Limited Site Assessment Report
Parcel 902 – Former M.T. Gaines Property
2937 Whiterock Road
Greensboro, Guilford County, NC
WBS Element: 34821.1.1
State Project: U-2525B
Incident Number: Pending
Risk Classification: Unknown

Prepared for:

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

Prepared by:

Solutions-IES, Inc.
1101 Nowell Drive
Raleigh, North Carolina 27607

Solutions - IES Project No. 3130.06A3.NDOT

October 27, 2006

Kevin Buchanan
Senior Environmental Specialist

Sheri L. Knox
Project Manager

Limited Site Assessment Report

A. Site Identification

DATE OF REPORT: October 27, 2006
Facility I.D.: None UST Incident Number: Pending
Site Name: Parcel 902 – Former M.T. Gaines Property; WBS Element: 34821.1.1
Site Location: 2937 Whiterock Road
Nearest City/Town: Greensboro County: Guilford

UST Owner: North Carolina Department of Transportation, Geotechnical Engineering Unit
Address: 1589 Mail Service Center; Raleigh, NC 27699-1589 Phone: (919) 250-4088

UST Operator: M.T. Gaines
Address: 3896 N. Elm Street Greensboro, NC 27455 Phone: (336) 282-2420

Property Owner: North Carolina Department of Transportation, Geotechnical Engineering Unit
Address: 1589 Mail Service Center; Raleigh, NC 27699-1589 Phone: (919) 250-4088

Previous Property Occupant: M.T. Gaines
Address: 3896 N. Elm Street Greensboro, NC 27455
Phone: (336) 282-2420

Consultant/Contractor: Solutions IES, Inc.
Address: 1101 Nowell Road, Raleigh, NC 27607 Phone: (919) 873-1060

Release Information
Date Discovered: May 31, 2006
Latitude: N 36°08'34" **Longitude:** W 79°43'53"
Figure 1 shows the site location and major highways in the area.

Estimated Quantity of Release: Unknown
Cause of Release: Unknown
Source of Release (e.g., Piping/UST): Probable product line leak
Sizes and contents of UST system(s) from which the release occurred): 550-gallon fuel oil UST.

Complete and include in report items B through J in the order listed.

I, Sheri L. Knox, a Professional Engineer for Solutions-IES, do certify that the information contained in this report is correct and accurate to the best of my knowledge.

(Please Affix Seal and Signature)

B. Risk Characterization

Submit the following questionnaire in its entirety. Answer all questions completely. Attach additional pages as needed to fully explain answers. Base answers/explanations on information known or required to be obtained during the Limited Site Assessment.

NOTE: *Source area means point of release from a UST system.*

Limited Site Assessment Risk Classification and Land Use Form

Part I – Groundwater/Surface Water/Vapor Impacts

High Risk

1. Has the release contaminated any water supply well including any well used for non-drinking purposes?

   Water supply wells were not tested. However, analytical results from a sample collected from the source area do not indicate that groundwater has been impacted by petroleum hydrocarbons.

   Is a water supply well used for drinking water located within 1,000 feet of the source area of the release?

   Yes, one water supply used for drinking is located approximately 625 feet from the source area. One out-of-service water well is located approximately 700 feet northeast of the source area. Solutions-IES interviewed Mr. Luis Cox who occupies the property located northeast of the source area; Ms. Minnie B. Andrews is the owner of this property. Mr. Cox indicated that he used a water supply well located on this property. He estimated that the water supply well is approximately 105 feet in depth. Property Owners located in the vicinity of the source area and related water-supply well information is summarized in Table B-5.

2. Is a water supply well not used for drinking water (e.g., irrigation, washing cars, industrial cooling water, filling swimming pools) located within 250 feet of the source area of the release?

   No.

3. Does groundwater within 500 feet of the source area of the release have the potential for future use (there is no other source of water supply other than the groundwater)?

   Unlikely, as the area is served by the City of Greensboro Municipal Supply System.

4. Do vapors from the release pose a threat of explosion because of accumulation of the vapors in a confined space or pose any other serious threat to public health, public safety or the environment?

