PRELIMINARY SITE ASSESSMENT
CAROLINA CONSTRUCTION CORPORATION PROPERTY
222 NORTH WATER STREET
ELIZABETH CITY, NORTH CAROLINA
STATE PROJECT: U-4438
WBS ELEMENT: 35742.1.1

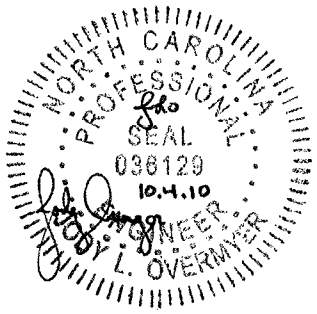
Prepared for:

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

Prepared by:

Solutions-IES
1101 Nowell Road
Raleigh, North Carolina 27607

Solutions-IES Project No. 3946.10A3.NDOT



September 8, 2010

Jody Overmyer, P.E.
Project Engineer

Sheri L. Knox
Senior Project Manager

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1.0 INTRODUCTION

Carolina Construction Corporation property is located at 222 North Water Street, Elizabeth City, in Pasquotank County, North Carolina. The property is currently a vacant lot. The location of the property is shown on **Figures 1** and **2**. The North Carolina Department of Transportation (NCDOT) plans to acquire the right-of-way (ROW) and/or easement at this property due to the planned 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

The Carolina Construction Corporation property, which once operated as a Gibson BP gas station, is currently a vacant lot. It is located in the southeast quadrant of East Elizabeth Street and North Water Street. According to North Carolina Department of Environment and Natural Resources (NCDENR) underground storage tank (UST) registry, five tanks were closed in 1989. Groundwater incident #5789 has been assigned to this property. On August 13, 2004, a Notice of No Further Action for Petroleum Underground Storage Tanks (2004 Notice) was issued to the Gibson Service Center because groundwater and unsaturated soil contamination "meet clean up requirements for a low risk site." However, at the time of the 2004 Notice, groundwater contamination remaining at the site still exceeded the groundwater quality standards established in 15A NCAC 2L.0202. It was also noted in the 2004 Notice that groundwater at the site and along the expected path of migration is <u>not suitable</u> for drinking. The Notice of No Further Action issued for the site is included in **Appendix A**. A 1948 Sanborn Map of the site identifying the location of the former Gibson BP gas station is included in **Appendix B**.

During our work, the PSA was performed along the ROW/proposed easement which stretches north to south generally along the east side of North Water Street. Work was not performed in areas outside of the ROW/proposed easement. Photographs of the site are included in **Appendix C**.

3.0 FIELD ACTIVITIES

Prior to mobilizing to the site to conduct work, 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 7, 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 ROW/proposed easement does not contain metallic USTs. Images of the EM and GPR findings are included in the geophysical report included as **Appendix D**. After a review of the geophysical report, Solutions-IES mobilized to the site on August 4, 2010, to collect soil and groundwater samples. Three soil borings were advanced using a Geoprobe® to a depth of 4 feet below ground surface (ft bgs). The approximate locations of the soil borings are displayed in **Figure 3**. The GPS coordinates of the boring locations are included in **Appendix E**. Borings 222-2 and 222-3 were advanced to a depth of 8 feet bgs to install temporary wells.

A Macro-Core® sampler fitted with a 4-foot 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 F** 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 dark brown to tan silty sands (Unified Soil Classification SM). The depth to groundwater was measured at approximately 5 ft bgs in a representative bore hole 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 non-detect to 3.1 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. The samples were placed in laboratory-supplied jars and stored on ice pending courier service to Prism Laboratories in Charlotte, NC. Two soil samples collected at borings 222-1 and 222-2 were also analyzed for fecal coliform bacteria by method SM9221 E. The samples were 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 borings 222-2 and 222-3, 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 each boring. Natural formation caved in around the well screen from approximately 3 to 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 F** contains boring logs with temporary well construction information. The stabilized water level was measured at 4.65 ft bgs in 222-2 and 4.90 ft bgs in 222-3. Each well was then sampled with a peristaltic pump, utilizing 3/8-inch diameter disposable polyethylene tubing. Prior to sample collection field parameters including 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 222-3 were submitted for analysis of volatile organic compounds (VOCs) by EPA Methods 8260 and semivolatile organic compounds (SVOCs) by EPA Method 8270. A groundwater sample obtained from the well at 222-2 was submitted for analysis of fecal coliform bacteria by method SM9221 E. The samples were placed in laboratory-supplied jars then stored on ice pending courier service to Prism Laboratories in Charlotte, NC (VOC/SVOC 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 indicate the presence of TPH (DRO and GRO) in soil and fecal coliform bacteria in soil and groundwater at concentrations above the laboratory reporting limits at Carolina Construction Corporation property. The analytical results are summarized in **Tables 2** and **3**, and the laboratory report is included in **Appendix G**.

At Boring 222-1, TPH (GRO) was detected in soil at a concentration of 19 milligrams per kilogram (mg/kg), above the NCDENR action level[1] for tank closure screening of 10 mg/kg. TPH (DRO) was also detected in boring 222-1 at a concentration of 22 mg/kg, which is also above the NCDENR action level for tank closure screening of 10 mg/kg. The UST petroleum release action levels were used as comparison since historically USTs were present on site. The 2004 Notice of No Further Action suggested that residual petroleum constituents may be present in the soil and groundwater at the site.

Fecal coliform bacteria, a potential indicator of municipal wastewater contamination, were detected in the soil at 13 most probable number of cells per gram (MPN/g) at boring 222-2, but below laboratory reporting limits of 2 MNP/g at boring 222-1. Fecal coliform bacteria was detected in groundwater above the NCAC 15A.2L.0200 (NC 2L) standard[2] of 1 MPN per 100 milliliter (1 MPN/100 mL) at 30 MPN/100 mL in the groundwater sample from temporary well 222-2. VOCs and SVOCs were not detected above the laboratory reporting limits in the groundwater sample collected from the site.

5.0 DISCUSSION/CONCLUSIONS

The geophysical survey conducted at the site suggested that no buried metallic objects such as a UST are present within the surveyed portion of the proposed ROW and/or easement. Solutions-IES advanced 3 soil borings at the study area to a depth of 4 ft bgs. Additionally, borings 222-2 and 222-3 were further advanced to a depth of 8 ft bgs for the installation of temporary groundwater monitoring wells. The highest FID reading measured 3.1 ppm in boring 222-3 at a depth of 0 to 2 ft bgs; however, analyzed constituents were not detected above laboratory reporting limits in the soil or groundwater sample submitted from that location. The soil sample from boring 222-1 (2-4 ft bgs) indicated the presence of TPH (GRO and DRO) in excess of the NCDENR action level. Fecal coliform bacteria were detected above the NC 2L standard for groundwater in temporary well 222-2.

The areal extent of TPH contamination in soil defined within the proposed ROW and/or easement is illustrated in **Figure 3**; contamination is estimated to extend to 4 ft bgs. The approximate total volume of soil with contaminants of concern in excess of the NCDENR action levels within the study area at Carolina Construction Corporation property is estimated at 90 bank cubic yards. Note that Solutions-IES

[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)*

attempted to identify the extent of unsaturated soil contamination. However, given 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 groundwater. From the base drawing provided by NCDOT, it appears that road construction operations are 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 identify the source of the contamination in soil and groundwater.

TABLES

TABLE 1
Summary of Field Screening Results for Soil
Carolina Construction Corporation
222 N. Water Street
Elizabeth City, North Carolina
WBS Element: 35742.1.1; State Project: U-4438
Sample Collection Date: August 4, 2010

Sample Depth Below Ground Surface	Soil Boring		
	222-1	222-2	222-3
	FID Reading (ppm)		
0 - 2 feet	0.0	0.0	3.1
2 - 4 feet	0.0	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

TABLE 2
Summary of Soil Analytical Results
Carolina Construction Corporation
222 N. Water Street
Elizabeth City, North Carolina
WBS Element: 35742.1.1; State Project: U-4438
Sample Collection Date: August 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)	
222-1	2-4	**19**	**22**	<2
222-2	2-4	<6.3	<9.2	**13**
222-3	0-2	<7.1	<9.1	NA
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

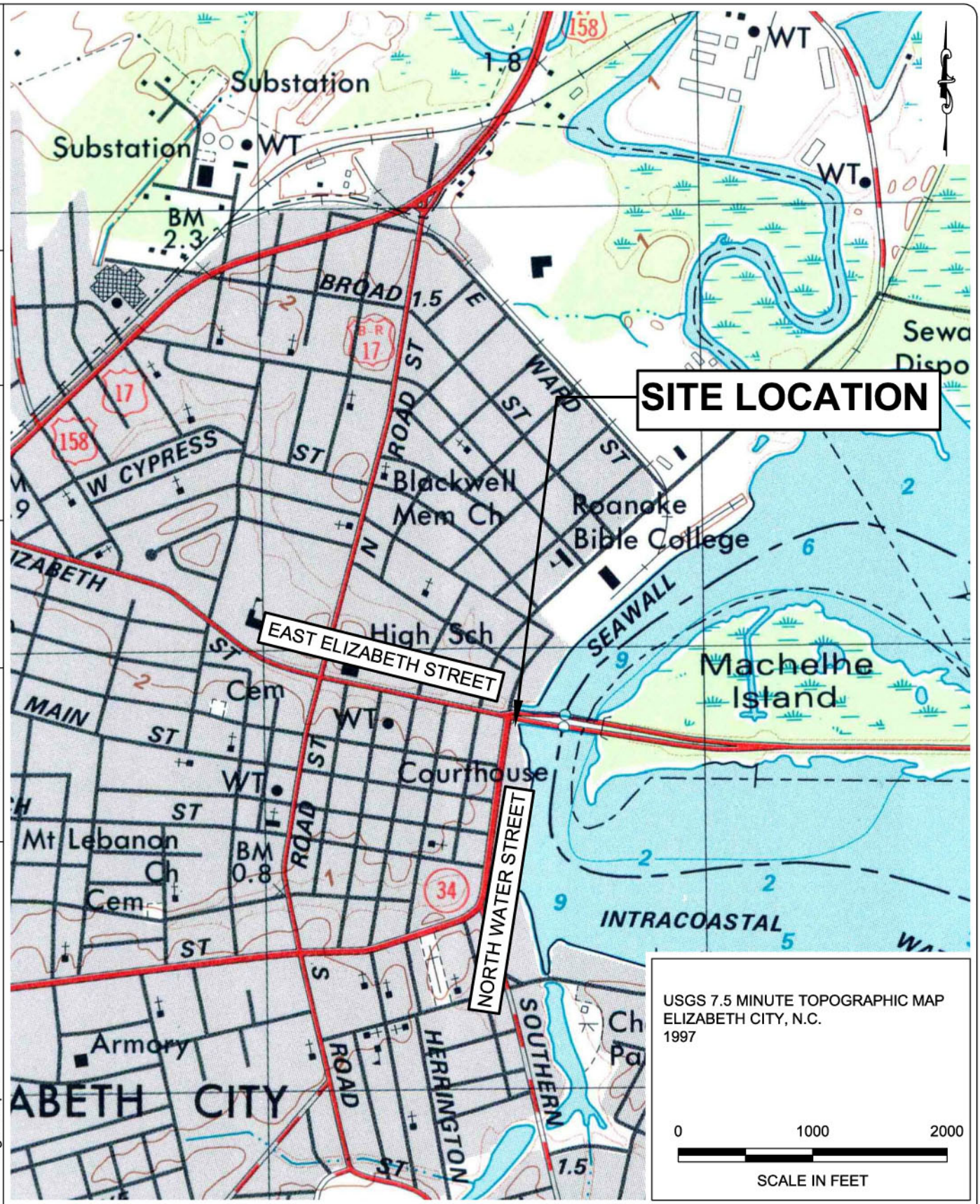
ft bgs = feet below ground surface
mg/kg = milligram per kilogram
MPN/g = most probable number per gram
Bold indicates value exceeds laboratory reporting limit.
Shaded values exceed NCDENR action level.
NA = Not analyzed
NE = Not established

TABLE 3
Summary of Groundwater Analytical Results
Carolina Construction Corp.
222 N. Water Street
Elizabeth City, North Carolina
WBS Element: 35742.1.1; State Project: U-4438
Sample Collection Date: August 4, 2010

Sample Information	VOCs (µg/L) (8260)	SVOCs (µg/L) (8270)	Fecal Coliform[3] (MPN/100 mL)
Sample ID	All Analytes	All Analytes	
222-2	NA	NA	**30**
222-3	BRL	BRL	NA
NC 2L Groundwater Quality Standards	NA	NA	1

Notes:
VOCs = Volatile organic compounds by EPA Method 8260
SVOCs = Semivolatile organic compounds by EPA Method 8270
Fecal Coliform by SM9221E
µg/L = Micrograms per liter
MPN/100 mL = Most probable number cells per 100 milliliters
NA = Not analyzed/Not applicable
Bold indicates value exceeds laboratory reporting limit.
Shaded values exceed NC 2L Groundwater Quality Standards (Janurary, 2010).
BRL = Below the laboratory reporting limit

FIGURES



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

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

CAROLINA CONSTRUCTION CORPORATION
222 NORTH WATER STREET
ELIZABETH CITY, NORTH CAROLINA
STATE PROJECT: U-4438
WBS ELEMENT: 35742.1.1

FIGURE:
1

roject Files\NCDOT\GeoEnvironmental\3946.10A3.NDOT - Elizabeth City PSAs (Seven Parcels)\CAD\Current Drawings\3946-ELIZABETHX.dwg, 1-CAROLINA, 1:1

PROJECT NUMBER 3946.10A3.NDOT

DRAFTER HRG

CHECKED BY SK

PROJECT MANAGER JO

DATE 09/20/2010

FILE Figure 2.pdf

EAST ELIZABETH STREET

PROPOSED EASEMENT

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86.60

MART, INC.,
H CAROLINA
ORATION

NORTH WATER STREET

NA
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TION

LEGEND

PROPOSED ROW LOCATION

0 20 40

SCALE IN FEET

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

CAROLINA CONSTRUCTION CORPORATION PROPERTY
222 NORTH WATER STREET
ELIZABETH CITY, NORTH CAROLINA
STATE PROJECT: U-4438
WBS ELEMENT: 35742.1.1

SITE MAP

FIGURE: 2

...\Carolina Construction Co-Figure 2.dgn 9/21/2010 10:48:31 AM

PROJECT NUMBER 3946.10A3.NDOT

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PROJECT MANAGER JO

DATE 09/20/2010

FILE Figure 3.pdf

EAST ELIZABETH STREET

STUDY AREA

222-2

222-3

222-1

NORTH WATER STREET

MART, INC.,
H CAROLINA
ORATION

NA
CTION
TION

LEGEND

- PROPOSED RIGHT-OF-WAY LOCATION
- STUDY AREA
- SOIL BORING
- SOIL BORING/TEMPORARY WELL
- ESTIMATED EXTENT OF TPH EXCEEDANCES IN SOIL

0 20 40

SCALE IN FEET

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

NOTES:

1) SOIL SAMPLES FOR FECAL COLIFORM COLLECTED AT BORING LOCATIONS 222-1 & 222-2.
2) GROUNDWATER SAMPLE FOR FECAL COLIFORM COLLECTED AT BORING LOCATION 222-2.

CAROLINA CONSTRUCTION CORPORATION PROPERTY
222 NORTH WATER STREET
ELIZABETH CITY, NORTH CAROLINA
STATE PROJECT: U-4438
WBS ELEMENT: 35742.1.1

SOIL AND GROUNDWATER SAMPLE LOCATION MAP

FIGURE: 3

APPENDIX A

NOTICE OF NO FURTHER ACTION

State of North Carolina
Department of Environment and
Natural Resources
Washington Regional Office

Michael F. Easley, Governor
William G. Ross Jr., Secretary
Dexter R. Matthews, Director

NCDENR
North Carolina Department of Environment and Natural Resources

DIVISION OF WASTE MANAGEMENT
UNDERGROUND STORAGE TANK SECTION
August 13, 2004

Mr. Charlie Gibson
Gibson Service Center
222 North Water Street
Elizabeth City, North Carolina 27909

Re: Notice of No Further Action 15A NCAC 2L .0115(h)
Risk-based Assessment and Corrective Action for Petroleum Underground Storage Tanks
Water Street BP (Gibson Service Center), 222 North Water Street
Elizabeth City, Pasquotank County, North Carolina
Incident # 5789 - **Low** Risk Classification

Dear Mr. Gibson:

The Underground Storage Tank (UST) Section, Division of Waste Management Washington Regional Office has received Site Closure Request and a Notice of Residual Petroleum for the above-referenced Site. **The Notice of Residual Petroleum was recorded in Book 811, Page 650 of the Pasquotank County Register of Deeds' Office.** A review of the file shows that unsaturated soil contamination and groundwater contamination meet the cleanup requirements for a low risk site. No further assessment or remedial actions are required at this time. However, please be advised that because groundwater contamination still exceeds the groundwater quality standards established in 15A NCAC 2L .0202, groundwater within the area of contamination or within the area where contamination is expected to migrate **is not suitable** for use as a water supply.

Pursuant to NCGS 143B-279.9 and 143B-279.11, the approved Notice of Residual Petroleum was recorded in **Book 811, Page 650 of the Pasquotank County Register of Deeds' Office. This No Further Action Determination will not become valid until the public notice requirements outlined below are completed.** Public notice in accordance with 15A NCAC 2L .0115(k) is required as follows. Within **30 days** of receipt of this no further action letter, you must provide a copy of this letter to the following persons:

- Local health director;
- Chief administrative officer (i.e., Mayor, Chairman of the County Commissioners, County Manager, City Manager or other official of equal or similar position) of each political jurisdiction in which the contamination occurs;
- All property owners and occupants within or contiguous to the area containing contamination; and
- All property owners and occupants within or contiguous to the area where the contamination is expected to migrate.

