PRELIMINARY SITE ASSESSMENT
PARCEL #15
507 EAST ELIZABETH STREET
ELIZABETH CITY, NORTH CAROLINA
STATE PROJECT: U-4438
WBS ELEMENT: 35742.1.1

Prepared for:

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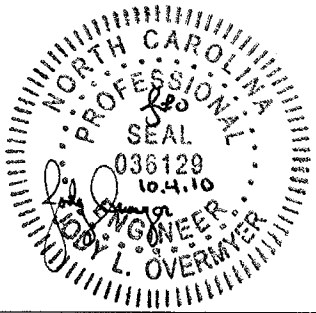

September 7, 2010

Jody Overmyer, P.E.
Project Engineer

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1.0 INTRODUCTION

Parcel #15 in Pasquotank County is located at 507 East Elizabeth Street, Elizabeth City, North Carolina. The location of the property is shown on **Figures 1** and **2**. The North Carolina Department of Transportation (NCDOT) plans to acquire the proposed easement at this property to accommodate widening of Elizabeth Street in downtown Elizabeth City. This report summarizes the results of field and laboratory activities conducted during the Preliminary Site Assessment (PSA) of the subject property. The scope of work executed at the site was performed in general accordance with Solutions-IES proposal NC101099 revised June 16, 2010, and was initiated based on a Notice to Proceed issued by the NCDOT Geotechnical Engineering Unit on June 24, 2010, under contract 7000010453, dated June 25, 2009.

2.0 BACKGROUND AND SITE DESCRIPTION

Gracie Bernardo owns the property which operates as retail office space. It is located on the south side of East Elizabeth Street between North McMorrine Street and North Poindexter Street. There is one fill port situated on the property located in the northeast corner of the building. According to the North Carolina Department of Environment and Natural Resources (NCDENR) underground storage tank (UST) registry, there are no known Facility IDs or Groundwater Incidents associated with this property. The PSA was performed along the proposed easement which stretches west to east along the south side of East Elizabeth Street and continues south on North Poindexter Street. Work was not performed in areas outside of the proposed easement. Photographs of the site are included in **Appendix A**.

3.0 FIELD ACTIVITIES

Prior to mobilizing to the site, Solutions-IES contacted North Carolina One Call and contracted Accumark to locate underground utilities at the site. Pyramid Environmental & Engineering, P.C. (Pyramid) was contracted to perform a geophysical survey, and mobilized to the study area July 8 and July 9, 2010. The geophysical investigation consisted of electromagnetic (EM) induction-metal detection surveys using a Geonics EM61-MK1 metal detection instrument and ground penetrating radar (GPR) surveys using a GSSI SIR-2000 unit equipped with a 400 MHz antenna. Results of the survey suggested that the surveyed portion within the proposed easement at Parcel #15 most likely contains a metallic UST. Images of the EM and GPR findings are included in the geophysical report included as **Appendix B**. After a review of the geophysical report, Solutions-IES mobilized to the site on August 2 and August 4, 2010, to collect soil and groundwater samples. Six soil borings were advanced using a Geoprobe® to a

depth of 4 feet below ground surface (ft bgs). Boring 507-4 was located on an asphalt drive over 1-foot thick reinforced concrete. Penhall Company was contracted during the field activities to cut one core 4 inches in diameter at boring 507-4. The approximate locations of the soil borings are displayed in **Figure 3**. The GPS coordinates of the boring locations are included in **Appendix C**. Two borings (boring numbers 507-1 and 507-6) were advanced to a depth of 8 feet bgs, and a temporary well was installed in each boring. Boring 507-6 was advanced twice: once on August 2, 2010 to collect samples for TPH analysis and then again on August 3, 2010 to collect a soil sample for fecal coliform analysis.

A Macro-Core® sampler fitted with a 4-ft dedicated polyvinyl chloride (PVC) liner was used to collect samples with a Geoprobe®. The Macro-Core® liner was divided and sampled in 2-foot intervals. Each soil sample was split into two aliquots. Each aliquot was placed in a separate resealable plastic bag. One bag was placed on ice for possible laboratory analysis, while the other bag was sealed and placed at ambient temperature for field screening with a flame ionization detector (FID). After approximately 20 minutes to allow accumulation of volatile organic compounds (VOCs) in the headspace of the bag, each sealed bag was scanned with the FID. The FID measurements were entered into the field logbook along with the soil description and any indications of staining or odor. That information was subsequently transferred onto boring logs. The boring logs are provided in **Appendix D** and the field screening results are summarized in **Table 1**. The field screening results are also shown on the boring logs.

The subsurface at the site generally consisted of tan silty to medium sand (Unified Soil Classification SM to SP). The depth to groundwater was measured at approximately 5 feet below ground surface (bgs) in a representative borehole by lowering a decontaminated water level probe into the borehole soon after the boring was opened.

Table 1 shows the FID field screening results of the soils ranged from not detected to 36.9 parts per million (ppm). One soil sample was collected from each boring at the interval identified in **Table 1** and analyzed for total petroleum hydrocarbons gasoline range organics and diesel range organics (TPH GRO/DRO) by EPA Methods 5035/3545/8015. Each collected sample was placed in laboratory-supplied jars and stored on ice pending courier service to Prism Laboratories in Charlotte, NC. Two soil samples collected at borings 507-4 and 507-6 were also analyzed for fecal coliform by method SM9221E. Each collected sample was placed in laboratory-supplied jars and stored on ice pending courier service to Environment 1 in Greenville, NC. Sample information was recorded on the chain-of-custody form.

Due to the shallow water table temporary groundwater monitoring wells were installed and sampled. Upon completion of the borings at 507-1 and 507-6, a 5-foot section of 1-inch diameter PVC slotted well screen, joined with an approximate 3-foot section of 1-inch diameter PVC riser, was introduced into the boring. Natural formation caved in around the well screen to approximately 4 ft bgs. Washed #2 well sand was introduced into the annulus of the boring, forming a sand pack around the screen from the top of the natural formation to within 1.5-foot of surface grade. The temporary wells were allowed to equilibrate for approximately 30 minutes before sampling and promptly abandoned once sampling was complete. **Appendix D** contains boring logs 507-1 and 507-6 and temporary well construction information. The stabilized water level was measured at 5.40 and 4.05 feet bgs in 507-1 and 507-6 temporary monitoring wells, respectively. The wells were then sampled with a peristaltic pump, utilizing 3/8-inch diameter disposable polyethylene tubing. Prior to sample collection, field parameters for pH, temperature, dissolved oxygen (DO), oxidation reduction potential (ORP), turbidity and conductivity were allowed to stabilize then recorded. Groundwater samples obtained from the well at 507-1 were submitted for laboratory analysis of volatile organic compounds (VOCs) by EPA Methods 8260 and semivolatile organic compounds (SVOCs) by EPA Method 8270. Groundwater samples obtained from the well at 507-6 were submitted for fecal coliform analysis by method SM9221E. Each collected sample was placed in laboratory-supplied jars then stored on ice pending courier service to Prism Laboratories in Charlotte, NC (VOCs/SVOCs analysis) or Environment 1 in Greenville, NC (fecal coliform). Sample information was recorded on the chain-of-custody form.

4.0 LABORATORY RESULTS

The laboratory analytical results from samples collected indicate the presence of TPH (DRO) in soil and VOCs and fecal coliform bacteria in groundwater at concentrations above the laboratory reporting limits at Parcel #15. The analytical results are summarized in **Tables 2** and **3**, and the laboratory reports are included in **Appendix E**.

Specifically, TPH (DRO) was detected at concentrations above the NCDENR action level[1] for tank closure screening of 10 milligrams per kilogram (mg/kg) at each of the six borings. The VOC methyl

[1] *UST Section Guidelines Site Checks, Tank Closure, and Initial Response and Abatement ([NCDENR, Division of Waste Management [DWM], UST Section, March 1, 2007; Version; Change 3, Effective December 1, 2008)*

[2] *North Carolina Administrative Code Title 15A DENR Division of Water Quality (DWQ) Subchapter 2L Classifications and Water Quality Standards Applicable to the Groundwaters of North Carolina (Last Amended on January 1, 2010)*

ethyl ketone was detected at 4.1 micrograms per liter (µg/L) in the groundwater sample from well 507-1 below the NCAC 15A.2L.0200 (NC 2L) standard[2] of 4,000 µg/L.

Fecal coliform bacteria, a potential indicator of municipal wastewater contamination, was detected above the NC 2L standard of 1 most probable number cells per 100 milliliters (MPN/100 mL) at 2,400 MPN/100 mL in the groundwater sample from temporary well 507-6. Fecal coliform bacteria counts were below laboratory detection limits in the soil samples from 507-4 and 507-6 (<2 MPN per gram).

5.0 DISCUSSION/CONCLUSIONS

The geophysical survey conducted at the site suggested that buried metallic object(s) such as a UST are present within the surveyed portion of the proposed easement. Solutions-IES advanced six soil borings at the study area to a depth of 4 ft bgs. Two borings were further advanced to a depth of 8 ft bgs for the installation of temporary monitoring wells. The highest FID reading measured 36.9 ppm in boring 507-4 at a depth of 2 to 4 ft bgs. Soil samples from all six borings (507-1 through 507-6) indicate the presence of TPH (DRO) in excess of the NCDENR action levels. Fecal coliform bacteria were detected in groundwater above the NC 2L standard at boring 507-6.

The areal extent of TPH contamination in soil defined within the study area is illustrated in Figure 3; contamination is estimated to extend to 4 ft bgs. The estimated total volume of soil with contaminants of concern in excess of the NCDENR action level within the study area at Parcel #15 is estimated at 200 bank cubic yards. Note that Solutions-IES attempted to identify the extent of unsaturated soil contamination. However, given the local tidal fluctuations, it is possible that much of the soil has been in contact with groundwater and impacted with contaminants that may be present in the groundwater. From the base drawing provided by NCDOT, it appears that road construction is planned in the vicinity of the borings advanced by Solutions-IES. Potential residual groundwater contamination may be encountered and impacted soil may be excavated during construction activities performed by NCDOT. Therefore, Solutions-IES recommends that NCDOT be prepared to monitor, transport, and dispose of impacted soil during construction activities and also consider exposure of workers to impacted soil and groundwater. Additional assessment would be necessary to confirm the source of the contamination in soil and groundwater.

TABLES

TABLE 1
Summary of Field Screening Results for Soil
Parcel #15
507 E. Elizabeth Street
Elizabeth City, North Carolina
WBS Element: 35742.1.1; State Project: U-4438
Sample Collection Date: August 2-4, 2010

Sample Depth Below Ground Surface	Soil Boring					
	507-1	507-2	507-3	507-4	507-5	507-6
	FID Reading (ppm)					
0 - 2 feet	0.0	0.0	0.0	NR	0.0	0.0
2 - 4 feet	4.5	0.0	0.0	36.9	0.0	0.0

Notes:

Samples denoted by shaded cells were submitted for laboratory analysis.

FID readings were obtained with a Photovac MicroFID Flame Ionization Detector.

ppm = parts per million

NR = No recovery

TABLE 2
Summary of Soil Analytical Results
Parcel #15
507 E. Elizabeth Street
Elizabeth City, North Carolina
WBS Element: 35742.1.1; State Project: U-4438
Sample Collection Date: August 2-4, 2010

Sample Information		Total Petroleum Hydrocarbons		Fecal Coliform[3] (MPN/g)
Boring Number	Depth (ft bgs)	Gasoline Range[1] (mg/kg)	Diesel Range[2] (mg/kg)	
507-1	2-4	<5.0	**38**	NA
507-2	2-4	<4.8	**37**	NA
507-3	2-4	<4.8	**34**	NA
507-4	1-4	<6.6	**150**	<2
507-5	2-4	<4.9	**36**	NA
507-6	2-4	<5.7	**16**	<2
Action Level		10	10	NE

Notes:

1. Total Petroleum Hydrocarbons (TPH) Method 5035/8015MOD - Gasoline Range Hydrocarbons
2. Total Petroleum Hydrocarbons (TPH) Method 3545/8015MOD - Diesel Range Hydrocarbons
3. Fecal Coliform SM9221 E

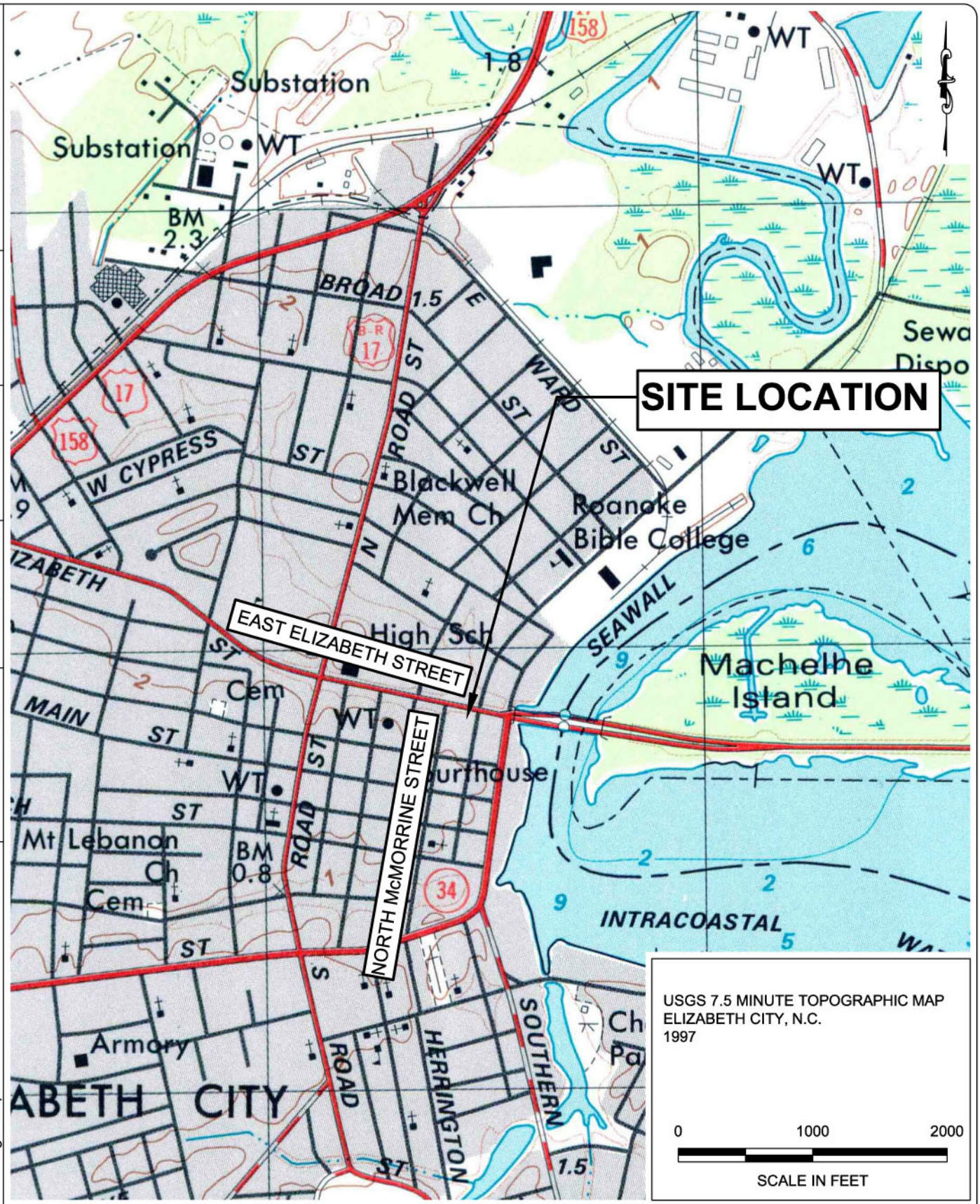
ft bgs = feet below ground surface
mg/kg = milligram per kilogram
MPN/g = most probable number per gram
Bold indicates value exceeds laboratory reporting limit.
Shaded values exceed NCDENR action level.
NA = Not analyzed
NE = Not established

TABLE 3
Summary of Groundwater Analytical Results
Parcel #15
507 E. Elizabeth Street
Elizabeth City, North Carolina
WBS Element: 35742.1.1; State Project: U-4438
Sample Collection Date: August 2-4, 2010

Sample Information		VOCs (µg/L) (8260)	SVOCs (µg/L) (8270)	Fecal Coliform (MPN/100 mL)
Sample ID	Sample Date	Methyl ethyl ketone	All Analytes	
507-1	8/2/2010	**4.1 J**	BRL	NA
507-6	8/4/2010	NA	NA	**2,400**
NC 2L Groundwater Quality Standards		4,000	NA	1

Notes:
VOCs = Volatile organic compounds by EPA Method 8260
SVOCs = Semivolatile organic compounds by EPA Method 8270
Fecal Coliform by SM9221 E
µg/L = Micrograms per liter
MPN/100 mL = Most probable number cells per 100 milliliters
J = The analyte was positively identified but the value is estimated below the reporting limit
Bold indicates value exceeds laboratory reporting limit.
BRL = Below the laboratory reporting limit
NA = Not analyzed/Not applicable
Shaded values exceed NC 2L Groundwater Quality Standards (Janurary, 2010).

FIGURES



PROJECT NUMBER 3946.10A3.NDOT
DRAFTER HRG
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PROJECT MANAGER JO
DATE 08/10/2010
FILE Figure 1.pdf

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PARCEL # 15-GRACIE BERNARDO
507 EAST ELIZABETH STREET
ELIZABETH CITY, NORTH CAROLINA
STATE PROJECT: U-4438
WBS ELEMENT: 35742.1.1

FIGURE:
1

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EAST ELIZABETH STREET

NORTH MCMORRINE STREET

NORTH POINDEXTER STREET

PROPOSED EASEMENT

ROCK PROPERTIES

THE CITY OF ELIZABETH CITY

15

16

17

S 07° 33'59" W 40.07'

S 07° 33'59" E 89.27'

S 81° 48'27" E 103.74'

N 82° 28'01" W 59.03'

N 82° 28'01" W 37.30'

N 82° 28'01" W 41.98'

LEGEND

APPROXIMATE LOCATION OF PROBABLE UST, AS SUGGESTED BY GPR SURVEY

0 20 40

SCALE IN FEET

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PARCEL # 15-GRACIE BERNARDO PROPERTY
507 EAST ELIZABETH STREET
ELIZABETH CITY, NORTH CAROLINA
STATE PROJECT: U-4438
WBS ELEMENT: 35742.1.1

SITE MAP

FIGURE: 2

EAST ELIZABETH STREET

NORTH MCMORRINE STREET

NORTH POINDEXTER STREET

STUDY AREA

507-4

507-5

507-6

507-1

507-2

507-3

ROCK PROPERTIES

15

16

THE CITY OF ELIZABETH CITY

S 07° 33'59" W

89.27'

N 07° 33'59" E

40.07'

59.03'

N 82° 28'01" W

37.30'

N 82° 28'01" W

41.98'

S 81° 48'27" E

103.74'

LEGEND

- STUDY AREA
- SOIL BORING
- SOIL BORING/TEMPORARY WELL
- APPROXIMATE LOCATION OF PROBABLE UST, AS SUGGESTED BY GPR SURVEY
- ESTIMATED EXTENT OF TPH EXCEEDANCES IN SOIL

0 20 40

SCALE IN FEET

PROJECT NUMBER 3946.10A3.NDOT

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PROJECT MANAGER JO

DATE 09/20/2010

FILE Figure 3.pdf

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NOTES:

1) SOIL SAMPLES FOR FECAL COLIFORM COLLECTED AT BORING LOCATIONS 507-4 & 507-6.
2) GROUNDWATER SAMPLE FOR FECAL COLIFORM COLLECTED AT BORING LOCATION 507-6.