   No, subsurface structures or confined spaces were not observed in proximity to the release area. It is not anticipated that vapor accumulation from this release will occur.

5. Are there any other factors that would cause the release to pose an imminent danger to public health, public safety, or the environment?

   Solutions-IES is not aware of any mitigating or documented factors that might create an imminent danger to public health, public safety or the environment.

Intermediate Risk

6. Is a surface water body located within 500 feet of the source area of the release?

   No, the nearest surface water body is an un-named tributary of Buffalo Fork located approximately 1,000 feet northeast of the release area. This tributary feeds into the Haw River.

   If **YES**, does the maximum groundwater contaminant concentration exceed the surface water quality standards and criteria found in 15A NCAC 2B .0200 by a factor of 10?

   N/A

7. Is the source area of the release located within an approved or planned wellhead protection area as defined in 42 USC 300h-7(e)?

   The North Carolina Department of Environment and Natural Resources (NCDENR) Public Water Supply Section does not list any approved wellhead protection areas or pending wellhead protection permit applications for locations within 1,500-feet of the site.

8. Is the release located in the Coastal Plain physiographic region as designated on a map entitled "Geology of North Carolina" published by the Department in 1985?

   No, the site is located in the Piedmont physiographic region underlain by the Carolina Slate Belt.

   _____

   If **YES**, is the source area of the release located in an area in which there is recharge to an unconfined or semi-confined deeper aquifer that is being used or may be used as a source of drinking water?

   N/A.

9. Do the levels of groundwater contamination for any contaminant exceed the gross contamination levels (see Table 9) established by the Department?

   No, the analysis of a groundwater sample obtained from a monitoring well installed on the site did not reveal the presence of any targeted compounds above their laboratory reporting limits for Environmental Protection Agency (EPA) Methods 602 or 625, or the Massachusetts Department of Environmental Protection (MADEP) Volatile Petroleum Hydrocarbons (VPH) and Extractable Petroleum Hydrocarbons (EPH) methods.

Part II - Land Use

Property Containing Source Area of Release

The questions below pertain to the property containing the source area of the release.

1. Does the property contain one or more primary or secondary residences (permanent or temporary)?

   No, the property was the former location of a residence, which was demolished after the North Carolina Department of Transportation (NCDOT) purchased the property for highway construction.

2. Does the property contain a school, daycare center, hospital, playground, park, recreation area, church, nursing home, or other place of public assembly?

No.

3. Does the property contain a commercial (e.g., retail, warehouse, office/business space, etc.) or industrial (e.g., manufacturing, utilities, industrial research and development, chemical/petroleum bulk storage, etc.) enterprise, an inactive commercial or industrial enterprise, or is the land undeveloped?

   No. All structures formerly located on the property were demolished by, or on behalf of the NCDOT after their purchase of the property in preparation of highway construction.

4. Describe.

   The property has been cleared for highway construction.

5. Do children visit the property?

   Possibly

   Explain.

   It is possible for children to visit the property, because people/children appear to live near the release area.

   Is access to the property reliably restricted consistent with its use (e.g., by fences, security personnel or both)?

   No.

   Explain:

   The property is currently undeveloped, and there are no restrictions (e.g., fences) preventing access to the former UST location.

6. Do pavement, buildings, or other structures cap the contaminated soil?

   No.

   Describe.

   The former UST area is covered at ground surface by gravel and/or fill,

   If yes, what mechanisms are in place or can be put into place to ensure that the contaminated soil will remain capped in the foreseeable future?

   The proposed future construction of Interstate 840 through the area may result in the installation of an off or on ramp in close proximity to the source area (see Appendix D). This construction may result in capping the soils with concrete or asphalt.

7. What is the zoning status of the property?

   "Agricultural"

8. Is the use of the property likely to change in the next 20 years?

Unknown, but not likely as the highway has a lifespan greater than 20 years.

Explain

The NCDOT has acquired ownership of this property to facilitate the construction on US Interstate 840. Once construction of the interstate highway has been completed, property use may change.

Property Surrounding Source Area of Release

The questions below pertain to the area within 1,500 feet of the source area of the release (excludes property containing source area of the release):

1. What is the distance from the source area of the release to the **nearest** primary or secondary residence (permanent or temporary)?