Copies of this no further action letter must be sent to the persons listed above by certified mail. If it is impractical to provide this public notice by certified mail to the occupants of apartment buildings, condominiums, office buildings, etc., you may post a copy of this letter in a prominent place where the occupants are most likely to see it.

Within **60 days** of receiving this no further action letter, you must provide the UST Section Washington Regional Office with proof of receipt of the copy of the letter or of refusal by the addressee to accept delivery of the copy of the letter. If a copy of the letter is posted, you must provide the UST Section with a description of the manner in which the letter was posted.

Interested parties may examine the file and Site Closure Request by contacting the UST Section at (252) 946-6481. In addition, the UST Section Washington Regional Office has the Site Closure Request along with other site information on file and available for public review. Interested parties may arrange to review this information by contacting the regional office as listed below. In addition, comments on the Site Closure Request may be submitted to the regional office.

UST Section
Washington Regional Office
943 Washington Square Mall
Washington, North Carolina 27889
(252) 946-6481

Pursuant to 15A NCAC 2L .0115(e), you have a continuing obligation to notify the UST Section of any changes that you know of or should know of, that might affect the level of risk assigned to the discharge or release. Such changes include, but are not limited to, changes in zoning of real property, use of real property or the use of groundwater that has been contaminated or is expected to be contaminated by the discharge or release, if such change could cause the UST Section to reclassify the risk. Please note that this responsibility not only pertains to changes involving the property on which the release occurred, but to changes involving the surrounding properties as well.

Please be advised that you should close any monitoring wells or injection wells used to investigate or remediate this incident in accordance with 15A NCAC 2C .0113 and .0114, respectively. For guidance on closure of wells, please contact The Division of Water Quality, Groundwater Section at the Washington Regional Office. Should you have any questions concerning this letter, please contact Ryan Nesbitt at (252) 946-6481, extension 282.

Sincerely,

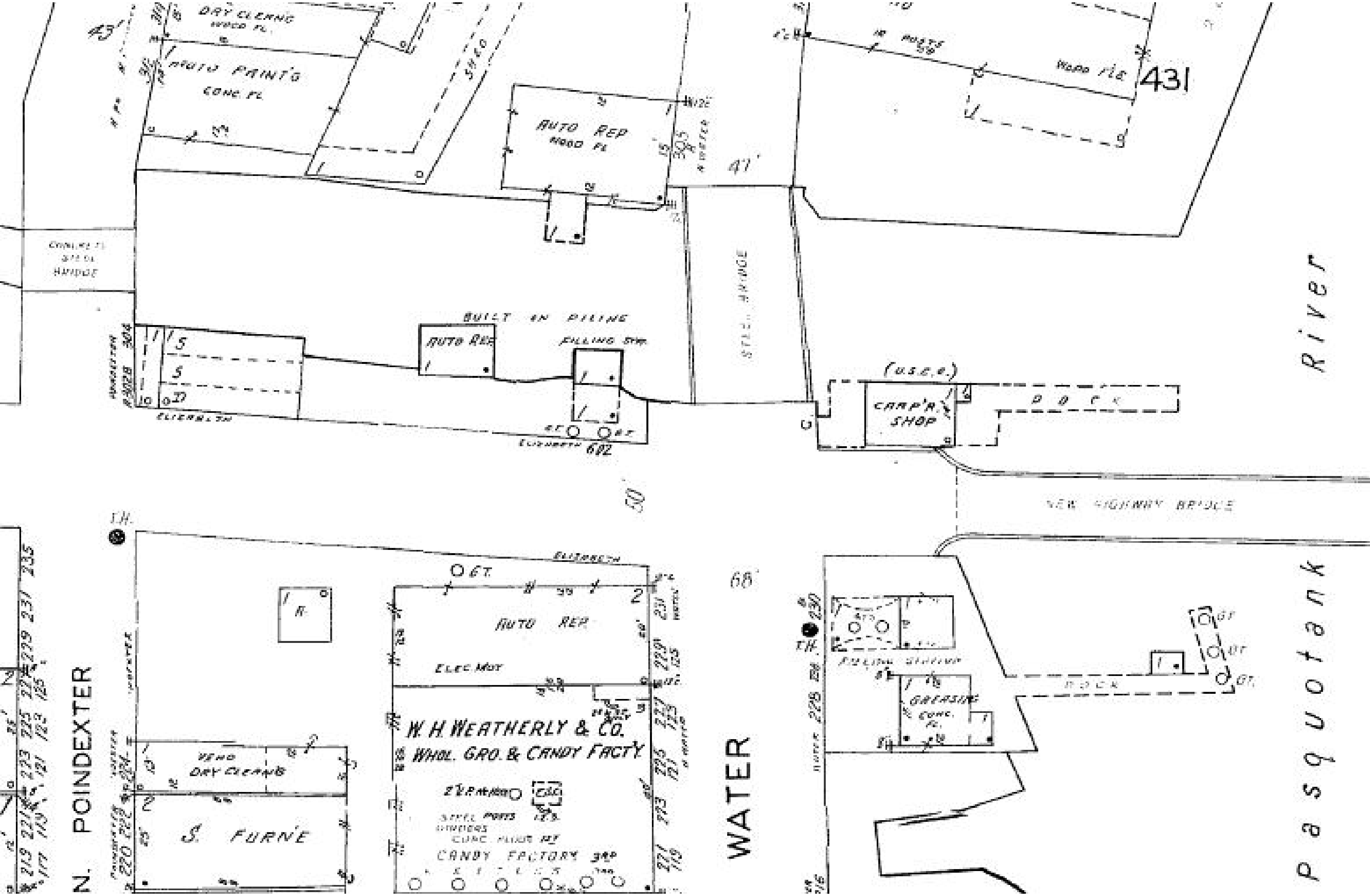
Richard R. Powers

Richard R. Powers
Regional UST Supervisor

cc: NorthEast Environmental, P.C., 402 Sugar Run Road, Sunbury, NC 27979
WaRO Incident File

APPENDIX B

1948 SANBORN MAP



431
DRY CLEANG
WOOD FL.
AUTO PAINT'G
CONC. FL.
SHED
AUTO REP.
WOOD FL.
WOOD FL'R
305
47'
43'
CONCRETE STEEL BRIDGE
STEEL BRIDGE
BUILT ON PILING
AUTO REP.
FILLING STA.
304
302B
ELIZABETH
602
(U.S.E.D.)
CARP'R. SHOP
DOCK
River
NEW HIGHWAY BRIDGE
50'
68'
T.H.
ELIZABETH
R.
AUTO REP.
ELEC. MOT.
W. H. WEATHERLY & CO.
WHOL. GRO. & CANDY FACT'Y.
STEEL POSTS
GIRDERS
CONC. FLOOR 1ST
CANDY FACTORY 3RD
VEND DRY CLEANG
S. FURN'E
POINDEXTER
N.
WATER
231
229
227
225
223
221
220
222
224
219
121
123
125
FILLING STATION
GREASING
CONC. FL.
DOCK
G.T.
228
230
Pasquotank

APPENDIX C

PHOTOGRAPHS

Photograph 1 – View of Carolina Construction Corporation property, looking north from North Water Street.

Photograph 2 – View of Carolina Construction Corporation property, look southeast from North Water Street.

APPENDIX D

GEOPHYSICAL REPORT

Pyramid Project # 2010159

GEOPHYSICAL INVESTIGATION REPORT

EM61 & GPR SURVEYS

222 NORTH WATER STREET SITE
Elizabeth City, North Carolina

August 18, 2010

Report prepared for: Jody L. Overmyer, P.E.
Solutions-IES
1101 Newell Road
Raleigh, North Carolina 27607

Prepared by: Mark Deml, PG

Reviewed by: Douglas Canavello, PG

PYRAMID ENVIRONMENTAL & ENGINEERING, P.C.
P.O. Box 16265
GREENSBORO, NC 27416-0265
(336) 335-3174

Solutions-IES
GEOPHYSICAL INVESTIGATION REPORT
222 NORTH WATER STREET SITE
Elizabeth City, North Carolina

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FIGURES

1.0 INTRODUCTION

Pyramid Environmental conducted geophysical investigations for Solutions-IES across the proposed Right-of-Way (ROW) portion of the 222 North Water Street site located in Elizabeth City, North Carolina. The property is owned by Carolina Construction Corporation and consists of an open, flat-lying grass-covered lot bordered by East Elizabeth Street Bridge and North Water Street to the north and west, respectively. Albemarle Sound and commercial property lie to the east and south, respectively.

Conducted on July 7 and 8, 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 222 North Water 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 has a maximum length and width of 130 feet and 65 feet, respectively. Photographs of the geophysical equipment used in this investigation and the geophysical survey area at the 222 North Water 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, pin flags and water-based marking paint. These grid marks were used as X-Y coordinates for location control when collecting the geophysical data and establishing base maps for the geophysical results.

The geophysical investigation consisted of electromagnetic (EM) induction-metal detection surveys and ground penetrating radar (GPR) surveys. The EM survey was performed on July 7, 2010 using a Geonics EM61-MK1 metal detection instrument. According to the instrument specifications, the EM61 can detect a metal drum down to a maximum depth of approximately 8 feet. Smaller objects (1-foot or less in size) can be detected to a maximum depth of 4 to 5 feet. All of the EM61 data were

digitally collected at approximately 0.8 foot intervals along northerly-southerly, parallel survey lines spaced five feet apart. All of the data were downloaded to a computer and reviewed in the field and office using the Geonics DAT61W and Surfer for Windows Version 7.0 software programs.

GPR surveys were conducted on July 8, 2010 across a significant portion of the site 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.

Locations of the EM61 metal detection survey lines and the GPR survey lines acquired across the geophysical survey area are shown as red dots and purple lines, respectively in **Figure 2**. Each red dot represents an EM61 data point.

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

Preliminary contour plots of the EM61 bottom coil and EM61 differential results obtained from the survey area were emailed to Ms. Overmyer on July 19, 2010.

3.0 DISCUSSION OF RESULTS

The linear, high-amplitude EM61 bottom coil anomaly (contours shaded in red) intersecting grid coordinates X=60 Y=120 is probably in response to the metal retaining wall that runs along the northern and eastern edge of the property. The linear, high-amplitude bottom coil anomalies intersecting grid coordinates X=25 Y=40 and X=30 Y=105 are probably in response to buried utility lines or conduits. GPR data suggest the linear EM61 differential anomalies intersecting grid coordinates X=35 Y=47, X=50 Y=14, X=70 Y=25, and X=75 Y=38 are in response to buried conduits and miscellaneous metal objects or debris. Similarly, GPR data suggest the EM61 differential anomalies centered near grid coordinates X=25 Y=76 and X=45 Y=68 are in response to buried conduits or metal objects/debris.

The geophysical investigation suggests that the remaining portion of the survey area does not contain buried metallic objects or debris and that the surveyed portion of the site does not contain unknown, metallic USTs.

4.0 SUMMARY & CONCLUSIONS

Our evaluation of the EM61 and GPR data collected across the proposed ROW area at the 222 North Water Street site located in Elizabeth City, North Carolina, provides the following summary and conclusions:

- The EM61 and GPR surveys provided reliable results for the detection of metallic USTs within the surveyed portion of the site.

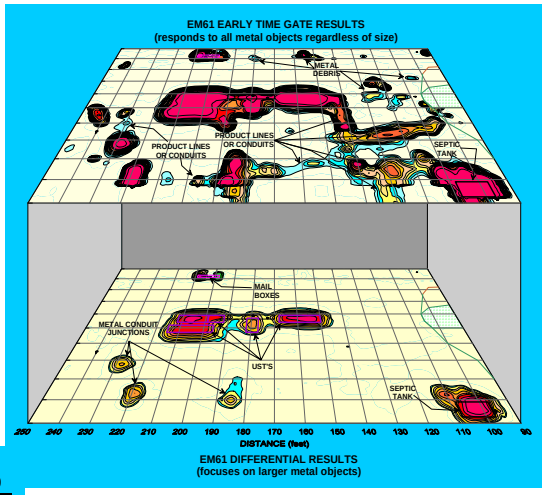
- The linear, high-amplitude EM61 bottom coil anomaly (contours shaded in red) intersecting grid coordinates X=60 Y=120 is probably in response to the metal retaining wall that runs along the northern and eastern edge of the property.

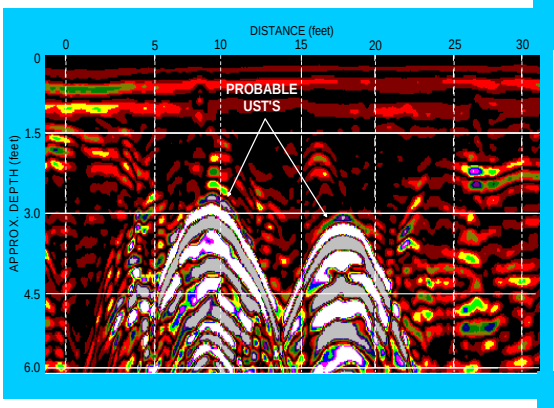
- GPR data suggest that the remaining linear EM61 anomalies are in response to buried metallic utility lines, conduits, miscellaneous objects, or debris.

- The geophysical investigation suggests that the surveyed portion of the site does not contain buried metallic USTs.

5.0 LIMITATIONS

EM61 and GPR surveys have been performed and this report prepared for Solutions-IES in accordance with generally accepted guidelines for EM61 and GPR surveys. It is generally recognized that the results of the EM61 and GPR are non-unique and may not represent actual subsurface conditions. The EM61 and GPR results do not conclusively determine that the site does not contain unknown, metallic USTs but that none were detected.

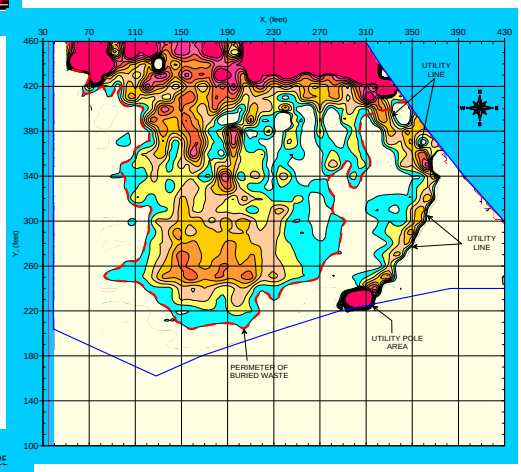


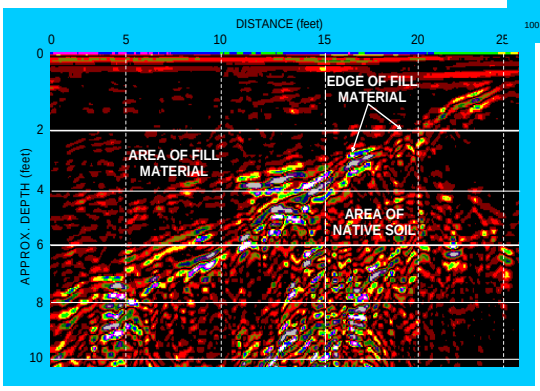


FIGURES

(on the following pages)

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





The photograph shows the Geonics EM61 metal detector that was used to conduct the metal detection survey across the 222 North Water Street site (Carolina Construction Corporation property) on July 7, 2010.

The photographs show the SIR-2000 GPR system equipped with a 400 MHz antenna that were used to conduct the ground penetrating radar investigation at the 222 North Water Street site on July 8, 2010.

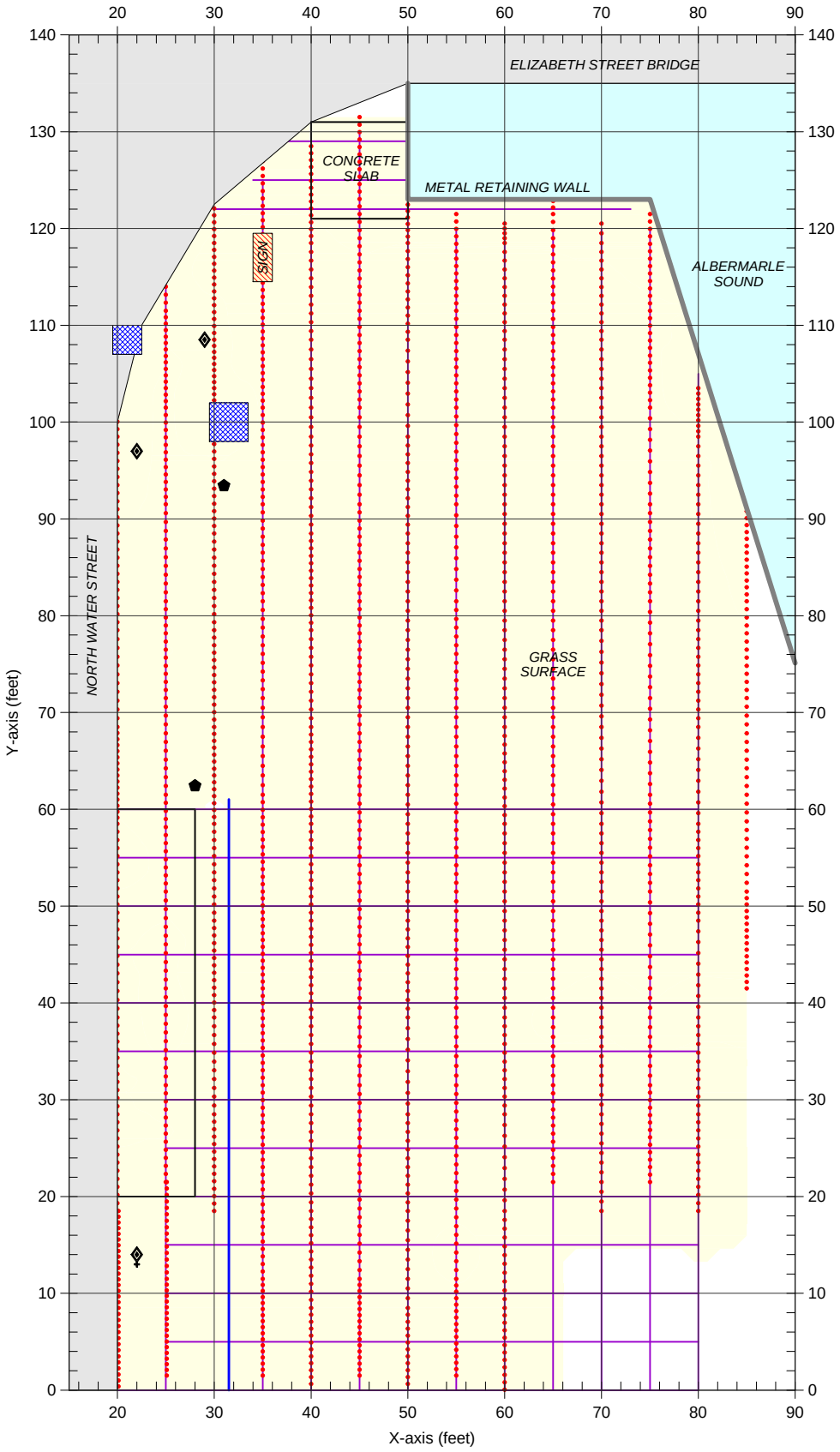
The photograph shows the 222 North Water Street site (Carolina Construction Corporation property) located at the intersection of North Water Street and East Elizabeth Street in Elizabeth City, North Carolina. The photograph is viewed in a southeasterly direction.