PARCEL # 15-GRACIE BERNARDO PROPERTY
507 EAST ELIZABETH STREET
ELIZABETH CITY, NORTH CAROLINA
STATE PROJECT: U-4438
WBS ELEMENT: 35742.1.1

SOIL AND GROUNDWATER SAMPLE LOCATION MAP

FIGURE: 3

APPENDIX A

PHOTOGRAPHS

Photograph 1 – View of Parcel #15, looking south from East Elizabeth Street.

Photograph 2 – View of Parcel #15, looking south from East Elizabeth Street.

APPENDIX B

GEOPHYSICAL REPORT

Pyramid Project # 2010159

GEOPHYSICAL INVESTIGATION REPORT

EM61 & GPR SURVEYS

507 EAST ELIZABETH STREET SITE
Elizabeth City, North Carolina

August 18, 2010

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Solutions-IES
GEOPHYSICAL INVESTIGATION REPORT
507 EAST ELIZABETH STREET SITE
Elizabeth City, North Carolina

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3.0 DISCUSSION OF RESULTS ……... 2

4.0 SUMMARY & CONCLUSIONS ……. 3

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FIGURES

Figure 1 Geophysical Equipment & Site Photographs
Figure 2 Ground Penetrating Radar Results
Figure 3 Images of GPR Survey Lines X=112 Y=73.5

1.0 INTRODUCTION

Pyramid Environmental conducted geophysical investigations for Solutions-IES across the proposed Right-of-Way (ROW) area of the 507 East Elizabeth Street site (Parcel 15) located in Elizabeth City, North Carolina. The property is owned by Gracie Bernardo and presently contains an active commercial building.

Conducted on July 8 and 9, 2010 the geophysical investigation was performed as part of the North Carolina Department of Transportation (NCDOT) preliminary site assessment project to determine if unknown, metallic underground storage tanks (UST's) were present beneath the area of interest at the 507 East Elizabeth Street site. Solutions-IES representative, Ms. Jody Overmyer, P.G. provided site maps that identified the geophysical survey area perimeter to Pyramid Environmental personnel. The survey area was primarily limited to the narrow open area between the building and East Elizabeth Street and the sidewalk between the building and North Poindexter Street. Photographs of the geophysical equipment used in this investigation and the geophysical survey area at the 507 East Elizabeth Street site are shown in **Figure 1**.

2.0 FIELD METHODOLOGY

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

After establishing the survey grid, a two-minute recon was performed with the EM61 metal detector across the site. The recon indicated that the sidewalk and concrete surfaces consists of steel reinforced concrete. Interference from the building, buried utility lines, steel reinforced concrete and other surface objects, plus the limited size of the survey area, eliminated the opportunity to conduct an EM61 metal detection survey. Consequently, a comprehensive ground penetrating radar (GPR) investigation was conducted across the entire proposed ROW area using a GSSI SIR-2000 unit

equipped with a 400 MHz antenna. Data were digitally collected in a continuous mode along X-axis and/or Y-axis survey lines, spaced 5.0 feet apart using a vertical scan of 512 samples, at a rate of 48 scans per second. A 70 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 5 feet, based on an estimated two-way travel time of 8 nanoseconds per foot. All of the GPR data were downloaded to a field computer and reviewed in the field and office using Radprint software.

The purple solid lines in **Figure 2** represent the locations of the GPR survey lines acquired at Parcel 15. Preliminary geophysical results obtained from the 507 East Elizabeth Street site were reported to Ms. Overmyer on July 19, 2010.

3.0 DISCUSSION OF RESULTS

Images of GPR survey lines X=112 and Y=73.5 are presented in **Figure 3** and show higher amplitude anomalies that are probably in response to a small UST object. The probable UST is centered near grid coordinates X=112 Y=73.5 and located immediately north of a visible fill port. Based on the GPR data, the probable UST is buried approximately 1.3 feet below surface, appears to be 5 feet long, 2.5 feet wide and oriented in an easterly-westerly direction.The foot print of the probable UST, as suggested by the GPR data, was marked in the field using orange marking paint and pin flags.

Although buried lines and conduits were detected by the GPR investigation, the GPR anomalies mentioned above represent the only potential (probable) UST that was detected by the GPR surveys. The GPR data suggest that the remaining portion of the proposed ROW area at the 507 East Elizabeth Street site does not contain unknown, metallic USTs.

4.0 SUMMARY & CONCLUSIONS

Our evaluation of the GPR data collected across the proposed ROW area at the 507 East Elizabeth Street site located in Elizabeth City, North Carolina, provides the following summary and conclusions:

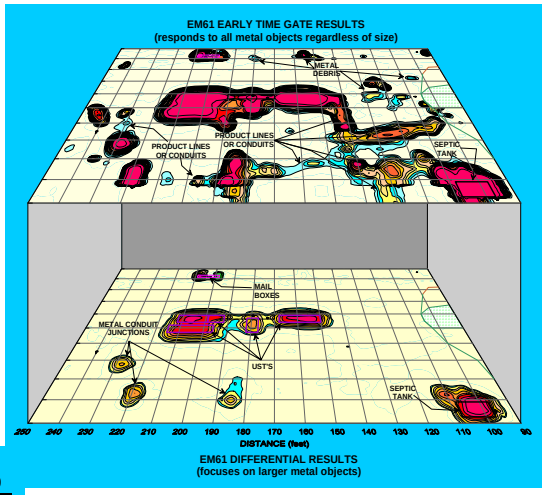
- The GPR surveys provided reliable results for the detection of metallic USTs within the surveyed portion of the site.

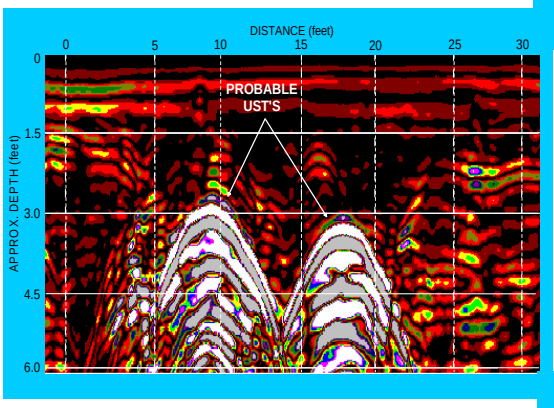
- GPR surveys recorded higher amplitude anomalies centered near grid coordinates X=112 Y=73.5 that may be in response to a probable UST buried 1.3 feet below surface and located immediately north of a visible fill port.

- The geophysical investigation suggests that the remaining portion of the GPR survey area does not contain buried metallic USTs.

5.0 LIMITATIONS

GPR surveys have been performed and this report prepared for Solutions-IES in accordance with generally accepted guidelines for GPR surveys. It is generally recognized that the results of the GPR data are non-unique and may not represent actual subsurface conditions. The GPR results do not conclusively determine that only one probable UST is present at this site but that only one UST was detected.





FIGURES

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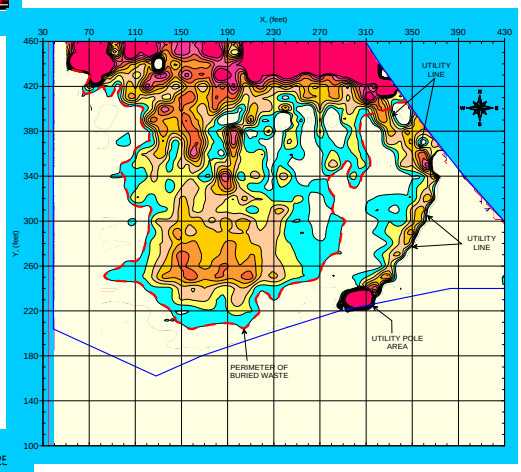
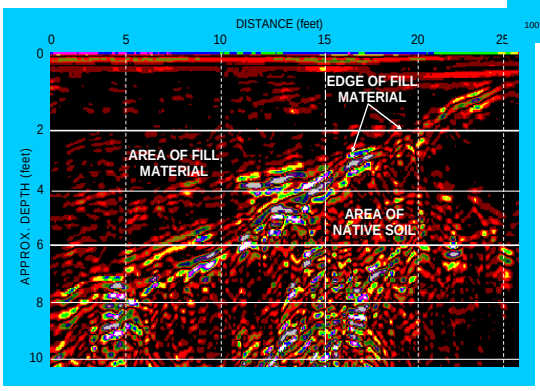
Figures shown on this page are for esthetic purposes only and are not related to the geophysical results discussed in this report.





The photographs show the SIR-2000 GPR system equipped with a 400 MHz antenna that were used to conduct the ground penetrating radar (GPR) investigation at the 507 East Elizabeth Street site on July 8 and 9, 2010.

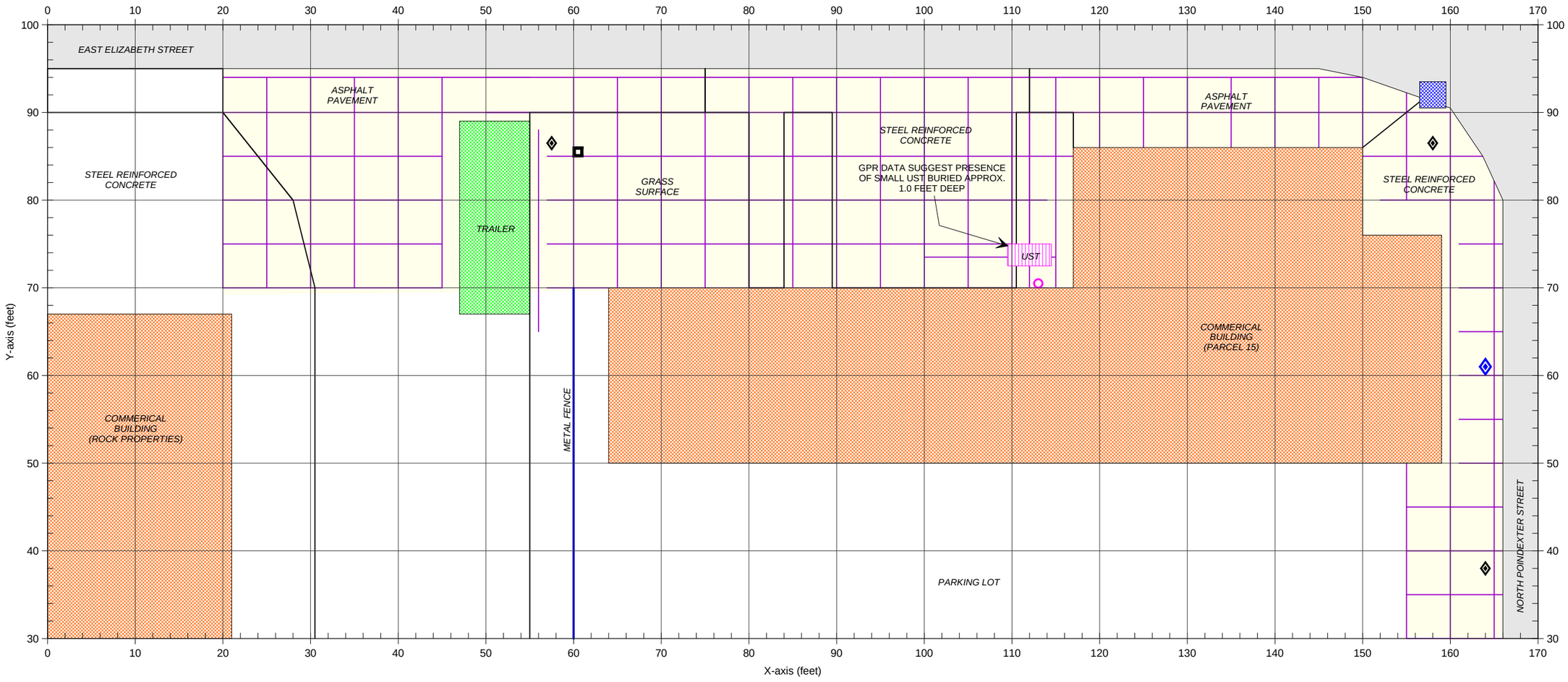
The photograph shows the 507 East Elizabeth Street site (Gracie Bernardo property, Parcel 15) located at the intersection of East Elizabeth Street and North Poindexter Street in Elizabeth City, North Carolina. The photograph is viewed in a southeasterly direction.

PYRAMID
ENVIRONMENTAL & ENGINEERING, P.C.

CLIENT	SOLUTIONS-IES	DATE	08/16/10	DRWN	MJD
SITE	507 EAST ELIZABETH STREET	LAY		CHKD	
CITY	ELIZABETH CITY	STATE	NORTH CAROLINA	DWG	
TITLE	GEOPHYSICAL RESULTS	JNO	2010-159	FIGURE	

GEOPHYSICAL EQUIPMENT & SITE PHOTOGRAPHS

FIGURE 1



LEGEND

- SURVEY AREA: GPR DATA ACQUIRED ALONG X-AXIS & Y-AXIS TRENDING LINES SPACED 5 FEET APART
- BUILDING
- TRAILER
- STORM SEWER GRATE
- UST VENT PIPE
- GUY WIRE
- ROAD SIGN
- UTILITY BOX
- FIRE HYDRANT
- UTILITY POLE
- GPR SURVEY LINE
- UST — PROBABLE UST, AS SUGGESTED BY GPR DATA

N E S W

APPROXIMATE NORTH

Note: EM61 metal detection surveys were not conducted at the 507 East Elizabeth Street site due to steel reinforced concrete and the limited amount of open space between the buildings, trailer and buried utility lines. Consequently ground penetrating radar (GPR) surveys were conducted along X-axis and Y-axis lines spaced 5 feet apart across the entire area of interest. GPR data were acquired on July 8 & 9, 2010 using a Geophysical Survey Systems SIR 2000 instrument with a 400 MHz antenna.

The GPR survey detected a probable UST adjacent to a visible fill port and centered near grid coordinates X=112 Y=74.

GROUND PENETRATING RADAR RESULTS

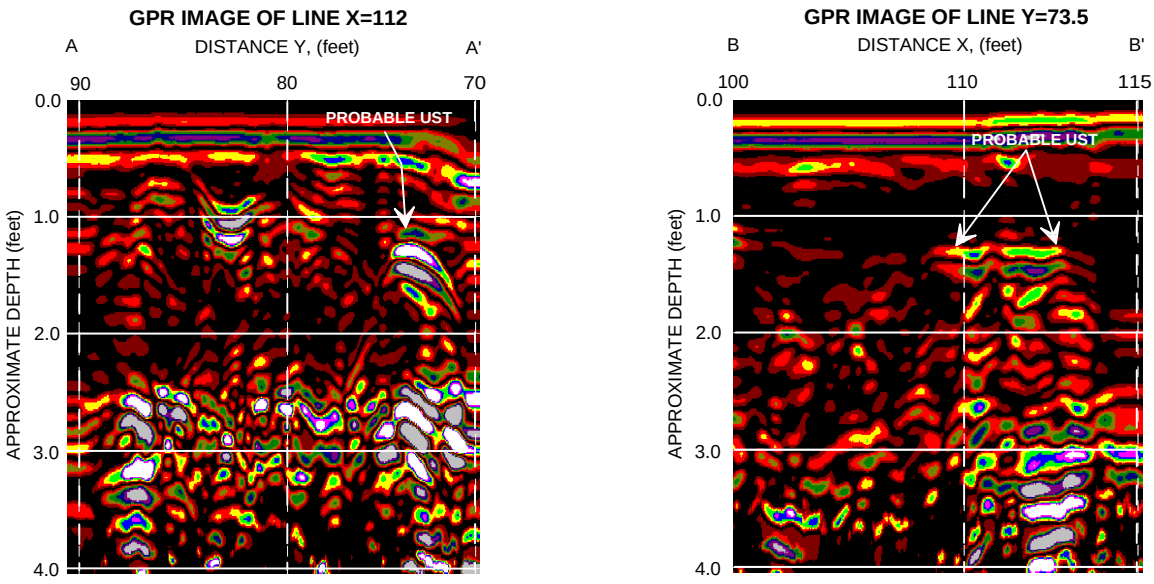
FIGURE 2

GRAPHIC SCALE IN FEET

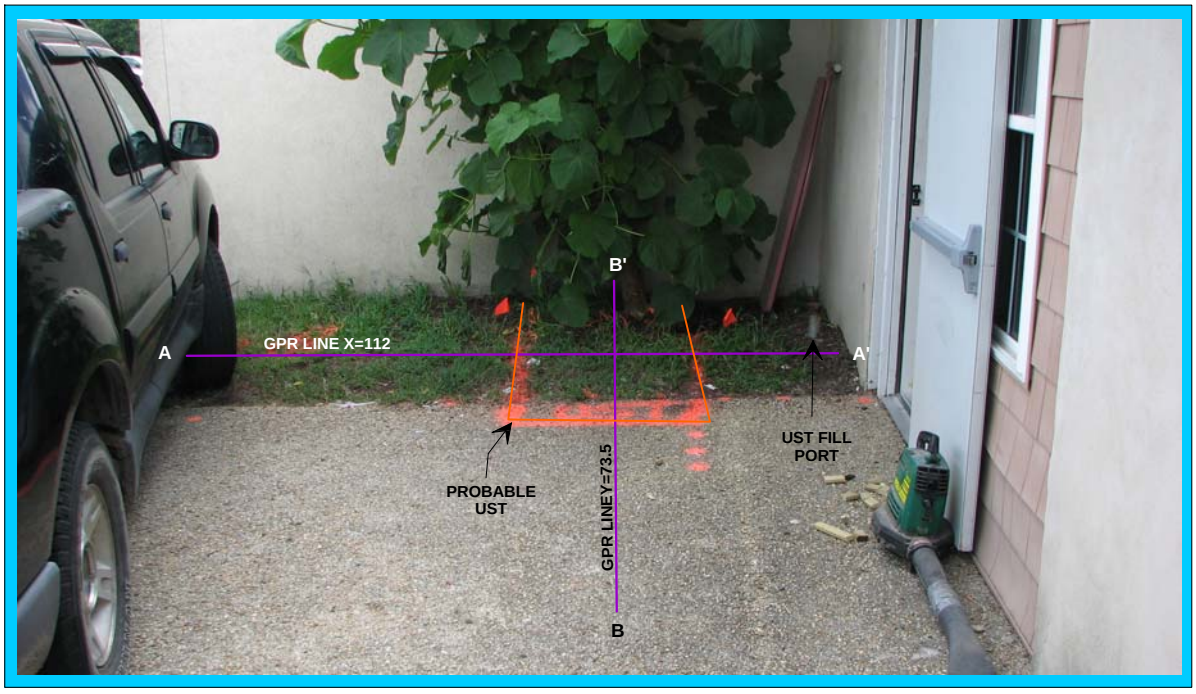
DRWN	CHKD		FIGURE
MJD			
DATE	LAY	DWG	J.-NO.
08/17/10			2010-159

CLIENT	SITE	CITY	STATE	TITLE
SOLUTIONS-IES	507 EAST ELIZABETH STREET SITE	ELIZABETH CITY	NORTH CAROLINA	GEOPHYSICAL RESULTS

PYRAMID
ENVIRONMENTAL & ENGINEERING, P.C.