   The nearest primary residence is located approximately 200-feet west-southwest of the source area. This residence is located on property also owned by the NCDOT, and the current resident (the Brunes) will vacate the property prior to the construction of the Interstate 840 highway.

2. What is the distance from the source area of the release to the **nearest** school, daycare center, hospital, playground, park, recreation area, church, nursing home or other place of public assembly?

   The nearest daycare and place of public assembly are the Triad Christian Academy (a daycare center/school), located approximately 1,300-feet northeast of the source area, and the United Holy Church of America, Inc., located approximately 1,400-feet north of the source area. Both of these institutions are serviced by the City of Greensboro Municipal Water Supply. An out-of-use playground, part of the United Holy Church of America, is situated approximately 1,400 feet north of the source area; the Triad Christian Academy also contains a playground.

3. What is the zoning status of properties in the surrounding area?

   "Agricultural"

4. Briefly characterize the use and activities of the land in the surrounding area.

   Properties immediately to the east and west of the site were purchased by the NCDOT to facilitate the construction of Interstate 840. Property north of the site is heavily wooded with sparse residential properties. Property south of the site is partially wooded and undeveloped, with the exception of a cell-phone tower approximately 800-feet southwest of the source area. Solutions-IES was unable to determine the owner(s) of this undeveloped land through the use of the Guilford County, NC GIS web server.

C. Receptor Information

1. Water Supply Wells (Complete and attach Table B-5 and attach map showing well locations)

Several water supply wells and potential locations with supply wells were identified by Solutions-IES. These wells are noted in Table B-5. The locations of these wells are depicted on Figure 2 and Figure 2A.

2. Public Water Supplies

Are public water supplies available within 1,500 feet of the source area of the release?

Yes. Public water is available to the site and surrounding properties through the City of Greensboro, NC Municipal Supply system.

If yes, where are the location of the nearest public water lines and the source(s) of the public water supply? (Indicate on map) Describe.

The nearest public water supply is a line operated by the City of Greensboro, NC Municipal Supply system located along the southern edge of the right of way for Whiterock Road.

3. Surface Water

Identify all surface water bodies (e.g., ditch, pond, stream, lake, river) within 1,500 feet of the source area of the release. This information must be shown on the USGS topographic map.

The nearest surface water body to the site is an Un-named tributary of Buffalo Fork, which is, itself, a tributary of the Haw River, is located approximately 1,000 feet northeast of the release area. Solutions-IES observed a private un-named pond located approximately 1,200 feet southwest of the release area but is not shown on the attached figures.

4. Wellhead Protection Areas

Identify all planned or approved wellhead protection areas (e.g., ditch, pond, stream, lake, river) within 1,500 feet of the source area of the release. This information must be shown on the USGS topographic map. Wellhead protection areas are defined in 42 USC 300h-7(e).

The NCDENR Public Water Supply Section does not list any approved wellhead protection areas or pending wellhead protection permit applications for locations within 1,500-feet of the site.

5. Describe Deep Aquifers in the Coastal Plain Physiographic Region *(refer to page 19 of the guidelines):*

The site does not lie within the Coastal Plain Physiographic Province of North Carolina.

NOTE: *This requirement only pertains to releases in the Coastal Plain physiographic region as designated on a map entitled "Geology of North Carolina" published by the Department in 1985.*

6. Describe Subsurface Structures *(refer to page 19 of the guidelines)*:

No subsurface structures are located within close proximity (100 feet) of the source area. A visual inspection revealed that the only notable subsurface structure near the source area is a buried water line (identified by the presence of water valves and hydrants), located along the southern right of way for Whiterock Road. This water line is approximately 150 feet south of the source area, and is assumed to be buried 6 to 8 feet beneath ground surface (bgs).

7. Property Owners and Occupants

Attach Table B-5, listing the names and addresses of 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.

Contamination has not impacted the groundwater and therefore, is not expected to migrate to off-site areas. For informational purposes, property ownership information is related in Table B-5, along with relevant information.

