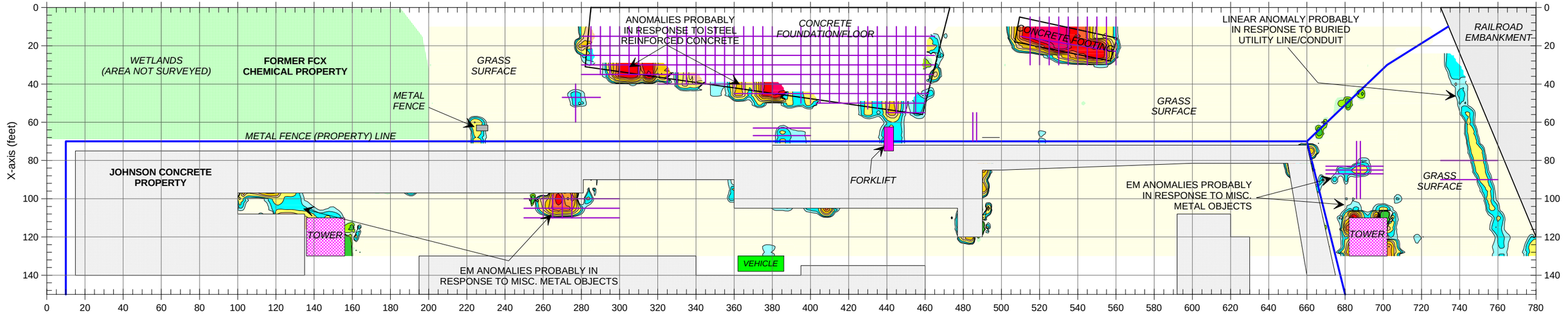
EM61 & GPR SURVEY LINE LOCATIONS

FIGURE 6

EM61 BOTTOM COIL RESULTS



EM61 DIFFERENTIAL RESULTS



LEGEND

- EM61 SURVEY AREA: EM DATA ACQUIRED ALONG NORTH-SOUTH TRENDING LINES SPACED 5 FEET APART
- AREA CONTAINING CONCRETE BLOCKS, CULVERTS, SUPPLIES AND EQUIPMENT
- ELECTRICAL TOWER
- METAL FENCE LINE
- GPR SURVEY LINE

APPROXIMATE NORTH

EM61 RESPONSE (MILLIVOLTS): 1000, 750, 500, 400, 300, 200, 150, 100, 75, 60, 20, -40, -100, -200, -5000

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.

PYRAMID ENVIRONMENTAL & ENGINEERING, P.C.

CLIENT	SOLUTIONS INDUSTRIAL & ENVIRONMENTAL	DATE	07/14/06	DRWN	MJD
SITE	JOHNSON CONCRETE & FORMER FCX CHEMICAL SITES	LAY		CHKD	
CITY	SALISBURY	STATE	NORTH CAROLINA	DWG	
TITLE	GEOPHYSICAL RESULTS	J.NO.	2006-176	FIGURE	

GRAPHIC SCALE IN METERS

EM61 RESULTS

FIGURE 7

APPENDIX C

BORING LOGS

Log of Soil Boring:FCXB1

Project: Klumac Rd. Project | *Solutions-IES Project No.:* 3210.06A3.NDOT | *Boring Number:* FCXB1

Client: NCDOT

WBS # 34951.1.1 | *City:* Salisbury | *Initial Water Level:* NA

State Project # U-3459 | *County:* Rowan | *Stabilized Water Level:* 8.2' bgs

Drilling Method: Direct Push | *Boring Date:* 7/17/06 | *Cave In Depth:* NA

Sampler Type: Macro Core | *Site:* FCX Chemical Plant

Logged By: KB | *Checked By:* JM | *Total Depth of Boring:* 16'

Depth ft. bgs	USCS Symbol	Description	Sample Interval	% Recovery	PID Field Screen ppm 250 500 750 / FID Field Screen ppm 250 500 750	Lab Sample Depth	Well Data
		Ground Surface					
0	CL	Moist, orange, silty clay		100	0		
3				100	0		
4							
5	ML	Moist, tan and orange, clayey silt		100	0		
7				100	0		
8	ML	Damp, tan and orange, silt (weathered) Damp to wet at 10 ft bgs Wet at 12 ft bgs		100	0		
11				100	0		
13				100	0		
15				100	0		
16							

Solutions-IES, Inc.
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Raleigh, NC 27607
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Solutions-IES
Industrial & Environmental Services

Log of Soil Boring:FCXB2

Project: Klumac Rd. Project | *Solutions-IES Project No.:* 3210.06A3.NDOT | *Boring Number:* FCXB2

Client: NCDOT

WBS # 34951.1.1 | *City:* Salisbury | *Initial Water Level:* NA

State Project # U-3459 | *County:* Rowan | *Stabilized Water Level:* 9.0' bgs

Drilling Method: Direct Push | *Boring Date:* 7/17/06 | *Cave In Depth:* NA

Sampler Type: Macro Core | *Site:* FCX Chemical Plant

Logged By: KB | *Checked By:* JM | *Total Depth of Boring:* 12'

Depth ft. bgs	USCS Symbol	Description	Sample Interval	% Recovery	PID Field Screen ppm 250 500 750 / FID Field Screen ppm 250 500 750	Lab Sample Depth	Well Data
0		Ground Surface					
1	SM	Moist, brown, fine silty sand		100	0		
2							
3	ML	Moist, red and brown, clayey silt Damp at 8 ft bgs		100	0		
4							
5				100	0		
6							
7				100	0		
8							
9	ML	Damp, tan and orange, clayey silt Wet at 10 ft bgs		100	0		
10							
11				100	0		
12							
13							
14							
15							
16							

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Log of Soil Boring:FCXB3

Project: Klumac Rd. Project | *Solutions-IES Project No.:* 3210.06A3.NDOT | *Boring Number:* FCXB3

Client: NCDOT

WBS # 34951.1.1 | *City:* Salisbury | *Initial Water Level:* NA

State Project # U-3459 | *County:* Rowan | *Stabilized Water Level:* 6.6' bgs

Drilling Method: Direct Push | *Boring Date:* 7/17/06 | *Cave In Depth:* NA

Sampler Type: Macro Core | *Site:* FCX Chemical Plant

Logged By: KB | *Checked By:* JM | *Total Depth of Boring:* 8'

Depth ft. bgs	USCS Symbol	Description	Sample Interval	% Recovery	PID Field Screen ppm 250 500 750 / FID Field Screen ppm 250 500 750	Lab Sample Depth	Well Data
0		Ground Surface					
0–2	SM	Moist, brown, fine silty sand		100	0		
2–8	ML	Moist, red and brown, clayey silt Damp at 6 ft bgs		100	0		
3–5				100	0		
5–7				100	0		
6–8							

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Log of Soil Boring:FCXB4

Project: Klumac Rd. Project | *Solutions-IES Project No.:* 3210.06A3.NDOT | *Boring Number:* FCXB4

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:* 7/17/06 | *Cave In Depth:* NA

Sampler Type: Macro Core | *Site:* FCX Chemical Plant

Logged By: KB | *Checked By:* JM | *Total Depth of Boring:* 8'

SUBSURFACE PROFILE			SAMPLE				
Depth ft. bgs	USCS Symbol	Description	Sample Interval	% Recovery	PID Field Screen ppm 250 500 750 / FID Field Screen ppm 250 500 750	Lab Sample Depth	Well Data
0		Ground Surface					
0–2	SM	Moist, red and brown, fine silty sand		100	0		
2–8	ML	Moist, red and brown, clayey silt Damp at 6 ft bgs		100	0		
4–6				100	0		
6–8				100	0		
8–16							

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Log of Soil Boring:FCXB5

Project: Klumac Rd. Project | *Solutions-IES Project No.:* 3210.06A3.NDOT | *Boring Number:* FCXB5

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:* 7/17/06 | *Cave In Depth:* NA

Sampler Type: Macro Core | *Site:* FCX Chemical Plant

Logged By: KB | *Checked By:* JM | *Total Depth of Boring:* 8'

Depth ft. bgs	USCS Symbol	Description	Sample Interval	% Recovery	PID Field Screen ppm 250 500 750 / FID Field Screen ppm 250 500 750	Lab Sample Depth	Well Data
0		Ground Surface					
0	SC	**SC** Dry, red and brown, fine clayey sand		100	0		
2	CL	**CL** Moist, red and brown, silty clay		100	0		
4	ML	**ML** Moist, tan and orange, clayey silt Damp at 6 ft bgs		100	0		
6				100	0		
8							
16							

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Log of Soil Boring: TMW-1

Project: Klumac Rd. Project | *Solutions-IES Project No.:* 3210.06A3.NDOT | *Boring Number:* TMW-1

Client: NCDOT

WBS # 34951.1.1 | *City:* Salisbury | *Initial Water Level:* NA

State Project # U-3459 | *County:* Rowan | *Stabilized Water Level:* 7.6' bgs

Drilling Method: Direct Push | *Boring Date:* 7/18/06 | *Cave In Depth:* NA

Sampler Type: | *Site:* FCX

Logged By: Sean Jarvah | *Checked By:* | *Total Depth of Boring:* 16'

SUBSURFACE PROFILE			SAMPLE				
Depth ft. bgs	USCS Symbol	Description	Sample Interval	% Recovery	PID Field Screen ppm 250 500 750 / FID Field Screen ppm 250 500 750	Lab Sample Depth	Well Data
0		Ground Surface			0		
1							
2					0		
3							
4					0		
5							
6					0		
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							

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APPENDIX D

LABORATORY ANALYTICAL REPORTS – SOIL

Pace Analytical Services, Inc.
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Pace Analytical Services, Inc.
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Phone: 828.254.7176
Fax: 828.252.4618

August 02, 2006

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

RE: Lab Project Number: 92123458
Client Project ID: NCDOT 34951.1.1 FCX

Dear Mr. Peoples:

Enclosed are the analytical results for sample(s) received by the laboratory on July 18, 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,

for

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

Enclosures

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Lab Project Number: 92123458
Client Project ID: NCDOT 34951.1.1 FCX

Solid results are reported on a dry weight basis

Lab Sample No: 927208306 Project Sample Number: 92123458-001 Date Collected: 07/17/06 12:15
Client Sample ID: FCXB1 6-8 Matrix: Soil Date Received: 07/18/06 17:10

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Metals								
Metals, Trace ICP	Prep/Method: EPA 3050 / EPA 6010							
Arsenic	ND	mg/kg	0.75	07/25/06 19:34	SHB	7440-38-2		
Barium	85.	mg/kg	0.75	07/25/06 19:34	SHB	7440-39-3		
Cadmium	ND	mg/kg	0.15	07/25/06 19:34	SHB	7440-43-9		
Chromium	16.	mg/kg	0.30	07/25/06 19:34	SHB	7440-47-3		
Lead	7.6	mg/kg	0.75	07/25/06 19:34	SHB	7439-92-1		
Selenium	ND	mg/kg	0.75	07/25/06 19:34	SHB	7782-49-2		
Silver	ND	mg/kg	0.30	07/25/06 19:34	SHB	7440-22-4		
Date Digested	07/21/06 14:00			07/21/06 14:00				
Mercury, CVAAS, in Soil	Method: EPA 7471							
Mercury	0.035	mg/kg	0.0063	07/20/06 14:41	ALV	7439-97-6		
Wet Chemistry								
Percent Moisture	Method: % Moisture							
Percent Moisture	30.2	%		07/19/06 10:04	TNM			
Nitrogen, Ammonia	Method: EPA 350.1 Modified							
Nitrogen, Ammonia	ND	mg/kg	11.	08/01/06 19:40	BMF	7727-37-9		
Nitrogen, Nitrate	Method: EPA 353.2 Modified							
Nitrate as N	29.	mg/kg	9.5	07/26/06 13:33	EWS			
pH	Method: EPA 9045							
pH	3.95	units		07/20/06 11:37	MLS1			
GC/MS Semivolatiles								
Semivolatile Organics	Prep/Method: EPA 3545 / EPA 8270							
Acenaphthene	ND	ug/kg	470	07/26/06 04:51	BET	83-32-9		
Acenaphthylene	ND	ug/kg	470	07/26/06 04:51	BET	208-96-8		
Anthracene	ND	ug/kg	470	07/26/06 04:51	BET	120-12-7		
Benzo(k)fluoranthene	ND	ug/kg	470	07/26/06 04:51	BET	207-08-9		
Benzo(b)fluoranthene	ND	ug/kg	470	07/26/06 04:51	BET	205-99-2		
Benzo(a)anthracene	ND	ug/kg	470	07/26/06 04:51	BET	56-55-3		
Benzoic acid	ND	ug/kg	2400	07/26/06 04:51	BET	65-85-0		
Benzo(g,h,i)perylene	ND	ug/kg	470	07/26/06 04:51	BET	191-24-2		
Benzyl alcohol	ND	ug/kg	950	07/26/06 04:51	BET	100-51-6		

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Lab Project Number: 92123458
Client Project ID: NCDOT 34951.1.1 FCX

Lab Sample No: 927208306 Project Sample Number: 92123458-001 Date Collected: 07/17/06 12:15
Client Sample ID: FCXB1 6-8 Matrix: Soil Date Received: 07/18/06 17:10

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Benzo(a)pyrene	ND	ug/kg	470	07/26/06 04:51	BET	50-32-8		
4-Bromophenylphenyl ether	ND	ug/kg	470	07/26/06 04:51	BET	101-55-3		
Butylbenzylphthalate	ND	ug/kg	470	07/26/06 04:51	BET	85-68-7		
4-Chloro-3-methylphenol	ND	ug/kg	950	07/26/06 04:51	BET	59-50-7		
4-Chloroaniline	ND	ug/kg	950	07/26/06 04:51	BET	106-47-8		
bis(2-Chloroethoxy)methane	ND	ug/kg	470	07/26/06 04:51	BET	111-91-1		
bis(2-Chloroethyl) ether	ND	ug/kg	470	07/26/06 04:51	BET	111-44-4		
bis(2-Chloroisopropyl) ether	ND	ug/kg	470	07/26/06 04:51	BET	39638-32-9		
2-Chloronaphthalene	ND	ug/kg	470	07/26/06 04:51	BET	91-58-7		
2-Chlorophenol	ND	ug/kg	470	07/26/06 04:51	BET	95-57-8		
4-Chlorophenylphenyl ether	ND	ug/kg	470	07/26/06 04:51	BET	7005-72-3		
Chrysene	ND	ug/kg	470	07/26/06 04:51	BET	218-01-9		
Dibenz(a,h)anthracene	ND	ug/kg	470	07/26/06 04:51	BET	53-70-3		
Dibenzofuran	ND	ug/kg	470	07/26/06 04:51	BET	132-64-9		
1,2-Dichlorobenzene	ND	ug/kg	470	07/26/06 04:51	BET	95-50-1		
1,3-Dichlorobenzene	ND	ug/kg	470	07/26/06 04:51	BET	541-73-1		
1,4-Dichlorobenzene	ND	ug/kg	470	07/26/06 04:51	BET	106-46-7		
3,3'-Dichlorobenzidine	ND	ug/kg	950	07/26/06 04:51	BET	91-94-1		
2,4-Dichlorophenol	ND	ug/kg	470	07/26/06 04:51	BET	120-83-2		
Diethylphthalate	ND	ug/kg	470	07/26/06 04:51	BET	84-66-2		
2,4-Dimethylphenol	ND	ug/kg	470	07/26/06 04:51	BET	105-67-9		
Dimethylphthalate	ND	ug/kg	470	07/26/06 04:51	BET	131-11-3		
Di-n-butylphthalate	ND	ug/kg	470	07/26/06 04:51	BET	84-74-2		
4,6-Dinitro-2-methylphenol	ND	ug/kg	470	07/26/06 04:51	BET	534-52-1		
2,4-Dinitrophenol	ND	ug/kg	2400	07/26/06 04:51	BET	51-28-5		
2,4-Dinitrotoluene	ND	ug/kg	470	07/26/06 04:51	BET	121-14-2		
2,6-Dinitrotoluene	ND	ug/kg	470	07/26/06 04:51	BET	606-20-2		
Di-n-octylphthalate	ND	ug/kg	470	07/26/06 04:51	BET	117-84-0		
1,2-Diphenylhydrazine	ND	ug/kg	470	07/26/06 04:51	BET	122-66-7		
bis(2-Ethylhexyl)phthalate	ND	ug/kg	470	07/26/06 04:51	BET	117-81-7		
Fluoranthene	ND	ug/kg	470	07/26/06 04:51	BET	206-44-0		
Fluorene	ND	ug/kg	470	07/26/06 04:51	BET	86-73-7		
Hexachloro-1,3-butadiene	ND	ug/kg	470	07/26/06 04:51	BET	87-68-3		
Hexachlorobenzene	ND	ug/kg	470	07/26/06 04:51	BET	118-74-1		
Hexachlorocyclopentadiene	ND	ug/kg	470	07/26/06 04:51	BET	77-47-4		
Hexachloroethane	ND	ug/kg	470	07/26/06 04:51	BET	67-72-1		
Indeno(1,2,3-cd)pyrene	ND	ug/kg	470	07/26/06 04:51	BET	193-39-5		
Isophorone	ND	ug/kg	470	07/26/06 04:51	BET	78-59-1		
1-Methylnaphthalene	ND	ug/kg	470	07/26/06 04:51	BET	90-12-0		

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Lab Project Number: 92123458
Client Project ID: NCDOT 34951.1.1 FCX

Lab Sample No: 927208306 Project Sample Number: 92123458-001 Date Collected: 07/17/06 12:15
Client Sample ID: FCXB1 6-8 Matrix: Soil Date Received: 07/18/06 17:10

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
2-Methylnaphthalene	ND	ug/kg	470	07/26/06 04:51	BET	91-57-6		
2-Methylphenol (o-Cresol)	ND	ug/kg	470	07/26/06 04:51	BET	95-48-7		
3&4-Methylphenol	ND	ug/kg	470	07/26/06 04:51	BET			
Naphthalene	ND	ug/kg	470	07/26/06 04:51	BET	91-20-3		
2-Nitroaniline	ND	ug/kg	2400	07/26/06 04:51	BET	88-74-4		
3-Nitroaniline	ND	ug/kg	2400	07/26/06 04:51	BET	99-09-2		
4-Nitroaniline	ND	ug/kg	2400	07/26/06 04:51	BET	100-01-6		
Nitrobenzene	ND	ug/kg	470	07/26/06 04:51	BET	98-95-3		
2-Nitrophenol	ND	ug/kg	470	07/26/06 04:51	BET	88-75-5		
4-Nitrophenol	ND	ug/kg	2400	07/26/06 04:51	BET	100-02-7		
N-Nitroso-di-n-propylamine	ND	ug/kg	470	07/26/06 04:51	BET	621-64-7		
N-Nitrosodiphenylamine	ND	ug/kg	470	07/26/06 04:51	BET	86-30-6		
Pentachlorophenol	ND	ug/kg	2400	07/26/06 04:51	BET	87-86-5		
Phenanthrene	ND	ug/kg	470	07/26/06 04:51	BET	85-01-8		
Phenol	ND	ug/kg	470	07/26/06 04:51	BET	108-95-2		
Pyrene	ND	ug/kg	470	07/26/06 04:51	BET	129-00-0		
1,2,4-Trichlorobenzene	ND	ug/kg	470	07/26/06 04:51	BET	120-82-1		
2,4,5-Trichlorophenol	ND	ug/kg	470	07/26/06 04:51	BET	95-95-4		
2,4,6-Trichlorophenol	ND	ug/kg	470	07/26/06 04:51	BET	88-06-2		
Nitrobenzene-d5 (S)	37	%		07/26/06 04:51	BET	4165-60-0		
2-Fluorobiphenyl (S)	39	%		07/26/06 04:51	BET	321-60-8		
Terphenyl-d14 (S)	55	%		07/26/06 04:51	BET	1718-51-0		
Phenol-d5 (S)	36	%		07/26/06 04:51	BET	4165-62-2	1	
2-Fluorophenol (S)	40	%		07/26/06 04:51	BET	367-12-4		
2,4,6-Tribromophenol (S)	57	%		07/26/06 04:51	BET	118-79-6		
Date Extracted	07/19/06			07/19/06				

GC Semivolatiles

Organochlorine Pesticides	Prep/Method: EPA 3545 / EPA 8081							
Aldrin	ND	ug/kg	1.4	07/24/06 19:11	JEM	309-00-2		
alpha-BHC	ND	ug/kg	2.9	07/24/06 19:11	JEM	319-84-6		
beta-BHC	ND	ug/kg	2.9	07/24/06 19:11	JEM	319-85-7		
delta-BHC	ND	ug/kg	2.9	07/24/06 19:11	JEM	319-86-8		
gamma-BHC (Lindane)	ND	ug/kg	2.9	07/24/06 19:11	JEM	58-89-9		
Chlordane	ND	ug/kg	12.	07/24/06 19:11	JEM	57-74-9		
gamma-Chlordane	ND	ug/kg	2.9	07/24/06 19:11	JEM	5103-74-2		
4,4'-DDD	ND	ug/kg	2.9	07/24/06 19:11	JEM	72-54-8		
4,4'-DDE	ND	ug/kg	2.9	07/24/06 19:11	JEM	72-55-9		
4,4'-DDT	ND	ug/kg	2.9	07/24/06 19:11	JEM	50-29-3		

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Lab Project Number: 92123458
Client Project ID: NCDOT 34951.1.1 FCX

Lab Sample No: 927208306 Project Sample Number: 92123458-001 Date Collected: 07/17/06 12:15
Client Sample ID: FCXB1 6-8 Matrix: Soil Date Received: 07/18/06 17:10

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Dieldrin	ND	ug/kg	1.4	07/24/06 19:11	JEM	60-57-1		
Endosulfan I	ND	ug/kg	2.9	07/24/06 19:11	JEM	959-98-8		
Endosulfan II	ND	ug/kg	2.9	07/24/06 19:11	JEM	33213-65-9		
Endosulfan sulfate	ND	ug/kg	2.9	07/24/06 19:11	JEM	1031-07-8		
Endrin	ND	ug/kg	2.9	07/24/06 19:11	JEM	72-20-8		
Endrin aldehyde	ND	ug/kg	2.9	07/24/06 19:11	JEM	7421-93-4		
Heptachlor	ND	ug/kg	2.9	07/24/06 19:11	JEM	76-44-8		
Heptachlor epoxide	ND	ug/kg	2.9	07/24/06 19:11	JEM	1024-57-3		
Methoxychlor	ND	ug/kg	10.	07/24/06 19:11	JEM	72-43-5		
Mirex	ND	ug/kg	10.	07/24/06 19:11	JEM	2385-85-5		
Toxaphene	ND	ug/kg	12.	07/24/06 19:11	JEM	8001-35-2		
Tetrachloro-m-xylene (S)	5	%		07/24/06 19:11	JEM	877-09-8	2	
Decachlorobiphenyl (S)	38	%		07/24/06 19:11	JEM	2051-24-3		
Date Extracted	07/20/06			07/20/06				

GC/MS Volatiles

GC/MS VOCs 5035/8260 low level Method: EPA 8260

Acetone	ND	ug/kg	120	07/25/06 19:36	DLK	67-64-1		
Benzene	ND	ug/kg	6.2	07/25/06 19:36	DLK	71-43-2		
Bromobenzene	ND	ug/kg	6.2	07/25/06 19:36	DLK	108-86-1		
Bromochloromethane	ND	ug/kg	6.2	07/25/06 19:36	DLK	74-97-5		
Bromodichloromethane	ND	ug/kg	6.2	07/25/06 19:36	DLK	75-27-4		
Bromoform	ND	ug/kg	6.2	07/25/06 19:36	DLK	75-25-2		
Bromomethane	ND	ug/kg	12.	07/25/06 19:36	DLK	74-83-9		
2-Butanone (MEK)	ND	ug/kg	120	07/25/06 19:36	DLK	78-93-3		
n-Butylbenzene	ND	ug/kg	6.2	07/25/06 19:36	DLK	104-51-8		
sec-Butylbenzene	ND	ug/kg	6.2	07/25/06 19:36	DLK	135-98-8		
tert-Butylbenzene	ND	ug/kg	6.2	07/25/06 19:36	DLK	98-06-6		
Carbon tetrachloride	ND	ug/kg	6.2	07/25/06 19:36	DLK	56-23-5		
Chlorobenzene	ND	ug/kg	6.2	07/25/06 19:36	DLK	108-90-7		
Chloroethane	ND	ug/kg	12.	07/25/06 19:36	DLK	75-00-3		
Chloroform	ND	ug/kg	6.2	07/25/06 19:36	DLK	67-66-3		
Chloromethane	ND	ug/kg	12.	07/25/06 19:36	DLK	74-87-3		
2-Chlorotoluene	ND	ug/kg	6.2	07/25/06 19:36	DLK	95-49-8		
4-Chlorotoluene	ND	ug/kg	6.2	07/25/06 19:36	DLK	106-43-4		
1,2-Dibromo-3-chloropropane	ND	ug/kg	6.2	07/25/06 19:36	DLK	96-12-8		
Dibromochloromethane	ND	ug/kg	6.2	07/25/06 19:36	DLK	124-48-1		
1,2-Dibromoethane (EDB)	ND	ug/kg	6.2	07/25/06 19:36	DLK	106-93-4		
Dibromomethane	ND	ug/kg	6.2	07/25/06 19:36	DLK	74-95-3		

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Lab Project Number: 92123458
Client Project ID: NCDOT 34951.1.1 FCX

Lab Sample No: 927208306 Project Sample Number: 92123458-001 Date Collected: 07/17/06 12:15
Client Sample ID: FCXB1 6-8 Matrix: Soil Date Received: 07/18/06 17:10

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
1,2-Dichlorobenzene	ND	ug/kg	6.2	07/25/06 19:36	DLK	95-50-1		
1,3-Dichlorobenzene	ND	ug/kg	6.2	07/25/06 19:36	DLK	541-73-1		
1,4-Dichlorobenzene	ND	ug/kg	6.2	07/25/06 19:36	DLK	106-46-7		
Dichlorodifluoromethane	ND	ug/kg	12.	07/25/06 19:36	DLK	75-71-8		
1,1-Dichloroethane	ND	ug/kg	6.2	07/25/06 19:36	DLK	75-34-3		
1,2-Dichloroethane	ND	ug/kg	6.2	07/25/06 19:36	DLK	107-06-2		
1,1-Dichloroethene	ND	ug/kg	6.2	07/25/06 19:36	DLK	75-35-4		
cis-1,2-Dichloroethene	ND	ug/kg	6.2	07/25/06 19:36	DLK	156-59-2		
trans-1,2-Dichloroethene	ND	ug/kg	6.2	07/25/06 19:36	DLK	156-60-5		
1,2-Dichloropropane	ND	ug/kg	6.2	07/25/06 19:36	DLK	78-87-5		
1,3-Dichloropropane	ND	ug/kg	6.2	07/25/06 19:36	DLK	142-28-9		
2,2-Dichloropropane	ND	ug/kg	6.2	07/25/06 19:36	DLK	594-20-7		
1,1-Dichloropropene	ND	ug/kg	6.2	07/25/06 19:36	DLK	563-58-6		
cis-1,3-Dichloropropene	ND	ug/kg	6.2	07/25/06 19:36	DLK	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/kg	6.2	07/25/06 19:36	DLK	10061-02-6		
Diisopropyl ether	ND	ug/kg	6.2	07/25/06 19:36	DLK	108-20-3		
Ethylbenzene	ND	ug/kg	6.2	07/25/06 19:36	DLK	100-41-4		
Hexachloro-1,3-butadiene	ND	ug/kg	6.2	07/25/06 19:36	DLK	87-68-3		
2-Hexanone	ND	ug/kg	62.	07/25/06 19:36	DLK	591-78-6		
Isopropylbenzene (Cumene)	ND	ug/kg	6.2	07/25/06 19:36	DLK	98-82-8		
p-Isopropyltoluene	ND	ug/kg	6.2	07/25/06 19:36	DLK	99-87-6		
Methylene chloride	ND	ug/kg	12.	07/25/06 19:36	DLK	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	62.	07/25/06 19:36	DLK	108-10-1		
Methyl-tert-butyl ether	ND	ug/kg	6.2	07/25/06 19:36	DLK	1634-04-4		
Naphthalene	ND	ug/kg	6.2	07/25/06 19:36	DLK	91-20-3		
n-Propylbenzene	ND	ug/kg	6.2	07/25/06 19:36	DLK	103-65-1		
Styrene	ND	ug/kg	6.2	07/25/06 19:36	DLK	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/kg	6.2	07/25/06 19:36	DLK	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/kg	6.2	07/25/06 19:36	DLK	79-34-5		
Tetrachloroethene	ND	ug/kg	6.2	07/25/06 19:36	DLK	127-18-4		
Toluene	ND	ug/kg	6.2	07/25/06 19:36	DLK	108-88-3		
1,2,3-Trichlorobenzene	ND	ug/kg	6.2	07/25/06 19:36	DLK	87-61-6		
1,2,4-Trichlorobenzene	ND	ug/kg	6.2	07/25/06 19:36	DLK	120-82-1		
1,1,1-Trichloroethane	ND	ug/kg	6.2	07/25/06 19:36	DLK	71-55-6		
1,1,2-Trichloroethane	ND	ug/kg	6.2	07/25/06 19:36	DLK	79-00-5		
Trichloroethene	ND	ug/kg	6.2	07/25/06 19:36	DLK	79-01-6		
Trichlorofluoromethane	ND	ug/kg	6.2	07/25/06 19:36	DLK	75-69-4		
1,2,3-Trichloropropane	ND	ug/kg	6.2	07/25/06 19:36	DLK	96-18-4		
1,2,4-Trimethylbenzene	ND	ug/kg	6.2	07/25/06 19:36	DLK	95-63-6		

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Lab Project Number: 92123458
Client Project ID: NCDOT 34951.1.1 FCX

Lab Sample No: 927208306 Project Sample Number: 92123458-001 Date Collected: 07/17/06 12:15
Client Sample ID: FCXB1 6-8 Matrix: Soil Date Received: 07/18/06 17:10

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
1,3,5-Trimethylbenzene	ND	ug/kg	6.2	07/25/06 19:36	DLK	108-67-8		
Vinyl acetate	ND	ug/kg	62.	07/25/06 19:36	DLK	108-05-4		
Vinyl chloride	ND	ug/kg	12.	07/25/06 19:36	DLK	75-01-4		
Xylene (Total)	ND	ug/kg	6.2	07/25/06 19:36	DLK	1330-20-7		
m&p-Xylene	ND	ug/kg	12.	07/25/06 19:36	DLK			
o-Xylene	ND	ug/kg	6.2	07/25/06 19:36	DLK	95-47-6		
Toluene-d8 (S)	102	%		07/25/06 19:36	DLK	2037-26-5		
4-Bromofluorobenzene (S)	95	%		07/25/06 19:36	DLK	460-00-4		
Dibromofluoromethane (S)	83	%		07/25/06 19:36	DLK	1868-53-7		
1,2-Dichloroethane-d4 (S)	84	%		07/25/06 19:36	DLK	17060-07-0		

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Lab Project Number: 92123458
Client Project ID: NCDOT 34951.1.1 FCX