The GPR images obtained along a portion of survey lines X=112 and Y=73.5 recorded higher amplitude GPR anomalies (reflections shaded in yellow and white) that may probably be in response to a UST buried approximately 1.3 feet below existing grade. The solid purple lines labeled AA' and BB' in the photograph below show the locations of GPR images X=112 and Y=73.5.



The orange rectangle in the photograph represents the approximate perimeter of a probable UST buried within the proposed ROW area and centered near grid coordinates X=112 Y=73.5. Based upon GPR data, the UST or object is buried approximately 1.3 feet below surface and oriented in a east-west direction. The solid purple lines in the photograph represent the approximate location of the GPR images X=112 and Y=73.5 shown above. The photograph is viewed in an easterly direction.

PYRAMID
ENVIRONMENTAL & ENGINEERING, P.C.

CLIENT	SOLUTIONS-IES	DATE	08/16/10	DRWN	MJD
SITE	507 EAST ELIZABETH STREET SITE	LAY		CHKD	
CITY	ELIZABETH CITY	STATE	NORTH CAROLINA	DWG	
TITLE	GEOPHYSICAL RESULTS	JNO.	2010-159	FIGURE	

IMAGES OF GPR SURVEY LINES X=112 & Y=73.5

FIGURE 3

APPENDIX C

GPS COORDINATES

APPENDIX C
Boring Location GPS Coordinates
Parcel #15
507 East Elizabeth Street
Elizabeth City, North Carolina
WBS Element: 35742.1.1; State Project: U-4438

Boring Identification	Latitude	Longitude
507-1	36.301251	76.219539
507-2	36.301367	76.219548
507-3	36.301280	76.219491
507-4	36.301390	76.219835
507-5	36.301345	76.219637
507-6	36.301375	76.219523

APPENDIX D

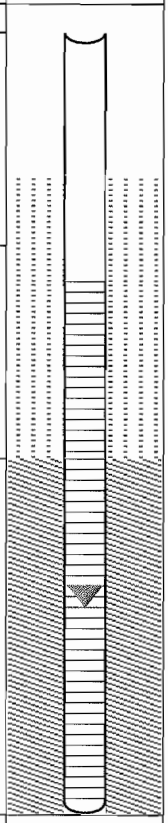
BORING LOGS

Log of Soil Boring: 507-1

Project Name: **Elizabeth City PSAs**
Solutions-IES Project Number: **3946.10A3.NDOT**
Client: **NCDOT**
Northing: **940528.82**
Easting: **2819434.02**
Project Location: **Elizabeth City** State: **NC**
County: **Pasquotank**
City: **Elizabeth City**
Site or Area: **507 E. Elizabeth Street**
Date Started: **8/2/10**
Date Completed: **8/2/10**
Drilling Method: **Direct push**
Initial Water Level: **5' bgs**
Final Water Level: **5.4' bgs**
Sample Method: **Macrocore**
Date & Time (i): **8/2/10 1615**
Date & Time (f): **8/2/10 1725**
Logged by: **KD** Checked by:
WBS #: **35742.1.1**
State Project #: **U-4438**

Depth	Elevation	USCS Symbol	Description	Sample Interval	Recovery %	Blows / 0.5 FT	Field Screen	Sample Interval	Sample ID
	0.00		Ground Surface						
0			**SP** tan and yellow sand, fine-grained				0.0		507-1-0-2
2			**OL** red/brown clay with silt, fill		20		4.5		507-1-2-4
4			**No Recovery**						
6			**Saturated**						
			End of Boring						
8									
10									

Well Information



Notes:
Field screen in conducted with FID. Results in parts per million (ppm).

Depth in feet.

Well Construction Details

Drilling Contractor: **Solutions-IES, Inc.**
Size of Borehole: **3.75"** TOC Elevation: **NA** Screen Interval: **7.34-2.34**
Completion: **Temporary** Casing Diameter: **1"** Screen Material: **PVC**
Total Depth: **7.34** Casing Material: **PVC** Slot Size: **0.01**

Solutions-IES
Industrial & Environmental Services
1101 Nowell Road
Raleigh, North Carolina 27607
Tel.: 919.873.1060 Fax.: 919.813.1074

Log of Soil Boring: 507-2

Project Name: **Elizabeth City PSAs**
Solutions-IES Project Number: **3946.10A3.NDOT**
Client: **NCDOT**
Northing: **940590.13**
Easting: **2819477.4**
Project Location: **Elizabeth City** State: **NC**
County: **Pasquotank**
City: **Elizabeth City**
Site or Area: **507 E. Elizabeth Street**
Date Started: **8/2/10**
Date Completed: **8/2/10**
Drilling Method: **Direct push**
Initial Water Level: **5' bgs**
Final Water Level:
Sample Method: **Macrocore**
Date & Time (i): **8/2/10 1615**
Date & Time (f):
Logged by: **KD** Checked by:
WBS #: **35742.1.1**
State Project #: **U-4438**

Depth	Elevation	USCS Symbol	Description	Sample Interval	Recovery %	Blows / 0.5 FT	Field Screen	Sample Interval	Sample ID	Well Const.
	0.00		Ground Surface							
0		OL	brown silt, plant material				0.0		507-2-0-2	
2		OL	red/ brown clayey-silt, moist, fill		25		0.0		507-2-2-4	
4			End of Boring							
6										
8										

Notes:
Field screen in conducted with FID. Results in parts per million (ppm).

Depth in feet.

Well Construction Details

Drilling Contractor: **Solutions-IES, Inc.**
Size of Borehole: **3.75"** TOC Elevation: **NA** Screen Interval:
Completion: Casing Diameter: Screen Material:
Total Depth: Casing Material: Slot Size:

Solutions-IES
Industrial & Environmental Services
1101 Nowell Road
Raleigh, North Carolina 27607
Tel.: 919.873.1060 Fax.: 919.813.1074

Log of Soil Boring: 507-3

Project Name: **Elizabeth City PSAs**
Solutions-IES Project Number: **3946.10A3.NDOT**
Client: **NCDOT**
Northing: **940052.88**
Easting: **2819294.05**
Project Location: **Elizabeth City** State: **NC**
County: **Pasquotank**
City: **Elizabeth City**
Site or Area: **507 E. Elizabeth Street**
Date Started: **8/2/10**
Date Completed: **8/2/10**
Drilling Method: **Direct push**
Initial Water Level: **5' bgs**
Final Water Level:
Sample Method: **Macrocore**
Date & Time (i): **8/2/2010 1615**
Date & Time (f):
Logged by: **KD** Checked by:
WBS #: **35742.1.1**
State Project #: **U-4438**

Depth	Elevation	USCS Symbol	Description	Sample Interval	Recovery %	Blows / 0.5 FT	Field Screen	Sample Interval	Sample ID	Well Const.
	0.00		Ground Surface							
0		OL	black silt, plant material				0.0		507-2-0-2	
2		SP	tan sand, medium-grained		20		0.0		507-2-2-4	
4			End of Boring							
6										
8										

Notes:
Field screen in conducted with FID. Results in parts per million (ppm).

Depth in feet.

Well Construction Details

Drilling Contractor: **Solutions-IES, Inc.**
Size of Borehole: **3.75"** TOC Elevation: **NA** Screen Interval:
Completion: Casing Diameter: Screen Material:
Total Depth: Casing Material: Slot Size:

Solutions-IES
Industrial & Environmental Services
1101 Nowell Road
Raleigh, North Carolina 27607
Tel.: 919.873.1060 Fax.: 919.813.1074

Log of Soil Boring: 507-4

Project Name: **Elizabeth City PSAs**
Solutions-IES Project Number: **3946.10A3.NDOT**
Client: **NCDOT**
Northing: **940090.07**
Easting: **2819191.6**
Project Location: **Elizabeth City** State: **NC**
County: **Pasquotank**
City: **Elizabeth City**
Site or Area: **507 E. Elizabeth Street**
Date Started: **8/4/10**
Date Completed: **8/4/10**
Drilling Method: **Direct push**
Initial Water Level: **5' bgs**
Final Water Level:
Sample Method: **Macrocore**
Date & Time (i): **8/2/2010 1615**
Date & Time (f):
Logged by: **KD** Checked by:
WBS #: **35742.1.1**
State Project #: **U-4438**

Depth		Lithology Sample Information					Laboratory Sample Information			Well Information
Depth	Elevation	USCS Symbol	Description	Sample Interval	Recovery %	Blows / 0.5 FT	Field Screen	Sample Interval	Sample ID	Well Const.
	0.00		Ground Surface							
0			Concrete							
		SM	dark gray silty-sand, fill, some gravel, some clay, slight odor							
2					30		36.9		507-4-1-4	
4			End of Boring							
6										
8										

Notes:
Field screen in conducted with FID. Results in parts per million (ppm).

Depth in feet.

Well Construction Details

Drilling Contractor: **Solutions-IES, Inc.**
Size of Borehole: **3.75"** TOC Elevation: **NA** Screen Interval:
Completion: Casing Diameter: Screen Material:
Total Depth: Casing Material: Slot Size:

Solutions-IES
Industrial & Environmental Services
1101 Nowell Road
Raleigh, North Carolina 27607
Tel.: 919.873.1060 Fax.: 919.813.1074

Log of Soil Boring: 507-5

Project Name: **Elizabeth City PSAs**
Solutions-IES Project Number: **3946.10A3.NDOT**
Client: **NCDOT**
Northing: **940075.33**
Easting: **2819250.38**
Project Location: **Elizabeth City** State: **NC**
County: **Pasquotank**
City: **Elizabeth City**
Site or Area: **507 E. Elizabeth Street**
Date Started: **8/2/10**
Date Completed: **8/2/10**
Drilling Method: **Direct push**
Initial Water Level: **5' bgs**
Final Water Level:
Sample Method: **Macrocore**
Date & Time (i): **8/2/2010 1615**
Date & Time (f):
Logged by: **KD** Checked by:
WBS #: **35742.1.1**
State Project #: **U-4438**

Depth	Elevation	USCS Symbol	Description	Sample Interval	Recovery %	Blows / 0.5 FT	Field Screen	Sample Interval	Sample ID	Well Const.
	0.00		Ground Surface							
0		OL	brown silt, dry				0.0			
2		OL	brown and gray silt with clay fill, moist		20		0.0		507-5-2-4	
4			End of Boring							
6										
8										

Notes:
Field screen in conducted with FID. Results in parts per million (ppm).

Depth in feet.

Well Construction Details

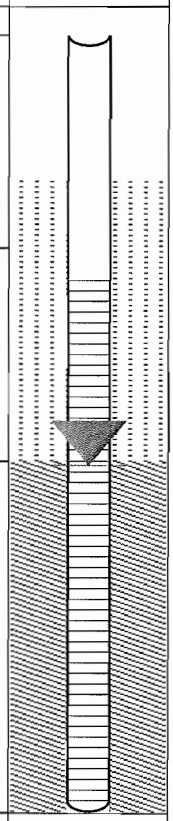
Drilling Contractor: **Solutions-IES, Inc.**
Size of Borehole: **3.75"** TOC Elevation: **NA** Screen Interval:
Completion: Casing Diameter: Screen Material:
Total Depth: Casing Material: Slot Size:

Solutions-IES
Industrial & Environmental Services
1101 Nowell Road
Raleigh, North Carolina 27607
Tel.: 919.873.1060 Fax.: 919.813.1074

Log of Soil Boring: 507-6

Project Name: **Elizabeth City PSAs**
Solutions-IES Project Number: **3946.10A3.NDOT**
Client: **NCDOT**
Northing: **940087.19**
Easting: **2819283.66**
Project Location: **Elizabeth City** State: **NC**
County: **Pasquotank**
City: **Elizabeth City**
Site or Area: **507 E. Elizabeth Street**
Date Started: **8/2/10**
Date Completed: **8/2/10**
Drilling Method: **Direct push**
Initial Water Level: **5' bgs**
Final Water Level: **4.05' bgs**
Sample Method: **Macrocore**
Date & Time (i): **8/2/10 1615**
Date & Time (f): **8/4/10 0945**
Logged by: **KD** Checked by:
WBS #: **35742.1.1**
State Project #: **U-4438**

Depth	Elevation	USCS Symbol	Description	Sample Interval	Recovery %	Blows / 0.5 FT	Field Screen	Sample Interval	Sample ID	Well Const.
	0.00		Ground Surface							
0			**SW** asphalt surface, gravel fill				0.0		507-6-0-2	
2			**SW** tan sand, moist, fine-grained		20		0.0		507-6-2-4	
4			**Saturated**							
6										
8			End of Boring							
10										



Notes:
Field screen in conducted with FID. Results in parts per million (ppm).

Depth in feet.

Well Construction Details

Drilling Contractor: **Solutions-IES, Inc.**
Size of Borehole: **3.75"** TOC Elevation: **NA**
Completion: **Temporary** Casing Diameter: **1"**
Total Depth: **7.3** Casing Material: **PVC**
Screen Interval: **7.3' - 2.3' bgs**
Screen Material: **PVC**
Slot Size: **0.01**

Solutions-IES
Industrial & Environmental Services
1101 Nowell Road
Raleigh, North Carolina 27607
Tel.: 919.873.1060 Fax.: 919.813.1074

APPENDIX E

LABORATORY ANALYTICAL REPORT

PRISM LABORATORIES, INC.
Full-Service Analytical & Environmental Solutions

NC Certification No. 402
SC Certification No. 99012
NC Drinking Water Cert No. 37735

Case Narrative

09/01/2010

Solutions IES (NCDOT Project)
Jody Overmyer
1101 Nowell Road
Raleigh, NC 27607

Project: NCDOT Elizabeth City PSA's - 507 E. Elizabeth St.
Project No.: WBS# 35742.1.1
Lab Submittal Date: 08/04/2010
Prism Work Order: 0080134

This data package contains the analytical results for the project identified above and includes a Case Narrative, Sample Results and Chain of Custody. Unless otherwise noted, all samples were received in acceptable condition and processed according to the referenced methods.

Data qualifiers are flagged individually on each sample. A key reference for the data qualifiers appears at the end of this case narrative.

Please call if you have any questions relating to this analytical report.

Respectfully,

PRISM LABORATORIES, INC.

VP Laboratory Services

Reviewed By

Data Qualifiers Key Reference:

J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
LH	High LCS recovery. Analyte not detected in the sample(s). No further action taken.
M	Matrix spike outside of the control limits.
P	Recovery outside of the QC limits due to inconsistency during extraction and chromatographic performance of this compound.
SR	Surrogate recovery outside the QC limits.
BRL	Below Reporting Limit
MDL	Method Detection Limit
RPD	Relative Percent Difference
*	Results reported to the reporting limit. All other results are reported to the MDL with values between MDL and reporting limit indicated with a J.