PYRAMID
ENVIRONMENTAL & ENGINEERING, P.C.

CLIENT	SOLUTIONS-IES	DATE	08/16/10	DRWN	MJD
SITE	222 NORTH WATER STREET SITE	LAY		CHKD	
CITY	ELIZABETH CITY	STATE	NORTH CAROLINA	DWG	
TITLE	GEOPHYSICAL RESULTS	JNO	2010-159	FIGURE	

GEOPHYSICAL EQUIPMENT & SITE PHOTOGRAPHS

FIGURE 1



N
W
E
S

APPROXIMATE NORTH

LEGEND

- SURVEY AREA: EM61 DATA ACQUIRED ALONG X-AXIS OR Y-AXIS TRENDING LINES SPACED 5 FEET APART
- STORM SEWER GRATE
- METALLIC RETAINING WALL
- ROAD SIGN
- GUY WIRE
- ROAD SIGN
- UTILITY POLE
- CHAIN FENCE
- EM61 METAL DETECTION SURVEY LINE
- GPR SURVEY LINE

Note: The map shows the geophysical survey area at the 222 North Water Street site (Carolina Construction Corp. property). The red dots represent the EM61 metal detection survey lines that were acquired on July 7, 2010 using a Geonics EM61 metal detection instrument. Each dot represents an EM61 data point.

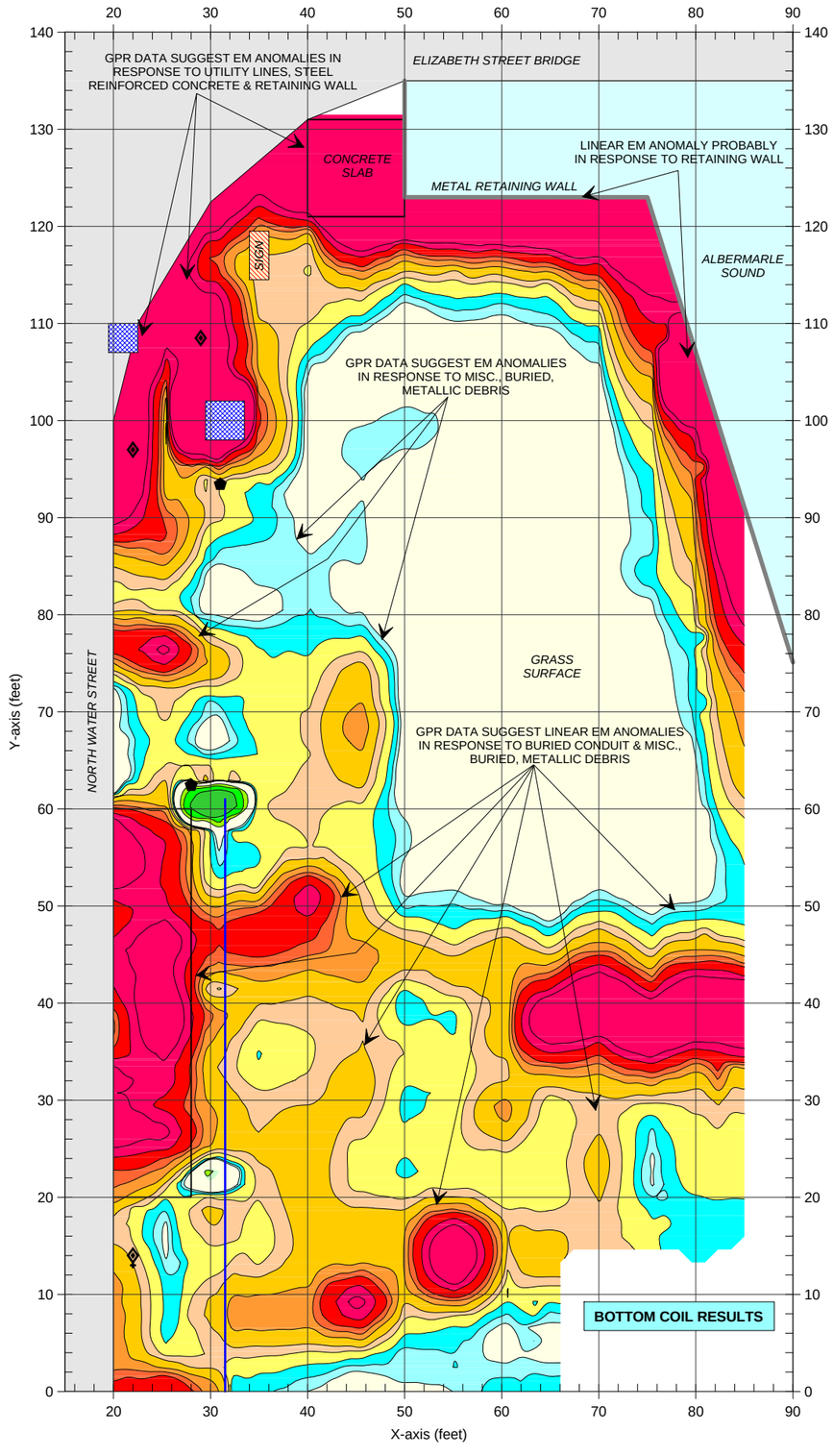
The solid purple lines represent the GPR survey lines. The GPR investigation was conducted on July 8, 2010 using a Geophysical Survey Systems SIR-2000 unit with a 400 MHz antenna.

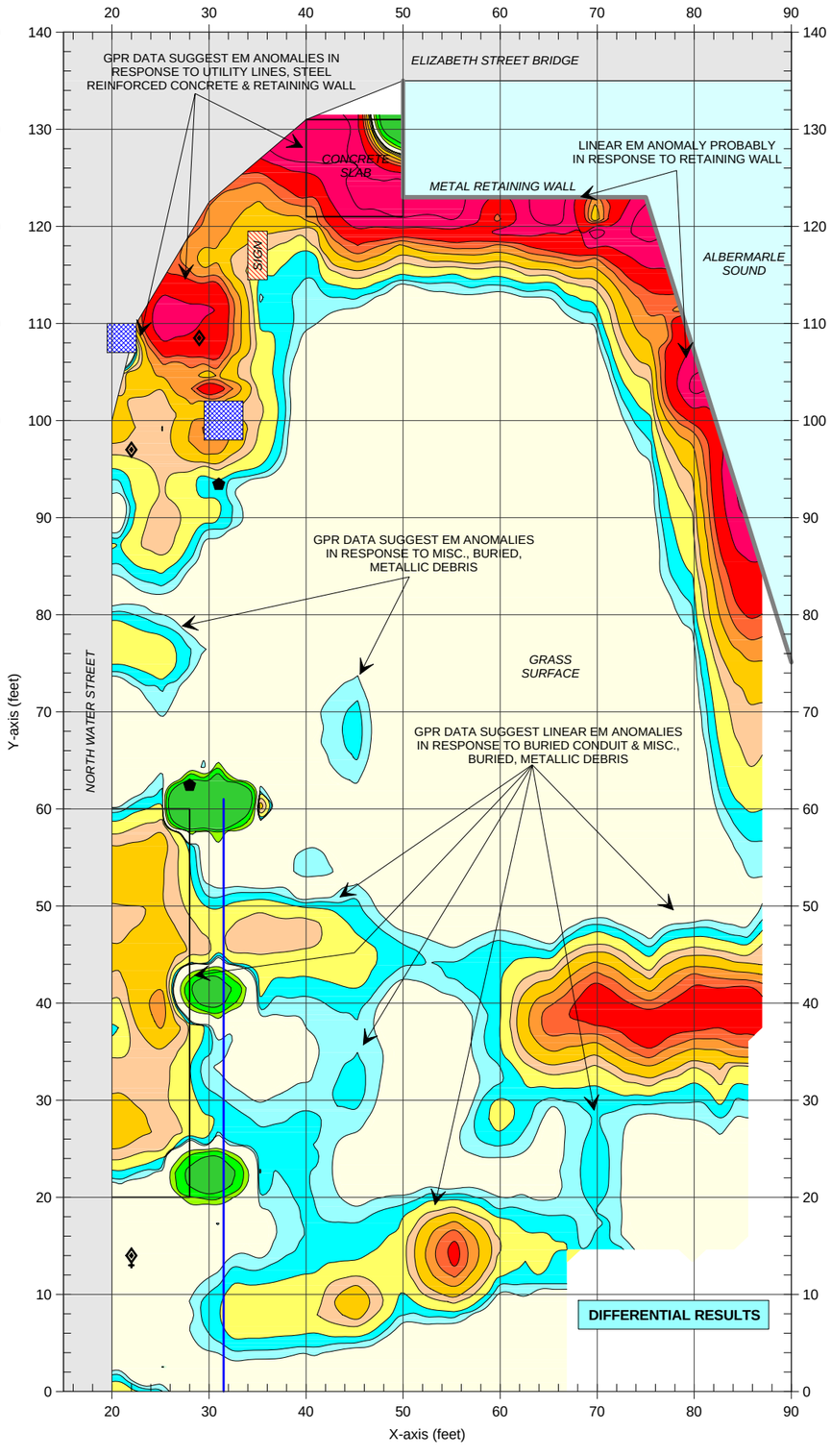
PYRAMID
ENVIRONMENTAL & ENGINEERING, P.C.

CLIENT	SOLUTIONS-IES	DATE	08/16/10	DRWN	MJD
SITE	222 NORTH WATER STREET SITE	LAY		CHKD	
CITY	ELIZABETH CITY	STATE	NORTH CAROLINA	DWG	
TITLE	GEOPHYSICAL RESULTS	JNO	2010-159	FIGURE	

GEOPHYSICAL SURVEY LINE LOCATIONS

FIGURE 2





N
W E
S
APPROXIMATE NORTH

LEGEND

- SURVEY AREA: EM61 DATA ACQUIRED ALONG X-AXIS OR Y-AXIS TRENDING LINES SPACED 5 FEET APART
- STORM SEWER GRATE
- METALLIC RETAINING WALL
- ROAD SIGN
- GUY WIRE
- ROAD SIGN
- UTILITY POLE
- CHAIN FENCE

EM61 METAL DETECTION RESPONSE (MILLIVOLTS)

-5000 -400 -200 -100 -90 -55 -60 -75 -100 -150 -200 -300 -400 -500 -750 -1000

The contour plot shows the bottom coil (most sensitive) and differential results of the EM61 instrument in millivolts (mV). The bottom coil response shows buried metallic objects regardless of size. The differential response focuses on larger, buried metallic objects such as drums and USTs and ignores smaller miscellaneous, buried, metal debris.

The EM61 data were collected on July 7, 2010 using a Geonics EM61 instrument. Ground penetrating radar (GPR) data were acquired on July 8, 2010 using a Geophysical Survey Systems SIR 2000 instrument with a 400 MHz antenna.

The geophysical investigation suggests that the surveyed portion of the property does not contain metallic USTs.

EM61 METAL DETECTION RESULTS

FIGURE 3

GRAPHIC SCALE IN FEET

DRWN	CHKD		FIGURE
MJD			
DATE	LAY	DWG	J.-NO.
08/16/10			2010-159

CLIENT: SOLUTIONS-IES
SITE: 222 NORTH WATER STREET SITE
CITY: ELIZABETH CITY
STATE: NORTH CAROLINA
TITLE: GEOPHYSICAL RESULTS

PYRAMID
ENVIRONMENTAL & ENGINEERING, P.C.

APPENDIX E

GPS COORDINATES

APPENDIX E
Boring Location GPS Coordinates
Carolina Construction Corporation
222 North Water Street
Elizabeth City, North Carolina
WBS Element: 35742.1.1; State Project: U-4438

Boring Identification	Latitude	Longitude
222-1	36.301108	76.218348
222-2	36.301202	76.218314
222-3	36.301192	76.218226

APPENDIX F

BORING LOGS

Log of Soil Boring: 222-1

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: **222 N. Water Street**
Date Started: **8/4/10**
Date Completed: **8/4/10**
Drilling Method: **Direct push**
Initial Water Level: **~4-5' bgs**
Final Water Level:
Sample Method: **Macrocore**
Date & Time (i): **8/4/10**
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			**OL** brown silt, plant material				0.0		222-1-0-2	
2			**OL** red/ brown clayey-silt, moist, fill		25		0.0		222-1-2-4	
4			End of Boring							
6										
8										

Notes: Depth in feet

Field Screen conducted with FID, results in parts per million (ppm).

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: 222-2

Project Name: **Elizabeth City PSAs**
Solutions-IES Project Number: **3946.10A3.NDOT**
Client: **NCDOT**
Northing: **940034.21**
Easting: **2819641.57**
Project Location: **Elizabeth City** State: **NC**
County: **Pasquotank**
City: **Elizabeth City**
Site or Area: **222 N. Water Street**
Date Started: **8/4/10**
Date Completed: **8/4/10**
Drilling Method: **Direct push**
Initial Water Level: **~4-5' bgs**
Final Water Level: **4.65' bgs**
Sample Method: **Macrocore**
Date & Time (i): **8/4/10 0745**
Date & Time (f): **8/4/10 925**
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		SM	topsoil, fine sand, plant material, loose				0.0		222-2-0-2	
2		SM	dark brown silty -sand, some gravel		50		0.0		222-2-2-4	
4										
6										
8										
			End of Boring							
10										

Notes: Depth in feet.

Field Screen conducted with FID, results in parts per million (ppm).

Well Construction Details

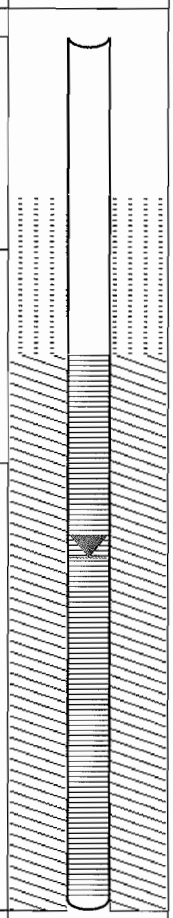
Drilling Contractor: **Solutions-IES, Inc.**
Size of Borehole: **3.75"** TOC Elevation: **NA** Screen Interval: **8.2' -3.2' bgs**
Completion: **Temporary** Casing Diameter: **1"** Screen Material: **PVC**
Total Depth: **8.2** Casing Material: **PVC** Slot Size: **0.01**

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

Log of Soil Boring: 222-3

Project Name: **Elizabeth City PSAs**
Solutions-IES Project Number: **3946.10A3.NDOT**
Client: **NCDOT**
Northing: **940031.29**
Easting: **2819667.59**
Project Location: **Elizabeth City** State: **NC**
County: **Pasquotank**
City: **Elizabeth City**
Site or Area: **222 N. Water Street**
Date Started: **8/4/10**
Date Completed: **8/4/10**
Drilling Method: **Direct push**
Initial Water Level: **~4 to 5' bgs**
Final Water Level: **4.90' bgs**
Sample Method: **Macrocore**
Date & Time (i): **8/4/10 0745**
Date & Time (f): **8/4/10 0820**
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		SM	topsoil, fine sand, plant material, loose				3.1		222-3-0-2	
2		SP	tan sand, slightly moist, fine-grained		35		0.0		222-3-2-4	
4										
6										
8										
			End of Boring							
10										



Notes: Depth in feet.

Field Screen conducted with FID, results in parts per million (ppm).

Well Construction Details

Drilling Contractor: **Solutions-IES, Inc.**
Size of Borehole: **3.75"** TOC Elevation: **NA**
Completion: **Temporary** Casing Diameter: **1"**
Total Depth: **8.2** Casing Material: **PVC**
Screen Interval: **8.2' -3.2' 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 G

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

08/30/2010

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

Project: NCDOT Elizabeth City PSA's - 222 Water St.
Project No.: WBS# 35742.1.1
Lab Submittal Date: 08/05/2010
Prism Work Order: 0080167

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:

This is a Revised Report and supercedes the original laboratory report dated 8/24/10. Revised Client Sample ID to 507-4-1-4 on Prism Sample ID 0080167-07.