Lab Sample No: 927208314 Project Sample Number: 92123458-002 Date Collected: 07/17/06 13:55
Client Sample ID: FCXB2 6-8 Matrix: Soil Date Received: 07/18/06 17:10

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Metals								
Metals, Trace ICP	Prep/Method: EPA 3050 / EPA 6010							
Arsenic	1.3	mg/kg	0.72	07/25/06 19:38	SHB	7440-38-2		
Barium	14.	mg/kg	0.72	07/25/06 19:38	SHB	7440-39-3		
Cadmium	ND	mg/kg	0.14	07/25/06 19:38	SHB	7440-43-9		
Chromium	52.	mg/kg	0.29	07/25/06 19:38	SHB	7440-47-3		
Lead	13.	mg/kg	0.72	07/25/06 19:38	SHB	7439-92-1		
Selenium	ND	mg/kg	0.72	07/25/06 19:38	SHB	7782-49-2		
Silver	ND	mg/kg	0.29	07/25/06 19:38	SHB	7440-22-4		
Date Digested	07/21/06 14:00			07/21/06 14:00				
Mercury, CVAAS, in Soil	Method: EPA 7471							
Mercury	0.0090	mg/kg	0.0071	07/20/06 14:41	ALV	7439-97-6		
Wet Chemistry								
Percent Moisture	Method: % Moisture							
Percent Moisture	31.9	%		07/19/06 10:05	TNM			
Nitrogen, Ammonia	Method: EPA 350.1 Modified							
Nitrogen, Ammonia	ND	mg/kg	14.	08/01/06 19:40	BMF	7727-37-9		
Nitrogen, Nitrate	Method: EPA 353.2 Modified							
Nitrate as N	ND	mg/kg	7.9	07/26/06 13:33	EWS			
pH	Method: EPA 9045							
pH	4.60	units		07/20/06 11:37	MLS1			
GC/MS Semivolatiles								
Semivolatile Organics	Prep/Method: EPA 3545 / EPA 8270							
Acenaphthene	ND	ug/kg	480	07/27/06 16:21	BET	83-32-9		
Acenaphthylene	ND	ug/kg	480	07/27/06 16:21	BET	208-96-8		
Anthracene	ND	ug/kg	480	07/27/06 16:21	BET	120-12-7		
Benzo(k)fluoranthene	ND	ug/kg	480	07/27/06 16:21	BET	207-08-9		
Benzo(b)fluoranthene	ND	ug/kg	480	07/27/06 16:21	BET	205-99-2		
Benzo(a)anthracene	ND	ug/kg	480	07/27/06 16:21	BET	56-55-3		
Benzoic acid	ND	ug/kg	2400	07/27/06 16:21	BET	65-85-0		
Benzo(g,h,i)perylene	ND	ug/kg	480	07/27/06 16:21	BET	191-24-2		
Benzyl alcohol	ND	ug/kg	970	07/27/06 16:21	BET	100-51-6		
Benzo(a)pyrene	ND	ug/kg	480	07/27/06 16:21	BET	50-32-8		

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Lab Project Number: 92123458
Client Project ID: NCDOT 34951.1.1 FCX

Lab Sample No: 927208314 Project Sample Number: 92123458-002 Date Collected: 07/17/06 13:55
Client Sample ID: FCXB2 6-8 Matrix: Soil Date Received: 07/18/06 17:10

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
4-Bromophenylphenyl ether	ND	ug/kg	480	07/27/06 16:21	BET	101-55-3		
Butylbenzylphthalate	ND	ug/kg	480	07/27/06 16:21	BET	85-68-7		
4-Chloro-3-methylphenol	ND	ug/kg	970	07/27/06 16:21	BET	59-50-7		
4-Chloroaniline	ND	ug/kg	970	07/27/06 16:21	BET	106-47-8		
bis(2-Chloroethoxy)methane	ND	ug/kg	480	07/27/06 16:21	BET	111-91-1		
bis(2-Chloroethyl) ether	ND	ug/kg	480	07/27/06 16:21	BET	111-44-4		
bis(2-Chloroisopropyl) ether	ND	ug/kg	480	07/27/06 16:21	BET	39638-32-9		
2-Chloronaphthalene	ND	ug/kg	480	07/27/06 16:21	BET	91-58-7		
2-Chlorophenol	ND	ug/kg	480	07/27/06 16:21	BET	95-57-8		
4-Chlorophenylphenyl ether	ND	ug/kg	480	07/27/06 16:21	BET	7005-72-3		
Chrysene	ND	ug/kg	480	07/27/06 16:21	BET	218-01-9		
Dibenz(a,h)anthracene	ND	ug/kg	480	07/27/06 16:21	BET	53-70-3		
Dibenzofuran	ND	ug/kg	480	07/27/06 16:21	BET	132-64-9		
1,2-Dichlorobenzene	ND	ug/kg	480	07/27/06 16:21	BET	95-50-1		
1,3-Dichlorobenzene	ND	ug/kg	480	07/27/06 16:21	BET	541-73-1		
1,4-Dichlorobenzene	ND	ug/kg	480	07/27/06 16:21	BET	106-46-7		
3,3'-Dichlorobenzidine	ND	ug/kg	970	07/27/06 16:21	BET	91-94-1		
2,4-Dichlorophenol	ND	ug/kg	480	07/27/06 16:21	BET	120-83-2		
Diethylphthalate	ND	ug/kg	480	07/27/06 16:21	BET	84-66-2		
2,4-Dimethylphenol	ND	ug/kg	480	07/27/06 16:21	BET	105-67-9		
Dimethylphthalate	ND	ug/kg	480	07/27/06 16:21	BET	131-11-3		
Di-n-butylphthalate	ND	ug/kg	480	07/27/06 16:21	BET	84-74-2		
4,6-Dinitro-2-methylphenol	ND	ug/kg	480	07/27/06 16:21	BET	534-52-1		
2,4-Dinitrophenol	ND	ug/kg	2400	07/27/06 16:21	BET	51-28-5		
2,4-Dinitrotoluene	ND	ug/kg	480	07/27/06 16:21	BET	121-14-2		
2,6-Dinitrotoluene	ND	ug/kg	480	07/27/06 16:21	BET	606-20-2		
Di-n-octylphthalate	ND	ug/kg	480	07/27/06 16:21	BET	117-84-0		
1,2-Diphenylhydrazine	ND	ug/kg	480	07/27/06 16:21	BET	122-66-7		
bis(2-Ethylhexyl)phthalate	ND	ug/kg	480	07/27/06 16:21	BET	117-81-7		
Fluoranthene	ND	ug/kg	480	07/27/06 16:21	BET	206-44-0		
Fluorene	ND	ug/kg	480	07/27/06 16:21	BET	86-73-7		
Hexachloro-1,3-butadiene	ND	ug/kg	480	07/27/06 16:21	BET	87-68-3		
Hexachlorobenzene	ND	ug/kg	480	07/27/06 16:21	BET	118-74-1		
Hexachlorocyclopentadiene	ND	ug/kg	480	07/27/06 16:21	BET	77-47-4		
Hexachloroethane	ND	ug/kg	480	07/27/06 16:21	BET	67-72-1		
Indeno(1,2,3-cd)pyrene	ND	ug/kg	480	07/27/06 16:21	BET	193-39-5		
Isophorone	ND	ug/kg	480	07/27/06 16:21	BET	78-59-1		
1-Methylnaphthalene	ND	ug/kg	480	07/27/06 16:21	BET	90-12-0		
2-Methylnaphthalene	ND	ug/kg	480	07/27/06 16:21	BET	91-57-6		

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Lab Project Number: 92123458
Client Project ID: NCDOT 34951.1.1 FCX

Lab Sample No: 927208314 Project Sample Number: 92123458-002 Date Collected: 07/17/06 13:55
Client Sample ID: FCXB2 6-8 Matrix: Soil Date Received: 07/18/06 17:10

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
2-Methylphenol (o-Cresol)	ND	ug/kg	480	07/27/06 16:21	BET	95-48-7		
3&4-Methylphenol	ND	ug/kg	480	07/27/06 16:21	BET			
Naphthalene	ND	ug/kg	480	07/27/06 16:21	BET	91-20-3		
2-Nitroaniline	ND	ug/kg	2400	07/27/06 16:21	BET	88-74-4		
3-Nitroaniline	ND	ug/kg	2400	07/27/06 16:21	BET	99-09-2		
4-Nitroaniline	ND	ug/kg	2400	07/27/06 16:21	BET	100-01-6		
Nitrobenzene	ND	ug/kg	480	07/27/06 16:21	BET	98-95-3		
2-Nitrophenol	ND	ug/kg	480	07/27/06 16:21	BET	88-75-5		
4-Nitrophenol	ND	ug/kg	2400	07/27/06 16:21	BET	100-02-7		
N-Nitroso-di-n-propylamine	ND	ug/kg	480	07/27/06 16:21	BET	621-64-7		
N-Nitrosodiphenylamine	ND	ug/kg	480	07/27/06 16:21	BET	86-30-6		
Pentachlorophenol	ND	ug/kg	2400	07/27/06 16:21	BET	87-86-5		
Phenanthrene	ND	ug/kg	480	07/27/06 16:21	BET	85-01-8		
Phenol	ND	ug/kg	480	07/27/06 16:21	BET	108-95-2		
Pyrene	ND	ug/kg	480	07/27/06 16:21	BET	129-00-0		
1,2,4-Trichlorobenzene	ND	ug/kg	480	07/27/06 16:21	BET	120-82-1		
2,4,5-Trichlorophenol	ND	ug/kg	480	07/27/06 16:21	BET	95-95-4		
2,4,6-Trichlorophenol	ND	ug/kg	480	07/27/06 16:21	BET	88-06-2		
Nitrobenzene-d5 (S)	28	%		07/27/06 16:21	BET	4165-60-0		
2-Fluorobiphenyl (S)	28	%		07/27/06 16:21	BET	321-60-8		
Terphenyl-d14 (S)	47	%		07/27/06 16:21	BET	1718-51-0		
Phenol-d5 (S)	36	%		07/27/06 16:21	BET	4165-62-2	1	
2-Fluorophenol (S)	41	%		07/27/06 16:21	BET	367-12-4		
2,4,6-Tribromophenol (S)	47	%		07/27/06 16:21	BET	118-79-6		
Date Extracted	07/26/06			07/26/06				

GC Semivolatiles

Organochlorine Pesticides	Prep/Method: EPA 3545 / EPA 8081							
Aldrin	ND	ug/kg	1.5	07/24/06 19:30	JEM	309-00-2		
alpha-BHC	ND	ug/kg	2.9	07/24/06 19:30	JEM	319-84-6		
beta-BHC	ND	ug/kg	2.9	07/24/06 19:30	JEM	319-85-7		
delta-BHC	ND	ug/kg	2.9	07/24/06 19:30	JEM	319-86-8		
gamma-BHC (Lindane)	ND	ug/kg	2.9	07/24/06 19:30	JEM	58-89-9		
Chlordane	ND	ug/kg	12.	07/24/06 19:30	JEM	57-74-9		
gamma-Chlordane	ND	ug/kg	2.9	07/24/06 19:30	JEM	5103-74-2		
4,4'-DDD	ND	ug/kg	2.9	07/24/06 19:30	JEM	72-54-8		
4,4'-DDE	ND	ug/kg	2.9	07/24/06 19:30	JEM	72-55-9		
4,4'-DDT	ND	ug/kg	2.9	07/24/06 19:30	JEM	50-29-3		
Dieldrin	ND	ug/kg	1.5	07/24/06 19:30	JEM	60-57-1		

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Lab Project Number: 92123458
Client Project ID: NCDOT 34951.1.1 FCX

Lab Sample No: 927208314 Project Sample Number: 92123458-002 Date Collected: 07/17/06 13:55
Client Sample ID: FCXB2 6-8 Matrix: Soil Date Received: 07/18/06 17:10

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Endosulfan I	ND	ug/kg	2.9	07/24/06 19:30	JEM	959-98-8		
Endosulfan II	ND	ug/kg	2.9	07/24/06 19:30	JEM	33213-65-9		
Endosulfan sulfate	ND	ug/kg	2.9	07/24/06 19:30	JEM	1031-07-8		
Endrin	ND	ug/kg	2.9	07/24/06 19:30	JEM	72-20-8		
Endrin aldehyde	ND	ug/kg	2.9	07/24/06 19:30	JEM	7421-93-4		
Heptachlor	ND	ug/kg	2.9	07/24/06 19:30	JEM	76-44-8		
Heptachlor epoxide	ND	ug/kg	2.9	07/24/06 19:30	JEM	1024-57-3		
Methoxychlor	ND	ug/kg	10.	07/24/06 19:30	JEM	72-43-5		
Mirex	ND	ug/kg	10.	07/24/06 19:30	JEM	2385-85-5		
Toxaphene	ND	ug/kg	12.	07/24/06 19:30	JEM	8001-35-2		
Tetrachloro-m-xylene (S)	9	%		07/24/06 19:30	JEM	877-09-8	2	
Decachlorobiphenyl (S)	40	%		07/24/06 19:30	JEM	2051-24-3		
Date Extracted	07/20/06			07/20/06				

GC/MS Volatiles

GC/MS VOCs 5035/8260 low level Method: EPA 8260

Acetone	ND	ug/kg	130	07/25/06 19:55	DLK	67-64-1		
Benzene	ND	ug/kg	6.5	07/25/06 19:55	DLK	71-43-2		
Bromobenzene	ND	ug/kg	6.5	07/25/06 19:55	DLK	108-86-1		
Bromochloromethane	ND	ug/kg	6.5	07/25/06 19:55	DLK	74-97-5		
Bromodichloromethane	ND	ug/kg	6.5	07/25/06 19:55	DLK	75-27-4		
Bromoform	ND	ug/kg	6.5	07/25/06 19:55	DLK	75-25-2		
Bromomethane	ND	ug/kg	13.	07/25/06 19:55	DLK	74-83-9		
2-Butanone (MEK)	ND	ug/kg	130	07/25/06 19:55	DLK	78-93-3		
n-Butylbenzene	ND	ug/kg	6.5	07/25/06 19:55	DLK	104-51-8		
sec-Butylbenzene	ND	ug/kg	6.5	07/25/06 19:55	DLK	135-98-8		
tert-Butylbenzene	ND	ug/kg	6.5	07/25/06 19:55	DLK	98-06-6		
Carbon tetrachloride	ND	ug/kg	6.5	07/25/06 19:55	DLK	56-23-5		
Chlorobenzene	ND	ug/kg	6.5	07/25/06 19:55	DLK	108-90-7		
Chloroethane	ND	ug/kg	13.	07/25/06 19:55	DLK	75-00-3		
Chloroform	ND	ug/kg	6.5	07/25/06 19:55	DLK	67-66-3		
Chloromethane	ND	ug/kg	13.	07/25/06 19:55	DLK	74-87-3		
2-Chlorotoluene	ND	ug/kg	6.5	07/25/06 19:55	DLK	95-49-8		
4-Chlorotoluene	ND	ug/kg	6.5	07/25/06 19:55	DLK	106-43-4		
1,2-Dibromo-3-chloropropane	ND	ug/kg	6.5	07/25/06 19:55	DLK	96-12-8		
Dibromochloromethane	ND	ug/kg	6.5	07/25/06 19:55	DLK	124-48-1		
1,2-Dibromoethane (EDB)	ND	ug/kg	6.5	07/25/06 19:55	DLK	106-93-4		
Dibromomethane	ND	ug/kg	6.5	07/25/06 19:55	DLK	74-95-3		
1,2-Dichlorobenzene	ND	ug/kg	6.5	07/25/06 19:55	DLK	95-50-1		

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Lab Project Number: 92123458
Client Project ID: NCDOT 34951.1.1 FCX

Lab Sample No: 927208314 Project Sample Number: 92123458-002 Date Collected: 07/17/06 13:55
Client Sample ID: FCXB2 6-8 Matrix: Soil Date Received: 07/18/06 17:10

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
1,3-Dichlorobenzene	ND	ug/kg	6.5	07/25/06 19:55	DLK	541-73-1		
1,4-Dichlorobenzene	ND	ug/kg	6.5	07/25/06 19:55	DLK	106-46-7		
Dichlorodifluoromethane	ND	ug/kg	13.	07/25/06 19:55	DLK	75-71-8		
1,1-Dichloroethane	ND	ug/kg	6.5	07/25/06 19:55	DLK	75-34-3		
1,2-Dichloroethane	ND	ug/kg	6.5	07/25/06 19:55	DLK	107-06-2		
1,1-Dichloroethene	ND	ug/kg	6.5	07/25/06 19:55	DLK	75-35-4		
cis-1,2-Dichloroethene	ND	ug/kg	6.5	07/25/06 19:55	DLK	156-59-2		
trans-1,2-Dichloroethene	ND	ug/kg	6.5	07/25/06 19:55	DLK	156-60-5		
1,2-Dichloropropane	ND	ug/kg	6.5	07/25/06 19:55	DLK	78-87-5		
1,3-Dichloropropane	ND	ug/kg	6.5	07/25/06 19:55	DLK	142-28-9		
2,2-Dichloropropane	ND	ug/kg	6.5	07/25/06 19:55	DLK	594-20-7		
1,1-Dichloropropene	ND	ug/kg	6.5	07/25/06 19:55	DLK	563-58-6		
cis-1,3-Dichloropropene	ND	ug/kg	6.5	07/25/06 19:55	DLK	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/kg	6.5	07/25/06 19:55	DLK	10061-02-6		
Diisopropyl ether	ND	ug/kg	6.5	07/25/06 19:55	DLK	108-20-3		
Ethylbenzene	ND	ug/kg	6.5	07/25/06 19:55	DLK	100-41-4		
Hexachloro-1,3-butadiene	ND	ug/kg	6.5	07/25/06 19:55	DLK	87-68-3		
2-Hexanone	ND	ug/kg	65.	07/25/06 19:55	DLK	591-78-6		
Isopropylbenzene (Cumene)	ND	ug/kg	6.5	07/25/06 19:55	DLK	98-82-8		
p-Isopropyltoluene	ND	ug/kg	6.5	07/25/06 19:55	DLK	99-87-6		
Methylene chloride	ND	ug/kg	13.	07/25/06 19:55	DLK	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	65.	07/25/06 19:55	DLK	108-10-1		
Methyl-tert-butyl ether	ND	ug/kg	6.5	07/25/06 19:55	DLK	1634-04-4		
Naphthalene	ND	ug/kg	6.5	07/25/06 19:55	DLK	91-20-3		
n-Propylbenzene	ND	ug/kg	6.5	07/25/06 19:55	DLK	103-65-1		
Styrene	ND	ug/kg	6.5	07/25/06 19:55	DLK	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/kg	6.5	07/25/06 19:55	DLK	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/kg	6.5	07/25/06 19:55	DLK	79-34-5		
Tetrachloroethene	ND	ug/kg	6.5	07/25/06 19:55	DLK	127-18-4		
Toluene	ND	ug/kg	6.5	07/25/06 19:55	DLK	108-88-3		
1,2,3-Trichlorobenzene	ND	ug/kg	6.5	07/25/06 19:55	DLK	87-61-6		
1,2,4-Trichlorobenzene	ND	ug/kg	6.5	07/25/06 19:55	DLK	120-82-1		
1,1,1-Trichloroethane	ND	ug/kg	6.5	07/25/06 19:55	DLK	71-55-6		
1,1,2-Trichloroethane	ND	ug/kg	6.5	07/25/06 19:55	DLK	79-00-5		
Trichloroethene	ND	ug/kg	6.5	07/25/06 19:55	DLK	79-01-6		
Trichlorofluoromethane	ND	ug/kg	6.5	07/25/06 19:55	DLK	75-69-4		
1,2,3-Trichloropropane	ND	ug/kg	6.5	07/25/06 19:55	DLK	96-18-4		
1,2,4-Trimethylbenzene	ND	ug/kg	6.5	07/25/06 19:55	DLK	95-63-6		
1,3,5-Trimethylbenzene	ND	ug/kg	6.5	07/25/06 19:55	DLK	108-67-8		

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Lab Project Number: 92123458
Client Project ID: NCDOT 34951.1.1 FCX

Lab Sample No: 927208314 Project Sample Number: 92123458-002 Date Collected: 07/17/06 13:55
Client Sample ID: FCXB2 6-8 Matrix: Soil Date Received: 07/18/06 17:10

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Vinyl acetate	ND	ug/kg	65.	07/25/06 19:55	DLK	108-05-4		
Vinyl chloride	ND	ug/kg	13.	07/25/06 19:55	DLK	75-01-4		
Xylene (Total)	ND	ug/kg	6.5	07/25/06 19:55	DLK	1330-20-7		
m&p-Xylene	ND	ug/kg	13.	07/25/06 19:55	DLK			
o-Xylene	ND	ug/kg	6.5	07/25/06 19:55	DLK	95-47-6		
Toluene-d8 (S)	103	%		07/25/06 19:55	DLK	2037-26-5		
4-Bromofluorobenzene (S)	92	%		07/25/06 19:55	DLK	460-00-4		
Dibromofluoromethane (S)	90	%		07/25/06 19:55	DLK	1868-53-7		
1,2-Dichloroethane-d4 (S)	84	%		07/25/06 19:55	DLK	17060-07-0		

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Lab Project Number: 92123458
Client Project ID: NCDOT 34951.1.1 FCX

Lab Sample No: 927208322 Project Sample Number: 92123458-003 Date Collected: 07/17/06 14:15
Client Sample ID: FCXB3 6-8 Matrix: Soil Date Received: 07/18/06 17:10

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Metals								
Metals, Trace ICP	Prep/Method: EPA 3050 / EPA 6010							
Arsenic	1.7	mg/kg	0.79	07/25/06 19:42	SHB	7440-38-2		
Barium	13.	mg/kg	0.79	07/25/06 19:42	SHB	7440-39-3		
Cadmium	ND	mg/kg	0.16	07/25/06 19:42	SHB	7440-43-9		
Chromium	42.	mg/kg	0.31	07/25/06 19:42	SHB	7440-47-3		
Lead	10.	mg/kg	0.79	07/25/06 19:42	SHB	7439-92-1		
Selenium	ND	mg/kg	0.79	07/25/06 19:42	SHB	7782-49-2		
Silver	ND	mg/kg	0.31	07/25/06 19:42	SHB	7440-22-4		
Date Digested	07/21/06 14:00			07/21/06 14:00				
Mercury, CVAAS, in Soil	Method: EPA 7471							
Mercury	0.0090	mg/kg	0.0061	07/20/06 14:41	ALV	7439-97-6		
Wet Chemistry								
Percent Moisture	Method: % Moisture							
Percent Moisture	29.4	%		07/19/06 10:05	TNM			
Nitrogen, Ammonia	Method: EPA 350.1 Modified							
Nitrogen, Ammonia	39.	mg/kg	12.	08/01/06 19:40	BMF	7727-37-9		
Nitrogen, Nitrate	Method: EPA 353.2 Modified							
Nitrate as N	24.	mg/kg	10.	07/26/06 13:33	EWS			
pH	Method: EPA 9045							
pH	4.10	units		07/20/06 11:37	MLS1			
GC/MS Semivolatiles								
Semivolatile Organics	Prep/Method: EPA 3545 / EPA 8270							
Acenaphthene	ND	ug/kg	470	07/26/06 05:34	BET	83-32-9		
Acenaphthylene	ND	ug/kg	470	07/26/06 05:34	BET	208-96-8		
Anthracene	ND	ug/kg	470	07/26/06 05:34	BET	120-12-7		
Benzo(k)fluoranthene	ND	ug/kg	470	07/26/06 05:34	BET	207-08-9		
Benzo(b)fluoranthene	ND	ug/kg	470	07/26/06 05:34	BET	205-99-2		
Benzo(a)anthracene	ND	ug/kg	470	07/26/06 05:34	BET	56-55-3		
Benzoic acid	ND	ug/kg	2300	07/26/06 05:34	BET	65-85-0		
Benzo(g,h,i)perylene	ND	ug/kg	470	07/26/06 05:34	BET	191-24-2		
Benzyl alcohol	ND	ug/kg	930	07/26/06 05:34	BET	100-51-6		
Benzo(a)pyrene	ND	ug/kg	470	07/26/06 05:34	BET	50-32-8		

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Lab Project Number: 92123458
Client Project ID: NCDOT 34951.1.1 FCX

Lab Sample No: 927208322 Project Sample Number: 92123458-003 Date Collected: 07/17/06 14:15
Client Sample ID: FCXB3 6-8 Matrix: Soil Date Received: 07/18/06 17:10

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
4-Bromophenylphenyl ether	ND	ug/kg	470	07/26/06 05:34	BET	101-55-3		
Butylbenzylphthalate	ND	ug/kg	470	07/26/06 05:34	BET	85-68-7		
4-Chloro-3-methylphenol	ND	ug/kg	930	07/26/06 05:34	BET	59-50-7		
4-Chloroaniline	ND	ug/kg	930	07/26/06 05:34	BET	106-47-8		
bis(2-Chloroethoxy)methane	ND	ug/kg	470	07/26/06 05:34	BET	111-91-1		
bis(2-Chloroethyl) ether	ND	ug/kg	470	07/26/06 05:34	BET	111-44-4		
bis(2-Chloroisopropyl) ether	ND	ug/kg	470	07/26/06 05:34	BET	39638-32-9		
2-Chloronaphthalene	ND	ug/kg	470	07/26/06 05:34	BET	91-58-7		
2-Chlorophenol	ND	ug/kg	470	07/26/06 05:34	BET	95-57-8		
4-Chlorophenylphenyl ether	ND	ug/kg	470	07/26/06 05:34	BET	7005-72-3		
Chrysene	ND	ug/kg	470	07/26/06 05:34	BET	218-01-9		
Dibenz(a,h)anthracene	ND	ug/kg	470	07/26/06 05:34	BET	53-70-3		
Dibenzofuran	ND	ug/kg	470	07/26/06 05:34	BET	132-64-9		
1,2-Dichlorobenzene	ND	ug/kg	470	07/26/06 05:34	BET	95-50-1		
1,3-Dichlorobenzene	ND	ug/kg	470	07/26/06 05:34	BET	541-73-1		
1,4-Dichlorobenzene	ND	ug/kg	470	07/26/06 05:34	BET	106-46-7		
3,3'-Dichlorobenzidine	ND	ug/kg	930	07/26/06 05:34	BET	91-94-1		
2,4-Dichlorophenol	ND	ug/kg	470	07/26/06 05:34	BET	120-83-2		
Diethylphthalate	ND	ug/kg	470	07/26/06 05:34	BET	84-66-2		
2,4-Dimethylphenol	ND	ug/kg	470	07/26/06 05:34	BET	105-67-9		
Dimethylphthalate	ND	ug/kg	470	07/26/06 05:34	BET	131-11-3		
Di-n-butylphthalate	ND	ug/kg	470	07/26/06 05:34	BET	84-74-2		
4,6-Dinitro-2-methylphenol	ND	ug/kg	470	07/26/06 05:34	BET	534-52-1		
2,4-Dinitrophenol	ND	ug/kg	2300	07/26/06 05:34	BET	51-28-5		
2,4-Dinitrotoluene	ND	ug/kg	470	07/26/06 05:34	BET	121-14-2		
2,6-Dinitrotoluene	ND	ug/kg	470	07/26/06 05:34	BET	606-20-2		
Di-n-octylphthalate	ND	ug/kg	470	07/26/06 05:34	BET	117-84-0		
1,2-Diphenylhydrazine	ND	ug/kg	470	07/26/06 05:34	BET	122-66-7		
bis(2-Ethylhexyl)phthalate	ND	ug/kg	470	07/26/06 05:34	BET	117-81-7		
Fluoranthene	ND	ug/kg	470	07/26/06 05:34	BET	206-44-0		
Fluorene	ND	ug/kg	470	07/26/06 05:34	BET	86-73-7		
Hexachloro-1,3-butadiene	ND	ug/kg	470	07/26/06 05:34	BET	87-68-3		
Hexachlorobenzene	ND	ug/kg	470	07/26/06 05:34	BET	118-74-1		
Hexachlorocyclopentadiene	ND	ug/kg	470	07/26/06 05:34	BET	77-47-4		
Hexachloroethane	ND	ug/kg	470	07/26/06 05:34	BET	67-72-1		
Indeno(1,2,3-cd)pyrene	ND	ug/kg	470	07/26/06 05:34	BET	193-39-5		
Isophorone	ND	ug/kg	470	07/26/06 05:34	BET	78-59-1		
1-Methylnaphthalene	ND	ug/kg	470	07/26/06 05:34	BET	90-12-0		
2-Methylnaphthalene	ND	ug/kg	470	07/26/06 05:34	BET	91-57-6		

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Lab Project Number: 92123458
Client Project ID: NCDOT 34951.1.1 FCX

Lab Sample No: 927208322 Project Sample Number: 92123458-003 Date Collected: 07/17/06 14:15
Client Sample ID: FCXB3 6-8 Matrix: Soil Date Received: 07/18/06 17:10

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
2-Methylphenol (o-Cresol)	ND	ug/kg	470	07/26/06 05:34	BET	95-48-7		
3&4-Methylphenol	ND	ug/kg	470	07/26/06 05:34	BET			
Naphthalene	ND	ug/kg	470	07/26/06 05:34	BET	91-20-3		
2-Nitroaniline	ND	ug/kg	2300	07/26/06 05:34	BET	88-74-4		
3-Nitroaniline	ND	ug/kg	2300	07/26/06 05:34	BET	99-09-2		
4-Nitroaniline	ND	ug/kg	2300	07/26/06 05:34	BET	100-01-6		
Nitrobenzene	ND	ug/kg	470	07/26/06 05:34	BET	98-95-3		
2-Nitrophenol	ND	ug/kg	470	07/26/06 05:34	BET	88-75-5		
4-Nitrophenol	ND	ug/kg	2300	07/26/06 05:34	BET	100-02-7		
N-Nitroso-di-n-propylamine	ND	ug/kg	470	07/26/06 05:34	BET	621-64-7		
N-Nitrosodiphenylamine	ND	ug/kg	470	07/26/06 05:34	BET	86-30-6		
Pentachlorophenol	ND	ug/kg	2300	07/26/06 05:34	BET	87-86-5		
Phenanthrene	ND	ug/kg	470	07/26/06 05:34	BET	85-01-8		
Phenol	ND	ug/kg	470	07/26/06 05:34	BET	108-95-2		
Pyrene	ND	ug/kg	470	07/26/06 05:34	BET	129-00-0		
1,2,4-Trichlorobenzene	ND	ug/kg	470	07/26/06 05:34	BET	120-82-1		
2,4,5-Trichlorophenol	ND	ug/kg	470	07/26/06 05:34	BET	95-95-4		
2,4,6-Trichlorophenol	ND	ug/kg	470	07/26/06 05:34	BET	88-06-2		
Nitrobenzene-d5 (S)	43	%		07/26/06 05:34	BET	4165-60-0		
2-Fluorobiphenyl (S)	50	%		07/26/06 05:34	BET	321-60-8		
Terphenyl-d14 (S)	73	%		07/26/06 05:34	BET	1718-51-0		
Phenol-d5 (S)	46	%		07/26/06 05:34	BET	4165-62-2		
2-Fluorophenol (S)	52	%		07/26/06 05:34	BET	367-12-4		
2,4,6-Tribromophenol (S)	86	%		07/26/06 05:34	BET	118-79-6		
Date Extracted	07/19/06			07/19/06				