Sample Receipt Summary

09/01/2010

Prism Work Order: 0080134

Client Sample ID	Lab Sample ID	Matrix	Date Sampled	Date Received
507-6-2-4	0080134-05	Solid	08/02/10	08/04/10
507-3-2-4	0080134-06	Solid	08/02/10	08/04/10
507-2-2-4	0080134-07	Solid	08/02/10	08/04/10
507-1-2-4	0080134-08	Solid	08/02/10	08/04/10
507-1	0080134-09	Water	08/02/10	08/04/10
507-5-2-4	0080134-10	Solid	08/02/10	08/04/10

Samples received in good condition at 3.6 degrees C unless otherwise noted.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

Solutions IES (NCDOT Project)
Attn: Jody Overmyer
1101 Nowell Road
Raleigh, NC 27607

Project: NCDOT Elizabeth City PSA's - 507 E. Elizabeth St.
Project No.: WBS# 35742.1.1
Sample Matrix: Solid

Client Sample ID: 507-6-2-4
Prism Sample ID: 0080134-05
Prism Work Order: 0080134
Time Collected: 08/02/10 18:30
Time Submitted: 08/04/10 16:10

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Diesel Range Organics by GC/FID									
Diesel Range Organics	**16**	**mg/kg dry**	**7.3**	**1.2**	**1**	***8015C**	**8/12/10 23:03**	**JMV**	**P0H0245**
			Surrogate			Recovery		Control Limits	
			o-Terphenyl			*63 %*		*49-124*	
Gasoline Range Organics by GC/FID									
Gasoline Range Organics	BRL	mg/kg dry	5.7	0.74	50	*8015C	8/10/10 10:22	HPE	P0H0204
			Surrogate			Recovery		Control Limits	
			a,a,a-Trifluorotoluene			*59 %*		*55-129*	
General Chemistry Parameters									
% Solids	**95.2**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**8/6/10 14:30**	**JAB**	**P0H0194**

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

Solutions IES (NCDOT Project)
Attn: Jody Overmyer
1101 Nowell Road
Raleigh, NC 27607

Project: NCDOT Elizabeth City PSA's - 507 E. Elizabeth St.
Project No.: WBS# 35742.1.1
Sample Matrix: Solid

Client Sample ID: 507-3-2-4
Prism Sample ID: 0080134-06
Prism Work Order: 0080134
Time Collected: 08/02/10 18:50
Time Submitted: 08/04/10 16:10

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Diesel Range Organics by GC/FID									
Diesel Range Organics	**34**	**mg/kg dry**	**7.7**	**1.2**	**1**	***8015C**	**8/12/10 13:32**	**JMV**	**P0H0245**
			Surrogate			Recovery		Control Limits	
			o-Terphenyl			*75 %*		*49-124*	
Gasoline Range Organics by GC/FID									
Gasoline Range Organics	BRL	mg/kg dry	4.8	0.62	50	*8015C	8/9/10 20:47	HPE	P0H0204
			Surrogate			Recovery		Control Limits	
			a,a,a-Trifluorotoluene			*91 %*		*55-129*	
General Chemistry Parameters									
% Solids	**90.8**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**8/6/10 14:30**	**JAB**	**P0H0194**

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

Solutions IES (NCDOT Project)
Attn: Jody Overmyer
1101 Nowell Road
Raleigh, NC 27607

Project: NCDOT Elizabeth City PSA's - 507 E. Elizabeth St.
Project No.: WBS# 35742.1.1
Sample Matrix: Solid

Client Sample ID: 507-2-2-4
Prism Sample ID: 0080134-07
Prism Work Order: 0080134
Time Collected: 08/02/10 18:30
Time Submitted: 08/04/10 16:10

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Diesel Range Organics by GC/FID									
Diesel Range Organics	**37**	**mg/kg dry**	**7.8**	**1.3**	**1**	***8015C**	**8/12/10 14:43**	**JMV**	**P0H0245**
			Surrogate			Recovery		Control Limits	
			o-Terphenyl			*81 %*		*49-124*	
Gasoline Range Organics by GC/FID									
Gasoline Range Organics	BRL	mg/kg dry	4.8	0.62	50	*8015C	8/9/10 21:21	HPE	P0H0204
			Surrogate			Recovery		Control Limits	
			a,a,a-Trifluorotoluene			*68 %*		*55-129*	
General Chemistry Parameters									
% Solids	**89.6**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**8/6/10 14:30**	**JAB**	**P0H0194**

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

Solutions IES (NCDOT Project)
Attn: Jody Overmyer
1101 Nowell Road
Raleigh, NC 27607

Project: NCDOT Elizabeth City PSA's - 507 E. Elizabeth St.
Project No.: WBS# 35742.1.1
Sample Matrix: Solid

Client Sample ID: 507-1-2-4
Prism Sample ID: 0080134-08
Prism Work Order: 0080134
Time Collected: 08/02/10 18:45
Time Submitted: 08/04/10 16:10

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Diesel Range Organics by GC/FID									
Diesel Range Organics	**38**	**mg/kg dry**	**8.4**	**1.4**	**1**	***8015C**	**8/12/10 15:19**	**JMV**	**P0H0245**
			Surrogate			Recovery		Control Limits	
			o-Terphenyl			*85 %*		*49-124*	
Gasoline Range Organics by GC/FID									
Gasoline Range Organics	BRL	mg/kg dry	5.0	0.65	50	*8015C	8/9/10 23:03	HPE	P0H0204
			Surrogate			Recovery		Control Limits	
			a,a,a-Trifluorotoluene			*71 %*		*55-129*	
General Chemistry Parameters									
% Solids	**82.3**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**8/6/10 14:30**	**JAB**	**P0H0194**

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

Solutions IES (NCDOT Project)
Attn: Jody Overmyer
1101 Nowell Road
Raleigh, NC 27607

Project: NCDOT Elizabeth City PSA's - 507 E. Elizabeth St.
Project No.: WBS# 35742.1.1
Sample Matrix: Water

Client Sample ID: 507-1
Prism Sample ID: 0080134-09
Prism Work Order: 0080134
Time Collected: 08/02/10 17:50
Time Submitted: 08/04/10 16:10

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Semivolatile Organic Compounds by GC/MS									
1,2,4-Trichlorobenzene	BRL	ug/L	10	2.2	1	8270D	8/21/10 17:41	CGP	P0H0172
1,2-Dichlorobenzene	BRL	ug/L	10	1.8	1	8270D	8/21/10 17:41	CGP	P0H0172
1,3-Dichlorobenzene	BRL	ug/L	10	1.8	1	8270D	8/21/10 17:41	CGP	P0H0172
1,4-Dichlorobenzene	BRL	ug/L	10	2.0	1	8270D	8/21/10 17:41	CGP	P0H0172
2,4,5-Trichlorophenol	BRL	ug/L	10	2.5	1	8270D	8/21/10 17:41	CGP	P0H0172
2,4,6-Trichlorophenol	BRL	ug/L	10	2.3	1	8270D	8/21/10 17:41	CGP	P0H0172
2,4-Dichlorophenol	BRL	ug/L	10	2.4	1	8270D	8/21/10 17:41	CGP	P0H0172
2,4-Dimethylphenol	BRL	ug/L	10	2.4	1	8270D	8/21/10 17:41	CGP	P0H0172
2,4-Dinitrophenol	BRL	ug/L	10	2.4	1	8270D	8/21/10 17:41	CGP	P0H0172
2,4-Dinitrotoluene	BRL	ug/L	10	0.95	1	8270D	8/21/10 17:41	CGP	P0H0172
2,6-Dinitrotoluene	BRL	ug/L	10	1.6	1	8270D	8/21/10 17:41	CGP	P0H0172
2-Chloronaphthalene	BRL	ug/L	10	2.3	1	8270D	8/21/10 17:41	CGP	P0H0172
2-Chlorophenol	BRL	ug/L	10	2.1	1	8270D	8/21/10 17:41	CGP	P0H0172
2-Methylnaphthalene	BRL	ug/L	10	2.6	1	8270D	8/21/10 17:41	CGP	P0H0172
2-Methylphenol	BRL	ug/L	10	2.4	1	8270D	8/21/10 17:41	CGP	P0H0172
2-Nitroaniline	BRL	ug/L	10	1.9	1	8270D	8/21/10 17:41	CGP	P0H0172
2-Nitrophenol	BRL	ug/L	10	2.5	1	8270D	8/21/10 17:41	CGP	P0H0172
3,3'-Dichlorobenzidine	BRL	ug/L	10	0.96	1	8270D	8/21/10 17:41	CGP	P0H0172
3/4-Methylphenol	BRL	ug/L	10	2.4	1	8270D	8/21/10 17:41	CGP	P0H0172
3-Nitroaniline	BRL	ug/L	10	1.3	1	8270D	8/21/10 17:41	CGP	P0H0172
4,6-Dinitro-2-methylphenol	BRL	ug/L	10	2.7	1	8270D	8/21/10 17:41	CGP	P0H0172
4-Bromophenyl phenyl ether	BRL	ug/L	10	1.8	1	8270D	8/21/10 17:41	CGP	P0H0172
4-Chloro-3-methylphenol	BRL	ug/L	10	2.3	1	8270D	8/21/10 17:41	CGP	P0H0172
4-Chloroaniline	BRL	ug/L	10	2.5	1	8270D	8/21/10 17:41	CGP	P0H0172
4-Chlorophenyl phenyl ether	BRL	ug/L	10	1.8	1	8270D	8/21/10 17:41	CGP	P0H0172
4-Nitroaniline	BRL	ug/L	10	0.91	1	8270D	8/21/10 17:41	CGP	P0H0172
4-Nitrophenol	BRL	ug/L	50	2.6	1	8270D	8/21/10 17:41	CGP	P0H0172
Acenaphthene	BRL	ug/L	10	2.1	1	8270D	8/21/10 17:41	CGP	P0H0172
Acenaphthylene	BRL	ug/L	10	2.2	1	8270D	8/21/10 17:41	CGP	P0H0172
Aniline	BRL	ug/L	10	2.2	1	8270D	8/21/10 17:41	CGP	P0H0172
Anthracene	BRL	ug/L	10	1.2	1	8270D	8/21/10 17:41	CGP	P0H0172
Azobenzene	BRL	ug/L	10	1.8	1	8270D	8/21/10 17:41	CGP	P0H0172
Benzo(a)anthracene	BRL	ug/L	10	0.95	1	8270D	8/21/10 17:41	CGP	P0H0172
Benzo(a)pyrene	BRL	ug/L	10	1.1	1	8270D	8/21/10 17:41	CGP	P0H0172
Benzo(b)fluoranthene	BRL	ug/L	10	1.4	1	8270D	8/21/10 17:41	CGP	P0H0172
Benzo(g,h,i)perylene	BRL	ug/L	10	2.1	1	8270D	8/21/10 17:41	CGP	P0H0172
Benzo(k)fluoranthene	BRL	ug/L	10	1.1	1	8270D	8/21/10 17:41	CGP	P0H0172
Benzoic Acid	BRL	ug/L	100	50	1	8270D	8/21/10 17:41	CGP	P0H0172
Benzyl alcohol	BRL	ug/L	10	2.1	1	8270D	8/21/10 17:41	CGP	P0H0172
bis(2-Chloroethoxy)methane	BRL	ug/L	10	2.2	1	8270D	8/21/10 17:41	CGP	P0H0172
Bis(2-Chloroethyl)ether	BRL	ug/L	10	1.9	1	8270D	8/21/10 17:41	CGP	P0H0172
Bis(2-chloroisopropyl)ether	BRL	ug/L	10	2.3	1	8270D	8/21/10 17:41	CGP	P0H0172

Solutions IES (NCDOT Project)
Attn: Jody Overmyer
1101 Nowell Road
Raleigh, NC 27607

Project: NCDOT Elizabeth City PSA's - 507 E. Elizabeth St.
Project No.: WBS# 35742.1.1
Sample Matrix: Water

Client Sample ID: 507-1
Prism Sample ID: 0080134-09
Prism Work Order: 0080134
Time Collected: 08/02/10 17:50
Time Submitted: 08/04/10 16:10

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Bis(2-Ethylhexyl)phthalate	BRL	ug/L	10	1.8	1	8270D	8/21/10 17:41	CGP	P0H0172
Butyl benzyl phthalate	BRL	ug/L	10	1.5	1	8270D	8/21/10 17:41	CGP	P0H0172
Chrysene	BRL	ug/L	10	1.2	1	8270D	8/21/10 17:41	CGP	P0H0172
Dibenzo(a,h)anthracene	BRL	ug/L	10	1.8	1	8270D	8/21/10 17:41	CGP	P0H0172
Dibenzofuran	BRL	ug/L	10	2.2	1	8270D	8/21/10 17:41	CGP	P0H0172
Diethyl phthalate	BRL	ug/L	10	1.4	1	8270D	8/21/10 17:41	CGP	P0H0172
Dimethyl phthalate	BRL	ug/L	10	1.6	1	8270D	8/21/10 17:41	CGP	P0H0172
Di-n-butyl phthalate	BRL	ug/L	10	1.8	1	8270D	8/21/10 17:41	CGP	P0H0172
Di-n-octyl phthalate	BRL	ug/L	10	1.9	1	8270D	8/21/10 17:41	CGP	P0H0172
Fluoranthene	BRL	ug/L	10	0.94	1	8270D	8/21/10 17:41	CGP	P0H0172
Fluorene	BRL	ug/L	10	1.8	1	8270D	8/21/10 17:41	CGP	P0H0172
Hexachlorobenzene	BRL	ug/L	10	1.4	1	8270D	8/21/10 17:41	CGP	P0H0172
Hexachlorobutadiene	BRL	ug/L	10	2.3	1	8270D	8/21/10 17:41	CGP	P0H0172
Hexachlorocyclopentadiene	BRL	ug/L	10	1.8	1	8270D	8/21/10 17:41	CGP	P0H0172
Hexachloroethane	BRL	ug/L	10	1.9	1	8270D	8/21/10 17:41	CGP	P0H0172
Indeno(1,2,3-cd)pyrene	BRL	ug/L	10	1.6	1	8270D	8/21/10 17:41	CGP	P0H0172
Isophorone	BRL	ug/L	10	2.4	1	8270D	8/21/10 17:41	CGP	P0H0172
Naphthalene	BRL	ug/L	10	2.3	1	8270D	8/21/10 17:41	CGP	P0H0172
Nitrobenzene	BRL	ug/L	10	2.0	1	8270D	8/21/10 17:41	CGP	P0H0172
N-Nitroso-di-n-propylamine	BRL	ug/L	10	2.3	1	8270D	8/21/10 17:41	CGP	P0H0172
N-Nitrosodiphenylamine	BRL	ug/L	10	1.6	1	8270D	8/21/10 17:41	CGP	P0H0172
Pentachlorophenol	BRL	ug/L	10	1.6	1	8270D	8/21/10 17:41	CGP	P0H0172
Phenanthrene	BRL	ug/L	10	1.2	1	8270D	8/21/10 17:41	CGP	P0H0172
Phenol	BRL	ug/L	10	2.2	1	8270D	8/21/10 17:41	CGP	P0H0172
Pyrene	BRL	ug/L	10	1.4	1	8270D	8/21/10 17:41	CGP	P0H0172

Surrogate	Recovery	Control Limits
2,4,6-Tribromophenol	*79 %*	*26-139*
2-Fluorobiphenyl	*69 %*	*41-112*
2-Fluorophenol	*36 %*	*10-48*
Nitrobenzene-d5	*67 %*	*34-102*
Phenol-d5	*22 %*	*10-34*
Terphenyl-d14	*90 %*	*31-165*

Volatile Organic Compounds by GC/MS

1,1,1,2-Tetrachloroethane	BRL	ug/L	1.0	0.15	1	8260B	8/11/10 20:57	KLA	P0H0263
1,1,1-Trichloroethane	BRL	ug/L	1.0	0.063	1	8260B	8/11/10 20:57	KLA	P0H0263
1,1,2,2-Tetrachloroethane	BRL	ug/L	1.0	0.071	1	8260B	8/11/10 20:57	KLA	P0H0263
1,1,2-Trichloroethane	BRL	ug/L	1.0	0.17	1	8260B	8/11/10 20:57	KLA	P0H0263
1,1-Dichloroethane	BRL	ug/L	1.0	0.096	1	8260B	8/11/10 20:57	KLA	P0H0263
1,1-Dichloroethylene	BRL	ug/L	1.0	0.078	1	8260B	8/11/10 20:57	KLA	P0H0263
1,1-Dichloropropylene	BRL	ug/L	1.0	0.061	1	8260B	8/11/10 20:57	KLA	P0H0263
1,2,3-Trichlorobenzene	BRL	ug/L	2.0	0.20	1	8260B	8/11/10 20:57	KLA	P0H0263
1,2,3-Trichloropropane	BRL	ug/L	1.0	0.081	1	8260B	8/11/10 20:57	KLA	P0H0263
1,2,4-Trichlorobenzene	BRL	ug/L	1.0	0.10	1	8260B	8/11/10 20:57	KLA	P0H0263

Solutions IES (NCDOT Project)
Attn: Jody Overmyer
1101 Nowell Road
Raleigh, NC 27607

Project: NCDOT Elizabeth City PSA's - 507 E. Elizabeth St.
Project No.: WBS# 35742.1.1
Sample Matrix: Water

Client Sample ID: 507-1
Prism Sample ID: 0080134-09
Prism Work Order: 0080134
Time Collected: 08/02/10 17:50
Time Submitted: 08/04/10 16:10

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
1,2,4-Trimethylbenzene	BRL	ug/L	1.0	0.048	1	8260B	8/11/10 20:57	KLA	P0H0263
1,2-Dibromo-3-chloropropane	BRL	ug/L	2.0	0.59	1	8260B	8/11/10 20:57	KLA	P0H0263
1,2-Dibromoethane	BRL	ug/L	1.0	0.14	1	8260B	8/11/10 20:57	KLA	P0H0263
1,2-Dichlorobenzene	BRL	ug/L	1.0	0.076	1	8260B	8/11/10 20:57	KLA	P0H0263
1,2-Dichloroethane	BRL	ug/L	1.0	0.14	1	8260B	8/11/10 20:57	KLA	P0H0263
1,2-Dichloropropane	BRL	ug/L	1.0	0.13	1	8260B	8/11/10 20:57	KLA	P0H0263
1,3,5-Trimethylbenzene	BRL	ug/L	1.0	0.057	1	8260B	8/11/10 20:57	KLA	P0H0263
1,3-Dichlorobenzene	BRL	ug/L	1.0	0.074	1	8260B	8/11/10 20:57	KLA	P0H0263
1,3-Dichloropropane	BRL	ug/L	1.0	0.11	1	8260B	8/11/10 20:57	KLA	P0H0263
1,4-Dichlorobenzene	BRL	ug/L	1.0	0.068	1	8260B	8/11/10 20:57	KLA	P0H0263
2,2-Dichloropropane	BRL	ug/L	2.0	0.11	1	8260B	8/11/10 20:57	KLA	P0H0263
2-Chloroethyl Vinyl Ether	BRL	ug/L	2.0	0.22	1	8260B	8/11/10 20:57	KLA	P0H0263
2-Chlorotoluene	BRL	ug/L	1.0	0.038	1	8260B	8/11/10 20:57	KLA	P0H0263
4-Chlorotoluene	BRL	ug/L	1.0	0.053	1	8260B	8/11/10 20:57	KLA	P0H0263
4-Isopropyltoluene	BRL	ug/L	1.0	0.065	1	8260B	8/11/10 20:57	KLA	P0H0263
Acetone	BRL	ug/L	10	0.62	1	8260B	8/11/10 20:57	KLA	P0H0263
Acrolein	BRL	ug/L	100	1.1	1	8260B	8/11/10 20:57	KLA	P0H0263
Acrylonitrile	BRL	ug/L	100	0.86	1	8260B	8/11/10 20:57	KLA	P0H0263
Benzene	BRL	ug/L	1.0	0.072	1	8260B	8/11/10 20:57	KLA	P0H0263
Bromobenzene	BRL	ug/L	1.0	0.064	1	8260B	8/11/10 20:57	KLA	P0H0263
Bromochloromethane	BRL	ug/L	1.0	0.13	1	8260B	8/11/10 20:57	KLA	P0H0263
Bromodichloromethane	BRL	ug/L	1.0	0.062	1	8260B	8/11/10 20:57	KLA	P0H0263
Bromoform	BRL	ug/L	1.0	0.27	1	8260B	8/11/10 20:57	KLA	P0H0263
Bromomethane	BRL	ug/L	3.0	0.47	1	8260B	8/11/10 20:57	KLA	P0H0263
Carbon disulfide	BRL	ug/L	5.0	1.4	1	8260B	8/11/10 20:57	KLA	P0H0263
Carbon Tetrachloride	BRL	ug/L	2.0	0.12	1	8260B	8/11/10 20:57	KLA	P0H0263
Chlorobenzene	BRL	ug/L	1.0	0.061	1	8260B	8/11/10 20:57	KLA	P0H0263
Chloroethane	BRL	ug/L	5.0	0.13	1	8260B	8/11/10 20:57	KLA	P0H0263
Chloroform	BRL	ug/L	1.0	0.089	1	8260B	8/11/10 20:57	KLA	P0H0263
Chloromethane	BRL	ug/L	2.0	0.11	1	8260B	8/11/10 20:57	KLA	P0H0263
cis-1,2-Dichloroethylene	BRL	ug/L	1.0	0.076	1	8260B	8/11/10 20:57	KLA	P0H0263
cis-1,3-Dichloropropylene	BRL	ug/L	1.0	0.10	1	8260B	8/11/10 20:57	KLA	P0H0263
Dibromochloromethane	BRL	ug/L	1.0	0.30	1	8260B	8/11/10 20:57	KLA	P0H0263
Dibromomethane	BRL	ug/L	1.0	0.13	1	8260B	8/11/10 20:57	KLA	P0H0263
Dichlorodifluoromethane	BRL	ug/L	2.0	0.11	1	8260B	8/11/10 20:57	KLA	P0H0263
Ethylbenzene	BRL	ug/L	1.0	0.067	1	8260B	8/11/10 20:57	KLA	P0H0263
Hexachlorobutadiene	BRL	ug/L	2.0	0.36	1	8260B	8/11/10 20:57	KLA	P0H0263
Isopropyl Ether	BRL	ug/L	1.0	0.043	1	8260B	8/11/10 20:57	KLA	P0H0263
Isopropylbenzene (Cumene)	BRL	ug/L	1.0	0.072	1	8260B	8/11/10 20:57	KLA	P0H0263
m,p-Xylenes	BRL	ug/L	2.0	0.081	1	8260B	8/11/10 20:57	KLA	P0H0263
Methyl Butyl Ketone (2-Hexanone)	BRL	ug/L	5.0	0.19	1	8260B	8/11/10 20:57	KLA	P0H0263
Methyl Ethyl Ketone (2-Butanone)	**4.1 J**	**ug/L**	**5.0**	**0.90**	**1**	**8260B**	**8/11/10 20:57**	**KLA**	**P0H0263**
Methyl Isobutyl Ketone	BRL	ug/L	5.0	0.12	1	8260B	8/11/10 20:57	KLA	P0H0263