- Discuss other relevant aspects of the site and nearby areas, including receptors. Provide data from available sources and/or site investigations concerning the following: Land use information, including the uses and activities (involving possible human exposure to contamination) that occur at the site and adjacent properties;
- Indicate on the site map other possible routes of exposure to contamination such as sewers, utility lines, conduits, basements, septic tanks, drainfields, etc.
- Distance to nearest body of surface water (e.g., ditch, pond, stream, river, etc.).

NOTE: *See the instructions for a water supply well survey on page 4-12:*

D. Site Geology and Hydrogeology

Describe the soil and geology encountered at the site. Discuss the effects of soil and geological characteristics on the migration and attenuation of contaminants. Include information obtained during assessment activities (e.g., lithologic descriptions made during drilling, probe surveys, tank closure, etc). If a Phase II investigation is required include a discussion of groundwater flow direction and hydraulic gradient (vertical and horizontal).

Soils encountered during the installation of a groundwater monitoring well (MW-1) at the site included dry to moist clayey silt from ground surface to approximately 11.5 ft bgs. Soils from 11.5 ft bgs to 44 ft bgs were comprised of weathered silt of varying color and moisture. Groundwater was measured at 35 ft bgs. A boring log detailing soils encountered during the installation of MW-1 is presented in Appendix A.

E. Sampling Results

Phase I Investigation

NOTE: *Responsible parties for all releases must perform a Phase I investigation.*

A Phase I investigation includes the installation of one monitoring well in the source area of a release. Soil samples are to be collected every five feet in the unsaturated zone and should be analyzed in accordance with the methods specified in Table 5 (Analytical Methods for Petroleum Contaminated Soil). If the water table is encountered at 7.6 m (25 feet) or greater from the land surface, samples for laboratory analysis should be collected every 3.0 m (10 feet) in the unsaturated zone.

1. Describe all soil sampling performed during the installation of the source well(s) (use maps and tables whenever possible) and include:
   - Location of soil samples;
   - Type of soil samples (from excavation, borehole, geoprobe, etc.);
   - Complete and attach Table B-3.
   - If multiple source areas have been identified, use individual tables for each source well installation.

Soil sampling conducted at the site was performed by Solutions-IES Personnel during the UST Closure activities performed on May 31, 2006, and during the installation of monitoring well MW-1 on September 13, 2006. With the exception of sample MW-1, all soil samples were collected from the bucket of a backhoe during the closure activities. Closure sample T1 was obtained from a location directly beneath the former tank. Corrective action samples N2, S2, E2 and W2 were obtained from the north, south, east and western sidewalls of the excavation created in the removal of petroleum-impacted soils. Corrective action sample B1

was retained from the middle (base) of the resulting excavation at a depth of 11 ft bgs. These soil samples were submitted to Prism Laboratories under Chain-of-Custody control procedures for laboratory analysis. A summary of analytical data for soil samples obtained during the tank closure activities and LSA are presented in Table B-3.

An additional soil sample (MW-1) was obtained through the advancement of MacroCore sampler with a Geoprobe®. Samples were obtained at 4-foot intervals from 11 to 44 ft bgs and screened for presence volatile vapors with a Flame Ionization Detector (FID). No volatile vapors were measured with the FID. A soil sample was retained from a depth interval of 32 to 34 ft bgs. This sample was submitted to Prism Laboratories, Inc. under Chain-of-Custody procedures for analysis by EPA Methods 8260B, 8270C, and the MADEP-VPH and EPH Methods. Analytical results for this sample did not indicate the presence of targeted compounds or tentatively identified compounds at levels in excess of the respective method reporting limits. Laboratory reports for this soil sample are included as Appendix C.

2. Describe any groundwater sampling from the source area monitoring well(s). Use maps and tables whenever possible and include:
   - Location of groundwater samples/monitoring wells/water supply wells;
   - Complete and attach Table B-4.
   - If multiple source areas have been identified, use individual tables for each source well.

   Note: If free product is present, do not sample the monitoring well. Report the estimated thickness, type, and quantity of free product present.

   Free product was not observed in monitoring well MW-1.