GC Semivolatiles

Organochlorine Pesticides	Prep/Method: EPA 3545 / EPA 8081							
Aldrin	ND	ug/kg	1.4	07/24/06 19:48	JEM	309-00-2		
alpha-BHC	ND	ug/kg	2.8	07/24/06 19:48	JEM	319-84-6		
beta-BHC	ND	ug/kg	2.8	07/24/06 19:48	JEM	319-85-7		
delta-BHC	ND	ug/kg	2.8	07/24/06 19:48	JEM	319-86-8		
gamma-BHC (Lindane)	ND	ug/kg	2.8	07/24/06 19:48	JEM	58-89-9		
Chlordane	ND	ug/kg	12.	07/24/06 19:48	JEM	57-74-9		
gamma-Chlordane	ND	ug/kg	2.8	07/24/06 19:48	JEM	5103-74-2		
4,4'-DDD	ND	ug/kg	2.8	07/24/06 19:48	JEM	72-54-8		
4,4'-DDE	ND	ug/kg	2.8	07/24/06 19:48	JEM	72-55-9		
4,4'-DDT	ND	ug/kg	2.8	07/24/06 19:48	JEM	50-29-3		
Dieldrin	ND	ug/kg	1.4	07/24/06 19:48	JEM	60-57-1		

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Lab Project Number: 92123458
Client Project ID: NCDOT 34951.1.1 FCX

Lab Sample No: 927208322 Project Sample Number: 92123458-003 Date Collected: 07/17/06 14:15
Client Sample ID: FCXB3 6-8 Matrix: Soil Date Received: 07/18/06 17:10

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Endosulfan I	ND	ug/kg	2.8	07/24/06 19:48	JEM	959-98-8		
Endosulfan II	ND	ug/kg	2.8	07/24/06 19:48	JEM	33213-65-9		
Endosulfan sulfate	ND	ug/kg	2.8	07/24/06 19:48	JEM	1031-07-8		
Endrin	ND	ug/kg	2.8	07/24/06 19:48	JEM	72-20-8		
Endrin aldehyde	ND	ug/kg	2.8	07/24/06 19:48	JEM	7421-93-4		
Heptachlor	ND	ug/kg	2.8	07/24/06 19:48	JEM	76-44-8		
Heptachlor epoxide	ND	ug/kg	2.8	07/24/06 19:48	JEM	1024-57-3		
Methoxychlor	ND	ug/kg	9.9	07/24/06 19:48	JEM	72-43-5		
Mirex	ND	ug/kg	9.9	07/24/06 19:48	JEM	2385-85-5		
Toxaphene	ND	ug/kg	12.	07/24/06 19:48	JEM	8001-35-2		
Tetrachloro-m-xylene (S)	41	%		07/24/06 19:48	JEM	877-09-8		
Decachlorobiphenyl (S)	48	%		07/24/06 19:48	JEM	2051-24-3		
Date Extracted	07/20/06			07/20/06				

GC/MS Volatiles

GC/MS VOCs 5035/8260 low level Method: EPA 8260

Acetone	ND	ug/kg	120	07/25/06 20:13	DLK	67-64-1		
Benzene	ND	ug/kg	6.0	07/25/06 20:13	DLK	71-43-2		
Bromobenzene	ND	ug/kg	6.0	07/25/06 20:13	DLK	108-86-1		
Bromochloromethane	ND	ug/kg	6.0	07/25/06 20:13	DLK	74-97-5		
Bromodichloromethane	ND	ug/kg	6.0	07/25/06 20:13	DLK	75-27-4		
Bromoform	ND	ug/kg	6.0	07/25/06 20:13	DLK	75-25-2		
Bromomethane	ND	ug/kg	12.	07/25/06 20:13	DLK	74-83-9		
2-Butanone (MEK)	ND	ug/kg	120	07/25/06 20:13	DLK	78-93-3		
n-Butylbenzene	ND	ug/kg	6.0	07/25/06 20:13	DLK	104-51-8		
sec-Butylbenzene	ND	ug/kg	6.0	07/25/06 20:13	DLK	135-98-8		
tert-Butylbenzene	ND	ug/kg	6.0	07/25/06 20:13	DLK	98-06-6		
Carbon tetrachloride	ND	ug/kg	6.0	07/25/06 20:13	DLK	56-23-5		
Chlorobenzene	ND	ug/kg	6.0	07/25/06 20:13	DLK	108-90-7		
Chloroethane	ND	ug/kg	12.	07/25/06 20:13	DLK	75-00-3		
Chloroform	ND	ug/kg	6.0	07/25/06 20:13	DLK	67-66-3		
Chloromethane	ND	ug/kg	12.	07/25/06 20:13	DLK	74-87-3		
2-Chlorotoluene	ND	ug/kg	6.0	07/25/06 20:13	DLK	95-49-8		
4-Chlorotoluene	ND	ug/kg	6.0	07/25/06 20:13	DLK	106-43-4		
1,2-Dibromo-3-chloropropane	ND	ug/kg	6.0	07/25/06 20:13	DLK	96-12-8		
Dibromochloromethane	ND	ug/kg	6.0	07/25/06 20:13	DLK	124-48-1		
1,2-Dibromoethane (EDB)	ND	ug/kg	6.0	07/25/06 20:13	DLK	106-93-4		
Dibromomethane	ND	ug/kg	6.0	07/25/06 20:13	DLK	74-95-3		
1,2-Dichlorobenzene	ND	ug/kg	6.0	07/25/06 20:13	DLK	95-50-1		

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Lab Project Number: 92123458
Client Project ID: NCDOT 34951.1.1 FCX

Lab Sample No: 927208322 Project Sample Number: 92123458-003 Date Collected: 07/17/06 14:15
Client Sample ID: FCXB3 6-8 Matrix: Soil Date Received: 07/18/06 17:10

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
1,3-Dichlorobenzene	ND	ug/kg	6.0	07/25/06 20:13	DLK	541-73-1		
1,4-Dichlorobenzene	ND	ug/kg	6.0	07/25/06 20:13	DLK	106-46-7		
Dichlorodifluoromethane	ND	ug/kg	12.	07/25/06 20:13	DLK	75-71-8		
1,1-Dichloroethane	ND	ug/kg	6.0	07/25/06 20:13	DLK	75-34-3		
1,2-Dichloroethane	ND	ug/kg	6.0	07/25/06 20:13	DLK	107-06-2		
1,1-Dichloroethene	ND	ug/kg	6.0	07/25/06 20:13	DLK	75-35-4		
cis-1,2-Dichloroethene	ND	ug/kg	6.0	07/25/06 20:13	DLK	156-59-2		
trans-1,2-Dichloroethene	ND	ug/kg	6.0	07/25/06 20:13	DLK	156-60-5		
1,2-Dichloropropane	ND	ug/kg	6.0	07/25/06 20:13	DLK	78-87-5		
1,3-Dichloropropane	ND	ug/kg	6.0	07/25/06 20:13	DLK	142-28-9		
2,2-Dichloropropane	ND	ug/kg	6.0	07/25/06 20:13	DLK	594-20-7		
1,1-Dichloropropene	ND	ug/kg	6.0	07/25/06 20:13	DLK	563-58-6		
cis-1,3-Dichloropropene	ND	ug/kg	6.0	07/25/06 20:13	DLK	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/kg	6.0	07/25/06 20:13	DLK	10061-02-6		
Diisopropyl ether	ND	ug/kg	6.0	07/25/06 20:13	DLK	108-20-3		
Ethylbenzene	ND	ug/kg	6.0	07/25/06 20:13	DLK	100-41-4		
Hexachloro-1,3-butadiene	ND	ug/kg	6.0	07/25/06 20:13	DLK	87-68-3		
2-Hexanone	ND	ug/kg	60.	07/25/06 20:13	DLK	591-78-6		
Isopropylbenzene (Cumene)	ND	ug/kg	6.0	07/25/06 20:13	DLK	98-82-8		
p-Isopropyltoluene	ND	ug/kg	6.0	07/25/06 20:13	DLK	99-87-6		
Methylene chloride	ND	ug/kg	12.	07/25/06 20:13	DLK	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	60.	07/25/06 20:13	DLK	108-10-1		
Methyl-tert-butyl ether	ND	ug/kg	6.0	07/25/06 20:13	DLK	1634-04-4		
Naphthalene	ND	ug/kg	6.0	07/25/06 20:13	DLK	91-20-3		
n-Propylbenzene	ND	ug/kg	6.0	07/25/06 20:13	DLK	103-65-1		
Styrene	ND	ug/kg	6.0	07/25/06 20:13	DLK	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/kg	6.0	07/25/06 20:13	DLK	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/kg	6.0	07/25/06 20:13	DLK	79-34-5		
Tetrachloroethene	ND	ug/kg	6.0	07/25/06 20:13	DLK	127-18-4		
Toluene	ND	ug/kg	6.0	07/25/06 20:13	DLK	108-88-3		
1,2,3-Trichlorobenzene	ND	ug/kg	6.0	07/25/06 20:13	DLK	87-61-6		
1,2,4-Trichlorobenzene	ND	ug/kg	6.0	07/25/06 20:13	DLK	120-82-1		
1,1,1-Trichloroethane	ND	ug/kg	6.0	07/25/06 20:13	DLK	71-55-6		
1,1,2-Trichloroethane	ND	ug/kg	6.0	07/25/06 20:13	DLK	79-00-5		
Trichloroethene	ND	ug/kg	6.0	07/25/06 20:13	DLK	79-01-6		
Trichlorofluoromethane	ND	ug/kg	6.0	07/25/06 20:13	DLK	75-69-4		
1,2,3-Trichloropropane	ND	ug/kg	6.0	07/25/06 20:13	DLK	96-18-4		
1,2,4-Trimethylbenzene	ND	ug/kg	6.0	07/25/06 20:13	DLK	95-63-6		
1,3,5-Trimethylbenzene	ND	ug/kg	6.0	07/25/06 20:13	DLK	108-67-8		

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Lab Project Number: 92123458
Client Project ID: NCDOT 34951.1.1 FCX

Lab Sample No: 927208322 Project Sample Number: 92123458-003 Date Collected: 07/17/06 14:15
Client Sample ID: FCXB3 6-8 Matrix: Soil Date Received: 07/18/06 17:10

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Vinyl acetate	ND	ug/kg	60.	07/25/06 20:13	DLK	108-05-4		
Vinyl chloride	ND	ug/kg	12.	07/25/06 20:13	DLK	75-01-4		
Xylene (Total)	ND	ug/kg	6.0	07/25/06 20:13	DLK	1330-20-7		
m&p-Xylene	ND	ug/kg	12.	07/25/06 20:13	DLK			
o-Xylene	ND	ug/kg	6.0	07/25/06 20:13	DLK	95-47-6		
Toluene-d8 (S)	102	%		07/25/06 20:13	DLK	2037-26-5		
4-Bromofluorobenzene (S)	91	%		07/25/06 20:13	DLK	460-00-4		
Dibromofluoromethane (S)	88	%		07/25/06 20:13	DLK	1868-53-7		
1,2-Dichloroethane-d4 (S)	85	%		07/25/06 20:13	DLK	17060-07-0		

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Lab Project Number: 92123458
Client Project ID: NCDOT 34951.1.1 FCX

Lab Sample No: 927208330 Project Sample Number: 92123458-004 Date Collected: 07/17/06 15:00
Client Sample ID: FCXB4 6-8 Matrix: Soil Date Received: 07/18/06 17:10

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Metals								
Metals, Trace ICP	Prep/Method: EPA 3050 / EPA 6010							
Arsenic	1.7	mg/kg	0.55	07/25/06 19:47	SHB	7440-38-2		
Barium	14.	mg/kg	0.55	07/25/06 19:47	SHB	7440-39-3		
Cadmium	ND	mg/kg	0.11	07/25/06 19:47	SHB	7440-43-9		
Chromium	24.	mg/kg	0.22	07/25/06 19:47	SHB	7440-47-3		
Lead	8.4	mg/kg	0.55	07/25/06 19:47	SHB	7439-92-1		
Silver	ND	mg/kg	0.22	07/25/06 19:47	SHB	7440-22-4		
Date Digested	07/21/06 14:00			07/21/06 14:00				
Mercury, CVAAS, in Soil	Method: EPA 7471							
Mercury	0.029	mg/kg	0.0068	07/20/06 14:41	ALV	7439-97-6		
Wet Chemistry								
Percent Moisture	Method: % Moisture							
Percent Moisture	26.1	%		07/19/06 10:05	TNM			
Nitrogen, Ammonia	Method: EPA 350.1 Modified							
Nitrogen, Ammonia	61.	mg/kg	11.	08/01/06 19:40	BMF	7727-37-9		
Nitrogen, Nitrate	Method: EPA 353.2 Modified							
Nitrate as N	40.	mg/kg	5.9	07/26/06 13:33	EWS			
pH	Method: EPA 9045							
pH	3.85	units		07/20/06 11:37	MLS1			
GC/MS Semivolatiles								
Semivolatile Organics	Prep/Method: EPA 3545 / EPA 8270							
Acenaphthene	ND	ug/kg	450	07/26/06 05:56	BET	83-32-9		
Acenaphthylene	ND	ug/kg	450	07/26/06 05:56	BET	208-96-8		
Anthracene	ND	ug/kg	450	07/26/06 05:56	BET	120-12-7		
Benzo(k)fluoranthene	ND	ug/kg	450	07/26/06 05:56	BET	207-08-9		
Benzo(b)fluoranthene	ND	ug/kg	450	07/26/06 05:56	BET	205-99-2		
Benzo(a)anthracene	ND	ug/kg	450	07/26/06 05:56	BET	56-55-3		
Benzoic acid	ND	ug/kg	2200	07/26/06 05:56	BET	65-85-0		
Benzo(g,h,i)perylene	ND	ug/kg	450	07/26/06 05:56	BET	191-24-2		
Benzyl alcohol	ND	ug/kg	890	07/26/06 05:56	BET	100-51-6		
Benzo(a)pyrene	ND	ug/kg	450	07/26/06 05:56	BET	50-32-8		
4-Bromophenylphenyl ether	ND	ug/kg	450	07/26/06 05:56	BET	101-55-3		

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Lab Project Number: 92123458
Client Project ID: NCDOT 34951.1.1 FCX

Lab Sample No: 927208330 Project Sample Number: 92123458-004 Date Collected: 07/17/06 15:00
Client Sample ID: FCXB4 6-8 Matrix: Soil Date Received: 07/18/06 17:10

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Butylbenzylphthalate	ND	ug/kg	450	07/26/06 05:56	BET	85-68-7		
4-Chloro-3-methylphenol	ND	ug/kg	890	07/26/06 05:56	BET	59-50-7		
4-Chloroaniline	ND	ug/kg	890	07/26/06 05:56	BET	106-47-8		
bis(2-Chloroethoxy)methane	ND	ug/kg	450	07/26/06 05:56	BET	111-91-1		
bis(2-Chloroethyl) ether	ND	ug/kg	450	07/26/06 05:56	BET	111-44-4		
bis(2-Chloroisopropyl) ether	ND	ug/kg	450	07/26/06 05:56	BET	39638-32-9		
2-Chloronaphthalene	ND	ug/kg	450	07/26/06 05:56	BET	91-58-7		
2-Chlorophenol	ND	ug/kg	450	07/26/06 05:56	BET	95-57-8		
4-Chlorophenylphenyl ether	ND	ug/kg	450	07/26/06 05:56	BET	7005-72-3		
Chrysene	ND	ug/kg	450	07/26/06 05:56	BET	218-01-9		
Dibenz(a,h)anthracene	ND	ug/kg	450	07/26/06 05:56	BET	53-70-3		
Dibenzofuran	ND	ug/kg	450	07/26/06 05:56	BET	132-64-9		
1,2-Dichlorobenzene	ND	ug/kg	450	07/26/06 05:56	BET	95-50-1		
1,3-Dichlorobenzene	ND	ug/kg	450	07/26/06 05:56	BET	541-73-1		
1,4-Dichlorobenzene	ND	ug/kg	450	07/26/06 05:56	BET	106-46-7		
3,3'-Dichlorobenzidine	ND	ug/kg	890	07/26/06 05:56	BET	91-94-1		
2,4-Dichlorophenol	ND	ug/kg	450	07/26/06 05:56	BET	120-83-2		
Diethylphthalate	ND	ug/kg	450	07/26/06 05:56	BET	84-66-2		
2,4-Dimethylphenol	ND	ug/kg	450	07/26/06 05:56	BET	105-67-9		
Dimethylphthalate	ND	ug/kg	450	07/26/06 05:56	BET	131-11-3		
Di-n-butylphthalate	ND	ug/kg	450	07/26/06 05:56	BET	84-74-2		
4,6-Dinitro-2-methylphenol	ND	ug/kg	450	07/26/06 05:56	BET	534-52-1		
2,4-Dinitrophenol	ND	ug/kg	2200	07/26/06 05:56	BET	51-28-5		
2,4-Dinitrotoluene	ND	ug/kg	450	07/26/06 05:56	BET	121-14-2		
2,6-Dinitrotoluene	ND	ug/kg	450	07/26/06 05:56	BET	606-20-2		
Di-n-octylphthalate	ND	ug/kg	450	07/26/06 05:56	BET	117-84-0		
1,2-Diphenylhydrazine	ND	ug/kg	450	07/26/06 05:56	BET	122-66-7		
bis(2-Ethylhexyl)phthalate	ND	ug/kg	450	07/26/06 05:56	BET	117-81-7		
Fluoranthene	ND	ug/kg	450	07/26/06 05:56	BET	206-44-0		
Fluorene	ND	ug/kg	450	07/26/06 05:56	BET	86-73-7		
Hexachloro-1,3-butadiene	ND	ug/kg	450	07/26/06 05:56	BET	87-68-3		
Hexachlorobenzene	ND	ug/kg	450	07/26/06 05:56	BET	118-74-1		
Hexachlorocyclopentadiene	ND	ug/kg	450	07/26/06 05:56	BET	77-47-4		
Hexachloroethane	ND	ug/kg	450	07/26/06 05:56	BET	67-72-1		
Indeno(1,2,3-cd)pyrene	ND	ug/kg	450	07/26/06 05:56	BET	193-39-5		
Isophorone	ND	ug/kg	450	07/26/06 05:56	BET	78-59-1		
1-Methylnaphthalene	ND	ug/kg	450	07/26/06 05:56	BET	90-12-0		
2-Methylnaphthalene	ND	ug/kg	450	07/26/06 05:56	BET	91-57-6		
2-Methylphenol (o-Cresol)	ND	ug/kg	450	07/26/06 05:56	BET	95-48-7		

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Lab Project Number: 92123458
Client Project ID: NCDOT 34951.1.1 FCX

Lab Sample No: 927208330 Project Sample Number: 92123458-004 Date Collected: 07/17/06 15:00
Client Sample ID: FCXB4 6-8 Matrix: Soil Date Received: 07/18/06 17:10

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
3&4-Methylphenol	ND	ug/kg	450	07/26/06 05:56	BET			
Naphthalene	ND	ug/kg	450	07/26/06 05:56	BET	91-20-3		
2-Nitroaniline	ND	ug/kg	2200	07/26/06 05:56	BET	88-74-4		
3-Nitroaniline	ND	ug/kg	2200	07/26/06 05:56	BET	99-09-2		
4-Nitroaniline	ND	ug/kg	2200	07/26/06 05:56	BET	100-01-6		
Nitrobenzene	ND	ug/kg	450	07/26/06 05:56	BET	98-95-3		
2-Nitrophenol	ND	ug/kg	450	07/26/06 05:56	BET	88-75-5		
4-Nitrophenol	ND	ug/kg	2200	07/26/06 05:56	BET	100-02-7		
N-Nitroso-di-n-propylamine	ND	ug/kg	450	07/26/06 05:56	BET	621-64-7		
N-Nitrosodiphenylamine	ND	ug/kg	450	07/26/06 05:56	BET	86-30-6		
Pentachlorophenol	ND	ug/kg	2200	07/26/06 05:56	BET	87-86-5		
Phenanthrene	ND	ug/kg	450	07/26/06 05:56	BET	85-01-8		
Phenol	ND	ug/kg	450	07/26/06 05:56	BET	108-95-2		
Pyrene	ND	ug/kg	450	07/26/06 05:56	BET	129-00-0		
1,2,4-Trichlorobenzene	ND	ug/kg	450	07/26/06 05:56	BET	120-82-1		
2,4,5-Trichlorophenol	ND	ug/kg	450	07/26/06 05:56	BET	95-95-4		
2,4,6-Trichlorophenol	ND	ug/kg	450	07/26/06 05:56	BET	88-06-2		
Nitrobenzene-d5 (S)	34	%		07/26/06 05:56	BET	4165-60-0		
2-Fluorobiphenyl (S)	38	%		07/26/06 05:56	BET	321-60-8		
Terphenyl-d14 (S)	61	%		07/26/06 05:56	BET	1718-51-0		
Phenol-d5 (S)	33	%		07/26/06 05:56	BET	4165-62-2	1	
2-Fluorophenol (S)	39	%		07/26/06 05:56	BET	367-12-4		
2,4,6-Tribromophenol (S)	70	%		07/26/06 05:56	BET	118-79-6		
Date Extracted	07/19/06			07/19/06				
GC Semivolatiles								
Organochlorine Pesticides	Prep/Method: EPA 3545 / EPA 8081							
Aldrin	ND	ug/kg	1.4	07/24/06 20:07	JEM	309-00-2		
alpha-BHC	ND	ug/kg	2.7	07/24/06 20:07	JEM	319-84-6		
beta-BHC	ND	ug/kg	2.7	07/24/06 20:07	JEM	319-85-7		
delta-BHC	ND	ug/kg	2.7	07/24/06 20:07	JEM	319-86-8		
gamma-BHC (Lindane)	ND	ug/kg	2.7	07/24/06 20:07	JEM	58-89-9		
Chlordane	ND	ug/kg	11.	07/24/06 20:07	JEM	57-74-9		
gamma-Chlordane	ND	ug/kg	2.7	07/24/06 20:07	JEM	5103-74-2		
4,4'-DDD	ND	ug/kg	2.7	07/24/06 20:07	JEM	72-54-8		
4,4'-DDE	ND	ug/kg	2.7	07/24/06 20:07	JEM	72-55-9		
4,4'-DDT	ND	ug/kg	2.7	07/24/06 20:07	JEM	50-29-3		
Dieldrin	1.8	ug/kg	1.4	07/24/06 20:07	JEM	60-57-1		
Endosulfan I	ND	ug/kg	2.7	07/24/06 20:07	JEM	959-98-8		

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Lab Project Number: 92123458
Client Project ID: NCDOT 34951.1.1 FCX

Lab Sample No: 927208330 Project Sample Number: 92123458-004 Date Collected: 07/17/06 15:00
Client Sample ID: FCXB4 6-8 Matrix: Soil Date Received: 07/18/06 17:10

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Endosulfan II	ND	ug/kg	2.7	07/24/06 20:07	JEM	33213-65-9		
Endosulfan sulfate	ND	ug/kg	2.7	07/24/06 20:07	JEM	1031-07-8		
Endrin	ND	ug/kg	2.7	07/24/06 20:07	JEM	72-20-8		
Endrin aldehyde	ND	ug/kg	2.7	07/24/06 20:07	JEM	7421-93-4		
Heptachlor	ND	ug/kg	2.7	07/24/06 20:07	JEM	76-44-8		
Heptachlor epoxide	ND	ug/kg	2.7	07/24/06 20:07	JEM	1024-57-3		
Methoxychlor	ND	ug/kg	9.5	07/24/06 20:07	JEM	72-43-5		
Mirex	ND	ug/kg	9.5	07/24/06 20:07	JEM	2385-85-5		
Toxaphene	ND	ug/kg	11.	07/24/06 20:07	JEM	8001-35-2		
Tetrachloro-m-xylene (S)	22	%		07/24/06 20:07	JEM	877-09-8	2	
Decachlorobiphenyl (S)	64	%		07/24/06 20:07	JEM	2051-24-3		
Date Extracted	07/20/06			07/20/06				

GC/MS Volatiles

GC/MS VOCs 5035/8260 low level Method: EPA 8260

Acetone	ND	ug/kg	110	07/25/06 20:31	DLK	67-64-1		
Benzene	ND	ug/kg	5.6	07/25/06 20:31	DLK	71-43-2		
Bromobenzene	ND	ug/kg	5.6	07/25/06 20:31	DLK	108-86-1		
Bromochloromethane	ND	ug/kg	5.6	07/25/06 20:31	DLK	74-97-5		
Bromodichloromethane	ND	ug/kg	5.6	07/25/06 20:31	DLK	75-27-4		
Bromoform	ND	ug/kg	5.6	07/25/06 20:31	DLK	75-25-2		
Bromomethane	ND	ug/kg	11.	07/25/06 20:31	DLK	74-83-9		
2-Butanone (MEK)	ND	ug/kg	110	07/25/06 20:31	DLK	78-93-3		
n-Butylbenzene	ND	ug/kg	5.6	07/25/06 20:31	DLK	104-51-8		
sec-Butylbenzene	ND	ug/kg	5.6	07/25/06 20:31	DLK	135-98-8		
tert-Butylbenzene	ND	ug/kg	5.6	07/25/06 20:31	DLK	98-06-6		
Carbon tetrachloride	ND	ug/kg	5.6	07/25/06 20:31	DLK	56-23-5		
Chlorobenzene	ND	ug/kg	5.6	07/25/06 20:31	DLK	108-90-7		
Chloroethane	ND	ug/kg	11.	07/25/06 20:31	DLK	75-00-3		
Chloroform	ND	ug/kg	5.6	07/25/06 20:31	DLK	67-66-3		
Chloromethane	ND	ug/kg	11.	07/25/06 20:31	DLK	74-87-3		
2-Chlorotoluene	ND	ug/kg	5.6	07/25/06 20:31	DLK	95-49-8		
4-Chlorotoluene	ND	ug/kg	5.6	07/25/06 20:31	DLK	106-43-4		
1,2-Dibromo-3-chloropropane	ND	ug/kg	5.6	07/25/06 20:31	DLK	96-12-8		
Dibromochloromethane	ND	ug/kg	5.6	07/25/06 20:31	DLK	124-48-1		
1,2-Dibromoethane (EDB)	ND	ug/kg	5.6	07/25/06 20:31	DLK	106-93-4		
Dibromomethane	ND	ug/kg	5.6	07/25/06 20:31	DLK	74-95-3		
1,2-Dichlorobenzene	ND	ug/kg	5.6	07/25/06 20:31	DLK	95-50-1		
1,3-Dichlorobenzene	ND	ug/kg	5.6	07/25/06 20:31	DLK	541-73-1		

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Lab Project Number: 92123458
Client Project ID: NCDOT 34951.1.1 FCX

Lab Sample No: 927208330 Project Sample Number: 92123458-004 Date Collected: 07/17/06 15:00
Client Sample ID: FCXB4 6-8 Matrix: Soil Date Received: 07/18/06 17:10

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
1,4-Dichlorobenzene	ND	ug/kg	5.6	07/25/06 20:31	DLK	106-46-7		
Dichlorodifluoromethane	ND	ug/kg	11.	07/25/06 20:31	DLK	75-71-8		
1,1-Dichloroethane	ND	ug/kg	5.6	07/25/06 20:31	DLK	75-34-3		
1,2-Dichloroethane	ND	ug/kg	5.6	07/25/06 20:31	DLK	107-06-2		
1,1-Dichloroethene	ND	ug/kg	5.6	07/25/06 20:31	DLK	75-35-4		
cis-1,2-Dichloroethene	ND	ug/kg	5.6	07/25/06 20:31	DLK	156-59-2		
trans-1,2-Dichloroethene	ND	ug/kg	5.6	07/25/06 20:31	DLK	156-60-5		
1,2-Dichloropropane	ND	ug/kg	5.6	07/25/06 20:31	DLK	78-87-5		
1,3-Dichloropropane	ND	ug/kg	5.6	07/25/06 20:31	DLK	142-28-9		
2,2-Dichloropropane	ND	ug/kg	5.6	07/25/06 20:31	DLK	594-20-7		
1,1-Dichloropropene	ND	ug/kg	5.6	07/25/06 20:31	DLK	563-58-6		
cis-1,3-Dichloropropene	ND	ug/kg	5.6	07/25/06 20:31	DLK	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/kg	5.6	07/25/06 20:31	DLK	10061-02-6		
Diisopropyl ether	ND	ug/kg	5.6	07/25/06 20:31	DLK	108-20-3		
Ethylbenzene	ND	ug/kg	5.6	07/25/06 20:31	DLK	100-41-4		
Hexachloro-1,3-butadiene	ND	ug/kg	5.6	07/25/06 20:31	DLK	87-68-3		
2-Hexanone	ND	ug/kg	56.	07/25/06 20:31	DLK	591-78-6		
Isopropylbenzene (Cumene)	ND	ug/kg	5.6	07/25/06 20:31	DLK	98-82-8		
p-Isopropyltoluene	ND	ug/kg	5.6	07/25/06 20:31	DLK	99-87-6		
Methylene chloride	ND	ug/kg	11.	07/25/06 20:31	DLK	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	56.	07/25/06 20:31	DLK	108-10-1		
Methyl-tert-butyl ether	ND	ug/kg	5.6	07/25/06 20:31	DLK	1634-04-4		
Naphthalene	ND	ug/kg	5.6	07/25/06 20:31	DLK	91-20-3		
n-Propylbenzene	ND	ug/kg	5.6	07/25/06 20:31	DLK	103-65-1		
Styrene	ND	ug/kg	5.6	07/25/06 20:31	DLK	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/kg	5.6	07/25/06 20:31	DLK	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/kg	5.6	07/25/06 20:31	DLK	79-34-5		
Tetrachloroethene	ND	ug/kg	5.6	07/25/06 20:31	DLK	127-18-4		
Toluene	ND	ug/kg	5.6	07/25/06 20:31	DLK	108-88-3		
1,2,3-Trichlorobenzene	ND	ug/kg	5.6	07/25/06 20:31	DLK	87-61-6		
1,2,4-Trichlorobenzene	ND	ug/kg	5.6	07/25/06 20:31	DLK	120-82-1		
1,1,1-Trichloroethane	ND	ug/kg	5.6	07/25/06 20:31	DLK	71-55-6		
1,1,2-Trichloroethane	ND	ug/kg	5.6	07/25/06 20:31	DLK	79-00-5		
Trichloroethene	ND	ug/kg	5.6	07/25/06 20:31	DLK	79-01-6		
Trichlorofluoromethane	ND	ug/kg	5.6	07/25/06 20:31	DLK	75-69-4		
1,2,3-Trichloropropane	ND	ug/kg	5.6	07/25/06 20:31	DLK	96-18-4		
1,2,4-Trimethylbenzene	ND	ug/kg	5.6	07/25/06 20:31	DLK	95-63-6		
1,3,5-Trimethylbenzene	ND	ug/kg	5.6	07/25/06 20:31	DLK	108-67-8		
Vinyl acetate	ND	ug/kg	56.	07/25/06 20:31	DLK	108-05-4		