Solutions IES (NCDOT Project)
Attn: Jody Overmyer
1101 Nowell Road
Raleigh, NC 27607

Project: NCDOT Elizabeth City PSA's - 507 E. Elizabeth St.
Project No.: WBS# 35742.1.1
Sample Matrix: Water

Client Sample ID: 507-1
Prism Sample ID: 0080134-09
Prism Work Order: 0080134
Time Collected: 08/02/10 17:50
Time Submitted: 08/04/10 16:10

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Methylene Chloride	BRL	ug/L	2.0	0.44	1	8260B	8/11/10 20:57	KLA	P0H0263
Methyl-tert-Butyl Ether	BRL	ug/L	1.0	0.070	1	8260B	8/11/10 20:57	KLA	P0H0263
Naphthalene	BRL	ug/L	1.0	0.098	1	8260B	8/11/10 20:57	KLA	P0H0263
n-Butylbenzene	BRL	ug/L	1.0	0.11	1	8260B	8/11/10 20:57	KLA	P0H0263
n-Propylbenzene	BRL	ug/L	1.0	0.060	1	8260B	8/11/10 20:57	KLA	P0H0263
o-Xylene	BRL	ug/L	1.0	0.046	1	8260B	8/11/10 20:57	KLA	P0H0263
sec-Butylbenzene	BRL	ug/L	1.0	0.087	1	8260B	8/11/10 20:57	KLA	P0H0263
Styrene	BRL	ug/L	1.0	0.047	1	8260B	8/11/10 20:57	KLA	P0H0263
tert-Butylbenzene	BRL	ug/L	1.0	0.080	1	8260B	8/11/10 20:57	KLA	P0H0263
Tetrachloroethylene	BRL	ug/L	1.0	0.069	1	8260B	8/11/10 20:57	KLA	P0H0263
Toluene	BRL	ug/L	1.0	0.042	1	8260B	8/11/10 20:57	KLA	P0H0263
trans-1,2-Dichloroethylene	BRL	ug/L	2.0	0.12	1	8260B	8/11/10 20:57	KLA	P0H0263
trans-1,3-Dichloropropylene	BRL	ug/L	1.0	0.043	1	8260B	8/11/10 20:57	KLA	P0H0263
Trichloroethylene	BRL	ug/L	2.0	0.054	1	8260B	8/11/10 20:57	KLA	P0H0263
Trichlorofluoromethane	BRL	ug/L	2.0	0.088	1	8260B	8/11/10 20:57	KLA	P0H0263
Vinyl acetate	BRL	ug/L	20	0.10	1	8260B	8/11/10 20:57	KLA	P0H0263
Vinyl chloride	BRL	ug/L	2.0	0.16	1	8260B	8/11/10 20:57	KLA	P0H0263

Surrogate	Recovery	Control Limits
4-Bromofluorobenzene	*111 %*	*80-124*
Dibromofluoromethane	*97 %*	*75-129*
Toluene-d8	*101 %*	*77-123*

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

Solutions IES (NCDOT Project)
Attn: Jody Overmyer
1101 Nowell Road
Raleigh, NC 27607

Project: NCDOT Elizabeth City PSA's - 507 E. Elizabeth St.
Project No.: WBS# 35742.1.1
Sample Matrix: Solid

Client Sample ID: 507-5-2-4
Prism Sample ID: 0080134-10
Prism Work Order: 0080134
Time Collected: 08/02/10 18:47
Time Submitted: 08/04/10 16:10

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Diesel Range Organics by GC/FID									
Diesel Range Organics	**36**	**mg/kg dry**	**9.6**	**1.6**	**1**	***8015C**	**8/12/10 15:55**	**JMV**	**P0H0245**
			Surrogate			Recovery		Control Limits	
			o-Terphenyl			*80 %*		*49-124*	
Gasoline Range Organics by GC/FID									
Gasoline Range Organics	BRL	mg/kg dry	4.9	0.64	50	*8015C	8/10/10 10:58	HPE	P0H0204
			Surrogate			Recovery		Control Limits	
			a,a,a-Trifluorotoluene			*99 %*		*55-129*	
General Chemistry Parameters									
% Solids	**72.7**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**8/6/10 14:30**	**JAB**	**P0H0194**

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

Solutions IES (NCDOT Project)
Attn: Jody Overmyer
1101 Nowell Road
Raleigh, NC 27607

Project: NCDOT Elizabeth City PSA's -
507 E. Elizabeth St.
Project No: WBS# 35742.1.1

Prism Work Order: 0080134
Time Submitted: 8/4/2010 4:10:00PM

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0H0263 - 5030B										
Blank (P0H0263-BLK1)				Prepared & Analyzed: 08/11/10						
1,1,1,2-Tetrachloroethane	BRL	1.0	ug/L							
1,1,1-Trichloroethane	BRL	1.0	ug/L							
1,1,2,2-Tetrachloroethane	BRL	1.0	ug/L							
1,1,2-Trichloroethane	BRL	1.0	ug/L							
1,1-Dichloroethane	BRL	1.0	ug/L							
1,1-Dichloroethylene	BRL	1.0	ug/L							
1,1-Dichloropropylene	BRL	1.0	ug/L							
1,2,3-Trichlorobenzene	BRL	2.0	ug/L							
1,2,3-Trichloropropane	BRL	1.0	ug/L							
1,2,4-Trichlorobenzene	BRL	1.0	ug/L							
1,2,4-Trimethylbenzene	BRL	1.0	ug/L							
1,2-Dibromo-3-chloropropane	BRL	2.0	ug/L							
1,2-Dibromoethane	BRL	1.0	ug/L							
1,2-Dichlorobenzene	BRL	1.0	ug/L							
1,2-Dichloroethane	BRL	1.0	ug/L							
1,2-Dichloropropane	BRL	1.0	ug/L							
1,3,5-Trimethylbenzene	BRL	1.0	ug/L							
1,3-Dichlorobenzene	BRL	1.0	ug/L							
1,3-Dichloropropane	BRL	1.0	ug/L							
1,4-Dichlorobenzene	BRL	1.0	ug/L							
2,2-Dichloropropane	BRL	2.0	ug/L							
2-Chloroethyl Vinyl Ether	BRL	2.0	ug/L							
2-Chlorotoluene	BRL	1.0	ug/L							
4-Chlorotoluene	BRL	1.0	ug/L							
4-Isopropyltoluene	BRL	1.0	ug/L							
Acetone	BRL	10	ug/L							
Acrolein	BRL	100	ug/L							
Acrylonitrile	BRL	100	ug/L							
Benzene	BRL	1.0	ug/L							
Bromobenzene	BRL	1.0	ug/L							
Bromochloromethane	BRL	1.0	ug/L							
Bromodichloromethane	BRL	1.0	ug/L							
Bromoform	BRL	1.0	ug/L							
Bromomethane	BRL	3.0	ug/L							
Carbon disulfide	BRL	5.0	ug/L							
Carbon Tetrachloride	BRL	2.0	ug/L							
Chlorobenzene	BRL	1.0	ug/L							
Chloroethane	BRL	5.0	ug/L							
Chloroform	BRL	1.0	ug/L							
Chloromethane	BRL	2.0	ug/L							
cis-1,2-Dichloroethylene	BRL	1.0	ug/L							
cis-1,3-Dichloropropylene	BRL	1.0	ug/L							
Dibromochloromethane	BRL	1.0	ug/L							
Dibromomethane	BRL	1.0	ug/L							
Dichlorodifluoromethane	BRL	2.0	ug/L							
Ethylbenzene	BRL	1.0	ug/L							

Solutions IES (NCDOT Project)
Attn: Jody Overmyer
1101 Nowell Road
Raleigh, NC 27607

Project: NCDOT Elizabeth City PSA's -
507 E. Elizabeth St.
Project No: WBS# 35742.1.1

Prism Work Order: 0080134
Time Submitted: 8/4/2010 4:10:00PM

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0H0263 - 5030B										
Blank (P0H0263-BLK1)				Prepared & Analyzed: 08/11/10						
Hexachlorobutadiene	BRL	2.0	ug/L							
Isopropyl Ether	BRL	1.0	ug/L							
Isopropylbenzene (Cumene)	BRL	1.0	ug/L							
m,p-Xylenes	BRL	2.0	ug/L							
Methyl Butyl Ketone (2-Hexanone)	BRL	5.0	ug/L							
Methyl Ethyl Ketone (2-Butanone)	BRL	5.0	ug/L							
Methyl Isobutyl Ketone	BRL	5.0	ug/L							
Methylene Chloride	BRL	2.0	ug/L							
Methyl-tert-Butyl Ether	BRL	1.0	ug/L							
Naphthalene	BRL	1.0	ug/L							
n-Butylbenzene	BRL	1.0	ug/L							
n-Propylbenzene	BRL	1.0	ug/L							
o-Xylene	BRL	1.0	ug/L							
sec-Butylbenzene	BRL	1.0	ug/L							
Styrene	BRL	1.0	ug/L							
tert-Butylbenzene	BRL	1.0	ug/L							
Tetrachloroethylene	BRL	1.0	ug/L							
Toluene	BRL	1.0	ug/L							
trans-1,2-Dichloroethylene	BRL	2.0	ug/L							
trans-1,3-Dichloropropylene	BRL	1.0	ug/L							
Trichloroethylene	BRL	2.0	ug/L							
Trichlorofluoromethane	BRL	2.0	ug/L							
Vinyl acetate	BRL	20	ug/L							
Vinyl chloride	BRL	2.0	ug/L							
Surrogate: 4-Bromofluorobenzene	*26.0*		*ug/L*	*25.0*		*104*	*80-124*			
Surrogate: Dibromofluoromethane	*23.7*		*ug/L*	*25.0*		*95*	*75-129*			
Surrogate: Toluene-d8	*24.3*		*ug/L*	*25.0*		*97*	*77-123*			

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Project No: WBS# 35742.1.1

Prism Work Order: 0080134
Time Submitted: 8/4/2010 4:10:00PM

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0H0263 - 5030B										
LCS (P0H0263-BS1)				Prepared & Analyzed: 08/11/10						
1,1-Dichloroethylene	51.1	1.0	ug/L	50.0		102	70-154			
Benzene	53.7	1.0	ug/L	50.0		107	77-128			
Carbon Tetrachloride	60.1	2.0	ug/L	50.0		120	72-142			
Chlorobenzene	51.7	1.0	ug/L	50.0		103	78-119			
Tetrachloroethylene	53.3	1.0	ug/L	50.0		107	80-129			
Toluene	53.6	1.0	ug/L	50.0		107	76-131			
Trichloroethylene	50.2	2.0	ug/L	50.0		100	77-133			
Surrogate: 4-Bromofluorobenzene	*25.7*		*ug/L*	*25.0*		*103*	*80-124*			
Surrogate: Dibromofluoromethane	*24.2*		*ug/L*	*25.0*		*97*	*75-129*			
Surrogate: Toluene-d8	*22.4*		*ug/L*	*25.0*		*90*	*77-123*			
LCS Dup (P0H0263-BSD1)				Prepared & Analyzed: 08/11/10						
1,1-Dichloroethylene	52.3	1.0	ug/L	50.0		105	70-154	2	200	
Benzene	50.6	1.0	ug/L	50.0		101	77-128	6	200	
Carbon Tetrachloride	55.4	2.0	ug/L	50.0		111	72-142	8	200	
Chlorobenzene	49.8	1.0	ug/L	50.0		100	78-119	4	200	
Tetrachloroethylene	50.7	1.0	ug/L	50.0		101	80-129	5	200	
Toluene	50.8	1.0	ug/L	50.0		102	76-131	5	200	
Trichloroethylene	48.2	2.0	ug/L	50.0		96	77-133	4	200	
Surrogate: 4-Bromofluorobenzene	*25.2*		*ug/L*	*25.0*		*101*	*80-124*			
Surrogate: Dibromofluoromethane	*24.7*		*ug/L*	*25.0*		*99*	*75-129*			
Surrogate: Toluene-d8	*23.1*		*ug/L*	*25.0*		*93*	*77-123*			
Matrix Spike (P0H0263-MS1)	**Source: 0080134-09**			Prepared & Analyzed: 08/11/10						
1,1-Dichloroethylene	513	10	ug/L	500	BRL	103	65-162			
Benzene	534	10	ug/L	500	BRL	107	73-131			
Carbon Tetrachloride	567	20	ug/L	500	BRL	113	66-149			
Chlorobenzene	506	10	ug/L	500	BRL	101	76-119			
Tetrachloroethylene	502	10	ug/L	500	BRL	100	76-130			
Toluene	529	10	ug/L	500	BRL	106	72-135			
Trichloroethylene	473	20	ug/L	500	BRL	95	72-133			
Surrogate: 4-Bromofluorobenzene	*23.8*		*ug/L*	*25.0*		*95*	*80-124*			
Surrogate: Dibromofluoromethane	*24.6*		*ug/L*	*25.0*		*98*	*75-129*			
Surrogate: Toluene-d8	*22.6*		*ug/L*	*25.0*		*90*	*77-123*			

Solutions IES (NCDOT Project)
Attn: Jody Overmyer
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Project: NCDOT Elizabeth City PSA's - 507 E. Elizabeth St.
Project No: WBS# 35742.1.1

Prism Work Order: 0080134
Time Submitted: 8/4/2010 4:10:00PM

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0H0263 - 5030B										
Matrix Spike Dup (P0H0263-MSD1)	**Source: 0080134-09**			Prepared & Analyzed: 08/11/10						
1,1-Dichloroethylene	530	10	ug/L	500	BRL	106	65-162	3	20	
Benzene	529	10	ug/L	500	BRL	106	73-131	1	17	
Carbon Tetrachloride	565	20	ug/L	500	BRL	113	66-149	0.3	23	
Chlorobenzene	487	10	ug/L	500	BRL	97	76-119	4	20	
Tetrachloroethylene	485	10	ug/L	500	BRL	97	76-130	3	20	
Toluene	527	10	ug/L	500	BRL	105	72-135	0.3	18	
Trichloroethylene	462	20	ug/L	500	BRL	92	72-133	2	17	
Surrogate: 4-Bromofluorobenzene	*24.7*		*ug/L*	*25.0*		*99*	*80-124*			
Surrogate: Dibromofluoromethane	*24.7*		*ug/L*	*25.0*		*99*	*75-129*			
Surrogate: Toluene-d8	*22.4*		*ug/L*	*25.0*		*90*	*77-123*			

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Prism Work Order: 0080134
Time Submitted: 8/4/2010 4:10:00PM

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0H0172 - 3510C MS										
Blank (P0H0172-BLK1)				Prepared: 08/06/10 Analyzed: 08/21/10						
1,2,4-Trichlorobenzene	BRL	10	ug/L							
1,2-Dichlorobenzene	BRL	10	ug/L							
1,3-Dichlorobenzene	BRL	10	ug/L							
1,4-Dichlorobenzene	BRL	10	ug/L							
2,4,5-Trichlorophenol	BRL	10	ug/L							
2,4,6-Trichlorophenol	BRL	10	ug/L							
2,4-Dichlorophenol	BRL	10	ug/L							
2,4-Dimethylphenol	BRL	10	ug/L							
2,4-Dinitrophenol	BRL	10	ug/L							
2,4-Dinitrotoluene	BRL	10	ug/L							
2,6-Dinitrotoluene	BRL	10	ug/L							
2-Chloronaphthalene	BRL	10	ug/L							
2-Chlorophenol	BRL	10	ug/L							
2-Methylnaphthalene	BRL	10	ug/L							
2-Methylphenol	BRL	10	ug/L							
2-Nitroaniline	BRL	10	ug/L							
2-Nitrophenol	BRL	10	ug/L							
3,3'-Dichlorobenzidine	BRL	10	ug/L							
3/4-Methylphenol	BRL	10	ug/L							
3-Nitroaniline	BRL	10	ug/L							
4,6-Dinitro-2-methylphenol	BRL	10	ug/L							
4-Bromophenyl phenyl ether	BRL	10	ug/L							
4-Chloro-3-methylphenol	BRL	10	ug/L							
4-Chloroaniline	BRL	10	ug/L							
4-Chlorophenyl phenyl ether	BRL	10	ug/L							
4-Nitroaniline	BRL	10	ug/L							
4-Nitrophenol	BRL	50	ug/L							
Acenaphthene	BRL	10	ug/L							
Acenaphthylene	BRL	10	ug/L							
Aniline	BRL	10	ug/L							
Anthracene	BRL	10	ug/L							
Azobenzene	BRL	10	ug/L							
Benzo(a)anthracene	BRL	10	ug/L							
Benzo(a)pyrene	3.80	10	ug/L							J
Benzo(b)fluoranthene	BRL	10	ug/L							
Benzo(g,h,i)perylene	BRL	10	ug/L							
Benzo(k)fluoranthene	BRL	10	ug/L							
Benzoic Acid	BRL	100	ug/L							
Benzyl alcohol	BRL	10	ug/L							
bis(2-Chloroethoxy)methane	BRL	10	ug/L							
Bis(2-Chloroethyl)ether	BRL	10	ug/L							
Bis(2-chloroisopropyl)ether	BRL	10	ug/L							
Bis(2-Ethylhexyl)phthalate	BRL	10	ug/L							
Butyl benzyl phthalate	BRL	10	ug/L							
Chrysene	BRL	10	ug/L							
Dibenzo(a,h)anthracene	BRL	10	ug/L							