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:

A	Compound recovered outside established QC limits in the LCS DUP. Acceptable recovery was obtained in the LCS. No further action was taken.
Aa	Sample analyzed out of hold.
D	RPD value outside of the control limits.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
MI	Matrix spike outside of the control limits. Matrix interference suspected.
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.

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

Sample Receipt Summary

08/30/2010

Prism Work Order: 0080167

Client Sample ID	Lab Sample ID	Matrix	Date Sampled	Date Received
222-1-2-4	0080167-01	Solid	08/04/10	08/05/10
222-2-2-4	0080167-02	Solid	08/04/10	08/05/10
222-3-0-2	0080167-03	Solid	08/04/10	08/05/10
222-3	0080167-04	Water	08/04/10	08/05/10
601-1	0080167-05	Water	08/04/10	08/05/10
229-2	0080167-06	Water	08/04/10	08/05/10
507-4-1-4	0080167-07	Solid	08/04/10	08/05/10

Samples received in good condition at 3.1 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 - 222 Water St.
Project No.: WBS# 35742.1.1
Sample Matrix: Solid

Client Sample ID: 222-1-2-4
Prism Sample ID: 0080167-01
Prism Work Order: 0080167
Time Collected: 08/04/10 08:20
Time Submitted: 08/05/10 18:05

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Diesel Range Organics by GC/FID									
Diesel Range Organics	**22**	**mg/kg dry**	**8.8**	**1.4**	**1**	***8015C**	**8/16/10 17:55**	**JMV**	**P0H0282**
			Surrogate			Recovery		Control Limits	
			o-Terphenyl			*81 %*		*49-124*	
Gasoline Range Organics by GC/FID									
Gasoline Range Organics	**19**	**mg/kg dry**	**4.9**	**0.64**	**50**	***8015C**	**8/10/10 17:25**	**HPE**	**P0H0224**
			Surrogate			Recovery		Control Limits	
			a,a,a-Trifluorotoluene			*94 %*		*55-129*	
General Chemistry Parameters									
% Solids	**78.9**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**8/11/10 14:45**	**JAB**	**P0H0272**

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 - 222 Water St.
Project No.: WBS# 35742.1.1
Sample Matrix: Solid

Client Sample ID: 222-2-2-4
Prism Sample ID: 0080167-02
Prism Work Order: 0080167
Time Collected: 08/04/10 08:30
Time Submitted: 08/05/10 18:05

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Diesel Range Organics by GC/FID									
Diesel Range Organics	BRL	mg/kg dry	9.2	1.5	1	*8015C	8/13/10 18:15	JMV	P0H0282
			Surrogate			Recovery		Control Limits	
			o-Terphenyl			*98 %*		*49-124*	
Gasoline Range Organics by GC/FID									
Gasoline Range Organics	BRL	mg/kg dry	6.3	0.82	50	*8015C	8/10/10 17:59	HPE	P0H0224
			Surrogate			Recovery		Control Limits	
			a,a,a-Trifluorotoluene			*94 %*		*55-129*	
General Chemistry Parameters									
% Solids	**75.9**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**8/11/10 14:45**	**JAB**	**P0H0272**

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 - 222 Water St.
Project No.: WBS# 35742.1.1
Sample Matrix: Solid

Client Sample ID: 222-3-0-2
Prism Sample ID: 0080167-03
Prism Work Order: 0080167
Time Collected: 08/04/10 08:35
Time Submitted: 08/05/10 18:05

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Diesel Range Organics by GC/FID									
Diesel Range Organics	BRL	mg/kg dry	9.1	1.5	1	*8015C	8/13/10 18:50	JMV	P0H0282
			Surrogate			Recovery		Control Limits	
			o-Terphenyl			*102 %*		*49-124*	
Gasoline Range Organics by GC/FID									
Gasoline Range Organics	BRL	mg/kg dry	7.1	0.92	50	*8015C	8/10/10 18:33	HPE	P0H0224
			Surrogate			Recovery		Control Limits	
			a,a,a-Trifluorotoluene			*93 %*		*55-129*	
General Chemistry Parameters									
% Solids	**76.7**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**8/11/10 14:45**	**JAB**	**P0H0272**

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 - 222 Water St.
Project No.: WBS# 35742.1.1
Sample Matrix: Water

Client Sample ID: 222-3
Prism Sample ID: 0080167-04
Prism Work Order: 0080167
Time Collected: 08/04/10 09:00
Time Submitted: 08/05/10 18:05

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	8/12/10 23:50	CGP	P0H0259
1,2-Dichlorobenzene	BRL	ug/L	10	1.8	1	8270D	8/12/10 23:50	CGP	P0H0259
1,3-Dichlorobenzene	BRL	ug/L	10	1.8	1	8270D	8/12/10 23:50	CGP	P0H0259
1,4-Dichlorobenzene	BRL	ug/L	10	2.0	1	8270D	8/12/10 23:50	CGP	P0H0259
2,4,5-Trichlorophenol	BRL	ug/L	10	2.5	1	8270D	8/12/10 23:50	CGP	P0H0259
2,4,6-Trichlorophenol	BRL	ug/L	10	2.3	1	8270D	8/12/10 23:50	CGP	P0H0259
2,4-Dichlorophenol	BRL	ug/L	10	2.4	1	8270D	8/12/10 23:50	CGP	P0H0259
2,4-Dimethylphenol	BRL	ug/L	10	2.4	1	8270D	8/12/10 23:50	CGP	P0H0259
2,4-Dinitrophenol	BRL	ug/L	10	2.4	1	8270D	8/12/10 23:50	CGP	P0H0259
2,4-Dinitrotoluene	BRL	ug/L	10	0.95	1	8270D	8/12/10 23:50	CGP	P0H0259
2,6-Dinitrotoluene	BRL	ug/L	10	1.6	1	8270D	8/12/10 23:50	CGP	P0H0259
2-Chloronaphthalene	BRL	ug/L	10	2.3	1	8270D	8/12/10 23:50	CGP	P0H0259
2-Chlorophenol	BRL	ug/L	10	2.1	1	8270D	8/12/10 23:50	CGP	P0H0259
2-Methylnaphthalene	BRL	ug/L	10	2.6	1	8270D	8/12/10 23:50	CGP	P0H0259
2-Methylphenol	BRL	ug/L	10	2.4	1	8270D	8/12/10 23:50	CGP	P0H0259
2-Nitroaniline	BRL	ug/L	10	1.9	1	8270D	8/12/10 23:50	CGP	P0H0259
2-Nitrophenol	BRL	ug/L	10	2.5	1	8270D	8/12/10 23:50	CGP	P0H0259
3,3'-Dichlorobenzidine	BRL	ug/L	10	0.96	1	8270D	8/12/10 23:50	CGP	P0H0259
3/4-Methylphenol	BRL	ug/L	10	2.4	1	8270D	8/12/10 23:50	CGP	P0H0259
3-Nitroaniline	BRL	ug/L	10	1.3	1	8270D	8/12/10 23:50	CGP	P0H0259
4,6-Dinitro-2-methylphenol	BRL	ug/L	10	2.7	1	8270D	8/12/10 23:50	CGP	P0H0259
4-Bromophenyl phenyl ether	BRL	ug/L	10	1.8	1	8270D	8/12/10 23:50	CGP	P0H0259
4-Chloro-3-methylphenol	BRL	ug/L	10	2.3	1	8270D	8/12/10 23:50	CGP	P0H0259
4-Chloroaniline	BRL	ug/L	10	2.5	1	8270D	8/12/10 23:50	CGP	P0H0259
4-Chlorophenyl phenyl ether	BRL	ug/L	10	1.8	1	8270D	8/12/10 23:50	CGP	P0H0259
4-Nitroaniline	BRL	ug/L	10	0.91	1	8270D	8/12/10 23:50	CGP	P0H0259
4-Nitrophenol	BRL	ug/L	50	2.6	1	8270D	8/12/10 23:50	CGP	P0H0259
Acenaphthene	BRL	ug/L	10	2.1	1	8270D	8/12/10 23:50	CGP	P0H0259
Acenaphthylene	BRL	ug/L	10	2.2	1	8270D	8/12/10 23:50	CGP	P0H0259
Aniline	BRL	ug/L	10	2.2	1	8270D	8/12/10 23:50	CGP	P0H0259
Anthracene	BRL	ug/L	10	1.2	1	8270D	8/12/10 23:50	CGP	P0H0259
Azobenzene	BRL	ug/L	10	1.8	1	8270D	8/12/10 23:50	CGP	P0H0259
Benzo(a)anthracene	BRL	ug/L	10	0.95	1	8270D	8/12/10 23:50	CGP	P0H0259
Benzo(a)pyrene	BRL	ug/L	10	1.1	1	8270D	8/12/10 23:50	CGP	P0H0259
Benzo(b)fluoranthene	BRL	ug/L	10	1.4	1	8270D	8/12/10 23:50	CGP	P0H0259
Benzo(g,h,i)perylene	BRL	ug/L	10	2.1	1	8270D	8/12/10 23:50	CGP	P0H0259
Benzo(k)fluoranthene	BRL	ug/L	10	1.1	1	8270D	8/12/10 23:50	CGP	P0H0259
Benzoic Acid	BRL	ug/L	100	50	1	8270D	8/12/10 23:50	CGP	P0H0259
Benzyl alcohol	BRL	ug/L	10	2.1	1	8270D	8/12/10 23:50	CGP	P0H0259
bis(2-Chloroethoxy)methane	BRL	ug/L	10	2.2	1	8270D	8/12/10 23:50	CGP	P0H0259
Bis(2-Chloroethyl)ether	BRL	ug/L	10	1.9	1	8270D	8/12/10 23:50	CGP	P0H0259
Bis(2-chloroisopropyl)ether	BRL	ug/L	10	2.3	1	8270D	8/12/10 23:50	CGP	P0H0259

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

Project: NCDOT Elizabeth City PSA's - 222 Water St.
Project No.: WBS# 35742.1.1
Sample Matrix: Water

Client Sample ID: 222-3
Prism Sample ID: 0080167-04
Prism Work Order: 0080167
Time Collected: 08/04/10 09:00
Time Submitted: 08/05/10 18:05

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	8/12/10 23:50	CGP	P0H0259
Butyl benzyl phthalate	BRL	ug/L	10	1.5	1	8270D	8/12/10 23:50	CGP	P0H0259
Chrysene	BRL	ug/L	10	1.2	1	8270D	8/12/10 23:50	CGP	P0H0259
Dibenzo(a,h)anthracene	BRL	ug/L	10	1.8	1	8270D	8/12/10 23:50	CGP	P0H0259
Dibenzofuran	BRL	ug/L	10	2.2	1	8270D	8/12/10 23:50	CGP	P0H0259
Diethyl phthalate	BRL	ug/L	10	1.4	1	8270D	8/12/10 23:50	CGP	P0H0259
Dimethyl phthalate	BRL	ug/L	10	1.6	1	8270D	8/12/10 23:50	CGP	P0H0259
Di-n-butyl phthalate	BRL	ug/L	10	1.8	1	8270D	8/12/10 23:50	CGP	P0H0259
Di-n-octyl phthalate	BRL	ug/L	10	1.9	1	8270D	8/12/10 23:50	CGP	P0H0259
Fluoranthene	BRL	ug/L	10	0.94	1	8270D	8/12/10 23:50	CGP	P0H0259
Fluorene	BRL	ug/L	10	1.8	1	8270D	8/12/10 23:50	CGP	P0H0259
Hexachlorobenzene	BRL	ug/L	10	1.4	1	8270D	8/12/10 23:50	CGP	P0H0259
Hexachlorobutadiene	BRL	ug/L	10	2.3	1	8270D	8/12/10 23:50	CGP	P0H0259
Hexachlorocyclopentadiene	BRL	ug/L	10	1.8	1	8270D	8/12/10 23:50	CGP	P0H0259
Hexachloroethane	BRL	ug/L	10	1.9	1	8270D	8/12/10 23:50	CGP	P0H0259
Indeno(1,2,3-cd)pyrene	BRL	ug/L	10	1.6	1	8270D	8/12/10 23:50	CGP	P0H0259
Isophorone	BRL	ug/L	10	2.4	1	8270D	8/12/10 23:50	CGP	P0H0259
Naphthalene	BRL	ug/L	10	2.3	1	8270D	8/12/10 23:50	CGP	P0H0259
Nitrobenzene	BRL	ug/L	10	2.0	1	8270D	8/12/10 23:50	CGP	P0H0259
N-Nitroso-di-n-propylamine	BRL	ug/L	10	2.3	1	8270D	8/12/10 23:50	CGP	P0H0259
N-Nitrosodiphenylamine	BRL	ug/L	10	1.6	1	8270D	8/12/10 23:50	CGP	P0H0259
Pentachlorophenol	BRL	ug/L	10	1.6	1	8270D	8/12/10 23:50	CGP	P0H0259
Phenanthrene	BRL	ug/L	10	1.2	1	8270D	8/12/10 23:50	CGP	P0H0259
Phenol	BRL	ug/L	10	2.2	1	8270D	8/12/10 23:50	CGP	P0H0259
Pyrene	BRL	ug/L	10	1.4	1	8270D	8/12/10 23:50	CGP	P0H0259

Surrogate	Recovery	Control Limits
2,4,6-Tribromophenol	*65 %*	*26-139*
2-Fluorobiphenyl	*57 %*	*41-112*
2-Fluorophenol	*24 %*	*10-48*
Nitrobenzene-d5	*53 %*	*34-102*
Phenol-d5	*12 %*	*10-34*
Terphenyl-d14	*76 %*	*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 23:31	KLA	P0H0263
1,1,1-Trichloroethane	BRL	ug/L	1.0	0.063	1	8260B	8/11/10 23:31	KLA	P0H0263
1,1,2,2-Tetrachloroethane	BRL	ug/L	1.0	0.071	1	8260B	8/11/10 23:31	KLA	P0H0263
1,1,2-Trichloroethane	BRL	ug/L	1.0	0.17	1	8260B	8/11/10 23:31	KLA	P0H0263
1,1-Dichloroethane	BRL	ug/L	1.0	0.096	1	8260B	8/11/10 23:31	KLA	P0H0263
1,1-Dichloroethylene	BRL	ug/L	1.0	0.078	1	8260B	8/11/10 23:31	KLA	P0H0263
1,1-Dichloropropylene	BRL	ug/L	1.0	0.061	1	8260B	8/11/10 23:31	KLA	P0H0263
1,2,3-Trichlorobenzene	BRL	ug/L	2.0	0.20	1	8260B	8/11/10 23:31	KLA	P0H0263
1,2,3-Trichloropropane	BRL	ug/L	1.0	0.081	1	8260B	8/11/10 23:31	KLA	P0H0263
1,2,4-Trichlorobenzene	BRL	ug/L	1.0	0.10	1	8260B	8/11/10 23:31	KLA	P0H0263

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

Project: NCDOT Elizabeth City PSA's - 222 Water St.
Project No.: WBS# 35742.1.1
Sample Matrix: Water

Client Sample ID: 222-3
Prism Sample ID: 0080167-04
Prism Work Order: 0080167
Time Collected: 08/04/10 09:00
Time Submitted: 08/05/10 18:05