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Lab Project Number: 92123458
Client Project ID: NCDOT 34951.1.1 FCX

Lab Sample No: 927208330 **Project Sample Number: 92123458-004** **Date Collected: 07/17/06 15:00**
Client Sample ID: FCXB4 6-8 **Matrix: Soil** **Date Received: 07/18/06 17:10**

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Vinyl chloride	ND	ug/kg	11.	07/25/06 20:31	DLK	75-01-4		
Xylene (Total)	ND	ug/kg	5.6	07/25/06 20:31	DLK	1330-20-7		
m&p-Xylene	ND	ug/kg	11.	07/25/06 20:31	DLK			
o-Xylene	ND	ug/kg	5.6	07/25/06 20:31	DLK	95-47-6		
Toluene-d8 (S)	101	%		07/25/06 20:31	DLK	2037-26-5		
4-Bromofluorobenzene (S)	94	%		07/25/06 20:31	DLK	460-00-4		
Dibromofluoromethane (S)	89	%		07/25/06 20:31	DLK	1868-53-7		
1,2-Dichloroethane-d4 (S)	93	%		07/25/06 20:31	DLK	17060-07-0		

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Lab Project Number: 92123458
Client Project ID: NCDOT 34951.1.1 FCX

Lab Sample No: 927208348 Project Sample Number: 92123458-005 Date Collected: 07/17/06 15:45
Client Sample ID: FCXB5 6-8 Matrix: Soil Date Received: 07/18/06 17:10

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Metals								
Metals, Trace ICP	Prep/Method: EPA 3050 / EPA 6010							
Arsenic	2.8	mg/kg	0.57	07/25/06 19:51	SHB	7440-38-2		
Barium	19.	mg/kg	0.57	07/25/06 19:51	SHB	7440-39-3		
Cadmium	ND	mg/kg	0.11	07/25/06 19:51	SHB	7440-43-9		
Chromium	42.	mg/kg	0.23	07/25/06 19:51	SHB	7440-47-3		
Lead	13.	mg/kg	0.57	07/25/06 19:51	SHB	7439-92-1		
Selenium	ND	mg/kg	0.57	07/25/06 19:51	SHB	7782-49-2		
Silver	ND	mg/kg	0.23	07/25/06 19:51	SHB	7440-22-4		
Date Digested	07/21/06 14:00			07/21/06 14:00				
Mercury, CVAAS, in Soil	Method: EPA 7471							
Mercury	0.044	mg/kg	0.0059	07/20/06 14:41	ALV	7439-97-6		
Wet Chemistry								
Percent Moisture	Method: % Moisture							
Percent Moisture	25.2	%		07/19/06 10:06	TNM			
Nitrogen, Ammonia	Method: EPA 350.1 Modified							
Nitrogen, Ammonia	47.	mg/kg	12.	08/01/06 19:40	BMF	7727-37-9		
Nitrogen, Nitrate	Method: EPA 353.2 Modified							
Nitrate as N	7.6	mg/kg	6.3	07/26/06 13:33	EWS			
pH	Method: EPA 9045							
pH	4.03	units		07/20/06 11:37	MLS1			
GC/MS Semivolatiles								
Semivolatile Organics	Prep/Method: EPA 3545 / EPA 8270							
Acenaphthene	ND	ug/kg	440	07/26/06 06:18	BET	83-32-9		
Acenaphthylene	ND	ug/kg	440	07/26/06 06:18	BET	208-96-8		
Anthracene	ND	ug/kg	440	07/26/06 06:18	BET	120-12-7		
Benzo(k)fluoranthene	ND	ug/kg	440	07/26/06 06:18	BET	207-08-9		
Benzo(b)fluoranthene	ND	ug/kg	440	07/26/06 06:18	BET	205-99-2		
Benzo(a)anthracene	ND	ug/kg	440	07/26/06 06:18	BET	56-55-3		
Benzoic acid	ND	ug/kg	2200	07/26/06 06:18	BET	65-85-0		
Benzo(g,h,i)perylene	ND	ug/kg	440	07/26/06 06:18	BET	191-24-2		
Benzyl alcohol	ND	ug/kg	880	07/26/06 06:18	BET	100-51-6		
Benzo(a)pyrene	ND	ug/kg	440	07/26/06 06:18	BET	50-32-8		

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Lab Project Number: 92123458
Client Project ID: NCDOT 34951.1.1 FCX

Lab Sample No: 927208348 Project Sample Number: 92123458-005 Date Collected: 07/17/06 15:45
Client Sample ID: FCXB5 6-8 Matrix: Soil Date Received: 07/18/06 17:10

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
4-Bromophenylphenyl ether	ND	ug/kg	440	07/26/06 06:18	BET	101-55-3		
Butylbenzylphthalate	ND	ug/kg	440	07/26/06 06:18	BET	85-68-7		
4-Chloro-3-methylphenol	ND	ug/kg	880	07/26/06 06:18	BET	59-50-7		
4-Chloroaniline	ND	ug/kg	880	07/26/06 06:18	BET	106-47-8		
bis(2-Chloroethoxy)methane	ND	ug/kg	440	07/26/06 06:18	BET	111-91-1		
bis(2-Chloroethyl) ether	ND	ug/kg	440	07/26/06 06:18	BET	111-44-4		
bis(2-Chloroisopropyl) ether	ND	ug/kg	440	07/26/06 06:18	BET	39638-32-9		
2-Chloronaphthalene	ND	ug/kg	440	07/26/06 06:18	BET	91-58-7		
2-Chlorophenol	ND	ug/kg	440	07/26/06 06:18	BET	95-57-8		
4-Chlorophenylphenyl ether	ND	ug/kg	440	07/26/06 06:18	BET	7005-72-3		
Chrysene	ND	ug/kg	440	07/26/06 06:18	BET	218-01-9		
Dibenz(a,h)anthracene	ND	ug/kg	440	07/26/06 06:18	BET	53-70-3		
Dibenzofuran	ND	ug/kg	440	07/26/06 06:18	BET	132-64-9		
1,2-Dichlorobenzene	ND	ug/kg	440	07/26/06 06:18	BET	95-50-1		
1,3-Dichlorobenzene	ND	ug/kg	440	07/26/06 06:18	BET	541-73-1		
1,4-Dichlorobenzene	ND	ug/kg	440	07/26/06 06:18	BET	106-46-7		
3,3'-Dichlorobenzidine	ND	ug/kg	880	07/26/06 06:18	BET	91-94-1		
2,4-Dichlorophenol	ND	ug/kg	440	07/26/06 06:18	BET	120-83-2		
Diethylphthalate	ND	ug/kg	440	07/26/06 06:18	BET	84-66-2		
2,4-Dimethylphenol	ND	ug/kg	440	07/26/06 06:18	BET	105-67-9		
Dimethylphthalate	ND	ug/kg	440	07/26/06 06:18	BET	131-11-3		
Di-n-butylphthalate	ND	ug/kg	440	07/26/06 06:18	BET	84-74-2		
4,6-Dinitro-2-methylphenol	ND	ug/kg	440	07/26/06 06:18	BET	534-52-1		
2,4-Dinitrophenol	ND	ug/kg	2200	07/26/06 06:18	BET	51-28-5		
2,4-Dinitrotoluene	ND	ug/kg	440	07/26/06 06:18	BET	121-14-2		
2,6-Dinitrotoluene	ND	ug/kg	440	07/26/06 06:18	BET	606-20-2		
Di-n-octylphthalate	ND	ug/kg	440	07/26/06 06:18	BET	117-84-0		
1,2-Diphenylhydrazine	ND	ug/kg	440	07/26/06 06:18	BET	122-66-7		
bis(2-Ethylhexyl)phthalate	ND	ug/kg	440	07/26/06 06:18	BET	117-81-7		
Fluoranthene	ND	ug/kg	440	07/26/06 06:18	BET	206-44-0		
Fluorene	ND	ug/kg	440	07/26/06 06:18	BET	86-73-7		
Hexachloro-1,3-butadiene	ND	ug/kg	440	07/26/06 06:18	BET	87-68-3		
Hexachlorobenzene	ND	ug/kg	440	07/26/06 06:18	BET	118-74-1		
Hexachlorocyclopentadiene	ND	ug/kg	440	07/26/06 06:18	BET	77-47-4		
Hexachloroethane	ND	ug/kg	440	07/26/06 06:18	BET	67-72-1		
Indeno(1,2,3-cd)pyrene	ND	ug/kg	440	07/26/06 06:18	BET	193-39-5		
Isophorone	ND	ug/kg	440	07/26/06 06:18	BET	78-59-1		
1-Methylnaphthalene	ND	ug/kg	440	07/26/06 06:18	BET	90-12-0		
2-Methylnaphthalene	ND	ug/kg	440	07/26/06 06:18	BET	91-57-6		

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Lab Project Number: 92123458
Client Project ID: NCDOT 34951.1.1 FCX

Lab Sample No: 927208348 Project Sample Number: 92123458-005 Date Collected: 07/17/06 15:45
Client Sample ID: FCXB5 6-8 Matrix: Soil Date Received: 07/18/06 17:10

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
2-Methylphenol (o-Cresol)	ND	ug/kg	440	07/26/06 06:18	BET	95-48-7		
3&4-Methylphenol	ND	ug/kg	440	07/26/06 06:18	BET			
Naphthalene	ND	ug/kg	440	07/26/06 06:18	BET	91-20-3		
2-Nitroaniline	ND	ug/kg	2200	07/26/06 06:18	BET	88-74-4		
3-Nitroaniline	ND	ug/kg	2200	07/26/06 06:18	BET	99-09-2		
4-Nitroaniline	ND	ug/kg	2200	07/26/06 06:18	BET	100-01-6		
Nitrobenzene	ND	ug/kg	440	07/26/06 06:18	BET	98-95-3		
2-Nitrophenol	ND	ug/kg	440	07/26/06 06:18	BET	88-75-5		
4-Nitrophenol	ND	ug/kg	2200	07/26/06 06:18	BET	100-02-7		
N-Nitroso-di-n-propylamine	ND	ug/kg	440	07/26/06 06:18	BET	621-64-7		
N-Nitrosodiphenylamine	ND	ug/kg	440	07/26/06 06:18	BET	86-30-6		
Pentachlorophenol	ND	ug/kg	2200	07/26/06 06:18	BET	87-86-5		
Phenanthrene	ND	ug/kg	440	07/26/06 06:18	BET	85-01-8		
Phenol	ND	ug/kg	440	07/26/06 06:18	BET	108-95-2		
Pyrene	ND	ug/kg	440	07/26/06 06:18	BET	129-00-0		
1,2,4-Trichlorobenzene	ND	ug/kg	440	07/26/06 06:18	BET	120-82-1		
2,4,5-Trichlorophenol	ND	ug/kg	440	07/26/06 06:18	BET	95-95-4		
2,4,6-Trichlorophenol	ND	ug/kg	440	07/26/06 06:18	BET	88-06-2		
Nitrobenzene-d5 (S)	35	%		07/26/06 06:18	BET	4165-60-0		
2-Fluorobiphenyl (S)	39	%		07/26/06 06:18	BET	321-60-8		
Terphenyl-d14 (S)	52	%		07/26/06 06:18	BET	1718-51-0		
Phenol-d5 (S)	36	%		07/26/06 06:18	BET	4165-62-2	1	
2-Fluorophenol (S)	41	%		07/26/06 06:18	BET	367-12-4		
2,4,6-Tribromophenol (S)	69	%		07/26/06 06:18	BET	118-79-6		
Date Extracted	07/19/06			07/19/06				

GC Semivolatiles

Organochlorine Pesticides	Prep/Method: EPA 3545 / EPA 8081							
Aldrin	ND	ug/kg	1.3	07/24/06 20:26	JEM	309-00-2		
alpha-BHC	ND	ug/kg	2.7	07/24/06 20:26	JEM	319-84-6		
beta-BHC	ND	ug/kg	2.7	07/24/06 20:26	JEM	319-85-7		
delta-BHC	ND	ug/kg	2.7	07/24/06 20:26	JEM	319-86-8		
gamma-BHC (Lindane)	ND	ug/kg	2.7	07/24/06 20:26	JEM	58-89-9		
Chlordane	ND	ug/kg	11.	07/24/06 20:26	JEM	57-74-9		
gamma-Chlordane	ND	ug/kg	2.7	07/24/06 20:26	JEM	5103-74-2		
4,4'-DDD	ND	ug/kg	2.7	07/24/06 20:26	JEM	72-54-8		
4,4'-DDE	ND	ug/kg	2.7	07/24/06 20:26	JEM	72-55-9		
4,4'-DDT	ND	ug/kg	2.7	07/24/06 20:26	JEM	50-29-3		
Dieldrin	ND	ug/kg	1.3	07/24/06 20:26	JEM	60-57-1		

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Lab Sample No: 927208348 Project Sample Number: 92123458-005 Date Collected: 07/17/06 15:45
Client Sample ID: FCXB5 6-8 Matrix: Soil Date Received: 07/18/06 17:10

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Endosulfan I	ND	ug/kg	2.7	07/24/06 20:26	JEM	959-98-8		
Endosulfan II	ND	ug/kg	2.7	07/24/06 20:26	JEM	33213-65-9		
Endosulfan sulfate	ND	ug/kg	2.7	07/24/06 20:26	JEM	1031-07-8		
Endrin	ND	ug/kg	2.7	07/24/06 20:26	JEM	72-20-8		
Endrin aldehyde	ND	ug/kg	2.7	07/24/06 20:26	JEM	7421-93-4		
Heptachlor	ND	ug/kg	2.7	07/24/06 20:26	JEM	76-44-8		
Heptachlor epoxide	ND	ug/kg	2.7	07/24/06 20:26	JEM	1024-57-3		
Methoxychlor	ND	ug/kg	9.4	07/24/06 20:26	JEM	72-43-5		
Mirex	ND	ug/kg	9.4	07/24/06 20:26	JEM	2385-85-5		
Toxaphene	ND	ug/kg	11.	07/24/06 20:26	JEM	8001-35-2		
Tetrachloro-m-xylene (S)	14	%		07/24/06 20:26	JEM	877-09-8	2	
Decachlorobiphenyl (S)	38	%		07/24/06 20:26	JEM	2051-24-3		
Date Extracted	07/20/06			07/20/06				

GC/MS Volatiles

GC/MS VOCs 5035/8260 low level Method: EPA 8260

Acetone	ND	ug/kg	99.	07/25/06 20:49	DLK	67-64-1		
Benzene	ND	ug/kg	5.0	07/25/06 20:49	DLK	71-43-2		
Bromobenzene	ND	ug/kg	5.0	07/25/06 20:49	DLK	108-86-1		
Bromochloromethane	ND	ug/kg	5.0	07/25/06 20:49	DLK	74-97-5		
Bromodichloromethane	ND	ug/kg	5.0	07/25/06 20:49	DLK	75-27-4		
Bromoform	ND	ug/kg	5.0	07/25/06 20:49	DLK	75-25-2		
Bromomethane	ND	ug/kg	9.9	07/25/06 20:49	DLK	74-83-9		
2-Butanone (MEK)	ND	ug/kg	99.	07/25/06 20:49	DLK	78-93-3		
n-Butylbenzene	ND	ug/kg	5.0	07/25/06 20:49	DLK	104-51-8		
sec-Butylbenzene	ND	ug/kg	5.0	07/25/06 20:49	DLK	135-98-8		
tert-Butylbenzene	ND	ug/kg	5.0	07/25/06 20:49	DLK	98-06-6		
Carbon tetrachloride	ND	ug/kg	5.0	07/25/06 20:49	DLK	56-23-5		
Chlorobenzene	ND	ug/kg	5.0	07/25/06 20:49	DLK	108-90-7		
Chloroethane	ND	ug/kg	9.9	07/25/06 20:49	DLK	75-00-3		
Chloroform	ND	ug/kg	5.0	07/25/06 20:49	DLK	67-66-3		
Chloromethane	ND	ug/kg	9.9	07/25/06 20:49	DLK	74-87-3		
2-Chlorotoluene	ND	ug/kg	5.0	07/25/06 20:49	DLK	95-49-8		
4-Chlorotoluene	ND	ug/kg	5.0	07/25/06 20:49	DLK	106-43-4		
1,2-Dibromo-3-chloropropane	ND	ug/kg	5.0	07/25/06 20:49	DLK	96-12-8		
Dibromochloromethane	ND	ug/kg	5.0	07/25/06 20:49	DLK	124-48-1		
1,2-Dibromoethane (EDB)	ND	ug/kg	5.0	07/25/06 20:49	DLK	106-93-4		
Dibromomethane	ND	ug/kg	5.0	07/25/06 20:49	DLK	74-95-3		
1,2-Dichlorobenzene	ND	ug/kg	5.0	07/25/06 20:49	DLK	95-50-1		

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Lab Project Number: 92123458
Client Project ID: NCDOT 34951.1.1 FCX

Lab Sample No: 927208348 Project Sample Number: 92123458-005 Date Collected: 07/17/06 15:45
Client Sample ID: FCXB5 6-8 Matrix: Soil Date Received: 07/18/06 17:10

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
1,3-Dichlorobenzene	ND	ug/kg	5.0	07/25/06 20:49	DLK	541-73-1		
1,4-Dichlorobenzene	ND	ug/kg	5.0	07/25/06 20:49	DLK	106-46-7		
Dichlorodifluoromethane	ND	ug/kg	9.9	07/25/06 20:49	DLK	75-71-8		
1,1-Dichloroethane	ND	ug/kg	5.0	07/25/06 20:49	DLK	75-34-3		
1,2-Dichloroethane	ND	ug/kg	5.0	07/25/06 20:49	DLK	107-06-2		
1,1-Dichloroethene	ND	ug/kg	5.0	07/25/06 20:49	DLK	75-35-4		
cis-1,2-Dichloroethene	ND	ug/kg	5.0	07/25/06 20:49	DLK	156-59-2		
trans-1,2-Dichloroethene	ND	ug/kg	5.0	07/25/06 20:49	DLK	156-60-5		
1,2-Dichloropropane	ND	ug/kg	5.0	07/25/06 20:49	DLK	78-87-5		
1,3-Dichloropropane	ND	ug/kg	5.0	07/25/06 20:49	DLK	142-28-9		
2,2-Dichloropropane	ND	ug/kg	5.0	07/25/06 20:49	DLK	594-20-7		
1,1-Dichloropropene	ND	ug/kg	5.0	07/25/06 20:49	DLK	563-58-6		
cis-1,3-Dichloropropene	ND	ug/kg	5.0	07/25/06 20:49	DLK	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/kg	5.0	07/25/06 20:49	DLK	10061-02-6		
Diisopropyl ether	ND	ug/kg	5.0	07/25/06 20:49	DLK	108-20-3		
Ethylbenzene	ND	ug/kg	5.0	07/25/06 20:49	DLK	100-41-4		
Hexachloro-1,3-butadiene	ND	ug/kg	5.0	07/25/06 20:49	DLK	87-68-3		
2-Hexanone	ND	ug/kg	50.	07/25/06 20:49	DLK	591-78-6		
Isopropylbenzene (Cumene)	ND	ug/kg	5.0	07/25/06 20:49	DLK	98-82-8		
p-Isopropyltoluene	ND	ug/kg	5.0	07/25/06 20:49	DLK	99-87-6		
Methylene chloride	ND	ug/kg	9.9	07/25/06 20:49	DLK	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	50.	07/25/06 20:49	DLK	108-10-1		
Methyl-tert-butyl ether	ND	ug/kg	5.0	07/25/06 20:49	DLK	1634-04-4		
Naphthalene	ND	ug/kg	5.0	07/25/06 20:49	DLK	91-20-3		
n-Propylbenzene	ND	ug/kg	5.0	07/25/06 20:49	DLK	103-65-1		
Styrene	ND	ug/kg	5.0	07/25/06 20:49	DLK	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/kg	5.0	07/25/06 20:49	DLK	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/kg	5.0	07/25/06 20:49	DLK	79-34-5		
Tetrachloroethene	ND	ug/kg	5.0	07/25/06 20:49	DLK	127-18-4		
Toluene	ND	ug/kg	5.0	07/25/06 20:49	DLK	108-88-3		
1,2,3-Trichlorobenzene	ND	ug/kg	5.0	07/25/06 20:49	DLK	87-61-6		
1,2,4-Trichlorobenzene	ND	ug/kg	5.0	07/25/06 20:49	DLK	120-82-1		
1,1,1-Trichloroethane	ND	ug/kg	5.0	07/25/06 20:49	DLK	71-55-6		
1,1,2-Trichloroethane	ND	ug/kg	5.0	07/25/06 20:49	DLK	79-00-5		
Trichloroethene	ND	ug/kg	5.0	07/25/06 20:49	DLK	79-01-6		
Trichlorofluoromethane	ND	ug/kg	5.0	07/25/06 20:49	DLK	75-69-4		
1,2,3-Trichloropropane	ND	ug/kg	5.0	07/25/06 20:49	DLK	96-18-4		
1,2,4-Trimethylbenzene	ND	ug/kg	5.0	07/25/06 20:49	DLK	95-63-6		
1,3,5-Trimethylbenzene	ND	ug/kg	5.0	07/25/06 20:49	DLK	108-67-8		

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Lab Project Number: 92123458
Client Project ID: NCDOT 34951.1.1 FCX

Lab Sample No: 927208348 Project Sample Number: 92123458-005 Date Collected: 07/17/06 15:45
Client Sample ID: FCXB5 6-8 Matrix: Soil Date Received: 07/18/06 17:10

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Vinyl acetate	ND	ug/kg	50.	07/25/06 20:49	DLK	108-05-4		
Vinyl chloride	ND	ug/kg	9.9	07/25/06 20:49	DLK	75-01-4		
Xylene (Total)	ND	ug/kg	5.0	07/25/06 20:49	DLK	1330-20-7		
m&p-Xylene	ND	ug/kg	9.9	07/25/06 20:49	DLK			
o-Xylene	ND	ug/kg	5.0	07/25/06 20:49	DLK	95-47-6		
Toluene-d8 (S)	100	%		07/25/06 20:49	DLK	2037-26-5		
4-Bromofluorobenzene (S)	94	%		07/25/06 20:49	DLK	460-00-4		
Dibromofluoromethane (S)	86	%		07/25/06 20:49	DLK	1868-53-7		
1,2-Dichloroethane-d4 (S)	78	%		07/25/06 20:49	DLK	17060-07-0		

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Lab Project Number: 92123458
Client Project ID: NCDOT 34951.1.1 FCX

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.
[2]	Surrogate recovery outside of control limits. The data was accepted based on valid recovery of remaining surrogate.

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QUALITY CONTROL DATA

Lab Project Number: 92123458
Client Project ID: NCDOT 34951.1.1 FCX

QC Batch: 162607 Analysis Method: EPA 8081
QC Batch Method: EPA 3545 Analysis Description: Organochlorine Pesticides
Associated Lab Samples: 927208306 927208314 927208322 927208330 927208348

METHOD BLANK: 927216507
Associated Lab Samples: 927208306 927208314 927208322 927208330 927208348

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Aldrin	ug/kg	ND	1.0	
alpha-BHC	ug/kg	ND	2.0	
beta-BHC	ug/kg	ND	2.0	
delta-BHC	ug/kg	ND	2.0	
gamma-BHC (Lindane)	ug/kg	ND	2.0	
Chlordane	ug/kg	ND	8.3	
gamma-Chlordane	ug/kg	ND	2.0	
4,4'-DDD	ug/kg	ND	2.0	
4,4'-DDE	ug/kg	ND	2.0	
4,4'-DDT	ug/kg	ND	2.0	
Dieldrin	ug/kg	ND	1.0	
Endosulfan I	ug/kg	ND	2.0	
Endosulfan II	ug/kg	ND	2.0	
Endosulfan sulfate	ug/kg	ND	2.0	
Endrin	ug/kg	ND	2.0	
Endrin aldehyde	ug/kg	ND	2.0	
Heptachlor	ug/kg	ND	2.0	
Heptachlor epoxide	ug/kg	ND	2.0	
Methoxychlor	ug/kg	ND	7.0	
Mirex	ug/kg	ND	7.0	
Toxaphene	ug/kg	ND	8.3	
Tetrachloro-m-xylene (S)	%	58		
Decachlorobiphenyl (S)	%	78		

LABORATORY CONTROL SAMPLE: 927216515

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Aldrin	ug/kg	2.667	2.676	100	
alpha-BHC	ug/kg	2.667	2.619	98	

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QUALITY CONTROL DATA

Lab Project Number: 92123458
Client Project ID: NCDOT 34951.1.1 FCX

LABORATORY CONTROL SAMPLE: 927216515

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
beta-BHC	ug/kg	2.667	3.234	121	
delta-BHC	ug/kg	2.667	2.897	109	
gamma-BHC (Lindane)	ug/kg	2.667	2.636	99	
4,4'-DDD	ug/kg	2.667	3.273	123	
4,4'-DDE	ug/kg	2.667	3.285	123	
4,4'-DDT	ug/kg	2.667	3.539	133	
Dieldrin	ug/kg	2.667	3.162	119	
Endosulfan I	ug/kg	2.667	3.785	142	
Endosulfan II	ug/kg	2.667	3.964	149	
Endosulfan sulfate	ug/kg	2.667	3.156	118	
Endrin	ug/kg	2.667	3.220	121	
Endrin aldehyde	ug/kg	2.667	2.326	87	
Heptachlor	ug/kg	2.667	3.336	125	
Heptachlor epoxide	ug/kg	2.667	3.047	114	
Methoxychlor	ug/kg	6.667	9.248	139	
Mirex	ug/kg	6.667	3.367	50	
Tetrachloro-m-xylene (S)				67	
Decachlorobiphenyl (S)				84	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 927216523 927216531

Parameter	Units	927214049 Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	RPD	Footnotes
Aldrin	ug/kg	0	3.024	2.435	2.518	80	83	3	
gamma-BHC (Lindane)	ug/kg	0	3.024	2.991	2.479	99	82	19	
4,4'-DDT	ug/kg	0	3.024	3.001	3.138	99	104	4	
Dieldrin	ug/kg	17.01	3.024	33.42	27.67	543	353	19	1,1
Endrin	ug/kg	0	3.024	2.703	2.812	89	93	4	
Heptachlor	ug/kg	0	3.024	3.344	3.132	111	104	7	
Tetrachloro-m-xylene (S)						57	54		
Decachlorobiphenyl (S)						71	70		

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QUALITY CONTROL DATA

Lab Project Number: 92123458
Client Project ID: NCDOT 34951.1.1 FCX

QC Batch: 162544 Analysis Method: EPA 8270
QC Batch Method: EPA 3545 Analysis Description: Semivolatile Organics
Associated Lab Samples: 927208306 927208314 927208322 927208330 927208348

METHOD BLANK: 927214247
Associated Lab Samples: 927208306 927208314 927208322 927208330 927208348

Parameter	Units	Blank Result	Reporting Limit	Footnotes
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	
Dimethylphthalate	ug/kg	ND	330	

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QUALITY CONTROL DATA

Lab Project Number: 92123458
Client Project ID: NCDOT 34951.1.1 FCX

METHOD BLANK: 927214247
Associated Lab Samples: 927208306 927208314 927208322 927208330 927208348

Parameter	Units	Blank Result	Reporting Limit	Footnotes
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	
Phenanthrene	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	
2,4,6-Trichlorophenol	ug/kg	ND	330	

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QUALITY CONTROL DATA

Lab Project Number: 92123458
Client Project ID: NCDOT 34951.1.1 FCX

METHOD BLANK: 927214247
Associated Lab Samples: 927208306 927208314 927208322 927208330 927208348

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Nitrobenzene-d5 (S)	%	48		
2-Fluorobiphenyl (S)	%	55		
Terphenyl-d14 (S)	%	71		
Phenol-d5 (S)	%	56		
2-Fluorophenol (S)	%	62		
2,4,6-Tribromophenol (S)	%	85		

LABORATORY CONTROL SAMPLE: 927214254

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Acenaphthene	ug/kg	1667.00	1092	66	
Acenaphthylene	ug/kg	1667.00	1135	68	
Anthracene	ug/kg	1667.00	1253	75	
Benzo(k)fluoranthene	ug/kg	1667.00	1288	77	
Benzo(b)fluoranthene	ug/kg	1667.00	1619	97	
Benzo(a)anthracene	ug/kg	1667.00	1239	74	
Benzoic acid	ug/kg	1667.00	786.5	47	
Benzo(g,h,i)perylene	ug/kg	1667.00	366.8	22	
Benzyl alcohol	ug/kg	1667.00	1268	76	
Benzo(a)pyrene	ug/kg	1667.00	1419	85	
4-Bromophenylphenyl ether	ug/kg	1667.00	1658	100	
Butylbenzylphthalate	ug/kg	1667.00	1098	66	
4-Chloro-3-methylphenol	ug/kg	1667.00	1080	65	
4-Chloroaniline	ug/kg	1667.00	1476	89	
bis(2-Chloroethoxy)methane	ug/kg	1667.00	887.5	53	
bis(2-Chloroethyl) ether	ug/kg	1667.00	1106	66	
bis(2-Chloroisopropyl) ether	ug/kg	1667.00	2440	146	2
2-Chloronaphthalene	ug/kg	1667.00	1097	66	
2-Chlorophenol	ug/kg	1667.00	1206	72	
4-Chlorophenylphenyl ether	ug/kg	1667.00	1374	82	
Chrysene	ug/kg	1667.00	1240	74	
Dibenz(a,h)anthracene	ug/kg	1667.00	495.7	30	
Dibenzofuran	ug/kg	1667.00	1179	71	
1,2-Dichlorobenzene	ug/kg	1667.00	1119	67	

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QUALITY CONTROL DATA

Lab Project Number: 92123458
Client Project ID: NCDOT 34951.1.1 FCX

LABORATORY CONTROL SAMPLE: 927214254

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
1,3-Dichlorobenzene	ug/kg	1667.00	1076	65	
1,4-Dichlorobenzene	ug/kg	1667.00	1109	67	
3,3'-Dichlorobenzidine	ug/kg	3333.00	910.7	27	
2,4-Dichlorophenol	ug/kg	1667.00	809.0	48	
Diethylphthalate	ug/kg	1667.00	1286	77	
2,4-Dimethylphenol	ug/kg	1667.00	771.3	46	
Dimethylphthalate	ug/kg	1667.00	1253	75	
Di-n-butylphthalate	ug/kg	1667.00	1253	75	
4,6-Dinitro-2-methylphenol	ug/kg	1667.00	1426	86	
2,4-Dinitrophenol	ug/kg	1667.00	1412	85	
2,4-Dinitrotoluene	ug/kg	1667.00	1441	86	
2,6-Dinitrotoluene	ug/kg	1667.00	1417	85	
Di-n-octylphthalate	ug/kg	1667.00	1028	62	
1,2-Diphenylhydrazine	ug/kg	1667.00	1114	67	
bis(2-Ethylhexyl)phthalate	ug/kg	1667.00	888.5	53	
Fluoranthene	ug/kg	1667.00	1343	81	
Fluorene	ug/kg	1667.00	1159	70	
Hexachloro-1,3-butadiene	ug/kg	1667.00	849.8	51	
Hexachlorobenzene	ug/kg	1667.00	1776	107	
Hexachlorocyclopentadiene	ug/kg	1667.00	871.2	52	
Hexachloroethane	ug/kg	1667.00	1154	69	
Indeno(1,2,3-cd)pyrene	ug/kg	1667.00	481.6	29	
Isophorone	ug/kg	1667.00	1459	88	
1-Methylnaphthalene	ug/kg	1667.00	804.4	48	
2-Methylnaphthalene	ug/kg	1667.00	813.2	49	
2-Methylphenol (o-Cresol)	ug/kg	1667.00	1212	73	
3&4-Methylphenol	ug/kg	1667.00	1186	71	
Naphthalene	ug/kg	1667.00	910.2	55	
2-Nitroaniline	ug/kg	1667.00	1423	85	
3-Nitroaniline	ug/kg	1667.00	1574	94	
4-Nitroaniline	ug/kg	1667.00	1529	92	
Nitrobenzene	ug/kg	1667.00	873.0	52	
2-Nitrophenol	ug/kg	1667.00	903.8	54	
4-Nitrophenol	ug/kg	1667.00	1350	81	
N-Nitroso-di-n-propylamine	ug/kg	1667.00	1188	71	
N-Nitrosodiphenylamine	ug/kg	1667.00	1358	82	
Pentachlorophenol	ug/kg	1667.00	1651	99	