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Prism Work Order: 0080134
Time Submitted: 8/4/2010 4:10:00PM

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0H0172 - 3510C MS										
Blank (P0H0172-BLK1)				Prepared: 08/06/10 Analyzed: 08/21/10						
Dibenzofuran	BRL	10	ug/L							
Diethyl phthalate	BRL	10	ug/L							
Dimethyl phthalate	BRL	10	ug/L							
Di-n-butyl phthalate	BRL	10	ug/L							
Di-n-octyl phthalate	BRL	10	ug/L							
Fluoranthene	BRL	10	ug/L							
Fluorene	BRL	10	ug/L							
Hexachlorobenzene	BRL	10	ug/L							
Hexachlorobutadiene	BRL	10	ug/L							
Hexachlorocyclopentadiene	BRL	10	ug/L							
Hexachloroethane	BRL	10	ug/L							
Indeno(1,2,3-cd)pyrene	BRL	10	ug/L							
Isophorone	BRL	10	ug/L							
Naphthalene	BRL	10	ug/L							
Nitrobenzene	BRL	10	ug/L							
N-Nitroso-di-n-propylamine	BRL	10	ug/L							
N-Nitrosodiphenylamine	BRL	10	ug/L							
Pentachlorophenol	BRL	10	ug/L							
Phenanthrene	BRL	10	ug/L							
Phenol	BRL	10	ug/L							
Pyrene	BRL	10	ug/L							
Surrogate: 2,4,6-Tribromophenol	*78.4*		*ug/L*	*100*		*78*	*26-139*			
Surrogate: 2-Fluorobiphenyl	*40.1*		*ug/L*	*50.0*		*80*	*41-112*			
Surrogate: 2-Fluorophenol	*52.6*		*ug/L*	*100*		*53*	*10-48*			*SR*
Surrogate: Nitrobenzene-d5	*42.9*		*ug/L*	*50.0*		*86*	*34-102*			
Surrogate: Phenol-d5	*32.1*		*ug/L*	*100*		*32*	*10-34*			
Surrogate: Terphenyl-d14	*49.6*		*ug/L*	*50.0*		*99*	*31-165*			

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Time Submitted: 8/4/2010 4:10:00PM

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0H0172 - 3510C MS										
LCS (P0H0172-BS1)				Prepared: 08/06/10 Analyzed: 08/21/10						
1,2,4-Trichlorobenzene	28.5	10	ug/L	50.0		57	39-102			
1,2-Dichlorobenzene	27.6	10	ug/L	50.0		55	46-90			
1,3-Dichlorobenzene	26.7	10	ug/L	50.0		53	31-100			
1,4-Dichlorobenzene	27.6	10	ug/L	50.0		55	45-89			
2,4,5-Trichlorophenol	41.3	10	ug/L	50.0		83	60-108			
2,4,6-Trichlorophenol	42.1	10	ug/L	50.0		84	48-118			
2,4-Dichlorophenol	39.6	10	ug/L	50.0		79	38-107			
2,4-Dimethylphenol	36.9	10	ug/L	50.0		74	26-108			
2,4-Dinitrophenol	32.0	10	ug/L	50.0		64	10-157			
2,4-Dinitrotoluene	45.1	10	ug/L	50.0		90	61-139			
2,6-Dinitrotoluene	45.1	10	ug/L	50.0		90	55-141			
2-Chloronaphthalene	35.0	10	ug/L	50.0		70	46-114			
2-Chlorophenol	35.9	10	ug/L	50.0		72	39-80			
2-Methylnaphthalene	34.3	10	ug/L	50.0		69	39-107			
2-Methylphenol	30.3	10	ug/L	50.0		61	24-73			
2-Nitroaniline	44.4	10	ug/L	50.0		89	65-123			
2-Nitrophenol	40.2	10	ug/L	50.0		80	40-111			
3,3'-Dichlorobenzidine	45.2	10	ug/L	50.0		90	25-203			
3/4-Methylphenol	28.3	10	ug/L	50.0		57	22-84			
3-Nitroaniline	50.6	10	ug/L	50.0		101	66-131			
4,6-Dinitro-2-methylphenol	40.4	10	ug/L	50.0		81	31-155			
4-Bromophenyl phenyl ether	44.7	10	ug/L	50.0		89	50-131			
4-Chloro-3-methylphenol	39.8	10	ug/L	50.0		80	48-94			
4-Chloroaniline	70.3	10	ug/L	50.0		141	45-120			LH
4-Chlorophenyl phenyl ether	42.8	10	ug/L	50.0		86	55-125			
4-Nitroaniline	52.4	10	ug/L	50.0		105	63-138			
4-Nitrophenol	13.0	50	ug/L	50.0		26	10-89			J
Acenaphthene	38.3	10	ug/L	50.0		77	53-118			
Acenaphthylene	38.2	10	ug/L	50.0		76	52-121			
Aniline	79.0	10	ug/L	50.0		158	24-105			LH
Anthracene	44.4	10	ug/L	50.0		89	59-138			
Azobenzene	44.2	10	ug/L	50.0		88	65-123			
Benzo(a)anthracene	44.5	10	ug/L	50.0		89	63-138			
Benzo(a)pyrene	42.2	10	ug/L	50.0		84	67-142			
Benzo(b)fluoranthene	40.9	10	ug/L	50.0		82	58-151			
Benzo(g,h,i)perylene	45.3	10	ug/L	50.0		91	47-151			
Benzo(k)fluoranthene	42.8	10	ug/L	50.0		86	45-155			
Benzoic Acid	BRL	100	ug/L	50.0			10-125			P
Benzyl alcohol	27.5	10	ug/L	50.0		55	25-77			
bis(2-Chloroethoxy)methane	42.4	10	ug/L	50.0		85	42-119			
Bis(2-Chloroethyl)ether	40.5	10	ug/L	50.0		81	38-109			
Bis(2-chloroisopropyl)ether	39.0	10	ug/L	50.0		78	31-117			
Bis(2-Ethylhexyl)phthalate	52.2	10	ug/L	50.0		104	52-165			
Butyl benzyl phthalate	51.9	10	ug/L	50.0		104	51-162			
Chrysene	42.1	10	ug/L	50.0		84	59-137			
Dibenzo(a,h)anthracene	42.4	10	ug/L	50.0		85	43-161			

Solutions IES (NCDOT Project)
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Project: NCDOT Elizabeth City PSA's -
507 E. Elizabeth St.
Project No: WBS# 35742.1.1

Prism Work Order: 0080134
Time Submitted: 8/4/2010 4:10:00PM

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0H0172 - 3510C MS										
LCS (P0H0172-BS1)				Prepared: 08/06/10 Analyzed: 08/21/10						
Dibenzofuran	39.9	10	ug/L	50.0		80	63-115			
Diethyl phthalate	47.0	10	ug/L	50.0		94	54-135			
Dimethyl phthalate	45.9	10	ug/L	50.0		92	46-135			
Di-n-butyl phthalate	49.8	10	ug/L	50.0		100	51-142			
Di-n-octyl phthalate	45.9	10	ug/L	50.0		92	54-160			
Fluoranthene	42.9	10	ug/L	50.0		86	52-137			
Fluorene	40.7	10	ug/L	50.0		81	56-122			
Hexachlorobenzene	41.4	10	ug/L	50.0		83	57-129			
Hexachlorobutadiene	27.1	10	ug/L	50.0		54	34-110			
Hexachlorocyclopentadiene	24.7	10	ug/L	50.0		49	27-120			
Hexachloroethane	25.5	10	ug/L	50.0		51	37-98			
Indeno(1,2,3-cd)pyrene	43.4	10	ug/L	50.0		87	24-172			
Isophorone	47.3	10	ug/L	50.0		95	44-117			
Naphthalene	33.4	10	ug/L	50.0		67	37-108			
Nitrobenzene	40.4	10	ug/L	50.0		81	29-120			
N-Nitroso-di-n-propylamine	39.2	10	ug/L	50.0		78	42-115			
N-Nitrosodiphenylamine	58.0	10	ug/L	50.0		116	69-142			
Pentachlorophenol	25.2	10	ug/L	50.0		50	42-156			
Phenanthrene	42.9	10	ug/L	50.0		86	60-133			
Phenol	13.8	10	ug/L	50.0		28	10-47			
Pyrene	46.0	10	ug/L	50.0		92	50-152			
Surrogate: 2,4,6-Tribromophenol	*90.3*		*ug/L*	*100*		*90*	*26-139*			
Surrogate: 2-Fluorobiphenyl	*39.6*		*ug/L*	*50.0*		*79*	*41-112*			
Surrogate: 2-Fluorophenol	*40.3*		*ug/L*	*100*		*40*	*10-48*			
Surrogate: Nitrobenzene-d5	*40.3*		*ug/L*	*50.0*		*81*	*34-102*			
Surrogate: Phenol-d5	*23.7*		*ug/L*	*100*		*24*	*10-34*			
Surrogate: Terphenyl-d14	*40.9*		*ug/L*	*50.0*		*82*	*31-165*			

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Project: NCDOT Elizabeth City PSA's -
507 E. Elizabeth St.
Project No: WBS# 35742.1.1

Prism Work Order: 0080134
Time Submitted: 8/4/2010 4:10:00PM

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0H0172 - 3510C MS										
LCS Dup (P0H0172-BSD1)				Prepared: 08/06/10 Analyzed: 08/21/10						
1,2,4-Trichlorobenzene	30.4	10	ug/L	50.0		61	39-102	7	200	
1,2-Dichlorobenzene	30.4	10	ug/L	50.0		61	46-90	10	200	
1,3-Dichlorobenzene	29.6	10	ug/L	50.0		59	31-100	10	200	
1,4-Dichlorobenzene	30.1	10	ug/L	50.0		60	45-89	9	200	
2,4,5-Trichlorophenol	43.8	10	ug/L	50.0		88	60-108	6	200	
2,4,6-Trichlorophenol	45.1	10	ug/L	50.0		90	48-118	7	200	
2,4-Dichlorophenol	41.4	10	ug/L	50.0		83	38-107	4	200	
2,4-Dimethylphenol	37.7	10	ug/L	50.0		75	26-108	2	200	
2,4-Dinitrophenol	34.6	10	ug/L	50.0		69	10-157	8	200	
2,4-Dinitrotoluene	48.8	10	ug/L	50.0		98	61-139	8	200	
2,6-Dinitrotoluene	48.8	10	ug/L	50.0		98	55-141	8	200	
2-Chloronaphthalene	36.4	10	ug/L	50.0		73	46-114	4	200	
2-Chlorophenol	37.0	10	ug/L	50.0		74	39-80	3	200	
2-Methylnaphthalene	36.8	10	ug/L	50.0		74	39-107	7	200	
2-Methylphenol	30.7	10	ug/L	50.0		61	24-73	1	200	
2-Nitroaniline	47.4	10	ug/L	50.0		95	65-123	6	200	
2-Nitrophenol	42.6	10	ug/L	50.0		85	40-111	6	200	
3,3'-Dichlorobenzidine	53.8	10	ug/L	50.0		108	25-203	17	200	
3/4-Methylphenol	27.8	10	ug/L	50.0		56	22-84	2	200	
3-Nitroaniline	55.6	10	ug/L	50.0		111	66-131	9	200	
4,6-Dinitro-2-methylphenol	42.5	10	ug/L	50.0		85	31-155	5	200	
4-Bromophenyl phenyl ether	46.1	10	ug/L	50.0		92	50-131	3	200	
4-Chloro-3-methylphenol	41.4	10	ug/L	50.0		83	48-94	4	200	
4-Chloroaniline	76.0	10	ug/L	50.0		152	45-120	8	200	LH
4-Chlorophenyl phenyl ether	45.3	10	ug/L	50.0		91	55-125	6	200	
4-Nitroaniline	60.8	10	ug/L	50.0		122	63-138	15	200	
4-Nitrophenol	12.8	50	ug/L	50.0		26	10-89	1	200	J
Acenaphthene	40.9	10	ug/L	50.0		82	53-118	7	200	
Acenaphthylene	42.0	10	ug/L	50.0		84	52-121	9	200	
Aniline	89.7	10	ug/L	50.0		179	24-105	13	200	LH
Anthracene	47.8	10	ug/L	50.0		96	59-138	7	200	
Azobenzene	46.2	10	ug/L	50.0		92	65-123	4	200	
Benzo(a)anthracene	46.8	10	ug/L	50.0		94	63-138	5	200	
Benzo(a)pyrene	45.3	10	ug/L	50.0		91	67-142	7	200	
Benzo(b)fluoranthene	43.6	10	ug/L	50.0		87	58-151	6	200	
Benzo(g,h,i)perylene	49.1	10	ug/L	50.0		98	47-151	8	200	
Benzo(k)fluoranthene	43.7	10	ug/L	50.0		87	45-155	2	200	
Benzoic Acid	BRL	100	ug/L	50.0			10-125		200	P
Benzyl alcohol	27.2	10	ug/L	50.0		54	25-77	1	200	
bis(2-Chloroethoxy)methane	45.1	10	ug/L	50.0		90	42-119	6	200	
Bis(2-Chloroethyl)ether	43.0	10	ug/L	50.0		86	38-109	6	200	
Bis(2-chloroisopropyl)ether	42.4	10	ug/L	50.0		85	31-117	8	200	
Bis(2-Ethylhexyl)phthalate	54.5	10	ug/L	50.0		109	52-165	4	200	
Butyl benzyl phthalate	53.2	10	ug/L	50.0		106	51-162	3	200	
Chrysene	45.4	10	ug/L	50.0		91	59-137	8	200	
Dibenzo(a,h)anthracene	46.6	10	ug/L	50.0		93	43-161	9	200	

Solutions IES (NCDOT Project)
Attn: Jody Overmyer
1101 Nowell Road
Raleigh, NC 27607

Project: NCDOT Elizabeth City PSA's - 507 E. Elizabeth St.
Project No: WBS# 35742.1.1

Prism Work Order: 0080134
Time Submitted: 8/4/2010 4:10:00PM

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0H0172 - 3510C MS										
LCS Dup (P0H0172-BSD1)				Prepared: 08/06/10 Analyzed: 08/21/10						
Dibenzofuran	42.7	10	ug/L	50.0		85	63-115	7	200	
Diethyl phthalate	50.6	10	ug/L	50.0		101	54-135	7	200	
Dimethyl phthalate	48.9	10	ug/L	50.0		98	46-135	6	200	
Di-n-butyl phthalate	54.5	10	ug/L	50.0		109	51-142	9	200	
Di-n-octyl phthalate	45.6	10	ug/L	50.0		91	54-160	0.7	200	
Fluoranthene	47.4	10	ug/L	50.0		95	52-137	10	200	
Fluorene	44.0	10	ug/L	50.0		88	56-122	8	200	
Hexachlorobenzene	44.0	10	ug/L	50.0		88	57-129	6	200	
Hexachlorobutadiene	29.8	10	ug/L	50.0		60	34-110	9	200	
Hexachlorocyclopentadiene	27.5	10	ug/L	50.0		55	27-120	11	200	
Hexachloroethane	28.5	10	ug/L	50.0		57	37-98	11	200	
Indeno(1,2,3-cd)pyrene	50.9	10	ug/L	50.0		102	24-172	16	200	
Isophorone	49.8	10	ug/L	50.0		100	44-117	5	200	
Naphthalene	36.1	10	ug/L	50.0		72	37-108	8	200	
Nitrobenzene	43.0	10	ug/L	50.0		86	29-120	6	200	
N-Nitroso-di-n-propylamine	41.7	10	ug/L	50.0		83	42-115	6	200	
N-Nitrosodiphenylamine	60.4	10	ug/L	50.0		121	69-142	4	200	
Pentachlorophenol	28.1	10	ug/L	50.0		56	42-156	11	200	
Phenanthrene	45.7	10	ug/L	50.0		91	60-133	6	200	
Phenol	13.4	10	ug/L	50.0		27	10-47	3	200	
Pyrene	45.2	10	ug/L	50.0		90	50-152	2	200	
Surrogate: 2,4,6-Tribromophenol	*98.7*		*ug/L*	*100*		*99*	*26-139*			
Surrogate: 2-Fluorobiphenyl	*42.7*		*ug/L*	*50.0*		*85*	*41-112*			
Surrogate: 2-Fluorophenol	*39.1*		*ug/L*	*100*		*39*	*10-48*			
Surrogate: Nitrobenzene-d5	*43.0*		*ug/L*	*50.0*		*86*	*34-102*			
Surrogate: Phenol-d5	*22.3*		*ug/L*	*100*		*22*	*10-34*			
Surrogate: Terphenyl-d14	*41.0*		*ug/L*	*50.0*		*82*	*31-165*			

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507 E. Elizabeth St.
Project No: WBS# 35742.1.1