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 23:31	KLA	P0H0263
1,2-Dibromo-3-chloropropane	BRL	ug/L	2.0	0.59	1	8260B	8/11/10 23:31	KLA	P0H0263
1,2-Dibromoethane	BRL	ug/L	1.0	0.14	1	8260B	8/11/10 23:31	KLA	P0H0263
1,2-Dichlorobenzene	BRL	ug/L	1.0	0.076	1	8260B	8/11/10 23:31	KLA	P0H0263
1,2-Dichloroethane	BRL	ug/L	1.0	0.14	1	8260B	8/11/10 23:31	KLA	P0H0263
1,2-Dichloropropane	BRL	ug/L	1.0	0.13	1	8260B	8/11/10 23:31	KLA	P0H0263
1,3,5-Trimethylbenzene	BRL	ug/L	1.0	0.057	1	8260B	8/11/10 23:31	KLA	P0H0263
1,3-Dichlorobenzene	BRL	ug/L	1.0	0.074	1	8260B	8/11/10 23:31	KLA	P0H0263
1,3-Dichloropropane	BRL	ug/L	1.0	0.11	1	8260B	8/11/10 23:31	KLA	P0H0263
1,4-Dichlorobenzene	BRL	ug/L	1.0	0.068	1	8260B	8/11/10 23:31	KLA	P0H0263
2,2-Dichloropropane	BRL	ug/L	2.0	0.11	1	8260B	8/11/10 23:31	KLA	P0H0263
2-Chloroethyl Vinyl Ether	BRL	ug/L	2.0	0.22	1	8260B	8/11/10 23:31	KLA	P0H0263
2-Chlorotoluene	BRL	ug/L	1.0	0.038	1	8260B	8/11/10 23:31	KLA	P0H0263
4-Chlorotoluene	BRL	ug/L	1.0	0.053	1	8260B	8/11/10 23:31	KLA	P0H0263
4-Isopropyltoluene	BRL	ug/L	1.0	0.065	1	8260B	8/11/10 23:31	KLA	P0H0263
Acetone	BRL	ug/L	10	0.62	1	8260B	8/11/10 23:31	KLA	P0H0263
Acrolein	BRL	ug/L	100	1.1	1	8260B	8/11/10 23:31	KLA	P0H0263
Acrylonitrile	BRL	ug/L	100	0.86	1	8260B	8/11/10 23:31	KLA	P0H0263
Benzene	BRL	ug/L	1.0	0.072	1	8260B	8/11/10 23:31	KLA	P0H0263
Bromobenzene	BRL	ug/L	1.0	0.064	1	8260B	8/11/10 23:31	KLA	P0H0263
Bromochloromethane	BRL	ug/L	1.0	0.13	1	8260B	8/11/10 23:31	KLA	P0H0263
Bromodichloromethane	BRL	ug/L	1.0	0.062	1	8260B	8/11/10 23:31	KLA	P0H0263
Bromoform	BRL	ug/L	1.0	0.27	1	8260B	8/11/10 23:31	KLA	P0H0263
Bromomethane	BRL	ug/L	3.0	0.47	1	8260B	8/11/10 23:31	KLA	P0H0263
Carbon disulfide	BRL	ug/L	5.0	1.4	1	8260B	8/11/10 23:31	KLA	P0H0263
Carbon Tetrachloride	BRL	ug/L	2.0	0.12	1	8260B	8/11/10 23:31	KLA	P0H0263
Chlorobenzene	BRL	ug/L	1.0	0.061	1	8260B	8/11/10 23:31	KLA	P0H0263
Chloroethane	BRL	ug/L	5.0	0.13	1	8260B	8/11/10 23:31	KLA	P0H0263
Chloroform	BRL	ug/L	1.0	0.089	1	8260B	8/11/10 23:31	KLA	P0H0263
Chloromethane	BRL	ug/L	2.0	0.11	1	8260B	8/11/10 23:31	KLA	P0H0263
cis-1,2-Dichloroethylene	BRL	ug/L	1.0	0.076	1	8260B	8/11/10 23:31	KLA	P0H0263
cis-1,3-Dichloropropylene	BRL	ug/L	1.0	0.10	1	8260B	8/11/10 23:31	KLA	P0H0263
Dibromochloromethane	BRL	ug/L	1.0	0.30	1	8260B	8/11/10 23:31	KLA	P0H0263
Dibromomethane	BRL	ug/L	1.0	0.13	1	8260B	8/11/10 23:31	KLA	P0H0263
Dichlorodifluoromethane	BRL	ug/L	2.0	0.11	1	8260B	8/11/10 23:31	KLA	P0H0263
Ethylbenzene	BRL	ug/L	1.0	0.067	1	8260B	8/11/10 23:31	KLA	P0H0263
Hexachlorobutadiene	BRL	ug/L	2.0	0.36	1	8260B	8/11/10 23:31	KLA	P0H0263
Isopropyl Ether	BRL	ug/L	1.0	0.043	1	8260B	8/11/10 23:31	KLA	P0H0263
Isopropylbenzene (Cumene)	BRL	ug/L	1.0	0.072	1	8260B	8/11/10 23:31	KLA	P0H0263
m,p-Xylenes	BRL	ug/L	2.0	0.081	1	8260B	8/11/10 23:31	KLA	P0H0263
Methyl Butyl Ketone (2-Hexanone)	BRL	ug/L	5.0	0.19	1	8260B	8/11/10 23:31	KLA	P0H0263
Methyl Ethyl Ketone (2-Butanone)	BRL	ug/L	5.0	0.90	1	8260B	8/11/10 23:31	KLA	P0H0263
Methyl Isobutyl Ketone	BRL	ug/L	5.0	0.12	1	8260B	8/11/10 23:31	KLA	P0H0263

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

Project: NCDOT Elizabeth City PSA's - 222 Water St.
Project No.: WBS# 35742.1.1
Sample Matrix: Water

Client Sample ID: 222-3
Prism Sample ID: 0080167-04
Prism Work Order: 0080167
Time Collected: 08/04/10 09:00
Time Submitted: 08/05/10 18:05

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 23:31	KLA	P0H0263
Methyl-tert-Butyl Ether	BRL	ug/L	1.0	0.070	1	8260B	8/11/10 23:31	KLA	P0H0263
Naphthalene	BRL	ug/L	1.0	0.098	1	8260B	8/11/10 23:31	KLA	P0H0263
n-Butylbenzene	BRL	ug/L	1.0	0.11	1	8260B	8/11/10 23:31	KLA	P0H0263
n-Propylbenzene	BRL	ug/L	1.0	0.060	1	8260B	8/11/10 23:31	KLA	P0H0263
o-Xylene	BRL	ug/L	1.0	0.046	1	8260B	8/11/10 23:31	KLA	P0H0263
sec-Butylbenzene	BRL	ug/L	1.0	0.087	1	8260B	8/11/10 23:31	KLA	P0H0263
Styrene	BRL	ug/L	1.0	0.047	1	8260B	8/11/10 23:31	KLA	P0H0263
tert-Butylbenzene	BRL	ug/L	1.0	0.080	1	8260B	8/11/10 23:31	KLA	P0H0263
Tetrachloroethylene	BRL	ug/L	1.0	0.069	1	8260B	8/11/10 23:31	KLA	P0H0263
Toluene	BRL	ug/L	1.0	0.042	1	8260B	8/11/10 23:31	KLA	P0H0263
trans-1,2-Dichloroethylene	BRL	ug/L	2.0	0.12	1	8260B	8/11/10 23:31	KLA	P0H0263
trans-1,3-Dichloropropylene	BRL	ug/L	1.0	0.043	1	8260B	8/11/10 23:31	KLA	P0H0263
Trichloroethylene	BRL	ug/L	2.0	0.054	1	8260B	8/11/10 23:31	KLA	P0H0263
Trichlorofluoromethane	BRL	ug/L	2.0	0.088	1	8260B	8/11/10 23:31	KLA	P0H0263
Vinyl acetate	BRL	ug/L	20	0.10	1	8260B	8/11/10 23:31	KLA	P0H0263
Vinyl chloride	BRL	ug/L	2.0	0.16	1	8260B	8/11/10 23:31	KLA	P0H0263

Surrogate	Recovery	Control Limits
4-Bromofluorobenzene	*111 %*	*80-124*
Dibromofluoromethane	*101 %*	*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 - 222 Water St.
Project No.: WBS# 35742.1.1
Sample Matrix: Water

Client Sample ID: 601-1
Prism Sample ID: 0080167-05
Prism Work Order: 0080167
Time Collected: 08/04/10 07:40
Time Submitted: 08/05/10 18:05

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	8/13/10 0:20	CGP	P0H0259
1,2-Dichlorobenzene	BRL	ug/L	10	1.8	1	8270D	8/13/10 0:20	CGP	P0H0259
1,3-Dichlorobenzene	BRL	ug/L	10	1.8	1	8270D	8/13/10 0:20	CGP	P0H0259
1,4-Dichlorobenzene	BRL	ug/L	10	2.0	1	8270D	8/13/10 0:20	CGP	P0H0259
2,4,5-Trichlorophenol	BRL	ug/L	10	2.5	1	8270D	8/13/10 0:20	CGP	P0H0259
2,4,6-Trichlorophenol	BRL	ug/L	10	2.3	1	8270D	8/13/10 0:20	CGP	P0H0259
2,4-Dichlorophenol	BRL	ug/L	10	2.4	1	8270D	8/13/10 0:20	CGP	P0H0259
2,4-Dimethylphenol	BRL	ug/L	10	2.4	1	8270D	8/13/10 0:20	CGP	P0H0259
2,4-Dinitrophenol	BRL	ug/L	10	2.4	1	8270D	8/13/10 0:20	CGP	P0H0259
2,4-Dinitrotoluene	BRL	ug/L	10	0.95	1	8270D	8/13/10 0:20	CGP	P0H0259
2,6-Dinitrotoluene	BRL	ug/L	10	1.6	1	8270D	8/13/10 0:20	CGP	P0H0259
2-Chloronaphthalene	BRL	ug/L	10	2.3	1	8270D	8/13/10 0:20	CGP	P0H0259
2-Chlorophenol	BRL	ug/L	10	2.1	1	8270D	8/13/10 0:20	CGP	P0H0259
2-Methylnaphthalene	BRL	ug/L	10	2.6	1	8270D	8/13/10 0:20	CGP	P0H0259
2-Methylphenol	BRL	ug/L	10	2.4	1	8270D	8/13/10 0:20	CGP	P0H0259
2-Nitroaniline	BRL	ug/L	10	1.9	1	8270D	8/13/10 0:20	CGP	P0H0259
2-Nitrophenol	BRL	ug/L	10	2.5	1	8270D	8/13/10 0:20	CGP	P0H0259
3,3'-Dichlorobenzidine	BRL	ug/L	10	0.96	1	8270D	8/13/10 0:20	CGP	P0H0259
3/4-Methylphenol	BRL	ug/L	10	2.4	1	8270D	8/13/10 0:20	CGP	P0H0259
3-Nitroaniline	BRL	ug/L	10	1.3	1	8270D	8/13/10 0:20	CGP	P0H0259
4,6-Dinitro-2-methylphenol	BRL	ug/L	10	2.7	1	8270D	8/13/10 0:20	CGP	P0H0259
4-Bromophenyl phenyl ether	BRL	ug/L	10	1.8	1	8270D	8/13/10 0:20	CGP	P0H0259
4-Chloro-3-methylphenol	BRL	ug/L	10	2.3	1	8270D	8/13/10 0:20	CGP	P0H0259
4-Chloroaniline	BRL	ug/L	10	2.5	1	8270D	8/13/10 0:20	CGP	P0H0259
4-Chlorophenyl phenyl ether	BRL	ug/L	10	1.8	1	8270D	8/13/10 0:20	CGP	P0H0259
4-Nitroaniline	BRL	ug/L	10	0.91	1	8270D	8/13/10 0:20	CGP	P0H0259
4-Nitrophenol	BRL	ug/L	50	2.6	1	8270D	8/13/10 0:20	CGP	P0H0259
Acenaphthene	BRL	ug/L	10	2.1	1	8270D	8/13/10 0:20	CGP	P0H0259
Acenaphthylene	BRL	ug/L	10	2.2	1	8270D	8/13/10 0:20	CGP	P0H0259
Aniline	BRL	ug/L	10	2.2	1	8270D	8/13/10 0:20	CGP	P0H0259
Anthracene	BRL	ug/L	10	1.2	1	8270D	8/13/10 0:20	CGP	P0H0259
Azobenzene	BRL	ug/L	10	1.8	1	8270D	8/13/10 0:20	CGP	P0H0259
Benzo(a)anthracene	BRL	ug/L	10	0.95	1	8270D	8/13/10 0:20	CGP	P0H0259
Benzo(a)pyrene	BRL	ug/L	10	1.1	1	8270D	8/13/10 0:20	CGP	P0H0259
Benzo(b)fluoranthene	BRL	ug/L	10	1.4	1	8270D	8/13/10 0:20	CGP	P0H0259
Benzo(g,h,i)perylene	BRL	ug/L	10	2.1	1	8270D	8/13/10 0:20	CGP	P0H0259
Benzo(k)fluoranthene	BRL	ug/L	10	1.1	1	8270D	8/13/10 0:20	CGP	P0H0259
Benzoic Acid	BRL	ug/L	100	50	1	8270D	8/13/10 0:20	CGP	P0H0259
Benzyl alcohol	BRL	ug/L	10	2.1	1	8270D	8/13/10 0:20	CGP	P0H0259
bis(2-Chloroethoxy)methane	BRL	ug/L	10	2.2	1	8270D	8/13/10 0:20	CGP	P0H0259
Bis(2-Chloroethyl)ether	BRL	ug/L	10	1.9	1	8270D	8/13/10 0:20	CGP	P0H0259
Bis(2-chloroisopropyl)ether	BRL	ug/L	10	2.3	1	8270D	8/13/10 0:20	CGP	P0H0259

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

Project: NCDOT Elizabeth City PSA's - 222 Water St.
Project No.: WBS# 35742.1.1
Sample Matrix: Water

Client Sample ID: 601-1
Prism Sample ID: 0080167-05
Prism Work Order: 0080167
Time Collected: 08/04/10 07:40
Time Submitted: 08/05/10 18:05

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	8/13/10 0:20	CGP	P0H0259
Butyl benzyl phthalate	BRL	ug/L	10	1.5	1	8270D	8/13/10 0:20	CGP	P0H0259
Chrysene	BRL	ug/L	10	1.2	1	8270D	8/13/10 0:20	CGP	P0H0259
Dibenzo(a,h)anthracene	BRL	ug/L	10	1.8	1	8270D	8/13/10 0:20	CGP	P0H0259
Dibenzofuran	BRL	ug/L	10	2.2	1	8270D	8/13/10 0:20	CGP	P0H0259
Diethyl phthalate	BRL	ug/L	10	1.4	1	8270D	8/13/10 0:20	CGP	P0H0259
Dimethyl phthalate	BRL	ug/L	10	1.6	1	8270D	8/13/10 0:20	CGP	P0H0259
Di-n-butyl phthalate	BRL	ug/L	10	1.8	1	8270D	8/13/10 0:20	CGP	P0H0259
Di-n-octyl phthalate	BRL	ug/L	10	1.9	1	8270D	8/13/10 0:20	CGP	P0H0259
Fluoranthene	BRL	ug/L	10	0.94	1	8270D	8/13/10 0:20	CGP	P0H0259
Fluorene	BRL	ug/L	10	1.8	1	8270D	8/13/10 0:20	CGP	P0H0259
Hexachlorobenzene	BRL	ug/L	10	1.4	1	8270D	8/13/10 0:20	CGP	P0H0259
Hexachlorobutadiene	BRL	ug/L	10	2.3	1	8270D	8/13/10 0:20	CGP	P0H0259
Hexachlorocyclopentadiene	BRL	ug/L	10	1.8	1	8270D	8/13/10 0:20	CGP	P0H0259
Hexachloroethane	BRL	ug/L	10	1.9	1	8270D	8/13/10 0:20	CGP	P0H0259
Indeno(1,2,3-cd)pyrene	BRL	ug/L	10	1.6	1	8270D	8/13/10 0:20	CGP	P0H0259
Isophorone	BRL	ug/L	10	2.4	1	8270D	8/13/10 0:20	CGP	P0H0259
Naphthalene	BRL	ug/L	10	2.3	1	8270D	8/13/10 0:20	CGP	P0H0259
Nitrobenzene	BRL	ug/L	10	2.0	1	8270D	8/13/10 0:20	CGP	P0H0259
N-Nitroso-di-n-propylamine	BRL	ug/L	10	2.3	1	8270D	8/13/10 0:20	CGP	P0H0259
N-Nitrosodiphenylamine	BRL	ug/L	10	1.6	1	8270D	8/13/10 0:20	CGP	P0H0259
Pentachlorophenol	BRL	ug/L	10	1.6	1	8270D	8/13/10 0:20	CGP	P0H0259
Phenanthrene	BRL	ug/L	10	1.2	1	8270D	8/13/10 0:20	CGP	P0H0259
Phenol	BRL	ug/L	10	2.2	1	8270D	8/13/10 0:20	CGP	P0H0259
Pyrene	BRL	ug/L	10	1.4	1	8270D	8/13/10 0:20	CGP	P0H0259

Surrogate	Recovery	Control Limits	
2,4,6-Tribromophenol	*26 %*	*26-139*	
2-Fluorobiphenyl	*53 %*	*41-112*	
2-Fluorophenol	*9 %*	*10-48*	*SR*
Nitrobenzene-d5	*50 %*	*34-102*	
Phenol-d5	*10 %*	*10-34*	*SR*
Terphenyl-d14	*68 %*	*31-165*	

Volatile Organic Compounds by GC/MS

1,1,1,2-Tetrachloroethane	BRL	ug/L	1.0	0.15	1	8260B	8/12/10 0:10	KLA	P0H0263
1,1,1-Trichloroethane	BRL	ug/L	1.0	0.063	1	8260B	8/12/10 0:10	KLA	P0H0263
1,1,2,2-Tetrachloroethane	BRL	ug/L	1.0	0.071	1	8260B	8/12/10 0:10	KLA	P0H0263
1,1,2-Trichloroethane	BRL	ug/L	1.0	0.17	1	8260B	8/12/10 0:10	KLA	P0H0263
1,1-Dichloroethane	BRL	ug/L	1.0	0.096	1	8260B	8/12/10 0:10	KLA	P0H0263
1,1-Dichloroethylene	BRL	ug/L	1.0	0.078	1	8260B	8/12/10 0:10	KLA	P0H0263
1,1-Dichloropropylene	BRL	ug/L	1.0	0.061	1	8260B	8/12/10 0:10	KLA	P0H0263
1,2,3-Trichlorobenzene	BRL	ug/L	2.0	0.20	1	8260B	8/12/10 0:10	KLA	P0H0263
1,2,3-Trichloropropane	BRL	ug/L	1.0	0.081	1	8260B	8/12/10 0:10	KLA	P0H0263
1,2,4-Trichlorobenzene	BRL	ug/L	1.0	0.10	1	8260B	8/12/10 0:10	KLA	P0H0263

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

Project: NCDOT Elizabeth City PSA's - 222 Water St.
Project No.: WBS# 35742.1.1
Sample Matrix: Water

Client Sample ID: 601-1
Prism Sample ID: 0080167-05
Prism Work Order: 0080167
Time Collected: 08/04/10 07:40
Time Submitted: 08/05/10 18:05