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QUALITY CONTROL DATA

Lab Project Number: 92123458
Client Project ID: NCDOT 34951.1.1 FCX

LABORATORY CONTROL SAMPLE: 927214254

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Phenanthrene	ug/kg	1667.00	1199	72	
Phenol	ug/kg	1667.00	1122	67	
Pyrene	ug/kg	1667.00	1088	65	
1,2,4-Trichlorobenzene	ug/kg	1667.00	812.9	49	
2,4,5-Trichlorophenol	ug/kg	1667.00	1416	85	
2,4,6-Trichlorophenol	ug/kg	1667.00	1205	72	
Nitrobenzene-d5 (S)				47	
2-Fluorobiphenyl (S)				61	
Terphenyl-d14 (S)				74	
Phenol-d5 (S)				63	
2-Fluorophenol (S)				66	
2,4,6-Tribromophenol (S)				102	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 927214262 927214270

Parameter	Units	927205666 Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	RPD	Footnotes
Acenaphthene	ug/kg	0	1726.00	1285	1236	74	72	4	
4-Chloro-3-methylphenol	ug/kg	0	1726.00	1244	1270	72	74	2	
2-Chlorophenol	ug/kg	0	1726.00	1226	1248	71	72	2	
1,4-Dichlorobenzene	ug/kg	0	1726.00	1090	1087	63	63	0	
2,4-Dinitrotoluene	ug/kg	0	1726.00	1569	1539	91	89	2	
4-Nitrophenol	ug/kg	0	1726.00	1411	1406	82	82	0	
N-Nitroso-di-n-propylamine	ug/kg	0	1726.00	1320	1338	76	78	1	
Pentachlorophenol	ug/kg	0	1726.00	2096	2116	121	123	1	
Phenol	ug/kg	0	1726.00	1181	1203	68	70	2	
Pyrene	ug/kg	0	1726.00	1188	1117	69	65	6	
1,2,4-Trichlorobenzene	ug/kg	0	1726.00	889.5	868.0	52	50	2	
Nitrobenzene-d5 (S)						49	49		
2-Fluorobiphenyl (S)						72	70		
Terphenyl-d14 (S)						79	74		
Phenol-d5 (S)						66	66		
2-Fluorophenol (S)						67	67		
2,4,6-Tribromophenol (S)						111	107		

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QUALITY CONTROL DATA

Lab Project Number: 92123458
Client Project ID: NCDOT 34951.1.1 FCX

QC Batch: 163052 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: GC/MS VOCs 5035/8260 low level
Associated Lab Samples: 927208306 927208314 927208322 927208330 927208348

METHOD BLANK: 927232231
Associated Lab Samples: 927208306 927208314 927208322 927208330 927208348

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Acetone	ug/kg	ND	100	
Benzene	ug/kg	ND	5.0	
Bromobenzene	ug/kg	ND	5.0	
Bromochloromethane	ug/kg	ND	5.0	
Bromodichloromethane	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	
trans-1,2-Dichloroethene	ug/kg	ND	5.0	

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QUALITY CONTROL DATA

Lab Project Number: 92123458
Client Project ID: NCDOT 34951.1.1 FCX

METHOD BLANK: 927232231
Associated Lab Samples: 927208306 927208314 927208322 927208330 927208348

Parameter	Units	Blank Result	Reporting Limit	Footnotes
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.	
o-Xylene	ug/kg	ND	5.0	

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QUALITY CONTROL DATA

Lab Project Number: 92123458
Client Project ID: NCDOT 34951.1.1 FCX

METHOD BLANK: 927232231
Associated Lab Samples: 927208306 927208314 927208322 927208330 927208348

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Toluene-d8 (S)	%	106		
4-Bromofluorobenzene (S)	%	90		
Dibromofluoromethane (S)	%	101		
1,2-Dichloroethane-d4 (S)	%	106		

LABORATORY CONTROL SAMPLE: 927232249

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Acetone	ug/kg	100.00	94.53	94	
Benzene	ug/kg	50.00	55.02	110	
Bromobenzene	ug/kg	50.00	55.17	110	
Bromochloromethane	ug/kg	50.00	56.27	113	
Bromodichloromethane	ug/kg	50.00	56.91	114	
Bromoform	ug/kg	50.00	47.49	95	
Bromomethane	ug/kg	50.00	53.60	107	
2-Butanone (MEK)	ug/kg	100.00	100.8	101	
n-Butylbenzene	ug/kg	50.00	51.99	104	
sec-Butylbenzene	ug/kg	50.00	52.69	105	
tert-Butylbenzene	ug/kg	50.00	54.53	109	
Carbon tetrachloride	ug/kg	50.00	59.29	119	
Chlorobenzene	ug/kg	50.00	54.98	110	
Chloroethane	ug/kg	50.00	54.70	109	
Chloroform	ug/kg	50.00	55.65	111	
Chloromethane	ug/kg	50.00	45.00	90	
2-Chlorotoluene	ug/kg	50.00	53.12	106	
4-Chlorotoluene	ug/kg	50.00	53.29	107	
1,2-Dibromo-3-chloropropane	ug/kg	50.00	49.37	99	
Dibromochloromethane	ug/kg	50.00	55.35	111	
1,2-Dibromoethane (EDB)	ug/kg	50.00	55.91	112	
Dibromomethane	ug/kg	50.00	56.37	113	
1,2-Dichlorobenzene	ug/kg	50.00	53.80	108	
1,3-Dichlorobenzene	ug/kg	50.00	54.02	108	
1,4-Dichlorobenzene	ug/kg	50.00	52.36	105	
Dichlorodifluoromethane	ug/kg	50.00	53.13	106	

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QUALITY CONTROL DATA

Lab Project Number: 92123458
Client Project ID: NCDOT 34951.1.1 FCX

LABORATORY CONTROL SAMPLE: 927232249

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
1,1-Dichloroethane	ug/kg	50.00	56.09	112	
1,2-Dichloroethane	ug/kg	50.00	53.75	107	
1,1-Dichloroethene	ug/kg	50.00	61.64	123	
cis-1,2-Dichloroethene	ug/kg	50.00	53.10	106	
trans-1,2-Dichloroethene	ug/kg	50.00	57.12	114	
1,2-Dichloropropane	ug/kg	50.00	54.23	108	
1,3-Dichloropropane	ug/kg	50.00	52.61	105	
2,2-Dichloropropane	ug/kg	50.00	54.83	110	
1,1-Dichloropropene	ug/kg	50.00	53.11	106	
cis-1,3-Dichloropropene	ug/kg	50.00	49.19	98	
trans-1,3-Dichloropropene	ug/kg	50.00	47.39	95	
Diisopropyl ether	ug/kg	50.00	52.07	104	
Ethylbenzene	ug/kg	50.00	56.97	114	
Hexachloro-1,3-butadiene	ug/kg	50.00	57.92	116	
2-Hexanone	ug/kg	100.00	108.6	109	
Isopropylbenzene (Cumene)	ug/kg	50.00	57.27	115	
p-Isopropyltoluene	ug/kg	50.00	51.26	103	
Methylene chloride	ug/kg	50.00	57.26	115	
4-Methyl-2-pentanone (MIBK)	ug/kg	100.00	99.89	100	
Methyl-tert-butyl ether	ug/kg	50.00	52.66	105	
Naphthalene	ug/kg	50.00	48.89	98	
n-Propylbenzene	ug/kg	50.00	54.98	110	
Styrene	ug/kg	50.00	59.48	119	
1,1,1,2-Tetrachloroethane	ug/kg	50.00	53.53	107	
1,1,2,2-Tetrachloroethane	ug/kg	50.00	52.85	106	
Tetrachloroethene	ug/kg	50.00	54.56	109	
Toluene	ug/kg	50.00	55.94	112	
1,2,3-Trichlorobenzene	ug/kg	50.00	60.04	120	
1,2,4-Trichlorobenzene	ug/kg	50.00	55.67	111	
1,1,1-Trichloroethane	ug/kg	50.00	50.75	101	
1,1,2-Trichloroethane	ug/kg	50.00	56.14	112	
Trichloroethene	ug/kg	50.00	52.35	105	
Trichlorofluoromethane	ug/kg	50.00	54.08	108	
1,2,3-Trichloropropane	ug/kg	50.00	49.97	100	
1,2,4-Trimethylbenzene	ug/kg	50.00	49.85	100	
1,3,5-Trimethylbenzene	ug/kg	50.00	51.45	103	
Vinyl acetate	ug/kg	100.00	73.51	74	

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QUALITY CONTROL DATA

Lab Project Number: 92123458
Client Project ID: NCDOT 34951.1.1 FCX

LABORATORY CONTROL SAMPLE: 927232249

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Vinyl chloride	ug/kg	50.00	53.36	107	
Xylene (Total)	ug/kg	150.00	172.4	115	
m&p-Xylene	ug/kg	100.00	116.1	116	
o-Xylene	ug/kg	50.00	56.30	113	
Toluene-d8 (S)				101	
4-Bromofluorobenzene (S)				102	
Dibromofluoromethane (S)				101	
1,2-Dichloroethane-d4 (S)				108	

MATRIX SPIKE: 927235697

Parameter	Units	927208314 Result	Spike Conc.	MS Result	MS % Rec	Footnotes
Benzene	ug/kg	0	69.51	77.93	112	
Chlorobenzene	ug/kg	0	69.51	80.27	116	
1,1-Dichloroethene	ug/kg	0	69.51	80.35	116	
Toluene	ug/kg	0	69.51	80.64	116	
Trichloroethene	ug/kg	0	69.51	79.61	114	
Toluene-d8 (S)					102	
4-Bromofluorobenzene (S)					98	
Dibromofluoromethane (S)					89	
1,2-Dichloroethane-d4 (S)					89	

SAMPLE DUPLICATE: 927235689

Parameter	Units	927208256 Result	DUP 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	
2-Butanone (MEK)	ug/kg	ND	ND	NC	

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QUALITY CONTROL DATA

Lab Project Number: 92123458
Client Project ID: NCDOT 34951.1.1 FCX

SAMPLE DUPLICATE: 927235689

Parameter	Units	927208256 Result	DUP Result	RPD	Footnotes
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	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	ND	NC	

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QUALITY CONTROL DATA

Lab Project Number: 92123458
Client Project ID: NCDOT 34951.1.1 FCX

SAMPLE DUPLICATE: 927235689

Parameter	Units	927208256 Result	DUP Result	RPD	Footnotes
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	111		
4-Bromofluorobenzene (S)	%	91	93		
Dibromofluoromethane (S)	%	96	94		
1,2-Dichloroethane-d4 (S)	%	107	95		

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QUALITY CONTROL DATA

Lab Project Number: 92123458
Client Project ID: NCDOT 34951.1.1 FCX

QC Batch: 162894 Analysis Method: EPA 7471
QC Batch Method: EPA 7471 Analysis Description: Mercury, CVAAS, in Soil
Associated Lab Samples: 927208306 927208314 927208322 927208330 927208348

METHOD BLANK: 927227850
Associated Lab Samples: 927208306 927208314 927208322 927208330 927208348

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Mercury	mg/kg	ND	0.0050	

LABORATORY CONTROL SAMPLE: 927227868

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Mercury	mg/kg	0.0667	0.0627	94	

MATRIX SPIKE: 927227991

Parameter	Units	927218842 Result	Spike Conc.	MS Result	MS % Rec	Footnotes
Mercury	mg/kg	0.00558	0.0695	0.0723	96	

SAMPLE DUPLICATE: 927228007

Parameter	Units	927218859 Result	DUP Result	RPD	Footnotes
Mercury	mg/kg	0.01100	0.01100	1	

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QUALITY CONTROL DATA

Lab Project Number: 92123458
Client Project ID: NCDOT 34951.1.1 FCX

QC Batch: 162595 Analysis Method: EPA 6010
QC Batch Method: EPA 3050 Analysis Description: Metals, Trace ICP
Associated Lab Samples: 927208306 927208314 927208322 927208330 927208348

METHOD BLANK: 927215657
Associated Lab Samples: 927208306 927208314 927208322 927208330 927208348

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Arsenic	mg/kg	ND	0.50	
Barium	mg/kg	ND	0.50	
Cadmium	mg/kg	ND	0.10	
Chromium	mg/kg	ND	0.20	
Lead	mg/kg	ND	0.50	
Selenium	mg/kg	ND	0.50	
Silver	mg/kg	ND	0.20	

LABORATORY CONTROL SAMPLE: 927215665

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Arsenic	mg/kg	50.00	49.60	99	
Barium	mg/kg	50.00	50.80	102	
Cadmium	mg/kg	50.00	50.70	101	
Chromium	mg/kg	50.00	51.60	103	
Lead	mg/kg	50.00	50.30	101	
Selenium	mg/kg	50.00	50.00	100	
Silver	mg/kg	25.00	25.10	100	

MATRIX SPIKE: 927215673

Parameter	Units	927213942 Result	Spike Conc.	MS Result	MS % Rec	Footnotes
Arsenic	mg/kg	1.056	64.78	59.08	90	
Barium	mg/kg	74.54	64.78	130.9	87	
Cadmium	mg/kg	0	64.78	58.04	90	
Chromium	mg/kg	10.72	64.78	76.44	102	
Lead	mg/kg	5.637	64.78	68.02	96	

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Asheville, NC 28804
Phone: 828.254.7176
Fax: 828.252.4618

QUALITY CONTROL DATA

Lab Project Number: 92123458
Client Project ID: NCDOT 34951.1.1 FCX

MATRIX SPIKE: 927215673

Parameter	Units	927213942 Result	Spike Conc.	MS Result	MS % Rec	Footnotes
Selenium	mg/kg	0	64.78	58.82	91	
Silver	mg/kg	0	32.39	31.61	98	

SAMPLE DUPLICATE: 927215681

Parameter	Units	927213959 Result	DUP Result	RPD	Footnotes
Arsenic	mg/kg	1.500	1.000	35	
Barium	mg/kg	42.00	28.00	40	3
Cadmium	mg/kg	ND	ND	NC	
Chromium	mg/kg	8.600	7.100	19	
Lead	mg/kg	10.00	7.500	28	3
Selenium	mg/kg	ND	ND	NC	
Silver	mg/kg	ND	ND	NC	

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QUALITY CONTROL DATA

Lab Project Number: 92123458
Client Project ID: NCDOT 34951.1.1 FCX

QC Batch: 162456 Analysis Method: % Moisture
QC Batch Method: Analysis Description: Percent Moisture
Associated Lab Samples: 927208306 927208314 927208322 927208330 927208348

SAMPLE DUPLICATE: 927209551

Parameter	Units	927208231 Result	DUP Result	RPD	Footnotes
Percent Moisture	%	26.30	27.00	3	

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QUALITY CONTROL DATA

Lab Project Number: 92123458
Client Project ID: NCDOT 34951.1.1 FCX

QC Batch: 162583 Analysis Method: EPA 9045
QC Batch Method: EPA 9045 Analysis Description: pH
Associated Lab Samples: 927208306 927208314 927208322 927208330 927208348

SAMPLE DUPLICATE: 927215467

Parameter	Units	927208306 Result	DUP Result	RPD	Footnotes
pH	units	3.950	4.000	1	

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QUALITY CONTROL DATA

Lab Project Number: 92123458
Client Project ID: NCDOT 34951.1.1 FCX

QC Batch: 163164 Analysis Method: EPA 353.2 Modified
QC Batch Method: EPA 353.2 Modified Analysis Description: Nitrogen, Nitrate
Associated Lab Samples: 927208306 927208314 927208322 927208330 927208348

METHOD BLANK: 927235408
Associated Lab Samples: 927208306 927208314 927208322 927208330 927208348

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Nitrate as N	mg/kg	ND	10.	

LABORATORY CONTROL SAMPLE: 927235416

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Nitrate as N	mg/kg	500.00	498.0	100	

MATRIX SPIKE: 927235424

Parameter	Units	927208306 Result	Spike Conc.	MS Result	MS % Rec	Footnotes
Nitrate as N	mg/kg	28.65	361.70	376.2	96	

SAMPLE DUPLICATE: 927235432

Parameter	Units	927208314 Result	DUP Result	RPD	Footnotes
Nitrate as N	mg/kg	ND	ND	NC	

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Fax: 828.252.4618

QUALITY CONTROL DATA

Lab Project Number: 92123458
Client Project ID: NCDOT 34951.1.1 FCX

QC Batch: 163728 Analysis Method: EPA 350.1 Modified
QC Batch Method: EPA 350.1 Modified Analysis Description: Nitrogen, Ammonia
Associated Lab Samples: 927208306 927208314 927208322 927208330 927208348

METHOD BLANK: 927255869
Associated Lab Samples: 927208306 927208314 927208322 927208330 927208348

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Nitrogen, Ammonia	mg/kg	ND	10.	

LABORATORY CONTROL SAMPLE: 927255877

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Nitrogen, Ammonia	mg/kg	100.00	107.5	107	

MATRIX SPIKE: 927255885

Parameter	Units	927208306 Result	Spike Conc.	MS Result	MS % Rec	Footnotes
Nitrogen, Ammonia	mg/kg	2.008	130.20	152.2	117	

SAMPLE DUPLICATE: 927255893

Parameter	Units	927208314 Result	DUP Result	RPD	Footnotes
Nitrogen, Ammonia	mg/kg	ND	ND	NC	

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Lab Project Number: 92123458
Client Project ID: NCDOT 34951.1.1 FCX

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]	The spike recovery was outside acceptance limits for the MS and/or MSD due to an analyte concentration in the sample at four times greater than the spike concentration. The QC batch was accepted based upon LCS and/or LCSD recoveries within acceptance limits.
[2]	Recovery falls outside of QC limits, however, this compound is not found in the associated samples.
[3]	The calculated RPD was outside QC acceptance limits.

Analytical Environmental Services, Inc.

Date: *28-Jul-06*

CLIENT:	Pace Analytical Services, Inc.	**Client Sample ID:**	927208306 FCX B1
Project:	92123458	**Collection Date:**	7/17/2006 12:15:00 PM
Lab ID:	0607A25-009	**Matrix:**	SOIL

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed
FORMALDEHYDE		**SW8315A**					Analyst: **FN**
Formaldehyde	BRL	1.0	H	mg/Kg	73424	1	7/26/2006 6:17 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	E	Estimated (Value above quantitation range)
BRL	Below Reporting Limit	S	Surrogate Recovery outside accepted recovery limits
H	Holding times for preparation or analysis exceeded	Narr	See Case Narrative
N	Analyte not NELAC certified	NC	Not Confirmed
B	Analyte detected in the associated Method Blank		

Analytical Environmental Services, Inc.

Date: *28-Jul-06*

CLIENT:	Pace Analytical Services, Inc.	**Client Sample ID:**	927208314 FCX B2
Project:	92123458	**Collection Date:**	7/17/2006 1:55:00 PM
Lab ID:	0607A25-010	**Matrix:**	SOIL

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed
FORMALDEHYDE		**SW8315A**					Analyst: **FN**
Formaldehyde	BRL	1.0	H	mg/Kg	73424	1	7/26/2006 6:28 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	E	Estimated (Value above quantitation range)
BRL	Below Reporting Limit	S	Surrogate Recovery outside accepted recovery limits
H	Holding times for preparation or analysis exceeded	Narr	See Case Narrative
N	Analyte not NELAC certified	NC	Not Confirmed
B	Analyte detected in the associated Method Blank		

Analytical Environmental Services, Inc.

Date: *28-Jul-06*

CLIENT:	Pace Analytical Services, Inc.	**Client Sample ID:**	927208322 FCX B3
Project:	92123458	**Collection Date:**	7/17/2006 2:15:00 PM
Lab ID:	0607A25-011	**Matrix:**	SOIL

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed
FORMALDEHYDE			**SW8315A**				Analyst: **FN**
Formaldehyde	BRL	1.0	H	mg/Kg	73424	1	7/26/2006 6:39 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	E	Estimated (Value above quantitation range)
BRL	Below Reporting Limit	S	Surrogate Recovery outside accepted recovery limits
H	Holding times for preparation or analysis exceeded	Narr	See Case Narrative
N	Analyte not NELAC certified	NC	Not Confirmed
B	Analyte detected in the associated Method Blank		

Analytical Environmental Services, Inc.

Date: *28-Jul-06*

CLIENT:	Pace Analytical Services, Inc.	**Client Sample ID:**	927208330 FCX B4
Project:	92123458	**Collection Date:**	7/17/2006 3:00:00 PM
Lab ID:	0607A25-012	**Matrix:**	SOIL

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed
FORMALDEHYDE		**SW8315A**					Analyst: **FN**
Formaldehyde	BRL	1.0	H	mg/Kg	73424	1	7/26/2006 6:50 PM

Qualifiers:	*	Value exceeds Maximum Contaminant Level	E	Estimated (Value above quantitation range)
	BRL	Below Reporting Limit	S	Surrogate Recovery outside accepted recovery limits
	H	Holding times for preparation or analysis exceeded	Narr	See Case Narrative
	N	Analyte not NELAC certified	NC	Not Confirmed
	B	Analyte detected in the associated Method Blank		

Analytical Environmental Services, Inc.

Date: *28-Jul-06*

CLIENT:	Pace Analytical Services, Inc.	**Client Sample ID:**	927208348 FCX B5
Project:	92123458	**Collection Date:**	7/17/2006 3:45:00 PM
Lab ID:	0607A25-013	**Matrix:**	SOIL

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed
FORMALDEHYDE		**SW8315A**					Analyst: **FN**
Formaldehyde	BRL	1.0	H	mg/Kg	73424	1	7/26/2006 7:01 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	E	Estimated (Value above quantitation range)
BRL	Below Reporting Limit	S	Surrogate Recovery outside accepted recovery limits
H	Holding times for preparation or analysis exceeded	Narr	See Case Narrative
N	Analyte not NELAC certified	NC	Not Confirmed
B	Analyte detected in the associated Method Blank		

Analytical Environmental Services, Inc.

Date: *28-Jul-06*

CLIENT:	Pace Analytical Services, Inc.	**Client Sample ID:**	927208306 / FCXB1 6-8
Project:	92123458	**Collection Date:**	7/17/2006 12:15:00 PM
Lab ID:	0607A60-001	**Matrix:**	SOIL

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed
CHLORINATED HERBICIDES		**SW8151A**			**(SW3550)**		Analyst: **MM**
2,4,5-T	BRL	33		µg/Kg	73498	1	7/27/2006 12:02 AM
2,4,5-TP (Silvex)	BRL	33		µg/Kg	73498	1	7/27/2006 12:02 AM
2,4-D	BRL	33		µg/Kg	73498	1	7/27/2006 12:02 AM
2,4-DB	BRL	170		µg/Kg	73498	1	7/27/2006 12:02 AM
Dalapon	BRL	330		µg/Kg	73498	1	7/27/2006 12:02 AM
Dicamba	BRL	33		µg/Kg	73498	1	7/27/2006 12:02 AM
Dichlorprop	BRL	33		µg/Kg	73498	1	7/27/2006 12:02 AM
Dinoseb	BRL	85		µg/Kg	73498	1	7/27/2006 12:02 AM
MCPA	BRL	3300		µg/Kg	73498	1	7/27/2006 12:02 AM
MCPP	BRL	3300		µg/Kg	73498	1	7/27/2006 12:02 AM
Surr: DCAA	90.5	28.3-154		%REC	73498	1	7/27/2006 12:02 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	E	Estimated (Value above quantitation range)
BRL	Below Reporting Limit	S	Surrogate Recovery outside accepted recovery limits
H	Holding times for preparation or analysis exceeded	Narr	See Case Narrative
N	Analyte not NELAC certified	NC	Not Confirmed
B	Analyte detected in the associated Method Blank		

Analytical Environmental Services, Inc.

Date: *28-Jul-06*

CLIENT: Pace Analytical Services, Inc.
Client Sample ID: 927208314 / FCXB2 6-8
Project: 92123458
Collection Date: 7/17/2006 1:55:00 PM
Lab ID: 0607A60-002
Matrix: SOIL

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed
CHLORINATED HERBICIDES		**SW8151A**			**(SW3550)**		Analyst: **MM**
2,4,5-T	BRL	33		µg/Kg	73498	1	7/27/2006 12:30 AM
2,4,5-TP (Silvex)	BRL	33		µg/Kg	73498	1	7/27/2006 12:30 AM
2,4-D	BRL	33		µg/Kg	73498	1	7/27/2006 12:30 AM
2,4-DB	BRL	170		µg/Kg	73498	1	7/27/2006 12:30 AM
Dalapon	BRL	330		µg/Kg	73498	1	7/27/2006 12:30 AM
Dicamba	BRL	33		µg/Kg	73498	1	7/27/2006 12:30 AM
Dichlorprop	BRL	33		µg/Kg	73498	1	7/27/2006 12:30 AM
Dinoseb	BRL	85		µg/Kg	73498	1	7/27/2006 12:30 AM
MCPA	BRL	3300		µg/Kg	73498	1	7/27/2006 12:30 AM
MCPP	BRL	3300		µg/Kg	73498	1	7/27/2006 12:30 AM
Surr: DCAA	95.1	28.3-154		%REC	73498	1	7/27/2006 12:30 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	E	Estimated (Value above quantitation range)
BRL	Below Reporting Limit	S	Surrogate Recovery outside accepted recovery limits
H	Holding times for preparation or analysis exceeded	Narr	See Case Narrative
N	Analyte not NELAC certified	NC	Not Confirmed
B	Analyte detected in the associated Method Blank		

Analytical Environmental Services, Inc.

Date: *28-Jul-06*

CLIENT:	Pace Analytical Services, Inc.	**Client Sample ID:**	927208322 / FCXB3 6-8
Project:	92123458	**Collection Date:**	7/17/2006 2:15:00 PM
Lab ID:	0607A60-003	**Matrix:**	SOIL

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed
CHLORINATED HERBICIDES		**SW8151A**			**(SW3550)**		Analyst: **MM**
2,4,5-T	BRL	33		µg/Kg	73498	1	7/27/2006 12:59 AM
2,4,5-TP (Silvex)	BRL	33		µg/Kg	73498	1	7/27/2006 12:59 AM
2,4-D	BRL	33		µg/Kg	73498	1	7/27/2006 12:59 AM
2,4-DB	BRL	170		µg/Kg	73498	1	7/27/2006 12:59 AM
Dalapon	BRL	330		µg/Kg	73498	1	7/27/2006 12:59 AM
Dicamba	BRL	33		µg/Kg	73498	1	7/27/2006 12:59 AM
Dichlorprop	BRL	33		µg/Kg	73498	1	7/27/2006 12:59 AM
Dinoseb	BRL	85		µg/Kg	73498	1	7/27/2006 12:59 AM
MCPA	BRL	3300		µg/Kg	73498	1	7/27/2006 12:59 AM
MCPP	BRL	3300		µg/Kg	73498	1	7/27/2006 12:59 AM
Surr: DCAA	86.8	28.3-154		%REC	73498	1	7/27/2006 12:59 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	E	Estimated (Value above quantitation range)
BRL	Below Reporting Limit	S	Surrogate Recovery outside accepted recovery limits
H	Holding times for preparation or analysis exceeded	Narr	See Case Narrative
N	Analyte not NELAC certified	NC	Not Confirmed
B	Analyte detected in the associated Method Blank		

Analytical Environmental Services, Inc.

Date: *28-Jul-06*

CLIENT: Pace Analytical Services, Inc.
Project: 92123458
Lab ID: 0607A60-004

Client Sample ID: 927208330 / FCXB4 6-8
Collection Date: 7/17/2006 3:00:00 PM
Matrix: SOIL

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed
CHLORINATED HERBICIDES		**SW8151A**			**(SW3550)**		Analyst: **MM**
2,4,5-T	BRL	33		µg/Kg	73498	1	7/27/2006 1:28 AM
2,4,5-TP (Silvex)	BRL	33		µg/Kg	73498	1	7/27/2006 1:28 AM
2,4-D	BRL	33		µg/Kg	73498	1	7/27/2006 1:28 AM
2,4-DB	BRL	170		µg/Kg	73498	1	7/27/2006 1:28 AM
Dalapon	BRL	330		µg/Kg	73498	1	7/27/2006 1:28 AM
Dicamba	BRL	33		µg/Kg	73498	1	7/27/2006 1:28 AM
Dichlorprop	BRL	33		µg/Kg	73498	1	7/27/2006 1:28 AM
Dinoseb	BRL	85		µg/Kg	73498	1	7/27/2006 1:28 AM
MCPA	BRL	3300		µg/Kg	73498	1	7/27/2006 1:28 AM
MCPP	BRL	3300		µg/Kg	73498	1	7/27/2006 1:28 AM
Surr: DCAA	104	28.3-154		%REC	73498	1	7/27/2006 1:28 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	E	Estimated (Value above quantitation range)
BRL	Below Reporting Limit	S	Surrogate Recovery outside accepted recovery limits
H	Holding times for preparation or analysis exceeded	Narr	See Case Narrative
N	Analyte not NELAC certified	NC	Not Confirmed
B	Analyte detected in the associated Method Blank		

Analytical Environmental Services, Inc.

Date: *28-Jul-06*

CLIENT:	Pace Analytical Services, Inc.	**Client Sample ID:**	927208348 / FCXB5 6-8
Project:	92123458	**Collection Date:**	7/17/2006 3:45:00 PM
Lab ID:	0607A60-005	**Matrix:**	SOIL

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed
CHLORINATED HERBICIDES		**SW8151A**			**(SW3550)**		Analyst: **MM**
2,4,5-T	BRL	33		µg/Kg	73498	1	7/27/2006 1:56 AM
2,4,5-TP (Silvex)	BRL	33		µg/Kg	73498	1	7/27/2006 1:56 AM
2,4-D	BRL	33		µg/Kg	73498	1	7/27/2006 1:56 AM
2,4-DB	BRL	170		µg/Kg	73498	1	7/27/2006 1:56 AM
Dalapon	BRL	330		µg/Kg	73498	1	7/27/2006 1:56 AM
Dicamba	BRL	33		µg/Kg	73498	1	7/27/2006 1:56 AM
Dichlorprop	BRL	33		µg/Kg	73498	1	7/27/2006 1:56 AM
Dinoseb	BRL	85		µg/Kg	73498	1	7/27/2006 1:56 AM
MCPA	BRL	3300		µg/Kg	73498	1	7/27/2006 1:56 AM
MCPP	BRL	3300		µg/Kg	73498	1	7/27/2006 1:56 AM
Surr: DCAA	93.6	28.3-154		%REC	73498	1	7/27/2006 1:56 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	E	Estimated (Value above quantitation range)
BRL	Below Reporting Limit	S	Surrogate Recovery outside accepted recovery limits
H	Holding times for preparation or analysis exceeded	Narr	See Case Narrative
N	Analyte not NELAC certified	NC	Not Confirmed
B	Analyte detected in the associated Method Blank		

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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.