   A groundwater sample was collected from monitoring well MW-1 and analyzed for petroleum impacts with EPA Methods 602 and 625, MADEP VPH and EPH. The sample was also analyzed for the 10 largest non-target peaks on the Method 625 analysis. The analytical results did not reveal the presence of targeted compounds or at levels in excess of the laboratory reporting limits. Analytical reports associated with this groundwater sample are presented in Appendix C.

3. Monitoring well construction information
   - Complete and attach Table B-6

   Table B-6 contains the well construction details for monitoring well MW-1. Well Construction Record (Form GW-1b) was completed for the installation of MW-1 and submitted to the Division of Water Quality. A copy of Form GW-1b is included as Appendix A.

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Phase II Investigation (If required)

NOTE: *A Phase II investigation should only be conducted if the release is from a commercial UST and the levels of groundwater contamination detected in the source area monitoring well exceed the groundwater standards or interim standards by a factor of 10.*

The approved scope of work did not include a Phase II Investigation.

F. Conclusions and Recommendations

Discuss the risk criteria that apply to the release and identify any other site-specific factors related to the release that may pose a risk to human health and the environment. Also, discuss any site-specific conditions or possible actions that could result in lowering the level of risk posed by the release

Risk criteria which apply to the release at the site include the presence of several water supply wells, as well as several private residences, a church and a church day care center, all located within 1,500 feet of the site. Based on analytical data for soil and groundwater samples obtained for this LSA, it is not likely that contaminants remaining in the subsurface will impact receptors. However, analytical results for soil sample B-1, obtained at 11 ft bgs directly beneath the former tank location, confirmed the presence of several compounds in excess of their respective Soil-to-Groundwater Maximum Soil Contaminant Concentrations (MSCC's). These data do not indicate that the release at the site has impacted groundwater beneath the site, nor does widespread soil contamination appear to exist. The NCDOT, which has purchased properties surrounding the release location, intends to construct a portion of US Interstate 840 through the area; construction of this roadway would cap the impacts at the site.

G. Free Product Investigation/Recovery (if applicable)

If free product is still present or is discovered during the limited site assessment, continue or begin free product recovery immediately in accordance with 15A NCAC 2N. 0705 and submit an up-to-date Free Product Recovery Report (Report B-4).

N/A

H. Site History:
Update site history information provided in the 20-Day Report as necessary**.**

No additional information is available.

I. Figures (Please attach the following figures)

- 71/2 minute USGS topographic quadrangle map copy showing an area within a 1,500-foot radius of the source area of the release and depicting the site location, all water supply wells, public water supplies, surface water intakes, surface water bodies, designated well head protection areas, and areas of recharge to deeper aquifers in the Coastal Plan that are or may be used as a source for drinking water.

  See Figure 1 – Site Locate Map and Figure 2A – Water Supply Well Locations

- 7-1/2 minute USGS topographic quadrangle map copy showing an area within a 1,500-foot radius of the source area of the release and depicting the site location as well as all schools, daycare centers, hospitals, playgrounds, parks, recreation areas, churches, nursing homes, or other places of public assembly. Also identify the zoning status of the area within the 1,500-foot radius.

  See Figure 2A – Water Supply Well Locations. Zoning information is provided on Figure 2 – Site Map and Adjacent Properties.

- Site map with UST systems location(s) including piping and pump islands, site boundaries, buildings, named roads, subsurface utilities, basements, adjacent properties, scale, and north arrow.

  See Figure 2 –Site Map and Adjacent Properties

- Site map showing the results of all soil sampling conducted. Indicate sample identifications, sample locations, sampling depths, and analytical results.

  See Figure 3 – Soil and Groundwater Sampling Results

- Site map showing the results of all groundwater sampling conducted. Indicate sample identifications, sample locations, monitoring well identifications, and analytical results.