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
1,2,4-Trimethylbenzene	**1.3**	**ug/L**	**1.0**	**0.048**	**1**	**8260B**	**8/12/10 0:10**	**KLA**	**P0H0263**
1,2-Dibromo-3-chloropropane	BRL	ug/L	2.0	0.59	1	8260B	8/12/10 0:10	KLA	P0H0263
1,2-Dibromoethane	BRL	ug/L	1.0	0.14	1	8260B	8/12/10 0:10	KLA	P0H0263
1,2-Dichlorobenzene	BRL	ug/L	1.0	0.076	1	8260B	8/12/10 0:10	KLA	P0H0263
1,2-Dichloroethane	BRL	ug/L	1.0	0.14	1	8260B	8/12/10 0:10	KLA	P0H0263
1,2-Dichloropropane	BRL	ug/L	1.0	0.13	1	8260B	8/12/10 0:10	KLA	P0H0263
1,3,5-Trimethylbenzene	**2.8**	**ug/L**	**1.0**	**0.057**	**1**	**8260B**	**8/12/10 0:10**	**KLA**	**P0H0263**
1,3-Dichlorobenzene	BRL	ug/L	1.0	0.074	1	8260B	8/12/10 0:10	KLA	P0H0263
1,3-Dichloropropane	BRL	ug/L	1.0	0.11	1	8260B	8/12/10 0:10	KLA	P0H0263
1,4-Dichlorobenzene	BRL	ug/L	1.0	0.068	1	8260B	8/12/10 0:10	KLA	P0H0263
2,2-Dichloropropane	BRL	ug/L	2.0	0.11	1	8260B	8/12/10 0:10	KLA	P0H0263
2-Chloroethyl Vinyl Ether	BRL	ug/L	2.0	0.22	1	8260B	8/12/10 0:10	KLA	P0H0263
2-Chlorotoluene	BRL	ug/L	1.0	0.038	1	8260B	8/12/10 0:10	KLA	P0H0263
4-Chlorotoluene	BRL	ug/L	1.0	0.053	1	8260B	8/12/10 0:10	KLA	P0H0263
4-Isopropyltoluene	BRL	ug/L	1.0	0.065	1	8260B	8/12/10 0:10	KLA	P0H0263
Acetone	BRL	ug/L	10	0.62	1	8260B	8/12/10 0:10	KLA	P0H0263
Acrolein	BRL	ug/L	100	1.1	1	8260B	8/12/10 0:10	KLA	P0H0263
Acrylonitrile	BRL	ug/L	100	0.86	1	8260B	8/12/10 0:10	KLA	P0H0263
Benzene	BRL	ug/L	1.0	0.072	1	8260B	8/12/10 0:10	KLA	P0H0263
Bromobenzene	BRL	ug/L	1.0	0.064	1	8260B	8/12/10 0:10	KLA	P0H0263
Bromochloromethane	BRL	ug/L	1.0	0.13	1	8260B	8/12/10 0:10	KLA	P0H0263
Bromodichloromethane	BRL	ug/L	1.0	0.062	1	8260B	8/12/10 0:10	KLA	P0H0263
Bromoform	BRL	ug/L	1.0	0.27	1	8260B	8/12/10 0:10	KLA	P0H0263
Bromomethane	BRL	ug/L	3.0	0.47	1	8260B	8/12/10 0:10	KLA	P0H0263
Carbon disulfide	BRL	ug/L	5.0	1.4	1	8260B	8/12/10 0:10	KLA	P0H0263
Carbon Tetrachloride	BRL	ug/L	2.0	0.12	1	8260B	8/12/10 0:10	KLA	P0H0263
Chlorobenzene	BRL	ug/L	1.0	0.061	1	8260B	8/12/10 0:10	KLA	P0H0263
Chloroethane	BRL	ug/L	5.0	0.13	1	8260B	8/12/10 0:10	KLA	P0H0263
Chloroform	BRL	ug/L	1.0	0.089	1	8260B	8/12/10 0:10	KLA	P0H0263
Chloromethane	BRL	ug/L	2.0	0.11	1	8260B	8/12/10 0:10	KLA	P0H0263
cis-1,2-Dichloroethylene	BRL	ug/L	1.0	0.076	1	8260B	8/12/10 0:10	KLA	P0H0263
cis-1,3-Dichloropropylene	BRL	ug/L	1.0	0.10	1	8260B	8/12/10 0:10	KLA	P0H0263
Dibromochloromethane	BRL	ug/L	1.0	0.30	1	8260B	8/12/10 0:10	KLA	P0H0263
Dibromomethane	BRL	ug/L	1.0	0.13	1	8260B	8/12/10 0:10	KLA	P0H0263
Dichlorodifluoromethane	BRL	ug/L	2.0	0.11	1	8260B	8/12/10 0:10	KLA	P0H0263
Ethylbenzene	BRL	ug/L	1.0	0.067	1	8260B	8/12/10 0:10	KLA	P0H0263
Hexachlorobutadiene	BRL	ug/L	2.0	0.36	1	8260B	8/12/10 0:10	KLA	P0H0263
Isopropyl Ether	BRL	ug/L	1.0	0.043	1	8260B	8/12/10 0:10	KLA	P0H0263
Isopropylbenzene (Cumene)	BRL	ug/L	1.0	0.072	1	8260B	8/12/10 0:10	KLA	P0H0263
m,p-Xylenes	BRL	ug/L	2.0	0.081	1	8260B	8/12/10 0:10	KLA	P0H0263
Methyl Butyl Ketone (2-Hexanone)	BRL	ug/L	5.0	0.19	1	8260B	8/12/10 0:10	KLA	P0H0263
Methyl Ethyl Ketone (2-Butanone)	BRL	ug/L	5.0	0.90	1	8260B	8/12/10 0:10	KLA	P0H0263
Methyl Isobutyl Ketone	BRL	ug/L	5.0	0.12	1	8260B	8/12/10 0:10	KLA	P0H0263

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

Project: NCDOT Elizabeth City PSA's - 222 Water St.
Project No.: WBS# 35742.1.1
Sample Matrix: Water

Client Sample ID: 601-1
Prism Sample ID: 0080167-05
Prism Work Order: 0080167
Time Collected: 08/04/10 07:40
Time Submitted: 08/05/10 18:05

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	8/12/10 0:10	KLA	P0H0263
Methyl-tert-Butyl Ether	**1.3**	**ug/L**	**1.0**	**0.070**	**1**	**8260B**	**8/12/10 0:10**	**KLA**	**P0H0263**
Naphthalene	**0.77 J**	**ug/L**	**1.0**	**0.098**	**1**	**8260B**	**8/12/10 0:10**	**KLA**	**P0H0263**
n-Butylbenzene	BRL	ug/L	1.0	0.11	1	8260B	8/12/10 0:10	KLA	P0H0263
n-Propylbenzene	BRL	ug/L	1.0	0.060	1	8260B	8/12/10 0:10	KLA	P0H0263
o-Xylene	**0.62 J**	**ug/L**	**1.0**	**0.046**	**1**	**8260B**	**8/12/10 0:10**	**KLA**	**P0H0263**
sec-Butylbenzene	BRL	ug/L	1.0	0.087	1	8260B	8/12/10 0:10	KLA	P0H0263
Styrene	BRL	ug/L	1.0	0.047	1	8260B	8/12/10 0:10	KLA	P0H0263
tert-Butylbenzene	BRL	ug/L	1.0	0.080	1	8260B	8/12/10 0:10	KLA	P0H0263
Tetrachloroethylene	BRL	ug/L	1.0	0.069	1	8260B	8/12/10 0:10	KLA	P0H0263
Toluene	BRL	ug/L	1.0	0.042	1	8260B	8/12/10 0:10	KLA	P0H0263
trans-1,2-Dichloroethylene	BRL	ug/L	2.0	0.12	1	8260B	8/12/10 0:10	KLA	P0H0263
trans-1,3-Dichloropropylene	BRL	ug/L	1.0	0.043	1	8260B	8/12/10 0:10	KLA	P0H0263
Trichloroethylene	BRL	ug/L	2.0	0.054	1	8260B	8/12/10 0:10	KLA	P0H0263
Trichlorofluoromethane	BRL	ug/L	2.0	0.088	1	8260B	8/12/10 0:10	KLA	P0H0263
Vinyl acetate	BRL	ug/L	20	0.10	1	8260B	8/12/10 0:10	KLA	P0H0263
Vinyl chloride	BRL	ug/L	2.0	0.16	1	8260B	8/12/10 0:10	KLA	P0H0263

Surrogate	Recovery	Control Limits
4-Bromofluorobenzene	*101 %*	*80-124*
Dibromofluoromethane	*102 %*	*75-129*
Toluene-d8	*98 %*	*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 - 222 Water St.
Project No.: WBS# 35742.1.1
Sample Matrix: Water

Client Sample ID: 229-2
Prism Sample ID: 0080167-06
Prism Work Order: 0080167
Time Collected: 08/04/10 08:10
Time Submitted: 08/05/10 18:05

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	8/13/10 0:50	CGP	P0H0259
1,2-Dichlorobenzene	BRL	ug/L	10	1.8	1	8270D	8/13/10 0:50	CGP	P0H0259
1,3-Dichlorobenzene	BRL	ug/L	10	1.8	1	8270D	8/13/10 0:50	CGP	P0H0259
1,4-Dichlorobenzene	BRL	ug/L	10	2.0	1	8270D	8/13/10 0:50	CGP	P0H0259
2,4,5-Trichlorophenol	BRL	ug/L	10	2.5	1	8270D	8/13/10 0:50	CGP	P0H0259
2,4,6-Trichlorophenol	BRL	ug/L	10	2.3	1	8270D	8/13/10 0:50	CGP	P0H0259
2,4-Dichlorophenol	BRL	ug/L	10	2.4	1	8270D	8/13/10 0:50	CGP	P0H0259
2,4-Dimethylphenol	BRL	ug/L	10	2.4	1	8270D	8/13/10 0:50	CGP	P0H0259
2,4-Dinitrophenol	BRL	ug/L	10	2.4	1	8270D	8/13/10 0:50	CGP	P0H0259
2,4-Dinitrotoluene	BRL	ug/L	10	0.95	1	8270D	8/13/10 0:50	CGP	P0H0259
2,6-Dinitrotoluene	BRL	ug/L	10	1.6	1	8270D	8/13/10 0:50	CGP	P0H0259
2-Chloronaphthalene	BRL	ug/L	10	2.3	1	8270D	8/13/10 0:50	CGP	P0H0259
2-Chlorophenol	BRL	ug/L	10	2.1	1	8270D	8/13/10 0:50	CGP	P0H0259
2-Methylnaphthalene	BRL	ug/L	10	2.6	1	8270D	8/13/10 0:50	CGP	P0H0259
2-Methylphenol	BRL	ug/L	10	2.4	1	8270D	8/13/10 0:50	CGP	P0H0259
2-Nitroaniline	BRL	ug/L	10	1.9	1	8270D	8/13/10 0:50	CGP	P0H0259
2-Nitrophenol	BRL	ug/L	10	2.5	1	8270D	8/13/10 0:50	CGP	P0H0259
3,3'-Dichlorobenzidine	BRL	ug/L	10	0.96	1	8270D	8/13/10 0:50	CGP	P0H0259
3/4-Methylphenol	BRL	ug/L	10	2.4	1	8270D	8/13/10 0:50	CGP	P0H0259
3-Nitroaniline	BRL	ug/L	10	1.3	1	8270D	8/13/10 0:50	CGP	P0H0259
4,6-Dinitro-2-methylphenol	BRL	ug/L	10	2.7	1	8270D	8/13/10 0:50	CGP	P0H0259
4-Bromophenyl phenyl ether	BRL	ug/L	10	1.8	1	8270D	8/13/10 0:50	CGP	P0H0259
4-Chloro-3-methylphenol	BRL	ug/L	10	2.3	1	8270D	8/13/10 0:50	CGP	P0H0259
4-Chloroaniline	BRL	ug/L	10	2.5	1	8270D	8/13/10 0:50	CGP	P0H0259
4-Chlorophenyl phenyl ether	BRL	ug/L	10	1.8	1	8270D	8/13/10 0:50	CGP	P0H0259
4-Nitroaniline	BRL	ug/L	10	0.91	1	8270D	8/13/10 0:50	CGP	P0H0259
4-Nitrophenol	BRL	ug/L	50	2.6	1	8270D	8/13/10 0:50	CGP	P0H0259
Acenaphthene	BRL	ug/L	10	2.1	1	8270D	8/13/10 0:50	CGP	P0H0259
Acenaphthylene	BRL	ug/L	10	2.2	1	8270D	8/13/10 0:50	CGP	P0H0259
Aniline	BRL	ug/L	10	2.2	1	8270D	8/13/10 0:50	CGP	P0H0259
Anthracene	BRL	ug/L	10	1.2	1	8270D	8/13/10 0:50	CGP	P0H0259
Azobenzene	BRL	ug/L	10	1.8	1	8270D	8/13/10 0:50	CGP	P0H0259
Benzo(a)anthracene	BRL	ug/L	10	0.95	1	8270D	8/13/10 0:50	CGP	P0H0259
Benzo(a)pyrene	BRL	ug/L	10	1.1	1	8270D	8/13/10 0:50	CGP	P0H0259
Benzo(b)fluoranthene	BRL	ug/L	10	1.4	1	8270D	8/13/10 0:50	CGP	P0H0259
Benzo(g,h,i)perylene	BRL	ug/L	10	2.1	1	8270D	8/13/10 0:50	CGP	P0H0259
Benzo(k)fluoranthene	BRL	ug/L	10	1.1	1	8270D	8/13/10 0:50	CGP	P0H0259
Benzoic Acid	BRL	ug/L	100	50	1	8270D	8/13/10 0:50	CGP	P0H0259
Benzyl alcohol	BRL	ug/L	10	2.1	1	8270D	8/13/10 0:50	CGP	P0H0259
bis(2-Chloroethoxy)methane	BRL	ug/L	10	2.2	1	8270D	8/13/10 0:50	CGP	P0H0259
Bis(2-Chloroethyl)ether	BRL	ug/L	10	1.9	1	8270D	8/13/10 0:50	CGP	P0H0259
Bis(2-chloroisopropyl)ether	BRL	ug/L	10	2.3	1	8270D	8/13/10 0:50	CGP	P0H0259

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

Project: NCDOT Elizabeth City PSA's - 222 Water St.
Project No.: WBS# 35742.1.1
Sample Matrix: Water

Client Sample ID: 229-2
Prism Sample ID: 0080167-06
Prism Work Order: 0080167
Time Collected: 08/04/10 08:10
Time Submitted: 08/05/10 18:05

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	8/13/10 0:50	CGP	P0H0259
Butyl benzyl phthalate	BRL	ug/L	10	1.5	1	8270D	8/13/10 0:50	CGP	P0H0259
Chrysene	BRL	ug/L	10	1.2	1	8270D	8/13/10 0:50	CGP	P0H0259
Dibenzo(a,h)anthracene	BRL	ug/L	10	1.8	1	8270D	8/13/10 0:50	CGP	P0H0259
Dibenzofuran	BRL	ug/L	10	2.2	1	8270D	8/13/10 0:50	CGP	P0H0259
Diethyl phthalate	BRL	ug/L	10	1.4	1	8270D	8/13/10 0:50	CGP	P0H0259
Dimethyl phthalate	BRL	ug/L	10	1.6	1	8270D	8/13/10 0:50	CGP	P0H0259
Di-n-butyl phthalate	BRL	ug/L	10	1.8	1	8270D	8/13/10 0:50	CGP	P0H0259
Di-n-octyl phthalate	BRL	ug/L	10	1.9	1	8270D	8/13/10 0:50	CGP	P0H0259
Fluoranthene	BRL	ug/L	10	0.94	1	8270D	8/13/10 0:50	CGP	P0H0259
Fluorene	BRL	ug/L	10	1.8	1	8270D	8/13/10 0:50	CGP	P0H0259
Hexachlorobenzene	BRL	ug/L	10	1.4	1	8270D	8/13/10 0:50	CGP	P0H0259
Hexachlorobutadiene	BRL	ug/L	10	2.3	1	8270D	8/13/10 0:50	CGP	P0H0259
Hexachlorocyclopentadiene	BRL	ug/L	10	1.8	1	8270D	8/13/10 0:50	CGP	P0H0259
Hexachloroethane	BRL	ug/L	10	1.9	1	8270D	8/13/10 0:50	CGP	P0H0259
Indeno(1,2,3-cd)pyrene	BRL	ug/L	10	1.6	1	8270D	8/13/10 0:50	CGP	P0H0259
Isophorone	BRL	ug/L	10	2.4	1	8270D	8/13/10 0:50	CGP	P0H0259
Naphthalene	BRL	ug/L	10	2.3	1	8270D	8/13/10 0:50	CGP	P0H0259
Nitrobenzene	BRL	ug/L	10	2.0	1	8270D	8/13/10 0:50	CGP	P0H0259
N-Nitroso-di-n-propylamine	BRL	ug/L	10	2.3	1	8270D	8/13/10 0:50	CGP	P0H0259
N-Nitrosodiphenylamine	BRL	ug/L	10	1.6	1	8270D	8/13/10 0:50	CGP	P0H0259
Pentachlorophenol	BRL	ug/L	10	1.6	1	8270D	8/13/10 0:50	CGP	P0H0259
Phenanthrene	BRL	ug/L	10	1.2	1	8270D	8/13/10 0:50	CGP	P0H0259
Phenol	BRL	ug/L	10	2.2	1	8270D	8/13/10 0:50	CGP	P0H0259
Pyrene	BRL	ug/L	10	1.4	1	8270D	8/13/10 0:50	CGP	P0H0259

Surrogate	Recovery	Control Limits
2,4,6-Tribromophenol	*66 %*	*26-139*
2-Fluorobiphenyl	*57 %*	*41-112*
2-Fluorophenol	*26 %*	*10-48*
Nitrobenzene-d5	*52 %*	*34-102*
Phenol-d5	*13 %*	*10-34*
Terphenyl-d14	*86 %*	*31-165*