1004587

Section A
Required Client Information:

Company	Solutions - IES
Address	1101 Nowell Rd, Raleigh, NC 27607
Email To:	sknox@solutions-ies.com
Phone	9198731060
Fax	9198731074
Requested Due Date/TAT:	

Section B
Required Project Information:

Report To:	Sheri Knox
Copy To:	WBS# 34951.1.1
Purchase Order No.:	4800006252 NCDOT
Project Name:	NCDOT - Klumac Rd.
Project Number:	3210.06A3.NDOT

Section C
Invoice Information:

Attention:	Chris Peoples
Company Name:	NC DOT AR# 616023
Address:	
Pace Quote Reference:	
Pace Project Manager:	BKM
Pace Profile #:	3869

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ Other ______

SITE LOCATION: ☐GA ☐IL ☐IN ☐MI ☐MN ☒NC ☐OH ☐SC ☐WI ☐OTHER ______

Filtered (Y/N)

Requested Analysis: Formaldehyde, 8260, 8270 PAH, 6010, pH, Ammonia, Nitrates, Pesticides, Herbicides, Residual Chlorine (Y/N)

Pace Project Number: 92123458

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

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	Composite Start Date	Composite Start Time	Composite End/Grab Date	Composite End/Grab Time	Sample Temp at Collection	# of Containers	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Formaldehyde	8260	8270 PAH	6010	pH	Ammonia	Nitrates	Pesticides	Herbicides	Residual Chlorine (Y/N)	Pace Project Number Lab I.D.
1	FCXB1 6-8	SL	G			7/17/06	1215			X						X		X	X	X	X	X	X	X	X	X		92?72203 06
2	FCXB2 6-8	SL	G			7/17/06	1355			X						X		X	X	X	X	X	X	X	X	X		0314
3	FCXB3 6-8	SL	G			7/17/06	1415			X						X		X	X	X	X	X	X	X	X	X		0322
4	FCXB4 6-8	SL	G			7/17/06	1500			X						X		X	X	X	X	X	X	X	X	X		0330
5	FCXB5 6-8	SL	G			7/17/06	1545			X						X		X	X	X	X	X	X	X	X	X		305
6																												
7																												
8																												
9																												
10																												
11																												
12																												

Additional Comments:

FORMER FCX SITE

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
[signature]	7/18/06	1610	[signature] / Pace	7/18/06	1610
[signature] / Pace	7/18/06	17:10	[signature]	7/19/06	[illegible]

SAMPLE CONDITION

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

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Kevin Buchanan

SIGNATURE of SAMPLER: [signature] DATE Signed (MM / DD / YY): 07/17/06

SEE REVERSE SIDE FOR INSTRUCTIONS

ALLQ020rev.3,31Mar05

APPENDIX E

LABORATORY ANALYTICAL REPORTS – GROUNDWATER

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 01, 2006

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

RE: Lab Project Number: 92123563
Client Project ID: NCDOT 34951.1.1 FCX

Dear Mr. Peoples:

Enclosed are the analytical results for sample(s) received by the laboratory on July 19, 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,

for

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

Enclosures

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www.pacelabs.com

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Phone: 828.254.7176
Fax: 828.252.4618

Lab Project Number: 92123563
Client Project ID: NCDOT 34951.1.1 FCX

Lab Sample No: 927213751 Project Sample Number: 92123563-001 Date Collected: 07/19/06 12:45
Client Sample ID: TMW-1 Matrix: Water Date Received: 07/19/06 16:00

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Metals								
Metals by Trace ICP	Prep/Method: EPA 3010 / EPA 6010							
Arsenic	ND	ug/l	5.0	07/27/06 15:33	SHB	7440-38-2		
Barium	38.	ug/l	5.0	07/27/06 15:33	SHB	7440-39-3		
Cadmium	ND	ug/l	1.0	07/27/06 15:33	SHB	7440-43-9		
Chromium	4.6	ug/l	2.0	07/27/06 15:33	SHB	7440-47-3		
Lead	7.0	ug/l	5.0	07/27/06 15:33	SHB	7439-92-1		
Selenium	5.9	ug/l	5.0	07/27/06 15:33	SHB	7782-49-2		
Silver	ND	ug/l	2.0	07/27/06 15:33	SHB	7440-22-4		
Date Digested	07/25/06 13:35			07/25/06 13:35				
Mercury, CVAAS, in Water	Method: EPA 7470							
Mercury	ND	ug/l	0.20	07/21/06 10:00	ALV	7439-97-6		
Wet Chemistry								
Ammonia	Method: EPA 350.1							
Nitrogen, Ammonia	38.	mg/l	3.0	07/27/06 10:04	TMR	7727-37-9		
48 Hour NO3 / NO2 / NOX	Method: EPA 353.2							
Nitrate as N	83.	mg/l	2.0	07/20/06 05:24	TMR			
Nitrate-Nitrite (as N)	84.	mg/l	2.0	07/20/06 05:24	TMR	7727-37-9		
Nitrite as N	0.91	mg/l	0.10	07/20/06 05:24	TMR			
Formaldehyde Scan	Method: NC Chromotropic Acid							
Formaldehyde	ND	mg/l	0.125	08/01/06 10:00	SHB	50-00-0		
GC/MS Semivolatiles								
Semivolatile Organics	Prep/Method: EPA 3510 / EPA 8270							
Acenaphthene	ND	ug/l	10.	07/24/06 22:39	BET	83-32-9		
Acenaphthylene	ND	ug/l	10.	07/24/06 22:39	BET	208-96-8		
Aniline	ND	ug/l	10.	07/24/06 22:39	BET	62-53-3		
Anthracene	ND	ug/l	10.	07/24/06 22:39	BET	120-12-7		
Benzo(k)fluoranthene	ND	ug/l	10.	07/24/06 22:39	BET	207-08-9		
Benzo(b)fluoranthene	ND	ug/l	10.	07/24/06 22:39	BET	205-99-2		
Benzo(a)anthracene	ND	ug/l	10.	07/24/06 22:39	BET	56-55-3		
Benzoic acid	ND	ug/l	52.	07/24/06 22:39	BET	65-85-0		
Benzo(g,h,i)perylene	ND	ug/l	10.	07/24/06 22:39	BET	191-24-2		
Benzyl alcohol	ND	ug/l	21.	07/24/06 22:39	BET	100-51-6		
Benzo(a)pyrene	ND	ug/l	10.	07/24/06 22:39	BET	50-32-8		

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Client Sample ID: TMW-1 Matrix: Water Date Received: 07/19/06 16:00

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
4-Bromophenylphenyl ether	ND	ug/l	10.	07/24/06 22:39	BET	101-55-3		
Butylbenzylphthalate	ND	ug/l	10.	07/24/06 22:39	BET	85-68-7		
4-Chloro-3-methylphenol	ND	ug/l	21.	07/24/06 22:39	BET	59-50-7		
4-Chloroaniline	ND	ug/l	21.	07/24/06 22:39	BET	106-47-8		
bis(2-Chloroethoxy)methane	ND	ug/l	10.	07/24/06 22:39	BET	111-91-1		
bis(2-Chloroethyl) ether	ND	ug/l	10.	07/24/06 22:39	BET	111-44-4		
bis(2-Chloroisopropyl) ether	ND	ug/l	10.	07/24/06 22:39	BET	39638-32-9		
2-Chloronaphthalene	ND	ug/l	10.	07/24/06 22:39	BET	91-58-7		
2-Chlorophenol	ND	ug/l	10.	07/24/06 22:39	BET	95-57-8		
4-Chlorophenylphenyl ether	ND	ug/l	10.	07/24/06 22:39	BET	7005-72-3		
Chrysene	ND	ug/l	10.	07/24/06 22:39	BET	218-01-9		
Dibenz(a,h)anthracene	ND	ug/l	10.	07/24/06 22:39	BET	53-70-3		
Dibenzofuran	ND	ug/l	10.	07/24/06 22:39	BET	132-64-9		
1,2-Dichlorobenzene	ND	ug/l	10.	07/24/06 22:39	BET	95-50-1		
1,3-Dichlorobenzene	ND	ug/l	10.	07/24/06 22:39	BET	541-73-1		
1,4-Dichlorobenzene	ND	ug/l	10.	07/24/06 22:39	BET	106-46-7		
3,3'-Dichlorobenzidine	ND	ug/l	21.	07/24/06 22:39	BET	91-94-1		
2,4-Dichlorophenol	ND	ug/l	10.	07/24/06 22:39	BET	120-83-2		
Diethylphthalate	ND	ug/l	10.	07/24/06 22:39	BET	84-66-2		
2,4-Dimethylphenol	ND	ug/l	10.	07/24/06 22:39	BET	105-67-9		
Dimethylphthalate	ND	ug/l	10.	07/24/06 22:39	BET	131-11-3		
Di-n-butylphthalate	ND	ug/l	10.	07/24/06 22:39	BET	84-74-2		
4,6-Dinitro-2-methylphenol	ND	ug/l	52.	07/24/06 22:39	BET	534-52-1		
2,4-Dinitrophenol	ND	ug/l	52.	07/24/06 22:39	BET	51-28-5		
2,4-Dinitrotoluene	ND	ug/l	10.	07/24/06 22:39	BET	121-14-2		
2,6-Dinitrotoluene	ND	ug/l	10.	07/24/06 22:39	BET	606-20-2		
Di-n-octylphthalate	ND	ug/l	10.	07/24/06 22:39	BET	117-84-0		
1,2-Diphenylhydrazine	ND	ug/l	21.	07/24/06 22:39	BET	122-66-7		
bis(2-Ethylhexyl)phthalate	ND	ug/l	10.	07/24/06 22:39	BET	117-81-7		
Fluoranthene	ND	ug/l	10.	07/24/06 22:39	BET	206-44-0		
Fluorene	ND	ug/l	10.	07/24/06 22:39	BET	86-73-7		
Hexachloro-1,3-butadiene	ND	ug/l	10.	07/24/06 22:39	BET	87-68-3		
Hexachlorobenzene	ND	ug/l	10.	07/24/06 22:39	BET	118-74-1		
Hexachlorocyclopentadiene	ND	ug/l	10.	07/24/06 22:39	BET	77-47-4		
Hexachloroethane	ND	ug/l	10.	07/24/06 22:39	BET	67-72-1		
Indeno(1,2,3-cd)pyrene	ND	ug/l	10.	07/24/06 22:39	BET	193-39-5		
Isophorone	ND	ug/l	10.	07/24/06 22:39	BET	78-59-1		
1-Methylnaphthalene	ND	ug/l	10.	07/24/06 22:39	BET	90-12-0		
2-Methylnaphthalene	ND	ug/l	10.	07/24/06 22:39	BET	91-57-6		

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Lab Project Number: 92123563
Client Project ID: NCDOT 34951.1.1 FCX

Lab Sample No: 927213751 Project Sample Number: 92123563-001 Date Collected: 07/19/06 12:45
Client Sample ID: TMW-1 Matrix: Water Date Received: 07/19/06 16:00

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
2-Methylphenol (o-Cresol)	ND	ug/l	10.	07/24/06 22:39	BET	95-48-7		
3&4-Methylphenol	ND	ug/l	10.	07/24/06 22:39	BET			
Naphthalene	ND	ug/l	10.	07/24/06 22:39	BET	91-20-3		
2-Nitroaniline	ND	ug/l	52.	07/24/06 22:39	BET	88-74-4		
3-Nitroaniline	ND	ug/l	52.	07/24/06 22:39	BET	99-09-2		
4-Nitroaniline	ND	ug/l	52.	07/24/06 22:39	BET	100-01-6		
Nitrobenzene	ND	ug/l	10.	07/24/06 22:39	BET	98-95-3		
2-Nitrophenol	ND	ug/l	10.	07/24/06 22:39	BET	88-75-5		
4-Nitrophenol	ND	ug/l	52.	07/24/06 22:39	BET	100-02-7		
N-Nitrosodimethylamine	ND	ug/l	10.	07/24/06 22:39	BET	62-75-9		
N-Nitroso-di-n-propylamine	ND	ug/l	10.	07/24/06 22:39	BET	621-64-7		
N-Nitrosodiphenylamine	ND	ug/l	10.	07/24/06 22:39	BET	86-30-6		
Pentachlorophenol	ND	ug/l	52.	07/24/06 22:39	BET	87-86-5		
Phenanthrene	ND	ug/l	10.	07/24/06 22:39	BET	85-01-8		
Phenol	ND	ug/l	10.	07/24/06 22:39	BET	108-95-2		
Pyrene	ND	ug/l	10.	07/24/06 22:39	BET	129-00-0		
1,2,4-Trichlorobenzene	ND	ug/l	10.	07/24/06 22:39	BET	120-82-1		
2,4,5-Trichlorophenol	ND	ug/l	52.	07/24/06 22:39	BET	95-95-4		
2,4,6-Trichlorophenol	ND	ug/l	10.	07/24/06 22:39	BET	88-06-2		
Nitrobenzene-d5 (S)	49	%		07/24/06 22:39	BET	4165-60-0		
2-Fluorobiphenyl (S)	55	%		07/24/06 22:39	BET	321-60-8		
Terphenyl-d14 (S)	76	%		07/24/06 22:39	BET	1718-51-0		
Phenol-d5 (S)	26	%		07/24/06 22:39	BET	4165-62-2		
2-Fluorophenol (S)	40	%		07/24/06 22:39	BET	367-12-4		
2,4,6-Tribromophenol (S)	93	%		07/24/06 22:39	BET	118-79-6		
Date Extracted	07/21/06			07/21/06				
GC Semivolatiles								
Organochlorine Pesticides	Prep/Method: EPA 3535 / EPA 8081							
Aldrin	ND	ug/l	0.050	07/25/06 19:47	JEM	309-00-2		
alpha-BHC	ND	ug/l	0.050	07/25/06 19:47	JEM	319-84-6		
beta-BHC	ND	ug/l	0.050	07/25/06 19:47	JEM	319-85-7		
delta-BHC	ND	ug/l	0.10	07/25/06 19:47	JEM	319-86-8		
gamma-BHC (Lindane)	ND	ug/l	0.050	07/25/06 19:47	JEM	58-89-9		
Chlordane	ND	ug/l	0.50	07/25/06 19:47	JEM	57-74-9		
4,4'-DDD	ND	ug/l	0.10	07/25/06 19:47	JEM	72-54-8		
4,4'-DDE	ND	ug/l	0.10	07/25/06 19:47	JEM	72-55-9		
4,4'-DDT	ND	ug/l	0.10	07/25/06 19:47	JEM	50-29-3		
Dieldrin	ND	ug/l	0.10	07/25/06 19:47	JEM	60-57-1		

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Lab Project Number: 92123563
Client Project ID: NCDOT 34951.1.1 FCX

Lab Sample No: 927213751 Project Sample Number: 92123563-001 Date Collected: 07/19/06 12:45
Client Sample ID: TMW-1 Matrix: Water Date Received: 07/19/06 16:00

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Endosulfan I	ND	ug/l	0.10	07/25/06 19:47	JEM	959-98-8		
Endosulfan II	ND	ug/l	0.10	07/25/06 19:47	JEM	33213-65-9		
Endosulfan sulfate	ND	ug/l	0.10	07/25/06 19:47	JEM	1031-07-8		
Endrin	ND	ug/l	0.060	07/25/06 19:47	JEM	72-20-8		
Endrin aldehyde	ND	ug/l	0.10	07/25/06 19:47	JEM	7421-93-4		
Heptachlor	ND	ug/l	0.050	07/25/06 19:47	JEM	76-44-8		
Heptachlor epoxide	ND	ug/l	0.80	07/25/06 19:47	JEM	1024-57-3		
Methoxychlor	ND	ug/l	0.50	07/25/06 19:47	JEM	72-43-5		
Mirex	ND	ug/l	0.50	07/25/06 19:47	JEM	2385-85-5		
Toxaphene	ND	ug/l	1.0	07/25/06 19:47	JEM	8001-35-2		
Tetrachloro-m-xylene (S)	34	%		07/25/06 19:47	JEM	877-09-8		
Decachlorobiphenyl (S)	74	%		07/25/06 19:47	JEM	2051-24-3		
Date Extracted	07/20/06			07/20/06				
EPH in Water by Mass. Method	Prep/Method: EPA 3510 / EPH							
Acenaphthene	ND	ug/l	5.3	07/25/06 03:29	KBS	83-32-9		
Acenaphthylene	ND	ug/l	5.3	07/25/06 03:29	KBS	208-96-8		
Anthracene	ND	ug/l	5.3	07/25/06 03:29	KBS	120-12-7		
Aromatic, Adjusted (C11-C22)	ND	ug/l	110	07/25/06 03:29	KBS			
Benzo(k)fluoranthene	ND	ug/l	5.3	07/25/06 03:29	KBS	207-08-9		
Benzo(b)fluoranthene	ND	ug/l	5.3	07/25/06 03:29	KBS	205-99-2		
Benzo(a)anthracene	ND	ug/l	5.3	07/25/06 03:29	KBS	56-55-3		
Benzo(g,h,i)perylene	ND	ug/l	5.3	07/25/06 03:29	KBS	191-24-2		
Benzo(a)pyrene	ND	ug/l	5.3	07/25/06 03:29	KBS	50-32-8		
Chrysene	ND	ug/l	5.3	07/25/06 03:29	KBS	218-01-9		
Dibenz(a,h)anthracene	ND	ug/l	5.3	07/25/06 03:29	KBS	53-70-3		
Fluoranthene	ND	ug/l	5.3	07/25/06 03:29	KBS	206-44-0		
Fluorene	ND	ug/l	5.3	07/25/06 03:29	KBS	86-73-7		
Indeno(1,2,3-cd)pyrene	ND	ug/l	5.3	07/25/06 03:29	KBS	193-39-5		
2-Methylnaphthalene	ND	ug/l	5.3	07/25/06 03:29	KBS	91-57-6		
Naphthalene	ND	ug/l	5.3	07/25/06 03:29	KBS	91-20-3		
Phenanthrene	ND	ug/l	5.3	07/25/06 03:29	KBS	85-01-8		
Pyrene	ND	ug/l	5.3	07/25/06 03:29	KBS	129-00-0		
Aliphatic (C09-C18)	ND	ug/l	110	07/25/06 03:29	KBS			
Aliphatic (C19-C36)	110	ug/l	110	07/25/06 03:29	KBS			
Nonatriacontane (S)	71	%		07/25/06 03:29	KBS	7194-86-7		
o-Terphenyl (S)	121	%		07/25/06 03:29	KBS	84-15-1		
2-Fluorobiphenyl (S)	112	%		07/25/06 03:29	KBS	321-60-8		
2-Bromonaphthalene (S)	80	%		07/25/06 03:29	KBS	580-13-2		

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Client Sample ID: TMW-1 Matrix: Water Date Received: 07/19/06 16:00

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Date Extracted	07/21/06 12:00			07/21/06 12:00				
GC Volatiles								
VPH in Water by Mass. Method	Method: VPH							
Aliphatic, Adjusted (C5-C8)	ND	ug/l	100	07/21/06 04:56	DHW			
Aliphatic, Adjusted (C9-C12)	ND	ug/l	100	07/21/06 04:56	DHW			
Benzene	ND	ug/l	5.0	07/21/06 04:56	DHW	71-43-2		
Ethylbenzene	ND	ug/l	5.0	07/21/06 04:56	DHW	100-41-4		
Methyl-tert-butyl ether	ND	ug/l	15.	07/21/06 04:56	DHW	1634-04-4		
Naphthalene	ND	ug/l	10.	07/21/06 04:56	DHW	91-20-3		
Toluene	ND	ug/l	15.	07/21/06 04:56	DHW	108-88-3		
Aromatic (C09-C10)	ND	ug/l	100	07/21/06 04:56	DHW			
m&p-Xylene	ND	ug/l	20.	07/21/06 04:56	DHW			
o-Xylene	ND	ug/l	10.	07/21/06 04:56	DHW	95-47-6		
2,5-Dibromotoluene (PID)(S)	107	%		07/21/06 04:56	DHW			
2,5-Dibromotoluene (FID)(S)	102	%		07/21/06 04:56	DHW			
GC/MS Volatiles								
GC/MS VOCs by 8260, low level	Method: EPA 8260							
Acetone	ND	ug/l	25.	07/28/06 20:43	MSF	67-64-1		
Benzene	ND	ug/l	1.0	07/28/06 20:43	MSF	71-43-2		
Bromobenzene	ND	ug/l	1.0	07/28/06 20:43	MSF	108-86-1		
Bromochloromethane	ND	ug/l	1.0	07/28/06 20:43	MSF	74-97-5		
Bromodichloromethane	ND	ug/l	1.0	07/28/06 20:43	MSF	75-27-4		
Bromoform	ND	ug/l	1.0	07/28/06 20:43	MSF	75-25-2		
Bromomethane	ND	ug/l	1.0	07/28/06 20:43	MSF	74-83-9		
2-Butanone (MEK)	ND	ug/l	5.0	07/28/06 20:43	MSF	78-93-3		
n-Butylbenzene	ND	ug/l	1.0	07/28/06 20:43	MSF	104-51-8		
sec-Butylbenzene	ND	ug/l	1.0	07/28/06 20:43	MSF	135-98-8		
tert-Butylbenzene	ND	ug/l	1.0	07/28/06 20:43	MSF	98-06-6		
Carbon tetrachloride	ND	ug/l	1.0	07/28/06 20:43	MSF	56-23-5		
Chlorobenzene	ND	ug/l	1.0	07/28/06 20:43	MSF	108-90-7		
Chloroethane	ND	ug/l	1.0	07/28/06 20:43	MSF	75-00-3		
Chloroform	ND	ug/l	1.0	07/28/06 20:43	MSF	67-66-3		
Chloromethane	ND	ug/l	1.0	07/28/06 20:43	MSF	74-87-3		
2-Chlorotoluene	ND	ug/l	1.0	07/28/06 20:43	MSF	95-49-8		
4-Chlorotoluene	ND	ug/l	1.0	07/28/06 20:43	MSF	106-43-4		
1,2-Dibromo-3-chloropropane	ND	ug/l	1.0	07/28/06 20:43	MSF	96-12-8		
Dibromochloromethane	ND	ug/l	1.0	07/28/06 20:43	MSF	124-48-1		

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Lab Sample No: 927213751 Project Sample Number: 92123563-001 Date Collected: 07/19/06 12:45
Client Sample ID: TMW-1 Matrix: Water Date Received: 07/19/06 16:00

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
1,2-Dibromoethane (EDB)	ND	ug/l	1.0	07/28/06 20:43	MSF	106-93-4		
Dibromomethane	ND	ug/l	1.0	07/28/06 20:43	MSF	74-95-3		
1,2-Dichlorobenzene	ND	ug/l	1.0	07/28/06 20:43	MSF	95-50-1		
1,3-Dichlorobenzene	ND	ug/l	1.0	07/28/06 20:43	MSF	541-73-1		
1,4-Dichlorobenzene	ND	ug/l	1.0	07/28/06 20:43	MSF	106-46-7		
Dichlorodifluoromethane	ND	ug/l	1.0	07/28/06 20:43	MSF	75-71-8		
1,1-Dichloroethane	ND	ug/l	1.0	07/28/06 20:43	MSF	75-34-3		
1,2-Dichloroethane	ND	ug/l	1.0	07/28/06 20:43	MSF	107-06-2		
1,2-Dichloroethene (Total)	ND	ug/l	1.0	07/28/06 20:43	MSF	540-59-0		
1,1-Dichloroethene	ND	ug/l	1.0	07/28/06 20:43	MSF	75-35-4		
cis-1,2-Dichloroethene	ND	ug/l	1.0	07/28/06 20:43	MSF	156-59-2		
trans-1,2-Dichloroethene	ND	ug/l	1.0	07/28/06 20:43	MSF	156-60-5		
1,2-Dichloropropane	ND	ug/l	1.0	07/28/06 20:43	MSF	78-87-5		
1,3-Dichloropropane	ND	ug/l	1.0	07/28/06 20:43	MSF	142-28-9		
2,2-Dichloropropane	ND	ug/l	1.0	07/28/06 20:43	MSF	594-20-7		
1,1-Dichloropropene	ND	ug/l	1.0	07/28/06 20:43	MSF	563-58-6		
Diisopropyl ether	ND	ug/l	1.0	07/28/06 20:43	MSF	108-20-3		
Ethylbenzene	ND	ug/l	1.0	07/28/06 20:43	MSF	100-41-4		
Hexachloro-1,3-butadiene	ND	ug/l	1.0	07/28/06 20:43	MSF	87-68-3		
Isopropylbenzene (Cumene)	ND	ug/l	1.0	07/28/06 20:43	MSF	98-82-8		
p-Isopropyltoluene	ND	ug/l	1.0	07/28/06 20:43	MSF	99-87-6		
Methylene chloride	ND	ug/l	2.0	07/28/06 20:43	MSF	75-09-2		
Methyl-tert-butyl ether	ND	ug/l	1.0	07/28/06 20:43	MSF	1634-04-4		
Naphthalene	ND	ug/l	1.0	07/28/06 20:43	MSF	91-20-3		
n-Propylbenzene	ND	ug/l	1.0	07/28/06 20:43	MSF	103-65-1		
Styrene	ND	ug/l	1.0	07/28/06 20:43	MSF	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/l	1.0	07/28/06 20:43	MSF	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/l	1.0	07/28/06 20:43	MSF	79-34-5		
Tetrachloroethene	ND	ug/l	1.0	07/28/06 20:43	MSF	127-18-4		
Toluene	ND	ug/l	1.0	07/28/06 20:43	MSF	108-88-3		
1,2,3-Trichlorobenzene	ND	ug/l	1.0	07/28/06 20:43	MSF	87-61-6		
1,2,4-Trichlorobenzene	ND	ug/l	1.0	07/28/06 20:43	MSF	120-82-1		
1,1,1-Trichloroethane	ND	ug/l	1.0	07/28/06 20:43	MSF	71-55-6		
1,1,2-Trichloroethane	ND	ug/l	1.0	07/28/06 20:43	MSF	79-00-5		
Trichloroethene	ND	ug/l	1.0	07/28/06 20:43	MSF	79-01-6		
Trichlorofluoromethane	ND	ug/l	1.0	07/28/06 20:43	MSF	75-69-4		
1,2,3-Trichloropropane	ND	ug/l	1.0	07/28/06 20:43	MSF	96-18-4		
1,2,4-Trimethylbenzene	ND	ug/l	1.0	07/28/06 20:43	MSF	95-63-6		
1,3,5-Trimethylbenzene	ND	ug/l	1.0	07/28/06 20:43	MSF	108-67-8		

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Lab Project Number: 92123563
Client Project ID: NCDOT 34951.1.1 FCX

Lab Sample No: 927213751 **Project Sample Number: 92123563-001** **Date Collected: 07/19/06 12:45**
Client Sample ID: TMW-1 **Matrix: Water** **Date Received: 07/19/06 16:00**

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Vinyl chloride	ND	ug/l	1.0	07/28/06 20:43	MSF	75-01-4		
Xylene (Total)	ND	ug/l	1.0	07/28/06 20:43	MSF	1330-20-7		
m&p-Xylene	ND	ug/l	2.0	07/28/06 20:43	MSF			
o-Xylene	ND	ug/l	1.0	07/28/06 20:43	MSF	95-47-6		
Toluene-d8 (S)	97	%		07/28/06 20:43	MSF	2037-26-5		
4-Bromofluorobenzene (S)	98	%		07/28/06 20:43	MSF	460-00-4		
Dibromofluoromethane (S)	101	%		07/28/06 20:43	MSF	1868-53-7		
1,2-Dichloroethane-d4 (S)	105	%		07/28/06 20:43	MSF	17060-07-0		

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Lab Project Number: 92123563
Client Project ID: NCDOT 34951.1.1 FCX

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

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QUALITY CONTROL DATA

Lab Project Number: 92123563
Client Project ID: NCDOT 34951.1.1 FCX

QC Batch: 162587 Analysis Method: EPA 8081
QC Batch Method: EPA 3535 Analysis Description: Organochlorine Pesticides
Associated Lab Samples: 927213751

METHOD BLANK: 927215574
Associated Lab Samples: 927213751

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Aldrin	ug/l	ND	0.050	
alpha-BHC	ug/l	ND	0.050	
beta-BHC	ug/l	ND	0.050	
delta-BHC	ug/l	ND	0.10	
gamma-BHC (Lindane)	ug/l	ND	0.050	
Chlordane	ug/l	ND	0.50	
4,4'-DDD	ug/l	ND	0.10	
4,4'-DDE	ug/l	ND	0.10	
4,4'-DDT	ug/l	ND	0.10	
Dieldrin	ug/l	ND	0.10	
Endosulfan I	ug/l	ND	0.10	
Endosulfan II	ug/l	ND	0.10	
Endosulfan sulfate	ug/l	ND	0.10	
Endrin	ug/l	ND	0.060	
Endrin aldehyde	ug/l	ND	0.10	
Heptachlor	ug/l	ND	0.050	
Heptachlor epoxide	ug/l	ND	0.80	
Methoxychlor	ug/l	ND	0.50	
Mirex	ug/l	ND	0.50	
Toxaphene	ug/l	ND	1.0	
Tetrachloro-m-xylene (S)	%	50		
Decachlorobiphenyl (S)	%	52		

LABORATORY CONTROL SAMPLE: 927215582

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
alpha-BHC	ug/l	0.1600	0.1553	97	
gamma-BHC (Lindane)	ug/l	0.1600	0.1416	88	
Mirex	ug/l	0.4000	0.3264	82	

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QUALITY CONTROL DATA

Lab Project Number: 92123563
Client Project ID: NCDOT 34951.1.1 FCX

LABORATORY CONTROL SAMPLE: 927215582

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
beta-BHC	ug/l	0.1600	0.1044	65	
Heptachlor	ug/l	0.1600	0.1693	106	
delta-BHC	ug/l	0.1600	0.1566	98	
Aldrin	ug/l	0.1600	0.1208	76	
Heptachlor epoxide	ug/l	0.1600	0.1587	99	
Endosulfan I	ug/l	0.1600	0.2144	134	
4,4'-DDE	ug/l	0.1600	0.1255	78	
Dieldrin	ug/l	0.1600	0.1625	102	
Endrin	ug/l	0.1600	0.1768	110	
4,4'-DDD	ug/l	0.1600	0.1345	84	
Endosulfan II	ug/l	0.1600	0.1893	118	
4,4'-DDT	ug/l	0.1600	0.2644	165	1
Endrin aldehyde	ug/l	0.1600	0.1654	103	
Endosulfan sulfate	ug/l	0.1600	0.1572	98	
Methoxychlor	ug/l	0.4000	0.4312	108	
Decachlorobiphenyl (S)				104	
Tetrachloro-m-xylene (S)				60	