  See Figure 3– Soil and Groundwater Sampling Results

- Site map showing the elevation of groundwater in the monitoring wells and the direction of groundwater flow. **NOTE:** *This requirement applies to the Phase II investigation only.*

  Not required

NOTE: *If possible, use a single base map to prepare site maps using a map scale of 1 inch = 40 feet (or a smaller scale for large sites, if necessary). Maps and figures should include conventional symbols, notations, labeling, legends, scales, and north arrows and should conform to generally accepted practices of map presentation such as those enumerated in the USGS Geological Survey pamphlet, "Topographic Maps."*

J. Other Information (Please attach the following information)

- Boring logs and lithologic descriptions;

  A boring log for monitoring well MW-1 is included as Appendix A.

- Well construction records (Table B-7);

  A Well Construction Record (Form GW-1b) was completed for the installation of monitoring well MW-1. The original GW-1b was submitted to the Division of Water Quality. A copy of this document is included in Appendix A.

- Field measurements (e.g., pH, dissolved oxygen, specific conductivity, temperature) made during groundwater sampling);

  N/A

- Standard procedures used at site for sampling, field equipment decontamination, field screening, etc.;

  Sample collection details used during the performance of this LSA are included as Appendix B.

- Disposal manifests

  No disposal manifests were generated during the performance of this LSA. All soil and groundwater were discharged to the land surface in landscaped or natural areas as allowed in the *Guidelines for Tank Closure* (North Carolina Underground Storage Tank Section, NCDENR, September 2003). Disposal manifests for the excavation and removal of soils during the UST closure performed at the location are included as an appendix in the UST Closure Report (Solutions-IES, June 23, 2006).

- All laboratory reports and chain-of-custody documents.
  All laboratory reports and Chain-of-Custody forms are included as Appendix C.

TABLES

(Tables are numbered according to the LSA format.)

Table B-1
UST System Information
Parcel 902-Former M.T. Gaines Property
Greensboro, N.C.
Solutions-IES Project No. 3130.06A3.NDOT
WBS Element: 34821.1.1
State Project: U-2525B

Product	Capacity (gallons)	Date Installed	Date Permanently Closed (P), or Still in Use* (C)	Was Release Associated With UST System?
Heating Oil	550	Unknown	5/31/2006 P (Permanently Closed)	Yes

Table B-2
UST Owner/Operator Information
Parcel 902-Former M.T. Gaines Property
Greensboro, N.C.
Solutions-IES Project No. 3130.06A3.NDOT
WBS Element: 34821.1.1
State Project: U-2525B

Name of Owner or Operator	Dates of Ownership / Operation	Owner or Operator?
Address		
Mr. M.T. Gaines Former Resident	Unknown to January, 1996	Owner/Operator
North Carolina Department of Transportation Contact: Mr. Terry Fox Geotechnical Engineering Unit Geoenvironmental Section 1589 Mail Service Center Raleigh, North Carolina 27699-0589 (919) 250-4088	January, 1996 to Present	Owner

Table B-3
Summary of Soil Analytical Results
Parcel 902-Former M.T. Gaines Property
Greensboro, N.C.
Solutions-IES Project No. 3130.06A3.NDOT
WBS Element: 34821.1.1
State Project: U-2525B