Volatile Organic Compounds by GC/MS

1,1,1,2-Tetrachloroethane	BRL	ug/L	1.0	0.15	1	8260B	8/12/10 0:58	KLA	P0H0263
1,1,1-Trichloroethane	BRL	ug/L	1.0	0.063	1	8260B	8/12/10 0:58	KLA	P0H0263
1,1,2,2-Tetrachloroethane	BRL	ug/L	1.0	0.071	1	8260B	8/12/10 0:58	KLA	P0H0263
1,1,2-Trichloroethane	BRL	ug/L	1.0	0.17	1	8260B	8/12/10 0:58	KLA	P0H0263
1,1-Dichloroethane	BRL	ug/L	1.0	0.096	1	8260B	8/12/10 0:58	KLA	P0H0263
1,1-Dichloroethylene	BRL	ug/L	1.0	0.078	1	8260B	8/12/10 0:58	KLA	P0H0263
1,1-Dichloropropylene	BRL	ug/L	1.0	0.061	1	8260B	8/12/10 0:58	KLA	P0H0263
1,2,3-Trichlorobenzene	BRL	ug/L	2.0	0.20	1	8260B	8/12/10 0:58	KLA	P0H0263
1,2,3-Trichloropropane	BRL	ug/L	1.0	0.081	1	8260B	8/12/10 0:58	KLA	P0H0263
1,2,4-Trichlorobenzene	BRL	ug/L	1.0	0.10	1	8260B	8/12/10 0:58	KLA	P0H0263

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

Project: NCDOT Elizabeth City PSA's - 222 Water St.
Project No.: WBS# 35742.1.1
Sample Matrix: Water

Client Sample ID: 229-2
Prism Sample ID: 0080167-06
Prism Work Order: 0080167
Time Collected: 08/04/10 08:10
Time Submitted: 08/05/10 18:05

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	8/12/10 0:58	KLA	P0H0263
1,2-Dibromo-3-chloropropane	BRL	ug/L	2.0	0.59	1	8260B	8/12/10 0:58	KLA	P0H0263
1,2-Dibromoethane	BRL	ug/L	1.0	0.14	1	8260B	8/12/10 0:58	KLA	P0H0263
1,2-Dichlorobenzene	BRL	ug/L	1.0	0.076	1	8260B	8/12/10 0:58	KLA	P0H0263
1,2-Dichloroethane	BRL	ug/L	1.0	0.14	1	8260B	8/12/10 0:58	KLA	P0H0263
1,2-Dichloropropane	BRL	ug/L	1.0	0.13	1	8260B	8/12/10 0:58	KLA	P0H0263
1,3,5-Trimethylbenzene	BRL	ug/L	1.0	0.057	1	8260B	8/12/10 0:58	KLA	P0H0263
1,3-Dichlorobenzene	BRL	ug/L	1.0	0.074	1	8260B	8/12/10 0:58	KLA	P0H0263
1,3-Dichloropropane	BRL	ug/L	1.0	0.11	1	8260B	8/12/10 0:58	KLA	P0H0263
1,4-Dichlorobenzene	BRL	ug/L	1.0	0.068	1	8260B	8/12/10 0:58	KLA	P0H0263
2,2-Dichloropropane	BRL	ug/L	2.0	0.11	1	8260B	8/12/10 0:58	KLA	P0H0263
2-Chloroethyl Vinyl Ether	BRL	ug/L	2.0	0.22	1	8260B	8/12/10 0:58	KLA	P0H0263
2-Chlorotoluene	BRL	ug/L	1.0	0.038	1	8260B	8/12/10 0:58	KLA	P0H0263
4-Chlorotoluene	BRL	ug/L	1.0	0.053	1	8260B	8/12/10 0:58	KLA	P0H0263
4-Isopropyltoluene	BRL	ug/L	1.0	0.065	1	8260B	8/12/10 0:58	KLA	P0H0263
Acetone	BRL	ug/L	10	0.62	1	8260B	8/12/10 0:58	KLA	P0H0263
Acrolein	BRL	ug/L	100	1.1	1	8260B	8/12/10 0:58	KLA	P0H0263
Acrylonitrile	BRL	ug/L	100	0.86	1	8260B	8/12/10 0:58	KLA	P0H0263
Benzene	BRL	ug/L	1.0	0.072	1	8260B	8/12/10 0:58	KLA	P0H0263
Bromobenzene	BRL	ug/L	1.0	0.064	1	8260B	8/12/10 0:58	KLA	P0H0263
Bromochloromethane	BRL	ug/L	1.0	0.13	1	8260B	8/12/10 0:58	KLA	P0H0263
Bromodichloromethane	BRL	ug/L	1.0	0.062	1	8260B	8/12/10 0:58	KLA	P0H0263
Bromoform	BRL	ug/L	1.0	0.27	1	8260B	8/12/10 0:58	KLA	P0H0263
Bromomethane	BRL	ug/L	3.0	0.47	1	8260B	8/12/10 0:58	KLA	P0H0263
Carbon disulfide	BRL	ug/L	5.0	1.4	1	8260B	8/12/10 0:58	KLA	P0H0263
Carbon Tetrachloride	BRL	ug/L	2.0	0.12	1	8260B	8/12/10 0:58	KLA	P0H0263
Chlorobenzene	BRL	ug/L	1.0	0.061	1	8260B	8/12/10 0:58	KLA	P0H0263
Chloroethane	BRL	ug/L	5.0	0.13	1	8260B	8/12/10 0:58	KLA	P0H0263
Chloroform	BRL	ug/L	1.0	0.089	1	8260B	8/12/10 0:58	KLA	P0H0263
Chloromethane	BRL	ug/L	2.0	0.11	1	8260B	8/12/10 0:58	KLA	P0H0263
cis-1,2-Dichloroethylene	BRL	ug/L	1.0	0.076	1	8260B	8/12/10 0:58	KLA	P0H0263
cis-1,3-Dichloropropylene	BRL	ug/L	1.0	0.10	1	8260B	8/12/10 0:58	KLA	P0H0263
Dibromochloromethane	BRL	ug/L	1.0	0.30	1	8260B	8/12/10 0:58	KLA	P0H0263
Dibromomethane	BRL	ug/L	1.0	0.13	1	8260B	8/12/10 0:58	KLA	P0H0263
Dichlorodifluoromethane	BRL	ug/L	2.0	0.11	1	8260B	8/12/10 0:58	KLA	P0H0263
Ethylbenzene	BRL	ug/L	1.0	0.067	1	8260B	8/12/10 0:58	KLA	P0H0263
Hexachlorobutadiene	BRL	ug/L	2.0	0.36	1	8260B	8/12/10 0:58	KLA	P0H0263
Isopropyl Ether	BRL	ug/L	1.0	0.043	1	8260B	8/12/10 0:58	KLA	P0H0263
Isopropylbenzene (Cumene)	BRL	ug/L	1.0	0.072	1	8260B	8/12/10 0:58	KLA	P0H0263
m,p-Xylenes	BRL	ug/L	2.0	0.081	1	8260B	8/12/10 0:58	KLA	P0H0263
Methyl Butyl Ketone (2-Hexanone)	BRL	ug/L	5.0	0.19	1	8260B	8/12/10 0:58	KLA	P0H0263
Methyl Ethyl Ketone (2-Butanone)	BRL	ug/L	5.0	0.90	1	8260B	8/12/10 0:58	KLA	P0H0263
Methyl Isobutyl Ketone	BRL	ug/L	5.0	0.12	1	8260B	8/12/10 0:58	KLA	P0H0263

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

Project: NCDOT Elizabeth City PSA's - 222 Water St.
Project No.: WBS# 35742.1.1
Sample Matrix: Water

Client Sample ID: 229-2
Prism Sample ID: 0080167-06
Prism Work Order: 0080167
Time Collected: 08/04/10 08:10
Time Submitted: 08/05/10 18:05

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	8/12/10 0:58	KLA	P0H0263
Methyl-tert-Butyl Ether	**0.72 J**	**ug/L**	**1.0**	**0.070**	**1**	**8260B**	**8/12/10 0:58**	**KLA**	**P0H0263**
Naphthalene	BRL	ug/L	1.0	0.098	1	8260B	8/12/10 0:58	KLA	P0H0263
n-Butylbenzene	BRL	ug/L	1.0	0.11	1	8260B	8/12/10 0:58	KLA	P0H0263
n-Propylbenzene	BRL	ug/L	1.0	0.060	1	8260B	8/12/10 0:58	KLA	P0H0263
o-Xylene	BRL	ug/L	1.0	0.046	1	8260B	8/12/10 0:58	KLA	P0H0263
sec-Butylbenzene	BRL	ug/L	1.0	0.087	1	8260B	8/12/10 0:58	KLA	P0H0263
Styrene	BRL	ug/L	1.0	0.047	1	8260B	8/12/10 0:58	KLA	P0H0263
tert-Butylbenzene	BRL	ug/L	1.0	0.080	1	8260B	8/12/10 0:58	KLA	P0H0263
Tetrachloroethylene	BRL	ug/L	1.0	0.069	1	8260B	8/12/10 0:58	KLA	P0H0263
Toluene	BRL	ug/L	1.0	0.042	1	8260B	8/12/10 0:58	KLA	P0H0263
trans-1,2-Dichloroethylene	BRL	ug/L	2.0	0.12	1	8260B	8/12/10 0:58	KLA	P0H0263
trans-1,3-Dichloropropylene	BRL	ug/L	1.0	0.043	1	8260B	8/12/10 0:58	KLA	P0H0263
Trichloroethylene	BRL	ug/L	2.0	0.054	1	8260B	8/12/10 0:58	KLA	P0H0263
Trichlorofluoromethane	BRL	ug/L	2.0	0.088	1	8260B	8/12/10 0:58	KLA	P0H0263
Vinyl acetate	BRL	ug/L	20	0.10	1	8260B	8/12/10 0:58	KLA	P0H0263
Vinyl chloride	BRL	ug/L	2.0	0.16	1	8260B	8/12/10 0:58	KLA	P0H0263

Surrogate	Recovery	Control Limits
4-Bromofluorobenzene	*104 %*	*80-124*
Dibromofluoromethane	*103 %*	*75-129*
Toluene-d8	*109 %*	*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 - 222 Water St.
Project No.: WBS# 35742.1.1
Sample Matrix: Solid

Client Sample ID: 507-4-1-4
Prism Sample ID: 0080167-07
Prism Work Order: 0080167
Time Collected: 08/04/10 09:15
Time Submitted: 08/05/10 18:05

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Diesel Range Organics by GC/FID									
Diesel Range Organics	**150**	**mg/kg dry**	**12**	**2.0**	**1**	***8015C**	**8/16/10 14:21**	**JMV**	**P0H0313**
			Surrogate			Recovery		Control Limits	
			o-Terphenyl			*91 %*		*49-124*	
Gasoline Range Organics by GC/FID									
Gasoline Range Organics	BRL	mg/kg dry	6.6	0.86	50	*8015C	8/17/10 12:31	HPE	P0H0354
			Surrogate			Recovery		Control Limits	
			a,a,a-Trifluorotoluene			*82 %*		*55-129*	
General Chemistry Parameters									
% Solids	**57.4 Aa**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**8/12/10 15:31**	**JAB**	**P0H0309**

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

Project: NCDOT Elizabeth City PSA's - 222 Water St.
Project No: WBS# 35742.1.1

Prism Work Order: 0080167
Time Submitted: 8/5/10 6:05:00PM

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)
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1101 Nowell Road
Raleigh, NC 27607

Project: NCDOT Elizabeth City PSA's - 222 Water St.
Project No: WBS# 35742.1.1

Prism Work Order: 0080167
Time Submitted: 8/5/10 6:05:00PM

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*			

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

Project: NCDOT Elizabeth City PSA's - 222 Water St.
Project No: WBS# 35742.1.1

Prism Work Order: 0080167
Time Submitted: 8/5/10 6:05:00PM

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*			

Solutions IES (NCDOT Project)
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Raleigh, NC 27607

Project: NCDOT Elizabeth City PSA's - 222 Water St.
Project No: WBS# 35742.1.1

Prism Work Order: 0080167
Time Submitted: 8/5/10 6:05:00PM

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 P0H0259 - 3510C MS										
Blank (P0H0259-BLK1)				Prepared: 08/11/10 Analyzed: 08/12/10						
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	BRL	10	ug/L							
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							

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

Project: NCDOT Elizabeth City PSA's - 222 Water St.
Project No: WBS# 35742.1.1

Prism Work Order: 0080167
Time Submitted: 8/5/10 6:05:00PM

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 P0H0259 - 3510C MS										
Blank (P0H0259-BLK1)				Prepared: 08/11/10 Analyzed: 08/12/10						
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	*58.7*		*ug/L*	*100*		*59*	*26-139*			
Surrogate: 2-Fluorobiphenyl	*36.3*		*ug/L*	*50.0*		*73*	*41-112*			
Surrogate: 2-Fluorophenol	*45.6*		*ug/L*	*100*		*46*	*10-48*			
Surrogate: Nitrobenzene-d5	*34.9*		*ug/L*	*50.0*		*70*	*34-102*			
Surrogate: Phenol-d5	*25.3*		*ug/L*	*100*		*25*	*10-34*			
Surrogate: Terphenyl-d14	*46.6*		*ug/L*	*50.0*		*93*	*31-165*			

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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 P0H0259 - 3510C MS										
LCS (P0H0259-BS1)				Prepared: 08/11/10 Analyzed: 08/12/10						
1,2,4-Trichlorobenzene	29.4	10	ug/L	50.0		59	39-102			
1,2-Dichlorobenzene	28.3	10	ug/L	50.0		57	46-90			
1,3-Dichlorobenzene	27.6	10	ug/L	50.0		55	31-100			
1,4-Dichlorobenzene	27.9	10	ug/L	50.0		56	45-89			
2,4,5-Trichlorophenol	39.2	10	ug/L	50.0		78	60-108			
2,4,6-Trichlorophenol	37.9	10	ug/L	50.0		76	48-118			
2,4-Dichlorophenol	35.8	10	ug/L	50.0		72	38-107			
2,4-Dimethylphenol	33.7	10	ug/L	50.0		67	26-108			
2,4-Dinitrophenol	28.2	10	ug/L	50.0		56	10-157			
2,4-Dinitrotoluene	41.6	10	ug/L	50.0		83	61-139			
2,6-Dinitrotoluene	39.1	10	ug/L	50.0		78	55-141			
2-Chloronaphthalene	31.8	10	ug/L	50.0		64	46-114			
2-Chlorophenol	30.8	10	ug/L	50.0		62	39-80			
2-Methylnaphthalene	36.3	10	ug/L	50.0		73	39-107			
2-Methylphenol	24.9	10	ug/L	50.0		50	24-73			
2-Nitroaniline	36.0	10	ug/L	50.0		72	65-123			
2-Nitrophenol	35.2	10	ug/L	50.0		70	40-111			
3,3'-Dichlorobenzidine	27.9	10	ug/L	50.0		56	25-203			
3/4-Methylphenol	22.8	10	ug/L	50.0		46	22-84			
3-Nitroaniline	57.3	10	ug/L	50.0		115	66-131			
4,6-Dinitro-2-methylphenol	28.0	10	ug/L	50.0		56	31-155			
4-Bromophenyl phenyl ether	39.8	10	ug/L	50.0		80	50-131			
4-Chloro-3-methylphenol	32.9	10	ug/L	50.0		66	48-94			
4-Chloroaniline	53.4	10	ug/L	50.0		107	45-120			
4-Chlorophenyl phenyl ether	39.1	10	ug/L	50.0		78	55-125			
4-Nitroaniline	39.6	10	ug/L	50.0		79	63-138			
4-Nitrophenol	5.92	50	ug/L	50.0		12	10-89			J
Acenaphthene	37.9	10	ug/L	50.0		76	53-118			
Acenaphthylene	39.5	10	ug/L	50.0		79	52-121			
Aniline	47.8	10	ug/L	50.0		96	24-105			
Anthracene	44.0	10	ug/L	50.0		88	59-138			
Azobenzene	41.0	10	ug/L	50.0		82	65-123			
Benzo(a)anthracene	41.4	10	ug/L	50.0		83	63-138			
Benzo(a)pyrene	43.2	10	ug/L	50.0		86	67-142			
Benzo(b)fluoranthene	39.9	10	ug/L	50.0		80	58-151			
Benzo(g,h,i)perylene	32.8	10	ug/L	50.0		66	47-151			
Benzo(k)fluoranthene	54.5	10	ug/L	50.0		109	45-155			
Benzoic Acid	BRL	100	ug/L	50.0			10-125			P
Benzyl alcohol	24.2	10	ug/L	50.0		48	25-77			
bis(2-Chloroethoxy)methane	35.6	10	ug/L	50.0		71	42-119			
Bis(2-Chloroethyl)ether	34.6	10	ug/L	50.0		69	38-109			
Bis(2-chloroisopropyl)ether	30.7	10	ug/L	50.0		61	31-117			
Bis(2-Ethylhexyl)phthalate	42.3	10	ug/L	50.0		85	52-165			
Butyl benzyl phthalate	44.2	10	ug/L	50.0		88	51-162			
Chrysene	44.3	10	ug/L	50.0		89	59-137			
Dibenzo(a,h)anthracene	32.4	10	ug/L	50.0		65	43-161			