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QUALITY CONTROL DATA

Lab Project Number: 92123563
Client Project ID: NCDOT 34951.1.1 FCX

QC Batch: 162749 Analysis Method: EPH
QC Batch Method: EPA 3510 Analysis Description: EPH in Water by Mass. Method
Associated Lab Samples: 927213751

METHOD BLANK: 927222596
Associated Lab Samples: 927213751

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Acenaphthene	ug/l	ND	5.0	
Acenaphthylene	ug/l	ND	5.0	
Anthracene	ug/l	ND	5.0	
Aromatic, Adjusted (C11-C22)	ug/l	ND	100	
Benzo(k)fluoranthene	ug/l	ND	5.0	
Benzo(b)fluoranthene	ug/l	ND	5.0	
Benzo(a)anthracene	ug/l	ND	5.0	
Benzo(g,h,i)perylene	ug/l	ND	5.0	
Benzo(a)pyrene	ug/l	ND	5.0	
Chrysene	ug/l	ND	5.0	
Dibenz(a,h)anthracene	ug/l	ND	5.0	
Fluoranthene	ug/l	ND	5.0	
Fluorene	ug/l	ND	5.0	
Indeno(1,2,3-cd)pyrene	ug/l	ND	5.0	
2-Methylnaphthalene	ug/l	ND	5.0	
Naphthalene	ug/l	ND	5.0	
Phenanthrene	ug/l	ND	5.0	
Pyrene	ug/l	ND	5.0	
Aliphatic (C09-C18)	ug/l	ND	100	
Aliphatic (C19-C36)	ug/l	ND	100	
Nonatriacontane (S)	%	73		
o-Terphenyl (S)	%	87		
2-Fluorobiphenyl (S)	%	97		
2-Bromonaphthalene (S)	%	58		

LABORATORY CONTROL SAMPLE & LCSD: 927222604 927222612

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	RPD	Footnotes
Acenaphthene	ug/l	50.00	30.01	48.39	60	97	47	2

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QUALITY CONTROL DATA

Lab Project Number: 92123563
Client Project ID: NCDOT 34951.1.1 FCX

LABORATORY CONTROL SAMPLE & LCSD: 927222604 927222612

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	RPD	Footnotes
Acenaphthylene	ug/l	50.00	41.39	50.82	83	102	20	
Anthracene	ug/l	50.00	42.09	54.21	84	108	25	
Aromatic, Adjusted (C11-C22)	ug/l	850.00	729.3	886.0	86	104	19	
Benzo(k)fluoranthene	ug/l	50.00	47.82	52.77	96	106	10	
Benzo(b)fluoranthene	ug/l	50.00	48.99	54.45	98	109	11	
Benzo(a)anthracene	ug/l	50.00	49.28	55.77	99	112	12	
Benzo(g,h,i)perylene	ug/l	50.00	47.36	53.72	95	107	13	
Benzo(a)pyrene	ug/l	50.00	47.27	52.88	94	106	11	
Chrysene	ug/l	50.00	47.75	53.68	96	107	12	
Dibenz(a,h)anthracene	ug/l	50.00	51.21	57.53	102	115	12	
Fluoranthene	ug/l	50.00	47.70	57.73	95	115	19	
Fluorene	ug/l	50.00	44.08	57.97	88	116	27	
Indeno(1,2,3-cd)pyrene	ug/l	50.00	43.79	49.30	88	99	12	
2-Methylnaphthalene	ug/l	50.00	23.05	33.30	46	67	36	2
Naphthalene	ug/l	50.00	21.12	32.31	42	65	42	2
Phenanthrene	ug/l	50.00	46.04	62.34	92	125	30	
Pyrene	ug/l	50.00	44.83	55.13	90	110	21	
Aliphatic (C09-C18)	ug/l	300.00	188.5	171.2	63	57	10	
Aliphatic (C19-C36)	ug/l	400.00	330.4	320.0	83	80	3	
Nonatriacontane (S)					74	87		
o-Terphenyl (S)					72	114		
2-Fluorobiphenyl (S)					68	102		
2-Bromonaphthalene (S)					43	40		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 927222620 927222638

Parameter	Units	927205153 Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	RPD	Footnotes
Acenaphthene	ug/l	0.4144	100.00	69.86	71.34	69	71	2	
Acenaphthylene	ug/l	2.587	100.00	76.40	86.47	74	84	12	
Anthracene	ug/l	0.3835	100.00	88.80	94.15	88	94	6	
Aromatic, Adjusted (C11-C22)	ug/l	99.66	1700.00	1502	1580	82	87	5	
Benzo(k)fluoranthene	ug/l	1.085	100.00	96.29	98.81	95	98	3	
Benzo(b)fluoranthene	ug/l	0	100.00	96.70	101.5	97	102	5	
Benzo(a)anthracene	ug/l	0	100.00	98.42	103.5	98	104	5	
Benzo(g,h,i)perylene	ug/l	0	100.00	94.69	99.66	95	100	5	

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QUALITY CONTROL DATA

Lab Project Number: 92123563
Client Project ID: NCDOT 34951.1.1 FCX

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 927222620 927222638

Parameter	Units	927205153 Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	RPD	Footnotes
Benzo(a)pyrene	ug/l	1.374	100.00	94.04	100.3	93	99	6	
Chrysene	ug/l	0	100.00	95.09	99.36	95	99	4	
Dibenz(a,h)anthracene	ug/l	0	100.00	101.5	107.0	102	107	5	
Fluoranthene	ug/l	0.6388	100.00	96.42	105.4	96	105	9	
Fluorene	ug/l	0.4388	100.00	89.93	105.3	90	105	16	
Indeno(1,2,3-cd)pyrene	ug/l	0	100.00	87.37	92.16	87	92	5	
2-Methylnaphthalene	ug/l	0.4454	100.00	53.66	51.19	53	51	5	
Naphthalene	ug/l	0	100.00	58.10	45.89	58	46	23	
Phenanthrene	ug/l	0.4215	100.00	96.59	106.6	96	106	10	
Pyrene	ug/l	0	100.00	99.19	101.0	99	101	2	
Aliphatic (C09-C18)	ug/l	26.91	600.00	356.0	335.3	55	51	6	
Aliphatic (C19-C36)	ug/l	7.560	800.00	612.3	612.4	76	76	0	
Nonatriacontane (S)						88	80		
o-Terphenyl (S)						92	98		
2-Fluorobiphenyl (S)						75	78		
2-Bromonaphthalene (S)						47	44		

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QUALITY CONTROL DATA

Lab Project Number: 92123563
Client Project ID: NCDOT 34951.1.1 FCX

QC Batch: 162622 Analysis Method: VPH
QC Batch Method: VPH Analysis Description: VPH in Water by Mass. Method
Associated Lab Samples: 927213751

METHOD BLANK: 927217240
Associated Lab Samples: 927213751

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Aliphatic, Adjusted (C5-C8)	ug/l	ND	100	
Aliphatic, Adjusted (C9-C12)	ug/l	ND	100	
Benzene	ug/l	ND	5.0	
Ethylbenzene	ug/l	ND	5.0	
Methyl-tert-butyl ether	ug/l	ND	15.	
Naphthalene	ug/l	ND	10.	
Toluene	ug/l	ND	15.	
Aromatic (C09-C10)	ug/l	ND	100	
m&p-Xylene	ug/l	ND	20.	
o-Xylene	ug/l	ND	10.	
2,5-Dibromotoluene (PID)(S)	%	103		
2,5-Dibromotoluene (FID)(S)	%	103		

LABORATORY CONTROL SAMPLE & LCSD: 927217257 927217265

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	RPD	Footnotes
Aliphatic, Adjusted (C5-C8)	ug/l	400.00	421.5	421.7	105	105	0	
Aliphatic, Adjusted (C9-C12)	ug/l	100.00	109.2	107.0	109	107	2	
Benzene	ug/l	50.00	53.55	51.02	107	102	5	
Ethylbenzene	ug/l	50.00	51.21	51.53	102	103	1	
Methyl-tert-butyl ether	ug/l	150.00	149.2	150.1	100	100	1	
Naphthalene	ug/l	100.00	101.0	101.1	101	101	0	
Toluene	ug/l	150.00	157.6	158.5	105	106	1	
Aromatic (C09-C10)	ug/l	100.00	98.23	98.68	98	99	0	
m&p-Xylene	ug/l	200.00	215.9	218.7	108	109	1	
o-Xylene	ug/l	100.00	107.5	108.0	107	108	1	
2,5-Dibromotoluene (PID)(S)					113	118		
2,5-Dibromotoluene (FID)(S)					100	100		

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QUALITY CONTROL DATA

Lab Project Number: 92123563
Client Project ID: NCDOT 34951.1.1 FCX

SAMPLE DUPLICATE: 927217273

Parameter	Units	927212993 Result	DUP Result	RPD	Footnotes
Aliphatic, Adjusted (C5-C8)	ug/l	ND	ND	NC	
Aliphatic, Adjusted (C9-C12)	ug/l	ND	ND	NC	
Benzene	ug/l	ND	ND	NC	
Ethylbenzene	ug/l	ND	ND	NC	
Methyl-tert-butyl ether	ug/l	ND	ND	NC	
Naphthalene	ug/l	ND	ND	NC	
Toluene	ug/l	ND	ND	NC	
Aromatic (C09-C10)	ug/l	ND	ND	NC	
m&p-Xylene	ug/l	ND	ND	NC	
o-Xylene	ug/l	ND	ND	NC	
2,5-Dibromotoluene (PID)(S)	%	94	96		
2,5-Dibromotoluene (FID)(S)	%	91	105		

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QUALITY CONTROL DATA

Lab Project Number: 92123563
Client Project ID: NCDOT 34951.1.1 FCX

QC Batch: 162656 Analysis Method: EPA 8270
QC Batch Method: EPA 3510 Analysis Description: Semivolatile Organics
Associated Lab Samples: 927213751

METHOD BLANK: 927224949
Associated Lab Samples: 927213751

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Acenaphthene	ug/l	ND	10.	
Acenaphthylene	ug/l	ND	10.	
Aniline	ug/l	ND	10.	
Anthracene	ug/l	ND	10.	
Benzo(k)fluoranthene	ug/l	ND	10.	
Benzo(b)fluoranthene	ug/l	ND	10.	
Benzo(a)anthracene	ug/l	ND	10.	
Benzoic acid	ug/l	ND	50.	
Benzo(g,h,i)perylene	ug/l	ND	10.	
Benzyl alcohol	ug/l	ND	20.	
Benzo(a)pyrene	ug/l	ND	10.	
4-Bromophenylphenyl ether	ug/l	ND	10.	
Butylbenzylphthalate	ug/l	ND	10.	
4-Chloro-3-methylphenol	ug/l	ND	20.	
4-Chloroaniline	ug/l	ND	20.	
bis(2-Chloroethoxy)methane	ug/l	ND	10.	
bis(2-Chloroethyl) ether	ug/l	ND	10.	
bis(2-Chloroisopropyl) ether	ug/l	ND	10.	
2-Chloronaphthalene	ug/l	ND	10.	
2-Chlorophenol	ug/l	ND	10.	
4-Chlorophenylphenyl ether	ug/l	ND	10.	
Chrysene	ug/l	ND	10.	
Dibenz(a,h)anthracene	ug/l	ND	10.	
Dibenzofuran	ug/l	ND	10.	
1,2-Dichlorobenzene	ug/l	ND	10.	
1,3-Dichlorobenzene	ug/l	ND	10.	
1,4-Dichlorobenzene	ug/l	ND	10.	
3,3'-Dichlorobenzidine	ug/l	ND	20.	
2,4-Dichlorophenol	ug/l	ND	10.	
Diethylphthalate	ug/l	ND	10.	
2,4-Dimethylphenol	ug/l	ND	10.	

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QUALITY CONTROL DATA

Lab Project Number: 92123563
Client Project ID: NCDOT 34951.1.1 FCX

METHOD BLANK: 927224949
Associated Lab Samples: 927213751

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Dimethylphthalate	ug/l	ND	10.	
Di-n-butylphthalate	ug/l	ND	10.	
4,6-Dinitro-2-methylphenol	ug/l	ND	50.	
2,4-Dinitrophenol	ug/l	ND	50.	
2,4-Dinitrotoluene	ug/l	ND	10.	
2,6-Dinitrotoluene	ug/l	ND	10.	
Di-n-octylphthalate	ug/l	ND	10.	
1,2-Diphenylhydrazine	ug/l	ND	20.	
bis(2-Ethylhexyl)phthalate	ug/l	ND	10.	
Fluoranthene	ug/l	ND	10.	
Fluorene	ug/l	ND	10.	
Hexachloro-1,3-butadiene	ug/l	ND	10.	
Hexachlorobenzene	ug/l	ND	10.	
Hexachlorocyclopentadiene	ug/l	ND	10.	
Hexachloroethane	ug/l	ND	10.	
Indeno(1,2,3-cd)pyrene	ug/l	ND	10.	
Isophorone	ug/l	ND	10.	
1-Methylnaphthalene	ug/l	ND	10.	
2-Methylnaphthalene	ug/l	ND	10.	
2-Methylphenol (o-Cresol)	ug/l	ND	10.	
3&4-Methylphenol	ug/l	ND	10.	
Naphthalene	ug/l	ND	10.	
2-Nitroaniline	ug/l	ND	50.	
3-Nitroaniline	ug/l	ND	50.	
4-Nitroaniline	ug/l	ND	50.	
Nitrobenzene	ug/l	ND	10.	
2-Nitrophenol	ug/l	ND	10.	
4-Nitrophenol	ug/l	ND	50.	
N-Nitrosodimethylamine	ug/l	ND	10.	
N-Nitroso-di-n-propylamine	ug/l	ND	10.	
N-Nitrosodiphenylamine	ug/l	ND	10.	
Pentachlorophenol	ug/l	ND	50.	
Phenanthrene	ug/l	ND	10.	
Phenol	ug/l	ND	10.	
Pyrene	ug/l	ND	10.	
1,2,4-Trichlorobenzene	ug/l	ND	10.	

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QUALITY CONTROL DATA

Lab Project Number: 92123563
Client Project ID: NCDOT 34951.1.1 FCX

METHOD BLANK: 927224949
Associated Lab Samples: 927213751

Parameter	Units	Blank Result	Reporting Limit	Footnotes
2,4,5-Trichlorophenol	ug/l	ND	50.	
2,4,6-Trichlorophenol	ug/l	ND	10.	
Nitrobenzene-d5 (S)	%	26		
2-Fluorobiphenyl (S)	%	32		
Terphenyl-d14 (S)	%	39		
Phenol-d5 (S)	%	12		
2-Fluorophenol (S)	%	23		
2,4,6-Tribromophenol (S)	%	50		

LABORATORY CONTROL SAMPLE: 927219501

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Acenaphthene	ug/l	50.00	37.95	76	
Acenaphthylene	ug/l	50.00	38.68	77	
Aniline	ug/l	50.00	51.60	103	
Anthracene	ug/l	50.00	43.64	87	
Benzo(k)fluoranthene	ug/l	50.00	40.18	80	
Benzo(b)fluoranthene	ug/l	50.00	38.24	76	
Benzo(a)anthracene	ug/l	50.00	42.09	84	
Benzoic acid	ug/l	50.00	10.95	22	
Benzo(g,h,i)perylene	ug/l	50.00	40.31	81	
Benzyl alcohol	ug/l	50.00	29.32	59	
Benzo(a)pyrene	ug/l	50.00	45.72	91	
4-Bromophenylphenyl ether	ug/l	50.00	41.71	83	
Butylbenzylphthalate	ug/l	50.00	44.96	90	
4-Chloro-3-methylphenol	ug/l	50.00	39.56	79	
4-Chloroaniline	ug/l	50.00	53.33	107	
bis(2-Chloroethoxy)methane	ug/l	50.00	32.32	65	
bis(2-Chloroethyl) ether	ug/l	50.00	29.16	58	
bis(2-Chloroisopropyl) ether	ug/l	50.00	28.73	58	
2-Chloronaphthalene	ug/l	50.00	35.60	71	
2-Chlorophenol	ug/l	50.00	29.83	60	
4-Chlorophenylphenyl ether	ug/l	50.00	40.14	80	
Chrysene	ug/l	50.00	41.37	83	

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QUALITY CONTROL DATA

Lab Project Number: 92123563
Client Project ID: NCDOT 34951.1.1 FCX

LABORATORY CONTROL SAMPLE: 927219501

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Dibenz(a,h)anthracene	ug/l	50.00	41.51	83	
Dibenzofuran	ug/l	50.00	40.49	81	
1,2-Dichlorobenzene	ug/l	50.00	25.69	51	
1,3-Dichlorobenzene	ug/l	50.00	23.81	48	
1,4-Dichlorobenzene	ug/l	50.00	25.00	50	
3,3'-Dichlorobenzidine	ug/l	100.00	35.81	36	
2,4-Dichlorophenol	ug/l	50.00	34.08	68	
Diethylphthalate	ug/l	50.00	42.82	86	
2,4-Dimethylphenol	ug/l	50.00	31.25	62	
Dimethylphthalate	ug/l	50.00	42.05	84	
Di-n-butylphthalate	ug/l	50.00	45.28	91	
4,6-Dinitro-2-methylphenol	ug/l	50.00	45.55	91	
2,4-Dinitrophenol	ug/l	50.00	36.14	72	
2,4-Dinitrotoluene	ug/l	50.00	43.74	88	
2,6-Dinitrotoluene	ug/l	50.00	41.64	83	
Di-n-octylphthalate	ug/l	50.00	43.84	88	
1,2-Diphenylhydrazine	ug/l	50.00	35.84	72	
bis(2-Ethylhexyl)phthalate	ug/l	50.00	44.02	88	
Fluoranthene	ug/l	50.00	41.43	83	
Fluorene	ug/l	50.00	39.80	80	
Hexachloro-1,3-butadiene	ug/l	50.00	22.03	44	
Hexachlorobenzene	ug/l	50.00	42.66	85	
Hexachlorocyclopentadiene	ug/l	50.00	15.73	32	
Hexachloroethane	ug/l	50.00	22.14	44	
Indeno(1,2,3-cd)pyrene	ug/l	50.00	40.06	80	
Isophorone	ug/l	50.00	58.97	118	
1-Methylnaphthalene	ug/l	50.00	35.82	72	
2-Methylnaphthalene	ug/l	50.00	32.28	65	
2-Methylphenol (o-Cresol)	ug/l	50.00	28.77	58	
3&4-Methylphenol	ug/l	50.00	27.94	56	
Naphthalene	ug/l	50.00	29.16	58	
2-Nitroaniline	ug/l	50.00	38.96	78	
3-Nitroaniline	ug/l	50.00	48.37	97	
4-Nitroaniline	ug/l	50.00	78.22	156	1
Nitrobenzene	ug/l	50.00	33.40	67	
2-Nitrophenol	ug/l	50.00	33.14	66	
4-Nitrophenol	ug/l	50.00	21.60	43	

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QUALITY CONTROL DATA

Lab Project Number: 92123563
Client Project ID: NCDOT 34951.1.1 FCX

LABORATORY CONTROL SAMPLE: 927219501

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
N-Nitrosodimethylamine	ug/l	50.00	5.803	12	
N-Nitroso-di-n-propylamine	ug/l	50.00	30.40	61	
N-Nitrosodiphenylamine	ug/l	50.00	55.20	110	
Pentachlorophenol	ug/l	50.00	41.82	84	
Phenanthrene	ug/l	50.00	42.34	85	
Phenol	ug/l	50.00	15.62	31	
Pyrene	ug/l	50.00	42.51	85	
1,2,4-Trichlorobenzene	ug/l	50.00	26.84	54	
2,4,5-Trichlorophenol	ug/l	50.00	38.49	77	
2,4,6-Trichlorophenol	ug/l	50.00	38.90	78	
Nitrobenzene-d5 (S)				60	
2-Fluorobiphenyl (S)				65	
Terphenyl-d14 (S)				80	
Phenol-d5 (S)				28	
2-Fluorophenol (S)				40	
2,4,6-Tribromophenol (S)				86	

LABORATORY CONTROL SAMPLE: 927224956

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Acenaphthene	ug/l	50.00	33.17	66	
Acenaphthylene	ug/l	50.00	34.57	69	
Aniline	ug/l	50.00	37.21	74	
Anthracene	ug/l	50.00	34.22	68	
Benzo(k)fluoranthene	ug/l	50.00	33.50	67	
Benzo(b)fluoranthene	ug/l	50.00	27.76	56	
Benzo(a)anthracene	ug/l	50.00	32.22	64	
Benzoic acid	ug/l	50.00	3.645	7	3
Benzo(g,h,i)perylene	ug/l	50.00	32.73	66	
Benzyl alcohol	ug/l	50.00	37.23	74	
Benzo(a)pyrene	ug/l	50.00	35.90	72	
4-Bromophenylphenyl ether	ug/l	50.00	43.81	88	
Butylbenzylphthalate	ug/l	50.00	27.93	56	
4-Chloro-3-methylphenol	ug/l	50.00	29.24	58	
4-Chloroaniline	ug/l	50.00	44.47	89	

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QUALITY CONTROL DATA

Lab Project Number: 92123563
Client Project ID: NCDOT 34951.1.1 FCX

LABORATORY CONTROL SAMPLE: 927224956

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
bis(2-Chloroethoxy)methane	ug/l	50.00	28.34	57	
bis(2-Chloroethyl) ether	ug/l	50.00	38.18	76	
bis(2-Chloroisopropyl) ether	ug/l	50.00	82.55	165	1
2-Chloronaphthalene	ug/l	50.00	35.25	70	
2-Chlorophenol	ug/l	50.00	40.44	81	
4-Chlorophenylphenyl ether	ug/l	50.00	39.58	79	
Chrysene	ug/l	50.00	33.35	67	
Dibenz(a,h)anthracene	ug/l	50.00	29.97	60	
Dibenzofuran	ug/l	50.00	34.62	69	
1,2-Dichlorobenzene	ug/l	50.00	32.60	65	
1,3-Dichlorobenzene	ug/l	50.00	30.22	60	
1,4-Dichlorobenzene	ug/l	50.00	31.82	64	
3,3'-Dichlorobenzidine	ug/l	100.00	29.54	30	
2,4-Dichlorophenol	ug/l	50.00	25.56	51	
Diethylphthalate	ug/l	50.00	36.23	72	
2,4-Dimethylphenol	ug/l	50.00	24.17	48	
Dimethylphthalate	ug/l	50.00	34.67	69	
Di-n-butylphthalate	ug/l	50.00	35.24	70	
4,6-Dinitro-2-methylphenol	ug/l	50.00	38.75	78	
2,4-Dinitrophenol	ug/l	50.00	28.31	57	
2,4-Dinitrotoluene	ug/l	50.00	37.37	75	
2,6-Dinitrotoluene	ug/l	50.00	37.34	75	
Di-n-octylphthalate	ug/l	50.00	26.63	53	
1,2-Diphenylhydrazine	ug/l	50.00	33.70	67	
bis(2-Ethylhexyl)phthalate	ug/l	50.00	23.70	47	
Fluoranthene	ug/l	50.00	37.21	74	
Fluorene	ug/l	50.00	33.08	66	
Hexachloro-1,3-butadiene	ug/l	50.00	22.64	45	
Hexachlorobenzene	ug/l	50.00	47.86	96	
Hexachlorocyclopentadiene	ug/l	50.00	44.50	89	
Hexachloroethane	ug/l	50.00	31.48	63	
Indeno(1,2,3-cd)pyrene	ug/l	50.00	31.42	63	
Isophorone	ug/l	50.00	46.15	92	
1-Methylnaphthalene	ug/l	50.00	24.62	49	
2-Methylnaphthalene	ug/l	50.00	24.63	49	
2-Methylphenol (o-Cresol)	ug/l	50.00	35.99	72	
3&4-Methylphenol	ug/l	50.00	32.42	65	

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QUALITY CONTROL DATA

Lab Project Number: 92123563
Client Project ID: NCDOT 34951.1.1 FCX

LABORATORY CONTROL SAMPLE: 927224956

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Naphthalene	ug/l	50.00	28.16	56	
2-Nitroaniline	ug/l	50.00	39.50	79	
3-Nitroaniline	ug/l	50.00	42.41	85	
4-Nitroaniline	ug/l	50.00	40.98	82	
Nitrobenzene	ug/l	50.00	28.68	57	
2-Nitrophenol	ug/l	50.00	28.05	56	
4-Nitrophenol	ug/l	50.00	10.60	21	
N-Nitrosodimethylamine	ug/l	50.00	32.17	64	
N-Nitroso-di-n-propylamine	ug/l	50.00	38.65	77	
N-Nitrosodiphenylamine	ug/l	50.00	36.65	73	
Pentachlorophenol	ug/l	50.00	52.61	105	
Phenanthrene	ug/l	50.00	33.22	66	
Phenol	ug/l	50.00	17.46	35	
Pyrene	ug/l	50.00	27.27	54	
1,2,4-Trichlorobenzene	ug/l	50.00	24.06	48	
2,4,5-Trichlorophenol	ug/l	50.00	39.39	79	
2,4,6-Trichlorophenol	ug/l	50.00	36.19	72	
Nitrobenzene-d5 (S)				50	
2-Fluorobiphenyl (S)				67	
Terphenyl-d14 (S)				63	
Phenol-d5 (S)				32	
2-Fluorophenol (S)				52	
2,4,6-Tribromophenol (S)				90	

LABORATORY CONTROL SAMPLE: 927226902

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Acenaphthene	ug/l	50.00	39.41	79	
Acenaphthylene	ug/l	50.00	42.13	84	
Aniline	ug/l	50.00	33.12	66	
Anthracene	ug/l	50.00	44.44	89	
Benzo(k)fluoranthene	ug/l	50.00	40.70	81	
Benzo(b)fluoranthene	ug/l	50.00	40.88	82	
Benzo(a)anthracene	ug/l	50.00	43.30	87	
Benzoic acid	ug/l	50.00	1.466	3	3

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QUALITY CONTROL DATA

Lab Project Number: 92123563
Client Project ID: NCDOT 34951.1.1 FCX

LABORATORY CONTROL SAMPLE: 927226902

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Benzo(g,h,i)perylene	ug/l	50.00	46.05	92	
Benzyl alcohol	ug/l	50.00	38.62	77	
Benzo(a)pyrene	ug/l	50.00	47.57	95	
4-Bromophenylphenyl ether	ug/l	50.00	58.23	116	
Butylbenzylphthalate	ug/l	50.00	35.88	72	
4-Chloro-3-methylphenol	ug/l	50.00	37.58	75	
4-Chloroaniline	ug/l	50.00	48.87	98	
bis(2-Chloroethoxy)methane	ug/l	50.00	29.30	59	
bis(2-Chloroethyl) ether	ug/l	50.00	36.40	73	
bis(2-Chloroisopropyl) ether	ug/l	50.00	78.09	156	1
2-Chloronaphthalene	ug/l	50.00	38.80	78	
2-Chlorophenol	ug/l	50.00	37.32	75	
4-Chlorophenylphenyl ether	ug/l	50.00	51.14	102	
Chrysene	ug/l	50.00	45.57	91	
Dibenz(a,h)anthracene	ug/l	50.00	42.94	86	
Dibenzofuran	ug/l	50.00	43.58	87	
1,2-Dichlorobenzene	ug/l	50.00	31.82	64	
1,3-Dichlorobenzene	ug/l	50.00	30.27	60	
1,4-Dichlorobenzene	ug/l	50.00	29.97	60	
3,3'-Dichlorobenzidine	ug/l	100.00	42.04	42	
2,4-Dichlorophenol	ug/l	50.00	26.81	54	
Diethylphthalate	ug/l	50.00	46.37	93	
2,4-Dimethylphenol	ug/l	50.00	27.37	55	
Dimethylphthalate	ug/l	50.00	46.10	92	
Di-n-butylphthalate	ug/l	50.00	46.07	92	
4,6-Dinitro-2-methylphenol	ug/l	50.00	15.90	32	
2,4-Dinitrophenol	ug/l	50.00	5.656	11	
2,4-Dinitrotoluene	ug/l	50.00	50.75	101	
2,6-Dinitrotoluene	ug/l	50.00	50.86	102	
Di-n-octylphthalate	ug/l	50.00	35.91	72	
1,2-Diphenylhydrazine	ug/l	50.00	40.90	82	
bis(2-Ethylhexyl)phthalate	ug/l	50.00	29.40	59	
Fluoranthene	ug/l	50.00	47.96	96	
Fluorene	ug/l	50.00	42.55	85	
Hexachloro-1,3-butadiene	ug/l	50.00	22.16	44	
Hexachlorobenzene	ug/l	50.00	54.21	108	
Hexachlorocyclopentadiene	ug/l	50.00	46.54	93	

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QUALITY CONTROL DATA

Lab Project Number: 92123563
Client Project ID: NCDOT 34951.1.1 FCX

LABORATORY CONTROL SAMPLE: 927226902

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Hexachloroethane	ug/l	50.00	30.67	61	
Indeno(1,2,3-cd)pyrene	ug/l	50.00	44.11	88	
Isophorone	ug/l	50.00	51.34	103	
1-Methylnaphthalene	ug/l	50.00	26.21	52	
2-Methylnaphthalene	ug/l	50.00	25.76	52	
2-Methylphenol (o-Cresol)	ug/l	50.00	35.23	70	
3&4-Methylphenol	ug/l	50.00	33.23	66	
Naphthalene	ug/l	50.00	27.60	55	
2-Nitroaniline	ug/l	50.00	51.61	103	
3-Nitroaniline	ug/l	50.00	60.32	121	
4-Nitroaniline	ug/l	50.00	60.31	121	
Nitrobenzene	ug/l	50.00	27.77	56	
2-Nitrophenol	ug/l	50.00	25.87	52	
4-Nitrophenol	ug/l	50.00	8.840	18	
N-Nitrosodimethylamine	ug/l	50.00	32.39	65	
N-Nitroso-di-n-propylamine	ug/l	50.00	38.60	77	
N-Nitrosodiphenylamine	ug/l	50.00	47.58	95	
Pentachlorophenol	ug/l	50.00	11.36	23	
Phenanthrene	ug/l	50.00	42.69	85	
Phenol	ug/l	50.00	16.81	34	
Pyrene	ug/l	50.00	37.33	75	
1,2,4-Trichlorobenzene	ug/l	50.00	24.03	48	
2,4,5-Trichlorophenol	ug/l	50.00	42.66	85	
2,4,6-Trichlorophenol	ug/l	50.00	30.24	60	
Nitrobenzene-d5 (S)				50	
2-Fluorobiphenyl (S)				73	
Terphenyl-d14 (S)				83	
Phenol-d5 (S)				30	
2-Fluorophenol (S)				38	
2,4,6-Tribromophenol (S)				97	

LABORATORY CONTROL SAMPLE: 927230284

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Acenaphthene	ug/l	50.00	34.63	69	