			Closure Sample	Corrective Action Samples					LSA Sample
Sample ID			**T1**	**N2**	**E2**	**S2**	**W2**	**B1**	**MW-1**
Depth (ft bgs)			**5**	**11**	**11**	**11**	**11**	**11**	**32-34**
Date Collected			**05/31/06**	**05/31/06**	**05/31/06**	**05/31/06**	**05/31/06**	**05/31/06**	**09/13/06**
Parameter	**MSCCs**	**Units**							
SVOCs									
Fluorene	44	mg/kg	NA	<0.47	<0.41	<0.47	<0.46	**12**	<0.53
2-Methylnaphthalene	3	mg/kg	NA	<0.47	<0.41	<0.47	<0.46	**79**	<0.53
Naphthalene	0.58	mg/kg	NA	<0.47	<0.41	<0.47	<0.46	**16**	<0.53
Phenanthrene	60	mg/kg	NA	<0.47	<0.41	<0.47	<0.46	**34**	<0.53
Pyrene	286	mg/kg	NA	<0.47	<0.41	<0.47	<0.46	**4.1**	<0.53
EPH/VPH									
C5 - C8 Aliphatics	72	mg/kg	NA	<9.9	<8.6	<10	<9.6	**300**	<11
C9 - C18 Aliphatics	3255	mg/kg	NA	<15	<13	<15	<14	**14100**	<16
C9 - C22 Aromatics	34	mg/kg	NA	<15	<13	<15	<14	**4700**	<16
C19 - C36 Aliphatics	NS	mg/kg	NA	<15	<13	<15	<14	**3900**	<16
VOCs									
Benzene	0.0056	mg/kg	NA	<0.0043	<0.0034	<0.0044	<0.0039	**0.011**	<0.0045
n-Butylbenzene	4	mg/kg	NA	<0.0072	<0.0057	<0.0073	<0.0065	**0.24**	<0.0075
sec -Butylbenzene	3	mg/kg	NA	<0.0072	<0.0057	<0.0073	<0.0065	**3.8**	<0.0075
tert -Butylbenzene	3	mg/kg	NA	<0.0072	<0.0057	<0.0073	<0.0065	**0.020**	<0.0075
Ethylbenzene	0.24	mg/kg	NA	<0.0072	<0.0057	<0.0073	<0.0065	**4.7**	<0.0075
Isopropylbenzene	2	mg/kg	NA	<0.0072	<0.0057	<0.0073	<0.0065	**0.22**	<0.0075
p-Isopropyltoluene	NS	mg/kg	NA	<0.0072	<0.0057	<0.0073	<0.0065	**3.7**	<0.0075
Naphthalene	0.58	mg/kg	NA	<0.014	<0.011	<0.015	<0.013	**34**	<0.015
n-Propylbenzene	2	mg/kg	NA	<0.0072	<0.0057	<0.0073	<0.0065	**0.086**	<0.0075
Toluene	7	mg/kg	NA	<0.0072	<0.0057	<0.0073	<0.0065	**0.029**	<0.0075
1,2,4-Trimethylbenzene	8	mg/kg	NA	<0.0072	<0.0057	<0.0073	<0.0065	**29**	<0.0075
1,3,5-Trimethylbenzene	7	mg/kg	NA	<0.0072	<0.0057	<0.0073	<0.0065	**11**	<0.0075
Total Xylenes	5	mg/kg	NA	15.4	<0.011	<0.015	<0.013	**15.4**	<0.015
OTHER ANALYSES									
TPH DRO	10	mg/kg	**5200**	NA	NA	NA	NA	NA	NA
TPH GRO	10	mg/kg	**280**	NA	NA	NA	NA	NA	NA

NOTES:

TPH = Total Petroleum Hydrocarbons DRO = Diesel Range Organics EPH = Extractable Petroleum Hydrocarbons
GRO = Gasoline Range Organics SVOCs = Semi Volatile Organic Compounds
VOCs = Volatile Organic Compounds VPH = Volatile Petroleum Hydrocarbons
ft bgs = feet below ground surface mg/kg = milligrams per kilogram
NA = not analyzed
MSCCs = North Carolina Department of Environment and Natural Resources (NC DENR) Soil-to-Groundwater Maximum Soil Contamination Concentrations, April 2001.
Shaded values exceed the NCDENR soil-to-groundwater MSCCs
MSCCs of the Guidelines for Assessment and Corrective Action, NC UST Section, April 2001:
C9-C18 Aliphatics & C9-C12Aliphatics = C9-C18 Aliphatics
C11-C22 Aromatics & C9-C10 Aromatics=- C9-C22 Aromatics

Table B-4
Summary of Groundwater Analytical Results
Parcel 902-Former M.T. Gaines Property
Greensboro, N.C.
Solutions-IES Project No. 3130.06A3.NDOT
WBS Element: 34821.1.1
State Project: U-2525B

Target compounds were not detected in groundwater sample MW-1 at levels in excess of the laboratory reporting limits for EPA 602, 625, or the MADEP VPH and EPH Methods. No TICS reported for 625 scan.