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

Project: NCDOT Elizabeth City PSA's - 222 Water St.
Project No: WBS# 35742.1.1

Prism Work Order: 0080167
Time Submitted: 8/5/10 6:05:00PM

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 P0H0259 - 3510C MS										
LCS (P0H0259-BS1)				Prepared: 08/11/10 Analyzed: 08/12/10						
Dibenzofuran	38.4	10	ug/L	50.0		77	63-115			
Diethyl phthalate	41.7	10	ug/L	50.0		83	54-135			
Dimethyl phthalate	41.3	10	ug/L	50.0		83	46-135			
Di-n-butyl phthalate	44.1	10	ug/L	50.0		88	51-142			
Di-n-octyl phthalate	44.4	10	ug/L	50.0		89	54-160			
Fluoranthene	42.3	10	ug/L	50.0		85	52-137			
Fluorene	40.7	10	ug/L	50.0		81	56-122			
Hexachlorobenzene	35.5	10	ug/L	50.0		71	57-129			
Hexachlorobutadiene	28.2	10	ug/L	50.0		56	34-110			
Hexachlorocyclopentadiene	21.8	10	ug/L	50.0		44	27-120			
Hexachloroethane	27.0	10	ug/L	50.0		54	37-98			
Indeno(1,2,3-cd)pyrene	28.2	10	ug/L	50.0		56	24-172			
Isophorone	36.6	10	ug/L	50.0		73	44-117			
Naphthalene	35.2	10	ug/L	50.0		70	37-108			
Nitrobenzene	32.1	10	ug/L	50.0		64	29-120			
N-Nitroso-di-n-propylamine	32.8	10	ug/L	50.0		66	42-115			
N-Nitrosodiphenylamine	62.0	10	ug/L	50.0		124	69-142			
Pentachlorophenol	25.8	10	ug/L	50.0		52	42-156			
Phenanthrene	42.0	10	ug/L	50.0		84	60-133			
Phenol	11.2	10	ug/L	50.0		22	10-47			
Pyrene	46.7	10	ug/L	50.0		93	50-152			
Surrogate: 2,4,6-Tribromophenol	*75.2*		*ug/L*	*100*		*75*	*26-139*			
Surrogate: 2-Fluorobiphenyl	*35.6*		*ug/L*	*50.0*		*71*	*41-112*			
Surrogate: 2-Fluorophenol	*33.2*		*ug/L*	*100*		*33*	*10-48*			
Surrogate: Nitrobenzene-d5	*32.2*		*ug/L*	*50.0*		*64*	*34-102*			
Surrogate: Phenol-d5	*18.1*		*ug/L*	*100*		*18*	*10-34*			
Surrogate: Terphenyl-d14	*37.4*		*ug/L*	*50.0*		*75*	*31-165*			

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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 P0H0259 - 3510C MS										
LCS Dup (P0H0259-BSD1)				Prepared: 08/11/10 Analyzed: 08/12/10						
1,2,4-Trichlorobenzene	25.8	10	ug/L	50.0		52	39-102	13	200	
1,2-Dichlorobenzene	25.2	10	ug/L	50.0		50	46-90	11	200	
1,3-Dichlorobenzene	23.8	10	ug/L	50.0		48	31-100	15	200	
1,4-Dichlorobenzene	25.4	10	ug/L	50.0		51	45-89	9	200	
2,4,5-Trichlorophenol	33.5	10	ug/L	50.0		67	60-108	16	200	
2,4,6-Trichlorophenol	32.0	10	ug/L	50.0		64	48-118	17	200	
2,4-Dichlorophenol	30.0	10	ug/L	50.0		60	38-107	18	200	
2,4-Dimethylphenol	29.4	10	ug/L	50.0		59	26-108	14	200	
2,4-Dinitrophenol	23.4	10	ug/L	50.0		47	10-157	19	200	
2,4-Dinitrotoluene	35.2	10	ug/L	50.0		70	61-139	17	200	
2,6-Dinitrotoluene	34.5	10	ug/L	50.0		69	55-141	13	200	
2-Chloronaphthalene	29.7	10	ug/L	50.0		59	46-114	7	200	
2-Chlorophenol	27.3	10	ug/L	50.0		55	39-80	12	200	
2-Methylnaphthalene	31.6	10	ug/L	50.0		63	39-107	14	200	
2-Methylphenol	22.2	10	ug/L	50.0		44	24-73	12	200	
2-Nitroaniline	31.4	10	ug/L	50.0		63	65-123	14	200	A
2-Nitrophenol	30.3	10	ug/L	50.0		61	40-111	15	200	
3,3'-Dichlorobenzidine	22.7	10	ug/L	50.0		45	25-203	21	200	
3/4-Methylphenol	20.8	10	ug/L	50.0		42	22-84	9	200	
3-Nitroaniline	50.0	10	ug/L	50.0		100	66-131	14	200	
4,6-Dinitro-2-methylphenol	23.5	10	ug/L	50.0		47	31-155	18	200	
4-Bromophenyl phenyl ether	33.6	10	ug/L	50.0		67	50-131	17	200	
4-Chloro-3-methylphenol	28.5	10	ug/L	50.0		57	48-94	14	200	
4-Chloroaniline	46.4	10	ug/L	50.0		93	45-120	14	200	
4-Chlorophenyl phenyl ether	33.3	10	ug/L	50.0		67	55-125	16	200	
4-Nitroaniline	33.6	10	ug/L	50.0		67	63-138	16	200	
4-Nitrophenol	5.23	50	ug/L	50.0		10	10-89	12	200	J
Acenaphthene	33.2	10	ug/L	50.0		66	53-118	13	200	
Acenaphthylene	34.8	10	ug/L	50.0		70	52-121	13	200	
Aniline	43.6	10	ug/L	50.0		87	24-105	9	200	
Anthracene	38.2	10	ug/L	50.0		76	59-138	14	200	
Azobenzene	36.0	10	ug/L	50.0		72	65-123	13	200	
Benzo(a)anthracene	36.0	10	ug/L	50.0		72	63-138	14	200	
Benzo(a)pyrene	38.8	10	ug/L	50.0		78	67-142	11	200	
Benzo(b)fluoranthene	34.1	10	ug/L	50.0		68	58-151	16	200	
Benzo(g,h,i)perylene	25.9	10	ug/L	50.0		52	47-151	24	200	
Benzo(k)fluoranthene	48.3	10	ug/L	50.0		97	45-155	12	200	
Benzoic Acid	BRL	100	ug/L	50.0			10-125		200	P
Benzyl alcohol	21.9	10	ug/L	50.0		44	25-77	10	200	
bis(2-Chloroethoxy)methane	31.3	10	ug/L	50.0		63	42-119	13	200	
Bis(2-Chloroethyl)ether	30.9	10	ug/L	50.0		62	38-109	11	200	
Bis(2-chloroisopropyl)ether	27.5	10	ug/L	50.0		55	31-117	11	200	
Bis(2-Ethylhexyl)phthalate	36.4	10	ug/L	50.0		73	52-165	15	200	
Butyl benzyl phthalate	37.7	10	ug/L	50.0		75	51-162	16	200	
Chrysene	38.0	10	ug/L	50.0		76	59-137	15	200	
Dibenzo(a,h)anthracene	25.4	10	ug/L	50.0		51	43-161	24	200	

Solutions IES (NCDOT Project)
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Project: NCDOT Elizabeth City PSA's - 222 Water St.
Project No: WBS# 35742.1.1

Prism Work Order: 0080167
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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 P0H0259 - 3510C MS										
LCS Dup (P0H0259-BSD1)				Prepared: 08/11/10 Analyzed: 08/12/10						
Dibenzofuran	33.1	10	ug/L	50.0		66	63-115	15	200	
Diethyl phthalate	37.0	10	ug/L	50.0		74	54-135	12	200	
Dimethyl phthalate	35.7	10	ug/L	50.0		71	46-135	14	200	
Di-n-butyl phthalate	38.4	10	ug/L	50.0		77	51-142	14	200	
Di-n-octyl phthalate	37.7	10	ug/L	50.0		75	54-160	16	200	
Fluoranthene	36.4	10	ug/L	50.0		73	52-137	15	200	
Fluorene	35.6	10	ug/L	50.0		71	56-122	13	200	
Hexachlorobenzene	30.0	10	ug/L	50.0		60	57-129	17	200	
Hexachlorobutadiene	24.6	10	ug/L	50.0		49	34-110	14	200	
Hexachlorocyclopentadiene	17.3	10	ug/L	50.0		35	27-120	23	200	
Hexachloroethane	24.3	10	ug/L	50.0		49	37-98	11	200	
Indeno(1,2,3-cd)pyrene	22.5	10	ug/L	50.0		45	24-172	23	200	
Isophorone	31.9	10	ug/L	50.0		64	44-117	14	200	
Naphthalene	31.4	10	ug/L	50.0		63	37-108	11	200	
Nitrobenzene	28.2	10	ug/L	50.0		56	29-120	13	200	
N-Nitroso-di-n-propylamine	28.6	10	ug/L	50.0		57	42-115	14	200	
N-Nitrosodiphenylamine	52.1	10	ug/L	50.0		104	69-142	17	200	
Pentachlorophenol	21.4	10	ug/L	50.0		43	42-156	19	200	
Phenanthrene	36.5	10	ug/L	50.0		73	60-133	14	200	
Phenol	10.3	10	ug/L	50.0		21	10-47	8	200	
Pyrene	40.2	10	ug/L	50.0		80	50-152	15	200	
Surrogate: 2,4,6-Tribromophenol	*63.5*		*ug/L*	*100*		*63*	*26-139*			
Surrogate: 2-Fluorobiphenyl	*31.1*		*ug/L*	*50.0*		*62*	*41-112*			
Surrogate: 2-Fluorophenol	*31.0*		*ug/L*	*100*		*31*	*10-48*			
Surrogate: Nitrobenzene-d5	*28.3*		*ug/L*	*50.0*		*57*	*34-102*			
Surrogate: Phenol-d5	*19.8*		*ug/L*	*100*		*20*	*10-34*			
Surrogate: Terphenyl-d14	*32.3*		*ug/L*	*50.0*		*65*	*31-165*			

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Prism Work Order: 0080167
Time Submitted: 8/5/10 6:05:00PM

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 P0H0224 - 5035										
Blank (P0H0224-BLK1)				Prepared & Analyzed: 08/10/10						
Gasoline Range Organics	BRL	5.0	mg/kg wet							
Surrogate: a,a,a-Trifluorotoluene	*5.10*		*mg/kg wet*	*5.00*		*102*	*55-129*			
LCS (P0H0224-BS1)				Prepared & Analyzed: 08/10/10						
Gasoline Range Organics	45.3	5.0	mg/kg wet	50.0		91	67-116			
Surrogate: a,a,a-Trifluorotoluene	*5.55*		*mg/kg wet*	*5.00*		*111*	*55-129*			
LCS Dup (P0H0224-BSD1)				Prepared & Analyzed: 08/10/10						
Gasoline Range Organics	46.8	5.0	mg/kg wet	50.0		94	67-116	3	200	
Surrogate: a,a,a-Trifluorotoluene	*5.65*		*mg/kg wet*	*5.00*		*113*	*55-129*			
Batch P0H0354 - 5035										
Blank (P0H0354-BLK1)				Prepared & Analyzed: 08/16/10						
Gasoline Range Organics	BRL	5.0	mg/kg wet							
Surrogate: a,a,a-Trifluorotoluene	*5.00*		*mg/kg wet*	*5.00*		*100*	*55-129*			
LCS (P0H0354-BS1)				Prepared & Analyzed: 08/16/10						
Gasoline Range Organics	44.0	5.0	mg/kg wet	50.0		88	67-116			
Surrogate: a,a,a-Trifluorotoluene	*5.55*		*mg/kg wet*	*5.00*		*111*	*55-129*			
LCS Dup (P0H0354-BSD1)				Prepared & Analyzed: 08/16/10						
Gasoline Range Organics	45.1	5.0	mg/kg wet	50.0		90	67-116	2	200	
Surrogate: a,a,a-Trifluorotoluene	*5.50*		*mg/kg wet*	*5.00*		*110*	*55-129*			

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

Project: NCDOT Elizabeth City PSA's - 222 Water St.
Project No: WBS# 35742.1.1

Prism Work Order: 0080167
Time Submitted: 8/5/10 6:05:00PM

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 P0H0282 - 3545A										
Blank (P0H0282-BLK1)				Prepared: 08/11/10 Analyzed: 08/13/10						
Diesel Range Organics	BRL	7.0	mg/kg wet							
Surrogate: o-Terphenyl	*1.95*		*mg/kg wet*	*1.60*		*122*	*49-124*			
LCS (P0H0282-BS1)				Prepared: 08/11/10 Analyzed: 08/13/10						
Diesel Range Organics	70.7	7.0	mg/kg wet	80.0		88	55-109			
Surrogate: o-Terphenyl	*2.54*		*mg/kg wet*	*1.60*		*159*	*49-124*			*SR*
LCS Dup (P0H0282-BSD1)				Prepared: 08/11/10 Analyzed: 08/13/10						
Diesel Range Organics	80.0	7.0	mg/kg wet	79.9		100	55-109	12	200	
Surrogate: o-Terphenyl	*2.75*		*mg/kg wet*	*1.60*		*172*	*49-124*			*SR*
Batch P0H0313 - 3545A										
Blank (P0H0313-BLK1)				Prepared: 08/12/10 Analyzed: 08/14/10						
Diesel Range Organics	BRL	7.0	mg/kg wet							
Surrogate: o-Terphenyl	*1.79*		*mg/kg wet*	*1.60*		*112*	*49-124*			
LCS (P0H0313-BS1)				Prepared: 08/12/10 Analyzed: 08/14/10						
Diesel Range Organics	69.3	7.0	mg/kg wet	79.9		87	55-109			
Surrogate: o-Terphenyl	*2.33*		*mg/kg wet*	*1.60*		*146*	*49-124*			*SR*
LCS Dup (P0H0313-BSD1)				Prepared: 08/12/10 Analyzed: 08/14/10						
Diesel Range Organics	73.7	7.0	mg/kg wet	79.9		92	55-109	6	200	
Surrogate: o-Terphenyl	*2.42*		*mg/kg wet*	*1.60*		*152*	*49-124*			*SR*
Matrix Spike (P0H0313-MS1)		**Source: 0080167-07**		Prepared: 08/12/10 Analyzed: 08/16/10						
Diesel Range Organics	655	12	mg/kg dry	139	153	361	50-117			MI
Surrogate: o-Terphenyl	*4.21*		*mg/kg dry*	*2.78*		*151*	*49-124*			*SR*

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

Project: NCDOT Elizabeth City PSA's - 222 Water St.
Project No: WBS# 35742.1.1

Prism Work Order: 0080167
Time Submitted: 8/5/10 6:05:00PM

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 P0H0313 - 3545A										
Matrix Spike Dup (P0H0313-MSD1)	**Source: 0080167-07**			Prepared: 08/12/10	Analyzed: 08/16/10					
Diesel Range Organics	216	12	mg/kg dry	139	153	45	50-117	101	24	D, MI
Surrogate: o-Terphenyl	*2.68*		*mg/kg dry*	*2.78*		*96*	*49-124*			

Sample Extraction Data

Prep Method: 3545A

Lab Number	Batch	Initial	Final	Date
0080167-01	P0H0282	25.08 g	1 mL	08/11/10
0080167-02	P0H0282	25.05 g	1 mL	08/11/10
0080167-03	P0H0282	25.09 g	1 mL	08/11/10
0080167-07	P0H0313	25.06 g	1 mL	08/12/10

Prep Method: 5035

Lab Number	Batch	Initial	Final	Date
0080167-01	P0H0224	6.43 g	5 mL	08/10/10
0080167-02	P0H0224	5.21 g	5 mL	08/10/10
0080167-03	P0H0224	4.62 g	5 mL	08/10/10
0080167-07	P0H0354	6.6 g	5 mL	08/16/10

NO PREP

Lab Number	Batch	Initial	Final	Date
0080167-01	P0H0272	30 g	30 mL	08/11/10
0080167-02	P0H0272	30 g	30 mL	08/11/10
0080167-03	P0H0272	30 g	30 mL	08/11/10
0080167-07	P0H0309	30 g	30 mL	08/12/10

Prep Method: 3510C MS

Lab Number	Batch	Initial	Final	Date
0080167-04	P0H0259	1000 mL	1 mL	08/11/10
0080167-05	P0H0259	1000 mL	1 mL	08/11/10
0080167-06	P0H0259	1000 mL	1 mL	08/11/10

Prep Method: 5030B

Lab Number	Batch	Initial	Final	Date
0080167-04	P0H0263	10 mL	10 mL	08/11/10
0080167-05	P0H0263	10 mL	10 mL	08/11/10
0080167-06	P0H0263	10 mL	10 mL	08/11/10

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: 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: Sday overmyer
Reporting Address: 101 Arowell 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 PSAs
Site Location Physical Address: 222 Water Street

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?	X		
Received ON WET ICE? Temp 3.1	X		
PROPER PRESERVATIVES indicated?	X		
Received WITHIN HOLDING TIMES?	X		
CUSTODY SEALS INTACT?			X
VOLATILES rec'd W/OUT HEADSPACE?	X		X
PROPER CONTAINERS used?	X		

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: TPH GRO	TPH DRO	8260	8270			REMARKS	PRISM LAB ID NO.
222-1-24	8/4/10	820	soil	VOA,G	4	40mL, 120z		X							01
222-2-24	8/4/10	830	soil	VOA,G	4	↓		X							02
222-3-0-2	8/4/10	835	soil	VOA,G	4	↓		X							03
222-3	8/4/10	900	water	VOA,A	5	40mL, 1L			X	X					04
601-1	8/9/10	0740	water	VOA, A	5	↓			X	X					05
229-2	8/9/10	810	water	VOA, A	5	↓			X	X					06
507-4-1-4	8/4/10	0915	Soil	VOA, G	4			X						Added 8/12 -PB - Prism	07

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Sampler's Signature Kathryn Doll | Sampled By (Print Name) Kathryn Doll | 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 Doll	Received By: (Signature) Alex Lassiter	080410	1030
Relinquished By: (Signature) Alex Lassiter	Received By: (Signature)	080510	1150
Relinquished By: (Signature)	Received For Prism Laboratories By: Dawn Morris	8-5-10	1600

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. 0080167

Additional Comments: Relinquished by - Dawn Morris 8-5-10 1805 8/5/10 1805

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 ☐

SEE REVERSE FOR TERMS & CONDITIONS

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

ORIGINAL

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

INVOICE COPY