Prism Work Order: 0080134
Time Submitted: 8/4/2010 4:10:00PM

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0H0172 - 3510C MS										
Matrix Spike (P0H0172-MS1)	**Source: 0080134-01**			Prepared: 08/06/10	Analyzed: 08/21/10					
1,2,4-Trichlorobenzene	54.2	20	ug/L	100	BRL	54	44-100			
1,2-Dichlorobenzene	52.8	20	ug/L	100	BRL	53	42-99			
1,3-Dichlorobenzene	51.4	20	ug/L	100	BRL	51	35-101			
1,4-Dichlorobenzene	52.6	20	ug/L	100	BRL	53	43-97			
2,4,5-Trichlorophenol	86.5	20	ug/L	100	BRL	87	51-122			
2,4,6-Trichlorophenol	82.2	20	ug/L	100	BRL	82	46-117			
2,4-Dichlorophenol	71.0	20	ug/L	100	BRL	71	42-108			
2,4-Dimethylphenol	73.0	20	ug/L	100	BRL	73	13-122			
2,4-Dinitrophenol	71.2	20	ug/L	100	BRL	71	10-166			
2,4-Dinitrotoluene	92.8	20	ug/L	100	BRL	93	64-135			
2,6-Dinitrotoluene	92.8	20	ug/L	100	BRL	93	50-146			
2-Chloronaphthalene	73.0	20	ug/L	100	BRL	73	46-114			
2-Chlorophenol	61.7	20	ug/L	100	BRL	62	36-94			
2-Methylnaphthalene	68.5	20	ug/L	100	BRL	69	36-115			
2-Methylphenol	61.6	20	ug/L	100	BRL	62	27-92			
2-Nitroaniline	93.0	20	ug/L	100	BRL	93	51-139			
2-Nitrophenol	68.9	20	ug/L	100	BRL	69	43-108			
3,3'-Dichlorobenzidine	103	20	ug/L	100	BRL	103	10-214			
3/4-Methylphenol	61.2	20	ug/L	100	BRL	61	22-84			
3-Nitroaniline	110	20	ug/L	100	BRL	110	50-145			
4,6-Dinitro-2-methylphenol	87.1	20	ug/L	100	BRL	87	25-152			
4-Bromophenyl phenyl ether	95.2	20	ug/L	100	BRL	95	52-128			
4-Chloro-3-methylphenol	86.5	20	ug/L	100	BRL	86	44-110			
4-Chloroaniline	131	20	ug/L	100	BRL	131	10-156			
4-Chlorophenyl phenyl ether	89.8	20	ug/L	100	BRL	90	55-125			
4-Nitroaniline	121	20	ug/L	100	BRL	121	39-159			
4-Nitrophenol	35.2	100	ug/L	100	BRL	35	10-105			J
Acenaphthene	83.1	20	ug/L	100	BRL	83	55-117			
Acenaphthylene	82.3	20	ug/L	100	BRL	82	52-121			
Aniline	159	20	ug/L	100	BRL	159	11-124			M
Anthracene	95.7	20	ug/L	100	BRL	96	60-136			
Azobenzene	95.3	20	ug/L	100	BRL	95	50-135			
Benzo(a)anthracene	93.8	20	ug/L	100	BRL	94	64-135			
Benzo(a)pyrene	89.6	20	ug/L	100	BRL	90	68-136			
Benzo(b)fluoranthene	86.9	20	ug/L	100	BRL	87	61-149			
Benzo(g,h,i)perylene	97.7	20	ug/L	100	BRL	98	47-151			
Benzo(k)fluoranthene	85.0	20	ug/L	100	BRL	85	45-148			
Benzoic Acid	BRL	200	ug/L	100	BRL		10-125			P
Benzyl alcohol	58.8	20	ug/L	100	BRL	59	30-97			
bis(2-Chloroethoxy)methane	73.6	20	ug/L	100	BRL	74	43-119			
Bis(2-Chloroethyl)ether	66.5	20	ug/L	100	BRL	66	36-115			
Bis(2-chloroisopropyl)ether	68.1	20	ug/L	100	BRL	68	36-113			
Bis(2-Ethylhexyl)phthalate	112	20	ug/L	100	BRL	112	50-168			
Butyl benzyl phthalate	111	20	ug/L	100	BRL	111	52-166			
Chrysene	90.4	20	ug/L	100	BRL	90	62-135			
Dibenzo(a,h)anthracene	93.8	20	ug/L	100	BRL	94	45-155			

Solutions IES (NCDOT Project)
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Project: NCDOT Elizabeth City PSA's - 507 E. Elizabeth St.
Project No: WBS# 35742.1.1

Prism Work Order: 0080134
Time Submitted: 8/4/2010 4:10:00PM

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0H0172 - 3510C MS										
Matrix Spike (P0H0172-MS1)	**Source: 0080134-01**			Prepared: 08/06/10	Analyzed: 08/21/10					
Dibenzofuran	86.2	20	ug/L	100	BRL	86	58-119			
Diethyl phthalate	101	20	ug/L	100	BRL	101	55-137			
Dimethyl phthalate	95.4	20	ug/L	100	BRL	95	46-135			
Di-n-butyl phthalate	109	20	ug/L	100	BRL	109	53-141			
Di-n-octyl phthalate	95.2	20	ug/L	100	BRL	95	48-166			
Fluoranthene	95.7	20	ug/L	100	BRL	96	51-136			
Fluorene	88.6	20	ug/L	100	BRL	89	57-121			
Hexachlorobenzene	87.7	20	ug/L	100	BRL	88	55-131			
Hexachlorobutadiene	53.3	20	ug/L	100	BRL	53	39-110			
Hexachlorocyclopentadiene	52.2	20	ug/L	100	BRL	52	26-122			
Hexachloroethane	47.3	20	ug/L	100	BRL	47	37-98			
Indeno(1,2,3-cd)pyrene	102	20	ug/L	100	BRL	102	14-177			
Isophorone	86.6	20	ug/L	100	BRL	87	49-113			
Naphthalene	62.7	20	ug/L	100	BRL	63	38-109			
Nitrobenzene	70.5	20	ug/L	100	BRL	71	34-117			
N-Nitroso-di-n-propylamine	68.2	20	ug/L	100	BRL	68	44-115			
N-Nitrosodiphenylamine	122	20	ug/L	100	BRL	122	57-156			
Pentachlorophenol	56.4	20	ug/L	100	BRL	56	17-167			
Phenanthrene	93.9	20	ug/L	100	BRL	94	62-131			
Phenol	37.9	20	ug/L	100	BRL	38	10-68			
Pyrene	92.9	20	ug/L	100	BRL	93	46-156			
Surrogate: 2,4,6-Tribromophenol	*189*		*ug/L*	*200*		*94*	*26-139*			
Surrogate: 2-Fluorobiphenyl	*76.0*		*ug/L*	*100*		*76*	*41-112*			
Surrogate: 2-Fluorophenol	*91.3*		*ug/L*	*200*		*46*	*10-48*			
Surrogate: Nitrobenzene-d5	*69.1*		*ug/L*	*100*		*69*	*34-102*			
Surrogate: Phenol-d5	*69.0*		*ug/L*	*200*		*35*	*10-34*			*SR*
Surrogate: Terphenyl-d14	*82.0*		*ug/L*	*100*		*82*	*31-165*			

Solutions IES (NCDOT Project)
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Project: NCDOT Elizabeth City PSA's -
507 E. Elizabeth St.
Project No: WBS# 35742.1.1

Prism Work Order: 0080134
Time Submitted: 8/4/2010 4:10:00PM

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0H0172 - 3510C MS										
Matrix Spike Dup (P0H0172-MSD1)	**Source: 0080134-01**			Prepared: 08/06/10	Analyzed: 08/21/10					
1,2,4-Trichlorobenzene	54.7	20	ug/L	100	BRL	55	44-100	0.9	30	
1,2-Dichlorobenzene	52.8	20	ug/L	100	BRL	53	42-99	0.08	34	
1,3-Dichlorobenzene	51.1	20	ug/L	100	BRL	51	35-101	0.6	36	
1,4-Dichlorobenzene	52.5	20	ug/L	100	BRL	52	43-97	0.2	35	
2,4,5-Trichlorophenol	85.8	20	ug/L	100	BRL	86	51-122	0.9	22	
2,4,6-Trichlorophenol	81.3	20	ug/L	100	BRL	81	46-117	1	30	
2,4-Dichlorophenol	72.2	20	ug/L	100	BRL	72	42-108	2	33	
2,4-Dimethylphenol	74.0	20	ug/L	100	BRL	74	13-122	1	36	
2,4-Dinitrophenol	76.0	20	ug/L	100	BRL	76	10-166	6	41	
2,4-Dinitrotoluene	95.0	20	ug/L	100	BRL	95	64-135	2	24	
2,6-Dinitrotoluene	95.0	20	ug/L	100	BRL	95	50-146	2	28	
2-Chloronaphthalene	71.0	20	ug/L	100	BRL	71	46-114	3	30	
2-Chlorophenol	62.0	20	ug/L	100	BRL	62	36-94	0.6	37	
2-Methylnaphthalene	68.7	20	ug/L	100	BRL	69	36-115	0.3	33	
2-Methylphenol	61.6	20	ug/L	100	BRL	62	27-92	0.03	36	
2-Nitroaniline	94.1	20	ug/L	100	BRL	94	51-139	1	24	
2-Nitrophenol	69.2	20	ug/L	100	BRL	69	43-108	0.6	33	
3,3'-Dichlorobenzidine	105	20	ug/L	100	BRL	105	10-214	1	34	
3/4-Methylphenol	60.8	20	ug/L	100	BRL	61	22-84	0.5	30	
3-Nitroaniline	111	20	ug/L	100	BRL	111	50-145	1	24	
4,6-Dinitro-2-methylphenol	88.2	20	ug/L	100	BRL	88	25-152	1	35	
4-Bromophenyl phenyl ether	95.4	20	ug/L	100	BRL	95	52-128	0.3	21	
4-Chloro-3-methylphenol	88.7	20	ug/L	100	BRL	89	44-110	3	25	
4-Chloroaniline	133	20	ug/L	100	BRL	133	10-156	2	38	
4-Chlorophenyl phenyl ether	90.1	20	ug/L	100	BRL	90	55-125	0.3	29	
4-Nitroaniline	124	20	ug/L	100	BRL	124	39-159	2	29	
4-Nitrophenol	36.2	100	ug/L	100	BRL	36	10-105	3	40	J
Acenaphthene	83.2	20	ug/L	100	BRL	83	55-117	0.07	33	
Acenaphthylene	81.8	20	ug/L	100	BRL	82	52-121	0.6	30	
Aniline	158	20	ug/L	100	BRL	158	11-124	0.4	35	M
Anthracene	95.5	20	ug/L	100	BRL	96	60-136	0.2	27	
Azobenzene	95.1	20	ug/L	100	BRL	95	50-135	0.1	34	
Benzo(a)anthracene	94.2	20	ug/L	100	BRL	94	64-135	0.4	18	
Benzo(a)pyrene	90.8	20	ug/L	100	BRL	91	68-136	1	21	
Benzo(b)fluoranthene	85.7	20	ug/L	100	BRL	86	61-149	1	34	
Benzo(g,h,i)perylene	98.3	20	ug/L	100	BRL	98	47-151	0.5	27	
Benzo(k)fluoranthene	85.4	20	ug/L	100	BRL	85	45-148	0.5	39	
Benzoic Acid	BRL	200	ug/L	100	BRL		10-125		51	P
Benzyl alcohol	58.7	20	ug/L	100	BRL	59	30-97	0.2	37	
bis(2-Chloroethoxy)methane	74.5	20	ug/L	100	BRL	75	43-119	1	30	
Bis(2-Chloroethyl)ether	65.9	20	ug/L	100	BRL	66	36-115	0.9	33	
Bis(2-chloroisopropyl)ether	67.7	20	ug/L	100	BRL	68	36-113	0.5	34	
Bis(2-Ethylhexyl)phthalate	113	20	ug/L	100	BRL	113	50-168	1	21	
Butyl benzyl phthalate	110	20	ug/L	100	BRL	110	52-166	1	23	
Chrysene	88.7	20	ug/L	100	BRL	89	62-135	2	22	
Dibenzo(a,h)anthracene	96.2	20	ug/L	100	BRL	96	45-155	3	28	

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Project: NCDOT Elizabeth City PSA's - 507 E. Elizabeth St.
Project No: WBS# 35742.1.1

Prism Work Order: 0080134
Time Submitted: 8/4/2010 4:10:00PM

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0H0172 - 3510C MS										
Matrix Spike Dup (P0H0172-MSD1)	**Source: 0080134-01**			Prepared: 08/06/10 Analyzed: 08/21/10						
Dibenzofuran	86.0	20	ug/L	100	BRL	86	58-119	0.2	23	
Diethyl phthalate	101	20	ug/L	100	BRL	101	55-137	0.3	22	
Dimethyl phthalate	95.9	20	ug/L	100	BRL	96	46-135	0.5	25	
Di-n-butyl phthalate	109	20	ug/L	100	BRL	109	53-141	0.3	24	
Di-n-octyl phthalate	95.5	20	ug/L	100	BRL	95	48-166	0.3	21	
Fluoranthene	96.0	20	ug/L	100	BRL	96	51-136	0.3	26	
Fluorene	89.1	20	ug/L	100	BRL	89	57-121	0.5	30	
Hexachlorobenzene	88.3	20	ug/L	100	BRL	88	55-131	0.7	29	
Hexachlorobutadiene	53.6	20	ug/L	100	BRL	54	39-110	0.6	35	
Hexachlorocyclopentadiene	51.6	20	ug/L	100	BRL	52	26-122	1	36	
Hexachloroethane	43.9	20	ug/L	100	BRL	44	37-98	7	37	
Indeno(1,2,3-cd)pyrene	101	20	ug/L	100	BRL	101	14-177	0.9	34	
Isophorone	87.5	20	ug/L	100	BRL	87	49-113	1	27	
Naphthalene	63.1	20	ug/L	100	BRL	63	38-109	0.7	35	
Nitrobenzene	71.3	20	ug/L	100	BRL	71	34-117	1	34	
N-Nitroso-di-n-propylamine	68.5	20	ug/L	100	BRL	68	44-115	0.4	33	
N-Nitrosodiphenylamine	122	20	ug/L	100	BRL	122	57-156	0.6	26	
Pentachlorophenol	58.4	20	ug/L	100	BRL	58	17-167	3	36	
Phenanthrene	93.7	20	ug/L	100	BRL	94	62-131	0.2	23	
Phenol	38.1	20	ug/L	100	BRL	38	10-68	0.5	43	
Pyrene	90.1	20	ug/L	100	BRL	90	46-156	3	31	
Surrogate: 2,4,6-Tribromophenol	*194*		*ug/L*	*200*		*97*	*26-139*			
Surrogate: 2-Fluorobiphenyl	*75.2*		*ug/L*	*100*		*75*	*41-112*			
Surrogate: 2-Fluorophenol	*91.6*		*ug/L*	*200*		*46*	*10-48*			
Surrogate: Nitrobenzene-d5	*69.5*		*ug/L*	*100*		*70*	*34-102*			
Surrogate: Phenol-d5	*69.2*		*ug/L*	*200*		*35*	*10-34*			*SR*
Surrogate: Terphenyl-d14	*79.9*		*ug/L*	*100*		*80*	*31-165*			

Solutions IES (NCDOT Project)
Attn: Jody Overmyer
1101 Nowell Road
Raleigh, NC 27607

Project: NCDOT Elizabeth City PSA's - 507 E. Elizabeth St.
Project No: WBS# 35742.1.1

Prism Work Order: 0080134
Time Submitted: 8/4/2010 4:10:00PM

Gasoline Range Organics by GC/FID - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0H0204 - 5035										
Blank (P0H0204-BLK1)				Prepared & Analyzed: 08/09/10						
Gasoline Range Organics	BRL	5.0	mg/kg wet							
Surrogate: a,a,a-Trifluorotoluene	*4.90*		*mg/kg wet*	*5.00*		*98*	*55-129*			
LCS (P0H0204-BS1)				Prepared & Analyzed: 08/09/10						
Gasoline Range Organics	44.6	5.0	mg/kg wet	50.0		89	67-116			
Surrogate: a,a,a-Trifluorotoluene	*5.50*		*mg/kg wet*	*5.00*		*110*	*55-129*			
LCS Dup (P0H0204-BSD1)				Prepared & Analyzed: 08/09/10						
Gasoline Range Organics	46.1	5.0	mg/kg wet	50.0		92	67-116	3	200	
Surrogate: a,a,a-Trifluorotoluene	*5.55*		*mg/kg wet*	*5.00*		*111*	*55-129*			
Matrix Spike (P0H0204-MS1)		**Source: 0080134-02**		Prepared & Analyzed: 08/09/10						
Gasoline Range Organics	56.4	6.6	mg/kg dry	65.7	BRL	86	57-113			
Surrogate: a,a,a-Trifluorotoluene	*6.70*		*mg/kg dry*	*6.57*		*102*	*55-129*			
Matrix Spike Dup (P0H0204-MSD1)		**Source: 0080134-02**		Prepared & Analyzed: 08/09/10						
Gasoline Range Organics	57.9	6.6	mg/kg dry	65.7	BRL	88	57-113	3	23	
Surrogate: a,a,a-Trifluorotoluene	*6.96*		*mg/kg dry*	*6.57*		*106*	*55-129*			

Solutions IES (NCDOT Project)
Attn: Jody Overmyer
1101 Nowell Road
Raleigh, NC 27607

Project: NCDOT Elizabeth City PSA's - 507 E. Elizabeth St.
Project No: WBS# 35742.1.1

Prism Work Order: 0080134
Time Submitted: 8/4/2010 4:10:00PM

Diesel Range Organics by GC/FID - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0H0245 - 3545A										
Blank (P0H0245-BLK1)				Prepared: 08/10/10 Analyzed: 08/12/10						
Diesel Range Organics	BRL	7.0	mg/kg wet							
Surrogate: o-Terphenyl	*1.23*		*mg/kg wet*	*1.60*		*77*	*49-124*			
LCS (P0H0245-BS1)				Prepared: 08/10/10 Analyzed: 08/12/10						
Diesel Range Organics	62.0	7.0	mg/kg wet	80.0		78	55-109			
Surrogate: o-Terphenyl	*1.76*		*mg/kg wet*	*1.60*		*110*	*49-124*			
LCS Dup (P0H0245-BSD1)				Prepared: 08/10/10 Analyzed: 08/12/10						
Diesel Range Organics	65.7	7.0	mg/kg wet	80.0		82	55-109	6	200	
Surrogate: o-Terphenyl	*1.76*		*mg/kg wet*	*1.60*		*110*	*49-124*			

Solutions IES (NCDOT Project)
Attn: Jody Overmyer
1101 Nowell Road
Raleigh, NC 27607

Project: NCDOT Elizabeth City PSA's -
507 E. Elizabeth St.
Project No: WBS# 35742.1.1

Prism Work Order: 0080134
Time Submitted: 8/4/2010 4:10:00PM

General Chemistry Parameters - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0H0194 - NO PREP										
Duplicate (P0H0194-DUP1)		**Source: 0080134-06**		Prepared & Analyzed: 08/06/10						
% Solids	90.7	0.100	% by Weight		90.8			0.1	20	

Sample Extraction Data

Prep Method: 3545A

Lab Number	Batch	Initial	Final	Date
0080134-05	P0H0245	25.12 g	1 mL	08/10/10
0080134-06	P0H0245	25.07 g	1 mL	08/10/10
0080134-07	P0H0245	25.01 g	1 mL	08/10/10
0080134-08	P0H0245	25.17 g	1 mL	08/10/10
0080134-10	P0H0245	25.06 g	1 mL	08/10/10

Prep Method: 5035

Lab Number	Batch	Initial	Final	Date
0080134-05	P0H0204	4.62 g	5 mL	08/09/10
0080134-06	P0H0204	5.75 g	5 mL	08/09/10
0080134-07	P0H0204	5.86 g	5 mL	08/09/10
0080134-08	P0H0204	6.04 g	5 mL	08/09/10
0080134-10	P0H0204	7.03 g	5 mL	08/09/10

NO PREP

Lab Number	Batch	Initial	Final	Date
0080134-05	P0H0194	30 g	30 mL	08/06/10
0080134-06	P0H0194	30 g	30 mL	08/06/10
0080134-07	P0H0194	30 g	30 mL	08/06/10
0080134-08	P0H0194	30 g	30 mL	08/06/10
0080134-10	P0H0194	30 g	30 mL	08/06/10