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QUALITY CONTROL DATA

Lab Project Number: 92123563
Client Project ID: NCDOT 34951.1.1 FCX

LABORATORY CONTROL SAMPLE: 927230284

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Acenaphthylene	ug/l	50.00	36.22	72	
Aniline	ug/l	50.00	27.01	54	
Anthracene	ug/l	50.00	36.51	73	
Benzo(k)fluoranthene	ug/l	50.00	36.56	73	
Benzo(b)fluoranthene	ug/l	50.00	31.64	63	
Benzo(a)anthracene	ug/l	50.00	36.21	72	
Benzoic acid	ug/l	50.00	2.676	5	3
Benzo(g,h,i)perylene	ug/l	50.00	29.59	59	
Benzyl alcohol	ug/l	50.00	32.71	65	
Benzo(a)pyrene	ug/l	50.00	39.53	79	
4-Bromophenylphenyl ether	ug/l	50.00	47.57	95	
Butylbenzylphthalate	ug/l	50.00	31.23	62	
4-Chloro-3-methylphenol	ug/l	50.00	30.04	60	
4-Chloroaniline	ug/l	50.00	44.31	89	
bis(2-Chloroethoxy)methane	ug/l	50.00	27.70	55	
bis(2-Chloroethyl) ether	ug/l	50.00	30.17	60	
bis(2-Chloroisopropyl) ether	ug/l	50.00	61.56	123	
2-Chloronaphthalene	ug/l	50.00	34.74	70	
2-Chlorophenol	ug/l	50.00	25.58	51	
4-Chlorophenylphenyl ether	ug/l	50.00	42.91	86	
Chrysene	ug/l	50.00	37.13	74	
Dibenz(a,h)anthracene	ug/l	50.00	30.85	62	
Dibenzofuran	ug/l	50.00	36.89	74	
1,2-Dichlorobenzene	ug/l	50.00	24.62	49	
1,3-Dichlorobenzene	ug/l	50.00	22.70	45	
1,4-Dichlorobenzene	ug/l	50.00	23.04	46	
3,3'-Dichlorobenzidine	ug/l	100.00	30.42	30	
2,4-Dichlorophenol	ug/l	50.00	19.29	39	
Diethylphthalate	ug/l	50.00	39.60	79	
2,4-Dimethylphenol	ug/l	50.00	23.47	47	
Dimethylphthalate	ug/l	50.00	38.50	77	
Di-n-butylphthalate	ug/l	50.00	37.80	76	
4,6-Dinitro-2-methylphenol	ug/l	50.00	7.832	16	3
2,4-Dinitrophenol	ug/l	50.00	5.436	11	
2,4-Dinitrotoluene	ug/l	50.00	42.32	85	
2,6-Dinitrotoluene	ug/l	50.00	42.00	84	
Di-n-octylphthalate	ug/l	50.00	30.16	60	

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QUALITY CONTROL DATA

Lab Project Number: 92123563
Client Project ID: NCDOT 34951.1.1 FCX

LABORATORY CONTROL SAMPLE: 927230284

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
1,2-Diphenylhydrazine	ug/l	50.00	33.74	68	
bis(2-Ethylhexyl)phthalate	ug/l	50.00	25.79	52	
Fluoranthene	ug/l	50.00	39.06	78	
Fluorene	ug/l	50.00	36.25	72	
Hexachloro-1,3-butadiene	ug/l	50.00	16.45	33	
Hexachlorobenzene	ug/l	50.00	49.62	99	
Hexachlorocyclopentadiene	ug/l	50.00	31.88	64	
Hexachloroethane	ug/l	50.00	21.80	44	
Indeno(1,2,3-cd)pyrene	ug/l	50.00	31.46	63	
Isophorone	ug/l	50.00	46.21	92	
1-Methylnaphthalene	ug/l	50.00	24.20	48	
2-Methylnaphthalene	ug/l	50.00	23.61	47	
2-Methylphenol (o-Cresol)	ug/l	50.00	30.77	62	
3&4-Methylphenol	ug/l	50.00	28.30	57	
Naphthalene	ug/l	50.00	24.58	49	
2-Nitroaniline	ug/l	50.00	43.98	88	
3-Nitroaniline	ug/l	50.00	49.47	99	
4-Nitroaniline	ug/l	50.00	47.61	95	
Nitrobenzene	ug/l	50.00	24.50	49	
2-Nitrophenol	ug/l	50.00	19.16	38	
4-Nitrophenol	ug/l	50.00	7.050	14	
N-Nitrosodimethylamine	ug/l	50.00	24.66	49	
N-Nitroso-di-n-propylamine	ug/l	50.00	36.23	72	
N-Nitrosodiphenylamine	ug/l	50.00	38.84	78	
Pentachlorophenol	ug/l	50.00	11.97	24	
Phenanthrene	ug/l	50.00	34.99	70	
Phenol	ug/l	50.00	12.23	24	
Pyrene	ug/l	50.00	31.09	62	
1,2,4-Trichlorobenzene	ug/l	50.00	19.09	38	
2,4,5-Trichlorophenol	ug/l	50.00	27.58	55	
2,4,6-Trichlorophenol	ug/l	50.00	17.51	35	
Nitrobenzene-d5 (S)				47	
2-Fluorobiphenyl (S)				72	
Terphenyl-d14 (S)				76	
Phenol-d5 (S)				25	
2-Fluorophenol (S)				24	
2,4,6-Tribromophenol (S)				70	

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QUALITY CONTROL DATA

Lab Project Number: 92123563
Client Project ID: NCDOT 34951.1.1 FCX

LABORATORY CONTROL SAMPLE: 927235655

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Acenaphthene	ug/l	50.00	38.91	78	
Acenaphthylene	ug/l	50.00	42.63	85	
Aniline	ug/l	50.00	38.99	78	
Anthracene	ug/l	50.00	42.08	84	
Benzo(k)fluoranthene	ug/l	50.00	51.67	103	
Benzo(b)fluoranthene	ug/l	50.00	52.65	105	
Benzo(a)anthracene	ug/l	50.00	41.55	83	
Benzoic acid	ug/l	50.00	15.87	32	
Benzo(g,h,i)perylene	ug/l	50.00	25.38	51	
Benzyl alcohol	ug/l	50.00	42.45	85	
Benzo(a)pyrene	ug/l	50.00	50.18	100	
4-Bromophenylphenyl ether	ug/l	50.00	55.08	110	
Butylbenzylphthalate	ug/l	50.00	41.18	82	
4-Chloro-3-methylphenol	ug/l	50.00	37.30	75	
4-Chloroaniline	ug/l	50.00	52.49	105	
bis(2-Chloroethoxy)methane	ug/l	50.00	36.11	72	
bis(2-Chloroethyl) ether	ug/l	50.00	43.22	86	
bis(2-Chloroisopropyl) ether	ug/l	50.00	90.88	182	1
2-Chloronaphthalene	ug/l	50.00	40.26	80	
2-Chlorophenol	ug/l	50.00	45.33	91	
4-Chlorophenylphenyl ether	ug/l	50.00	48.27	96	
Chrysene	ug/l	50.00	42.44	85	
Dibenz(a,h)anthracene	ug/l	50.00	26.79	54	
Dibenzofuran	ug/l	50.00	41.65	83	
1,2-Dichlorobenzene	ug/l	50.00	34.35	69	
1,3-Dichlorobenzene	ug/l	50.00	30.75	62	
1,4-Dichlorobenzene	ug/l	50.00	31.95	64	
3,3'-Dichlorobenzidine	ug/l	100.00	27.58	28	
2,4-Dichlorophenol	ug/l	50.00	31.68	63	
Diethylphthalate	ug/l	50.00	44.07	88	
2,4-Dimethylphenol	ug/l	50.00	28.36	57	
Dimethylphthalate	ug/l	50.00	43.86	88	
Di-n-butylphthalate	ug/l	50.00	48.63	97	
4,6-Dinitro-2-methylphenol	ug/l	50.00	16.39	33	
2,4-Dinitrophenol	ug/l	50.00	9.513	19	
2,4-Dinitrotoluene	ug/l	50.00	46.78	94	
2,6-Dinitrotoluene	ug/l	50.00	48.43	97	

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QUALITY CONTROL DATA

Lab Project Number: 92123563
Client Project ID: NCDOT 34951.1.1 FCX

LABORATORY CONTROL SAMPLE: 927235655

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Di-n-octylphthalate	ug/l	50.00	33.89	68	
1,2-Diphenylhydrazine	ug/l	50.00	37.39	75	
bis(2-Ethylhexyl)phthalate	ug/l	50.00	31.42	63	
Fluoranthene	ug/l	50.00	44.46	89	
Fluorene	ug/l	50.00	40.69	81	
Hexachloro-1,3-butadiene	ug/l	50.00	20.91	42	
Hexachlorobenzene	ug/l	50.00	57.75	116	
Hexachlorocyclopentadiene	ug/l	50.00	7.562	15	
Hexachloroethane	ug/l	50.00	28.84	58	
Indeno(1,2,3-cd)pyrene	ug/l	50.00	29.12	58	
Isophorone	ug/l	50.00	56.93	114	
1-Methylnaphthalene	ug/l	50.00	28.64	57	
2-Methylnaphthalene	ug/l	50.00	28.48	57	
2-Methylphenol (o-Cresol)	ug/l	50.00	32.22	64	
3&4-Methylphenol	ug/l	50.00	40.00	80	
Naphthalene	ug/l	50.00	31.14	62	
2-Nitroaniline	ug/l	50.00	54.05	108	
3-Nitroaniline	ug/l	50.00	57.85	116	
4-Nitroaniline	ug/l	50.00	55.30	111	
Nitrobenzene	ug/l	50.00	30.53	61	
2-Nitrophenol	ug/l	50.00	32.45	65	
4-Nitrophenol	ug/l	50.00	17.64	35	
N-Nitrosodimethylamine	ug/l	50.00	35.75	72	
N-Nitroso-di-n-propylamine	ug/l	50.00	44.13	88	
N-Nitrosodiphenylamine	ug/l	50.00	45.40	91	
Pentachlorophenol	ug/l	50.00	56.53	113	
Phenanthrene	ug/l	50.00	40.55	81	
Phenol	ug/l	50.00	24.65	49	
Pyrene	ug/l	50.00	40.46	81	
1,2,4-Trichlorobenzene	ug/l	50.00	24.80	50	
2,4,5-Trichlorophenol	ug/l	50.00	38.74	78	
2,4,6-Trichlorophenol	ug/l	50.00	41.19	82	
Nitrobenzene-d5 (S)				59	
2-Fluorobiphenyl (S)				83	
Terphenyl-d14 (S)				98	
Phenol-d5 (S)				42	
2-Fluorophenol (S)				61	
2,4,6-Tribromophenol (S)				115	4

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QUALITY CONTROL DATA

Lab Project Number: 92123563
Client Project ID: NCDOT 34951.1.1 FCX

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 927219519 927219527

Parameter	Units	927205153 Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	RPD	Footnotes
Acenaphthene	ug/l	0	100.00	68.92	67.90	69	68	1	
4-Chloro-3-methylphenol	ug/l	0	100.00	71.69	67.57	72	68	6	
2-Chlorophenol	ug/l	0	100.00	64.51	62.96	64	63	2	
1,4-Dichlorobenzene	ug/l	0	100.00	44.58	44.12	45	44	1	
2,4-Dinitrotoluene	ug/l	0	100.00	88.67	84.54	89	84	5	
4-Nitrophenol	ug/l	0	100.00	18.96	14.97	19	15	23	
N-Nitroso-di-n-propylamine	ug/l	0	100.00	67.93	63.44	68	63	7	
Pentachlorophenol	ug/l	0	100.00	51.46	45.01	52	45	13	
Phenol	ug/l	0	100.00	28.46	28.49	28	28	0	
Pyrene	ug/l	0	100.00	89.67	89.94	90	90	0	
1,2,4-Trichlorobenzene	ug/l	0	100.00	37.35	36.49	37	36	2	
Nitrobenzene-d5 (S)						44	44		
2-Fluorobiphenyl (S)						64	62		
Terphenyl-d14 (S)						108	107		
Phenol-d5 (S)						28	28		
2-Fluorophenol (S)						43	41		
2,4,6-Tribromophenol (S)						73	69		

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QUALITY CONTROL DATA

Lab Project Number: 92123563
Client Project ID: NCDOT 34951.1.1 FCX

QC Batch: 163557 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: GC/MS VOCs by 8260, low level
Associated Lab Samples: 927213751

METHOD BLANK: 927252049
Associated Lab Samples: 927213751

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Acetone	ug/l	ND	25.	
Benzene	ug/l	ND	1.0	
Bromobenzene	ug/l	ND	1.0	
Bromochloromethane	ug/l	ND	1.0	
Bromodichloromethane	ug/l	ND	1.0	
Bromoform	ug/l	ND	1.0	
Bromomethane	ug/l	ND	1.0	
2-Butanone (MEK)	ug/l	ND	5.0	
n-Butylbenzene	ug/l	ND	1.0	
sec-Butylbenzene	ug/l	ND	1.0	
tert-Butylbenzene	ug/l	ND	1.0	
Carbon tetrachloride	ug/l	ND	1.0	
Chlorobenzene	ug/l	ND	1.0	
Chloroethane	ug/l	ND	1.0	
Chloroform	ug/l	ND	1.0	
Chloromethane	ug/l	ND	1.0	
2-Chlorotoluene	ug/l	ND	1.0	
4-Chlorotoluene	ug/l	ND	1.0	
1,2-Dibromo-3-chloropropane	ug/l	ND	1.0	
Dibromochloromethane	ug/l	ND	1.0	
1,2-Dibromoethane (EDB)	ug/l	ND	1.0	
Dibromomethane	ug/l	ND	1.0	
1,2-Dichlorobenzene	ug/l	ND	1.0	
1,3-Dichlorobenzene	ug/l	ND	1.0	
1,4-Dichlorobenzene	ug/l	ND	1.0	
Dichlorodifluoromethane	ug/l	ND	1.0	
1,1-Dichloroethane	ug/l	ND	1.0	
1,2-Dichloroethane	ug/l	ND	1.0	
1,2-Dichloroethene (Total)	ug/l	ND	1.0	
1,1-Dichloroethene	ug/l	ND	1.0	
cis-1,2-Dichloroethene	ug/l	ND	1.0	

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QUALITY CONTROL DATA

Lab Project Number: 92123563
Client Project ID: NCDOT 34951.1.1 FCX

METHOD BLANK: 927252049
Associated Lab Samples: 927213751

Parameter	Units	Blank Result	Reporting Limit	Footnotes
trans-1,2-Dichloroethene	ug/l	ND	1.0	
1,2-Dichloropropane	ug/l	ND	1.0	
1,3-Dichloropropane	ug/l	ND	1.0	
2,2-Dichloropropane	ug/l	ND	1.0	
1,1-Dichloropropene	ug/l	ND	1.0	
Diisopropyl ether	ug/l	ND	1.0	
Ethylbenzene	ug/l	ND	1.0	
Hexachloro-1,3-butadiene	ug/l	ND	1.0	
Isopropylbenzene (Cumene)	ug/l	ND	1.0	
p-Isopropyltoluene	ug/l	ND	1.0	
Methylene chloride	ug/l	ND	2.0	
Methyl-tert-butyl ether	ug/l	ND	1.0	
Naphthalene	ug/l	ND	1.0	
n-Propylbenzene	ug/l	ND	1.0	
Styrene	ug/l	ND	1.0	
1,1,1,2-Tetrachloroethane	ug/l	ND	1.0	
1,1,2,2-Tetrachloroethane	ug/l	ND	1.0	
Tetrachloroethene	ug/l	ND	1.0	
Toluene	ug/l	ND	1.0	
1,2,3-Trichlorobenzene	ug/l	ND	1.0	
1,2,4-Trichlorobenzene	ug/l	ND	1.0	
1,1,1-Trichloroethane	ug/l	ND	1.0	
1,1,2-Trichloroethane	ug/l	ND	1.0	
Trichloroethene	ug/l	ND	1.0	
Trichlorofluoromethane	ug/l	ND	1.0	
1,2,3-Trichloropropane	ug/l	ND	1.0	
1,2,4-Trimethylbenzene	ug/l	ND	1.0	
1,3,5-Trimethylbenzene	ug/l	ND	1.0	
Vinyl chloride	ug/l	ND	1.0	
Xylene (Total)	ug/l	ND	1.0	
m&p-Xylene	ug/l	ND	2.0	
o-Xylene	ug/l	ND	1.0	
Toluene-d8 (S)	%	100		
4-Bromofluorobenzene (S)	%	98		
Dibromofluoromethane (S)	%	100		
1,2-Dichloroethane-d4 (S)	%	103		

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QUALITY CONTROL DATA

Lab Project Number: 92123563
Client Project ID: NCDOT 34951.1.1 FCX

LABORATORY CONTROL SAMPLE: 927252056

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Acetone	ug/l	100.00	57.34	57	
Benzene	ug/l	50.00	51.12	102	
Bromobenzene	ug/l	50.00	49.14	98	
Bromochloromethane	ug/l	50.00	49.37	99	
Bromodichloromethane	ug/l	50.00	49.74	100	
Bromoform	ug/l	50.00	43.77	88	
Bromomethane	ug/l	50.00	71.62	143	
2-Butanone (MEK)	ug/l	100.00	75.21	75	
n-Butylbenzene	ug/l	50.00	44.42	89	
sec-Butylbenzene	ug/l	50.00	49.00	98	
tert-Butylbenzene	ug/l	50.00	48.64	97	
Carbon tetrachloride	ug/l	50.00	50.77	102	
Chlorobenzene	ug/l	50.00	51.08	102	
Chloroethane	ug/l	50.00	51.82	104	
Chloroform	ug/l	50.00	49.77	100	
Chloromethane	ug/l	50.00	50.71	101	
2-Chlorotoluene	ug/l	50.00	47.83	96	
4-Chlorotoluene	ug/l	50.00	47.26	94	
1,2-Dibromo-3-chloropropane	ug/l	50.00	40.45	81	
Dibromochloromethane	ug/l	50.00	45.72	91	
1,2-Dibromoethane (EDB)	ug/l	50.00	50.37	101	
Dibromomethane	ug/l	50.00	48.49	97	
1,2-Dichlorobenzene	ug/l	50.00	47.91	96	
1,3-Dichlorobenzene	ug/l	50.00	47.59	95	
1,4-Dichlorobenzene	ug/l	50.00	47.77	96	
Dichlorodifluoromethane	ug/l	50.00	54.49	109	
1,1-Dichloroethane	ug/l	50.00	49.16	98	
1,2-Dichloroethane	ug/l	50.00	44.26	88	
1,2-Dichloroethene (Total)	ug/l	100.00	104.5	104	
1,1-Dichloroethene	ug/l	50.00	53.53	107	
cis-1,2-Dichloroethene	ug/l	50.00	52.08	104	
trans-1,2-Dichloroethene	ug/l	50.00	52.39	105	
1,2-Dichloropropane	ug/l	50.00	46.53	93	
1,3-Dichloropropane	ug/l	50.00	46.34	93	
2,2-Dichloropropane	ug/l	50.00	46.40	93	
1,1-Dichloropropene	ug/l	50.00	48.81	98	
Diisopropyl ether	ug/l	50.00	49.99	100	

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QUALITY CONTROL DATA

Lab Project Number: 92123563
Client Project ID: NCDOT 34951.1.1 FCX

LABORATORY CONTROL SAMPLE: 927252056

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Ethylbenzene	ug/l	50.00	52.27	105	
Hexachloro-1,3-butadiene	ug/l	50.00	50.24	100	
Isopropylbenzene (Cumene)	ug/l	50.00	52.48	105	
p-Isopropyltoluene	ug/l	50.00	44.67	89	
Methylene chloride	ug/l	50.00	53.62	107	
Methyl-tert-butyl ether	ug/l	50.00	48.71	97	
Naphthalene	ug/l	50.00	42.64	85	
n-Propylbenzene	ug/l	50.00	48.18	96	
Styrene	ug/l	50.00	54.32	109	
1,1,1,2-Tetrachloroethane	ug/l	50.00	53.33	107	
1,1,2,2-Tetrachloroethane	ug/l	50.00	44.59	89	
Tetrachloroethene	ug/l	50.00	50.70	101	
Toluene	ug/l	50.00	49.32	99	
1,2,3-Trichlorobenzene	ug/l	50.00	48.39	97	
1,2,4-Trichlorobenzene	ug/l	50.00	49.17	98	
1,1,1-Trichloroethane	ug/l	50.00	50.11	100	
1,1,2-Trichloroethane	ug/l	50.00	46.91	94	
Trichloroethene	ug/l	50.00	50.68	101	
Trichlorofluoromethane	ug/l	50.00	48.12	96	
1,2,3-Trichloropropane	ug/l	50.00	46.06	92	
1,2,4-Trimethylbenzene	ug/l	50.00	44.03	88	
1,3,5-Trimethylbenzene	ug/l	50.00	44.27	88	
Vinyl chloride	ug/l	50.00	54.17	108	
Xylene (Total)	ug/l	150.00	155.7	104	
m&p-Xylene	ug/l	100.00	104.7	105	
o-Xylene	ug/l	50.00	50.93	102	
Toluene-d8 (S)				99	
4-Bromofluorobenzene (S)				104	
Dibromofluoromethane (S)				96	
1,2-Dichloroethane-d4 (S)				94	

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

QUALITY CONTROL DATA

Lab Project Number: 92123563
Client Project ID: NCDOT 34951.1.1 FCX

QC Batch: 162668 Analysis Method: EPA 7470
QC Batch Method: EPA 7470 Analysis Description: Mercury, CVAAS, in Water
Associated Lab Samples: 927213751

METHOD BLANK: 927219816
Associated Lab Samples: 927213751

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Mercury	ug/l	ND	0.20	

LABORATORY CONTROL SAMPLE: 927219824

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Mercury	ug/l	2.500	2.600	104	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 927219832 927219840

Parameter	Units	927218032 Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	RPD	Footnotes
Mercury	ug/l	0.1810	2.500	2.430	2.380	90	88	2	

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QUALITY CONTROL DATA

Lab Project Number: 92123563
Client Project ID: NCDOT 34951.1.1 FCX

QC Batch: 163042 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: Metals by Trace ICP
Associated Lab Samples: 927213751

METHOD BLANK: 927231662
Associated Lab Samples: 927213751

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Arsenic	ug/l	ND	5.0	
Barium	ug/l	ND	5.0	
Cadmium	ug/l	ND	1.0	
Chromium	ug/l	ND	2.0	
Lead	ug/l	ND	5.0	
Selenium	ug/l	ND	5.0	
Silver	ug/l	ND	2.0	

LABORATORY CONTROL SAMPLE: 927231670

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Arsenic	ug/l	500.00	509.0	102	
Barium	ug/l	500.00	512.0	102	
Cadmium	ug/l	500.00	522.0	104	
Chromium	ug/l	500.00	530.0	106	
Lead	ug/l	500.00	507.0	101	
Selenium	ug/l	500.00	500.0	100	
Silver	ug/l	250.00	258.0	103	

MATRIX SPIKE: 927231688

Parameter	Units	927205146 Result	Spike Conc.	MS Result	MS % Rec	Footnotes
Arsenic	ug/l	0	500.00	496.0	99	
Barium	ug/l	216.0	500.00	711.0	99	
Cadmium	ug/l	0	500.00	492.0	98	
Chromium	ug/l	0.2070	500.00	511.0	102	
Lead	ug/l	3.300	500.00	495.0	98	

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QUALITY CONTROL DATA

Lab Project Number: 92123563
Client Project ID: NCDOT 34951.1.1 FCX

MATRIX SPIKE: 927231688

Parameter	Units	927205146 Result	Spike Conc.	MS Result	MS % Rec	Footnotes
Selenium	ug/l	2.060	500.00	486.0	97	
Silver	ug/l	0	250.00	252.0	101	

SAMPLE DUPLICATE: 927231696

Parameter	Units	927225508 Result	DUP Result	RPD	Footnotes
Arsenic	mg/l	ND	ND	NC	
Barium	mg/l	ND	ND	NC	
Cadmium	mg/l	ND	ND	NC	
Chromium	mg/l	ND	ND	NC	
Lead	mg/l	ND	ND	NC	
Selenium	mg/l	ND	ND	NC	
Silver	mg/l	ND	ND	NC	

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QUALITY CONTROL DATA

Lab Project Number: 92123563
Client Project ID: NCDOT 34951.1.1 FCX

QC Batch: 163734 **Analysis Method: NC Chromotropic Acid**
QC Batch Method: NC Chromotropic Acid **Analysis Description: Formaldehyde Scan**
Associated Lab Samples: 927213751

METHOD BLANK: 927256040
Associated Lab Samples: 927213751

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Formaldehyde	mg/l	ND	0.125	

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QUALITY CONTROL DATA

Lab Project Number: 92123563
Client Project ID: NCDOT 34951.1.1 FCX

QC Batch: 162552 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 48 Hour NO3 / NO2 / NOX
Associated Lab Samples: 927213751

METHOD BLANK: 927214411
Associated Lab Samples: 927213751

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Nitrate as N	mg/l	ND	0.10	
Nitrate-Nitrite (as N)	mg/l	ND	0.10	
Nitrite as N	mg/l	ND	0.10	

LABORATORY CONTROL SAMPLE: 927214429

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Nitrate as N	mg/l	5.000	4.900	98	
Nitrate-Nitrite (as N)	mg/l	5.000	4.900	98	

MATRIX SPIKE: 927214437

Parameter	Units	927213926 Result	Spike Conc.	MS Result	MS % Rec	Footnotes
Nitrate as N	mg/l	0	5.000	4.940	99	
Nitrate-Nitrite (as N)	mg/l	0	5.000	4.940	99	

SAMPLE DUPLICATE: 927214452

Parameter	Units	927211631 Result	DUP Result	RPD	Footnotes
Nitrate as N	mg/l	ND	ND	NC	
Nitrate-Nitrite (as N)	mg/l	ND	ND	NC	
Nitrite as N	mg/l	ND	ND	NC	

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QUALITY CONTROL DATA

Lab Project Number: 92123563
Client Project ID: NCDOT 34951.1.1 FCX

QC Batch: 163307 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Analysis Description: Ammonia
Associated Lab Samples: 927213751

METHOD BLANK: 927241091
Associated Lab Samples: 927213751

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Nitrogen, Ammonia	mg/l	ND	0.10	

LABORATORY CONTROL SAMPLE: 927241109

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Nitrogen, Ammonia	mg/l	1.000	0.9469	95	

MATRIX SPIKE: 927241125

Parameter	Units	927212233 Result	Spike Conc.	MS Result	MS % Rec	Footnotes
Nitrogen, Ammonia	mg/l	0.06100	1.000	0.9540	89	

SAMPLE DUPLICATE: 927241117

Parameter	Units	927212233 Result	DUP Result	RPD	Footnotes
Nitrogen, Ammonia	mg/l	ND	ND	NC	

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Lab Project Number: 92123563
Client Project ID: NCDOT 34951.1.1 FCX

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.
[2]	RPD value was outside of control limits, however % Recoveries were acceptable. Samples for QC batch accepted based on % recoveries and completeness of QC data.
[3]	The surrogate and/or spike recovery was outside acceptance limits.
[4]	Acid surrogate recovery outside of control limits. The data was accepted based on valid recovery of the two remaining acid surrogates.

Analytical Environmental Services, Inc.

Date: *27-Jul-06*

CLIENT: Pace Analytical Services, Inc.
Project: 92123563
Lab ID: 0607A28-001

Client Sample ID: 927213751 / TMW-1
Collection Date: 7/19/2006 12:45:00 PM
Matrix: AQUEOUS

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed
CHLORINATED HERBICIDES		**SW8151A**			**(SW3510B)**		Analyst: **MM**
2,4,5-T	BRL	2.0		µg/L	73404	1	7/25/2006 6:23 PM
2,4,5-TP (Silvex)	BRL	2.0		µg/L	73404	1	7/25/2006 6:23 PM
2,4-D	BRL	2.0		µg/L	73404	1	7/25/2006 6:23 PM
2,4-DB	BRL	10		µg/L	73404	1	7/25/2006 6:23 PM
Dalapon	BRL	10		µg/L	73404	1	7/25/2006 6:23 PM
Dicamba	BRL	2.0		µg/L	73404	1	7/25/2006 6:23 PM
Dichlorprop	BRL	2.0		µg/L	73404	1	7/25/2006 6:23 PM
Dinoseb	BRL	5.0		µg/L	73404	1	7/25/2006 6:23 PM
MCPA	BRL	500		µg/L	73404	1	7/25/2006 6:23 PM
MCPP	BRL	500		µg/L	73404	1	7/25/2006 6:23 PM
Surr: DCAA	119	39.3-151		%REC	73404	1	7/25/2006 6:23 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	E	Estimated (Value above quantitation range)
BRL	Below Reporting Limit	S	Surrogate Recovery outside accepted recovery limits
H	Holding times for preparation or analysis exceeded	Narr	See Case Narrative
N	Analyte not NELAC certified	NC	Not Confirmed
B	Analyte detected in the associated Method Blank		

CHAIN-OF-CUSTODY / Analytical Request Document

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

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Page: 1 of 1

1004967

Section A
Required Client Information:

Company: SOLUTIONS-IES
Address: 1101 Nowell Rd.
RALEIGH NC 27603
Email To: SKNOX@SOLUTIONS-IES.COM
Phone: 9198731060 Fax: 9198731074
Requested Due Date/TAT:

Section B
Required Project Information:

Report To: Sheri KNOX
Copy To:
WBS# 34951.1.1
Purchase Order No.: 9800006252 NCDOT
Project Name: NCDOT KLUMAC Rd.
Project Number: 3210.06A3.NDOT

Section C
Invoice Information:

Attention: CHRIS Peeples
Company Name: NC DOT AR#L0116023
Address:
Pace Quote Reference:
Pace Project Manager: BKM
Pace Profile #: 3869-9

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ Other

SITE LOCATION

☐GA ☐IL ☐IN ☐MI ☐MN ☒NC
☐OH ☐SC ☐WI ☐OTHER

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

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Filtered (Y/N)	Requested Analysis: METALS	8260	8270	VPH/EPH	FORMALDEHYDE	AMMONIA	NITRATES	PESTICIDES	HERBICIDES	Residual Chlorine (Y/N)	Pace Project Number / Lab I.D
1	TMW-1	NT	G			7/19/06	1245												X	X	X	X	X	X	X	X	12721751
2																											
3																											
4																											
5																											
6																											
7																											
8																											
9																											
10																											
11																											
12																											

Additional Comments:
FORMER FOX PROPERTY

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
	7/19/06	1335	UPS - FED EX	7-19-06	1335
	7-19-06	1600			

SAMPLE CONDITION

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

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: KEVIN BUCHANAN
SIGNATURE of SAMPLER:
DATE Signed (MM/DD/YY): 07/19/06

SEE REVERSE SIDE FOR INSTRUCTIONS

APPENDIX F

GPS COORDINATES

APPENDIX F
GPS Coordinates of Borings
FCX
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)]
FCXB1	35.65469999	-80.48935278
FCXB2	35.65453243	-80.48946116
FCXB3	35.65425550	-80.48942168
FCXB4	35.65406623	-80.48933879
FCXB5	35.65388862	-80.48925740

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