Prep Method: 3510C MS

Lab Number	Batch	Initial	Final	Date
0080134-09	P0H0172	1000 mL	1 mL	08/06/10

Prep Method: 5030B

Lab Number	Batch	Initial	Final	Date
0080134-09	P0H0263	10 mL	10 mL	08/11/10

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

CHAIN OF CUSTODY RECORD

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

449 Springbrook Road • P.O. Box 240543 • Charlotte, NC 28224-0543
Phone: 704/529-6364 • Fax: 704/525-0409

PAGE 1 OF 1 QUOTE # TO ENSURE PROPER BILLING: _____

Project Name: Elizabeth City, NC
Short Hold Analysis: (Yes) (No) UST Project: (Yes) (No)
*Please ATTACH any project specific reporting (QC LEVEL I II III IV) provisions and/or QC Requirements
Invoice To: NCDOT
Address: _____

Client Company Name: Solutions-IES
Report To/Contact Name: Sody Overmyer
Reporting Address: 1101 Nowell Rd Raleigh, NC 27607
Phone: 919-873-1060 Fax (Yes) (No): _____
Email (Yes) (No) Email Address: Sovermyer@solutions-ies.com
EDD Type: PDF ✓ Excel ___ Other ___
Site Location Name: Elizabeth City PSAs
Site Location Physical Address: 610 E Elizabeth St Elizabeth City, NC

Purchase Order No./Billing Reference 4300132875
Requested Due Date ☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 4 Days ☐ 5 Days
"Working Days" ☐ 6-9 Days ☒ Standard 10 days ☐ Rush Work Must Be Pre-Approved
Samples received after 15:00 will be processed next business day.
Turnaround time is based on business days, excluding weekends and holidays.
(SEE REVERSE FOR TERMS & CONDITIONS REGARDING SERVICES RENDERED BY PRISM LABORATORIES, INC. TO CLIENT)

LAB USE ONLY

	YES	NO	N/A
Samples INTACT upon arrival?	✓		
Received ON WET ICE? Temp 3.6	✓		
PROPER PRESERVATIVES Indicated?	✓		
Received WITHIN HOLDING TIMES?			✓
CUSTODY SEALS INTACT?			✓
VOLATILES rec'd W/OUT HEADSPACE?	✓		
PROPER CONTAINERS used?	✓		

OK

TO BE FILLED IN BY CLIENT/SAMPLING PERSONNEL

Certification: NELAC ___ USACE ___ FL ___ NC X
SC ___ OTHER ___ N/A ___
Water Chlorinated: YES ___ NO X
Sample Iced Upon Collection: YES X NO ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	ANALYSES REQUESTED 8260	8270	TPH GRO DRO				REMARKS	PRISM LAB ID NO.
610-1	8/2/10	1330	W	VOA, A	5	40mL, 1L	HCl	X	X						01
610-1-2-4	8/2/10	1835	S	VOA, G	4	40mL, 12oz				X					02
610-2-0-2	8/2/10	1840	S	VOA, G	4	40mL, 12oz				X					03
610-3-2-3	8/2/10	1842	S	VOA, G	4	40mL, 12oz				X					04
S07-6-2-4	8/2/10	1830	S	VOA, G	4	40mL, 12oz				X					05
S07-3-2-4	8/2/10	1850	S	VOA, G	4	40mL, 12oz				X					06
S07-2-2-4	8/2/10	1830	S	VOA, G	4	40mL, 12oz				X					~~09~~ 07
S07-1-2-4	8/2/10	1545	S	VOA, G	4	40mL, 12oz				X					08
S07-1	8/2/10	1750	W	VOA, A	5	40mL, 1L		X	X						09
S07-5-2-4	8/2/10	1847	S	VOA, G	5	40mL, 12oz				X					10

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Sampler's Signature Kathryn Dail | Sampled By (Print Name) Kathryn Dail | Affiliation Solutions-IES

Upon relinquishing, this Chain of Custody is your authorization for Prism to proceed with the analyses as requested above. Any changes must be submitted in writing to the Prism Project Manager. There will be charges for any changes after analyses have been initialized.

		Date	Military/Hours
Relinquished By: (Signature) Kathryn Dail	Received By: (Signature) Alex Lassiter	080310	1010
Relinquished By: (Signature) Alex Lassiter	Received By: (Signature) Joe Hook	080310	1400
Relinquished By: (Signature) Joe Hook	Received For Prism Laboratories By: Dawn Morin	8-4-10	1250

Method of Shipment: NOTE: ALL SAMPLE COOLERS SHOULD BE TAPED SHUT WITH CUSTODY SEALS FOR TRANSPORTATION TO THE LABORATORY. SAMPLES ARE NOT ACCEPTED AND VERIFIED AGAINST COC UNTIL RECEIVED AT THE LABORATORY.

☐ Fed Ex ☐ UPS ☐ Hand-delivered ☒ Prism Field Service ☐ Other ___

COC Group No. 0080134

Additional Comments: Relinquished by Dawn Morin 8/4/10 1600 Received

PRISM USE ONLY

Site Arrival Time:
Site Departure Time:
Field Tech Fee:
Mileage:

NPDES:	UST:	GROUNDWATER:	DRINKING WATER:	SOLID WASTE:	RCRA:	CERCLA	LANDFILL	OTHER:
☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐	☐ NC ☐ SC ☐	☐ NC ☐ SC ☐	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

8/4/10 1610

PRISM LABORATORIES, INC.
Full-Service Analytical & Environmental Solutions

NC Certification No. 402
SC Certification No. 99012
NC Drinking Water Cert No. 37735

Case Narrative

08/30/2010

Solutions IES (NCDOT Project)
Jody Overmyer
1101 Nowell Road
Raleigh, NC 27607

Project: NCDOT Elizabeth City PSA's
Project No.: WBS# 35742.1.1
Lab Submittal Date: 08/05/2010
Prism Work Order: 0080212

This data package contains the analytical results for the project identified above and includes a Case Narrative, Sample Results and Chain of Custody. Unless otherwise noted, all samples were received in acceptable condition and processed according to the referenced methods.

Data qualifiers are flagged individually on each sample. A key reference for the data qualifiers appears at the end of this case narrative.

Narrative Notes:

Fecal Coliform analyses subcontracted to Environmental 1, Inc. Laboratory report is attached with a total page count of 8 pages.

Please call if you have any questions relating to this analytical report.

Respectfully,

PRISM LABORATORIES, INC.

VP Laboratory Services

Reviewed By

Data Qualifiers Key Reference:

BRL	Below Reporting Limit
MDL	Method Detection Limit
RPD	Relative Percent Difference
*	Results reported to the reporting limit. All other results are reported to the MDL with values between MDL and reporting limit indicated with a J.

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

Sample Receipt Summary

Prism Work Order:

Client Sample ID	Lab Sample ID	Matrix	Date Sampled	Date Received

Samples received in good condition at 0.6 degrees C unless otherwise noted.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

Laboratory Report

08/30/2010

Solutions IES (NCDOT Project) Project: NCDOT Elizabeth City PSA's Prism Work Order: 0080212
Attn: Chemical Testing Engineer
Materials and Testing, 1801 Blue Ridg Project No.: WBS# 35742.1.1
Raleigh, NC 27607

Field Data

Laboratory ID	Client ID	Field Parameter	Result
0080212-01	507-6-2-4		
0080212-02	601-3-2-3		
0080212-03	229-4-2-4		
0080212-04	229-2-2-4		
0080212-05	601-1-0-2		
0080212-06	222-1-2-4		
0080212-07	222-2-2-4		
0080212-08	507-4-1-4		
0080212-09	222-2		
0080212-10	229-2		
0080212-11	601-1		
0080212-12	507-6		

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 425

PRISM (MISC. TESTING)
MS. ANGELA OVERCASH
P.O. BOX 240543
CHARLOTTE ,NC 28224-0543

DATE COLLECTED: 08/03/10
DATE REPORTED : 08/05/10

REVIEWED BY:

PARAMETERS	Sample #1	Sample #2	Sample #3	Sample #4	Sample #5	Analysis Date	Analyst	Method Code
Fecal Coliform (MPN), /gram Solids	<2	<2	<2	<2	<2	08/04/10	MJN	SM9221E

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 425

PRISM (MISC. TESTING)
MS. ANGELA OVERCASH
P.O. BOX 240543
CHARLOTTE ,NC 28224-0543

DATE COLLECTED: 08/04/10
DATE REPORTED : 08/05/10

REVIEWED BY:

PARAMETERS	Sample #6	Sample #7	Sample #8	Sample #9	Sample #10	Analysis Date	Analyst	Method Code
Fecal Coliform (MPN), /100 Mls				30	13	08/04/10	MEL	SM9221E
Fecal Coliform (MPN), /gram Solids	<2	13	<2			08/04/10	MJN	SM9221E

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 425

PRISM (MISC. TESTING)
MS. ANGELA OVERCASH
P.O. BOX 240543
CHARLOTTE ,NC 28224-0543

DATE COLLECTED: 08/04/10
DATE REPORTED : 08/05/10

REVIEWED BY:

PARAMETERS	Sample #11	Sample #12	Analysis Date	Analyst	Method Code
Fecal Coliform (MPN), /100 Mls	30	2400	08/04/10	MEL	SM9221E

Acct#425

PRISM LABORATORIES, INC.

Full-Service Analytical & Environmental Solutions

449 Springbrook Road • P.O. Box 240543 • Charlotte, NC 28224-0543
Phone: 704/529-6364 • Fax: 704/525-0409

CHAIN OF CUSTODY RECORD

PAGE 1 OF 2 QUOTE # TO ENSURE PROPER BILLING: _____

Project Name: NCDOT Elizabeth City PSAs
Short Hold Analysis: (Yes) (No) UST Project: (Yes) (No)
*Please ATTACH any project specific reporting (QC LEVEL I II III IV) provisions and/or QC Requirements
Invoice To: NCDOT WBS # 35742.1.1
Address: _____

Client Company Name: Solutions-IES
Report To/Contact Name: Jody Overmyer
Reporting Address: 1101 Nowell Road
Raleigh, NC 27607
Phone: 919-873-1060 Fax (Yes) (No): _____
Email (Yes) (No) Email Address: Jovermyer@solutions-ies.com
EDD Type: PDF X Excel ___ Other _____
Site Location Name: NCDOT Elizabeth City
Site Location Physical Address: _____

Purchase Order No./Billing Reference 4300132875

Requested Due Date ☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 4 Days ☐ 5 Days
"Working Days" ☐ 6-9 Days ☒ Standard 10 days ☐ Rush Work Must Be Pre-Approved

Samples received after 15:00 will be processed next business day.
Turnaround time is based on business days, excluding weekends and holidays.
(SEE REVERSE FOR TERMS & CONDITIONS REGARDING SERVICES RENDERED BY PRISM LABORATORIES, INC. TO CLIENT)

LAB USE ONLY

	YES	NO	N/A
Samples INTACT upon arrival?	✓		
Received ON WET ICE? Temp 0.6	✓		
PROPER PRESERVATIVES indicated?			
Received WITHIN HOLDING TIMES?	✓		
CUSTODY SEALS INTACT?	✓		
VOLATILES rec'd W/OUT HEADSPACE?			✓
PROPER CONTAINERS used?	✓		

TO BE FILLED IN BY CLIENT/SAMPLING PERSONNEL

Certification: NELAC ___ USACE ___ FL ___ NC X
SC ___ OTHER ___ N/A ___
Water Chlorinated: YES ___ NO X
Sample Iced Upon Collection: YES X NO ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	ANALYSES REQUESTED Fecal Coliform		REMARKS	PRISM LAB ID NO.
507-6-2-4	8/3/10	1620	Soil	Plastic	1	250mL	None	X	Sample 1	SUB TO E1 (AL)	
601-3-2-3	8/3/10	1621	Soil	Plastic	1	250mL	None	X	Sample 2		
229-4-2-4	8/3/10	1645	Soil	Plastic	1	250mL	None	X	Sample 3		
229-2-2-4	8/3/10	1650	Soil	Plastic	1	250mL	None	X	Sample 4		
601-1-0-2	8/3/10	1700	Soil	Plastic	1	250mL	None	X	Sample 5		
222-1-2-4	8/4/10	825	Soil	Plastic	1	250mL	None	X	Sample 6		
222-2-2-4	8/4/10	0755	Soil	Plastic	1	250mL	None	X	Sample 7		
507-4-1-4	8/4/10	915	Soil	Plastic	1	250mL	None	X	Sample 8		
222-2	8/4/10	935	Water	Plastic	1		$Na_2S_2O_3$	X	Sample 9		
229-2	8/4/10	937	Water	Plastic	1		↓	X	Sample 10		

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Sampler's Signature Kathryn Dall Sampled By (Print Name) Kathryn Dall Affiliation Solutions IES

Upon relinquishing, this Chain of Custody is your authorization for Prism to proceed with the analyses as requested above. Any changes must be submitted in writing to the Prism Project Manager. There will be charges for any changes after analyses have been initialized.

		Date	Military/Hours
Relinquished By: (Signature) Kathryn Dall	Received By: (Signature) Alex Lasseter	080410	1030
Relinquished By: (Signature) Alex Lasseter	Received By: (Signature) Margo Nyne	8/4/10	1235
Relinquished By: (Signature)	Received For Prism Laboratories By:	Date	

Method of Shipment: NOTE: ALL SAMPLE COOLERS SHOULD BE TAPED SHUT WITH CUSTODY SEALS FOR TRANSPORTATION TO THE LABORATORY. SAMPLES ARE NOT ACCEPTED AND VERIFIED AGAINST COC UNTIL RECEIVED AT THE LABORATORY.

COC Group No.

☐ Fed Ex ☐ UPS ☐ Hand-delivered ☐ Prism Field Service ☐ Other _____

Additional Comments:

PRISM USE ONLY

Site Arrival Time:
Site Departure Time:
Field Tech Fee:
Mileage:

NPDES:	UST:	GROUNDWATER:	DRINKING WATER:	SOLID WASTE:	RCRA:	CERCLA	LANDFILL	OTHER:
☐ NC ☐ SC ☐	☐ NC ☐ SC ☐	☐ NC ☐ SC ☐	☐ NC ☐ SC ☐	☐ NC ☐ SC ☐	☐ NC ☐ SC ☐	☐ NC ☐ SC ☐	☐ NC ☐ SC ☐	☐ NC ☐ SC ☐

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

INVOICE COPY

Work Order #425

PRISM LABORATORIES, INC.

Full-Service Analytical & Environmental Solutions

449 Springbrook Road • P.O. Box 240543 • Charlotte, NC 28224-0543
Phone: 704/529-6364 • Fax: 704/525-0409

CHAIN OF CUSTODY RECORD

PAGE 2 OF 2 QUOTE # TO ENSURE PROPER BILLING: _____

Client Company Name: Solutions-IES
Report To/Contact Name: Jody Wevmyer
Reporting Address: 1101 Wowell Road, Raleigh, NC
Phone: 919-873-1060 Fax (Yes) (No): _____
Email (Yes) (No) Email Address: _____
EDD Type: PDF ✓ Excel ___ Other _____
Site Location Name: NCDOT Elizabeth City
Site Location Physical Address: _____

Project Name: _____
Short Hold Analysis: (Yes) (No) UST Project: (Yes) (No)
*Please ATTACH any project specific reporting (QC LEVEL I II III IV) provisions and/or QC Requirements
Invoice To: NCDOT WBS # 35742.1.1
Address: _____

Purchase Order No./Billing Reference 4300132875
Requested Due Date ❑ 1 Day ❑ 2 Days ☒ 3 Days ❑ 4 Days ❑ 5 Days
"Working Days" ❑ 6-9 Days ☒ Standard 10 days ❑ Rush Work Must Be Pre-Approved
Samples received after 15:00 will be processed next business day.
Turnaround time is based on business days, excluding weekends and holidays.
(SEE REVERSE FOR TERMS & CONDITIONS REGARDING SERVICES RENDERED BY PRISM LABORATORIES, INC. TO CLIENT)

LAB USE ONLY

	YES	NO	N/A
Samples INTACT upon arrival?	✓		
Received ON WET ICE? Temp 0.6°	✓		
PROPER PRESERVATIVES indicated?			
Received WITHIN HOLDING TIMES?	✓		
CUSTODY SEALS INTACT?	✓		
VOLATILES rec'd W/OUT HEADSPACE?			✓
PROPER CONTAINERS used?	✓		

TO BE FILLED IN BY CLIENT/SAMPLING PERSONNEL

Certification: NELAC ___ USACE ___ FL ___ NC ✓
SC ___ OTHER ___ N/A ___
Water Chlorinated: YES ✓ NO ___
Sample Iced Upon Collection: YES ✓ NO ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	ANALYSES REQUESTED: Fecal Coliform	REMARKS	PRISM LAB ID NO.
601-1	8/9/10	940	water	Plastic	1		$Na_2S_2O_3$	✓ Sample #1	SUB TO E1 (AL)	
507-6	8/9/10	955	water	Plastic	1		↓	✓ Sample #2	SUB TO E1 (AL)	

Sampler's Signature: Kathryn Doll
Sampled By (Print Name): Kathryn Doll
Affiliation: Solutions-IES

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Upon relinquishing, this Chain of Custody is your authorization for Prism to proceed with the analyses as requested above. Any changes must be submitted in writing to the Prism Project Manager. There will be charges for any changes after analyses have been initialized.

		Date	Military/Hours
Relinquished By: (Signature) Kathryn Doll	Received By: (Signature) Alex Lessard	080410	1030
Relinquished By: (Signature) Alex Lessard	Received By: (Signature) Mason Long	8/4/10	1235P
Relinquished By: (Signature)	Received For Prism Laboratories By:	Date	

Additional Comments:

PRISM USE ONLY

Site Arrival Time:
Site Departure Time:
Field Tech Fee:
Mileage:

Method of Shipment: NOTE: ALL SAMPLE COOLERS SHOULD BE TAPED SHUT WITH CUSTODY SEALS FOR TRANSPORTATION TO THE LABORATORY. SAMPLES ARE NOT ACCEPTED AND VERIFIED AGAINST COC UNTIL RECEIVED AT THE LABORATORY.

COC Group No.

❑ Fed Ex ❑ UPS ☒ Hand-delivered ☒ Prism Field Service ❑ Other _____

NPDES:	UST:	GROUNDWATER:	DRINKING WATER:	SOLID WASTE:	RCRA:	CERCLA	LANDFILL	OTHER:
❑ NC ❑ SC	❑ NC ❑ SC	❑ NC ❑ SC	❑ NC ❑ SC	❑ NC ❑ SC	❑ NC ❑ SC	❑ NC ❑ SC	❑ NC ❑ SC	❑ NC ❑ SC
❑ _____	❑	❑	❑	❑	❑	❑	❑	❑

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

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