NOTES:

EPH = Extractable Petroleum Hydrocarbons
VPH = Volatile Petroleum Hydrocarbons
MADEP = Massachusetts Department of Environmental Protection
EPA = Environmental Protection Agency
TIC = Tentatively Identified Compounds

Table B-5
Property Owners/Occupants and Supply Well Information
Parcel 902-Former M.T. Gaines Property Greensboro, N.C.
WBS Element: 34821.1.1 State Project: U-2525B

Property Number	Tax Parcel Number	Owner/ Occupant Name & Address	Property Address	Water Supply Well Information	Direction from Site
1	703014000505000 21	NCDOT 1589 Mail Service Center Raleigh, NC 27699	2937 Whiterock Road Greensboro, NC 27405	No Supply Well Present	SITE
2	703014000505000 87	NCDOT 1589 Mail Service Center Raleigh, NC 27699	2939 Whiterock Road Greensboro, NC 27405	No Supply Well Present	(Adjoins site) East
3	0703014000505000 22	NCDOT 1589 Mail Service Center Raleigh, NC 27699	2943 Whiterock Road Greensboro, NC 27405	No Supply Well Present	East
4	07040191D0460000 33	Minnie B. Andrews Luis Cox (occupant) 4829 Grafton Road Greensboro, NC 27405	3107 Burnette Drive Greensboro, NC 27405	One well in use (105' deep) One well out of service	625' NE 700' NE
5	0700301400050000 04	United Holy Church of America, Inc. 312 E. Umstead Street Durham, NC 27707	5110 Dunstan Road Greensboro, NC 27405	No Supply Well Present	1,300' North
6	070301400050000 76	Jerome O. & Marla M. Spruill 5102 Dunstan Road Greensboro, NC 27405	5102 Dunstan Road Greensboro, NC 27405	Unknown-Supply Well Likely Present	(Adjoins site) North
7	070301400050000 88	NCDOT 1589 Mail Service Center Raleigh, NC 27699	2935 Whiterock Road Greensboro, NC 27405	No Supply Well Present	(Adjoins site) West
8	070301400050000 89	NCDOT 1589 Mail Service Center Raleigh, NC 27699	2933 Whiterock Road Greensboro, NC 27405	No Supply Well Present	West
9	703014000505000 20	Richard G. & Elizabeth G. Cockereece P.O. Box 14371 Greensboro, NC 27415	2918 Whiterock Road Greensboro, NC 27405	Unknown-Supply Well Possibly Present	540' SW
10	07040191D046000 019	William Claude Belton 4601 Arvid Drive Greensboro, NC 27405	4601 Arvid Drive Greensboro, NC 27405-9404	One well in use (307' deep) One well out of service	1450' East 1375' East
11	070301400050500 093	Ronnie L. & Sandra Fulk 200 Plum Hollow Court Brown Summit, NC 27214	4323 US Highway 29 North Greensboro, NC 27405 (Location of High Cone Auto Body)	One water supply well in use Construction Data Unknown	1250' NW
12	07030140G0506S 002	Red Bird Associates, Inc. P.O. Box 368 Kinston, NC 28502	4715 US Highway 29 North Greensboro, NC 27405 (Location of Cardinal Lawn & Garden)	One water supply well in use Construction Data Unknown	1500' NW

NOTES:

1) Locations of Properties 1 through 8 are shown on Figure 2. Locations of Properties 9 through 12 are shown on Figure 2A.
2) NE Denotes "Northeast" NW Denotes "Northwest" SW Denotes "Southwest"
3) Dark gray cells denote locations with confirmed water supply wells in use (Properties 4, 10, 11, 12)
4) Light gray cells denote locations with possible water supply wells (Properties 6 and 9)
5) For locations where wells are likely or possibly present, Solutions-IES left well information survey forms at the properties, and has not received replies from the occupants.

Table B-6
Monitoring Well Construction Information
Parcel 902-Former M.T. Gaines Property
Greensboro, N.C.
Solutions-IES Project No. 3130.06A3.NDOT
WBS Element: 34821.1.1
State Project: U-2525B

Well ID	Date Installed	Date Water Level Measured	Well Casing Depth (ft bgs)	Screened Interval (ft bgs)	Depth to Water from Top of Casing (ft)	Free Product Thickness (ft)
MW-1	9/13/2006	9/14/2006	29	29-44	38.34	N/A

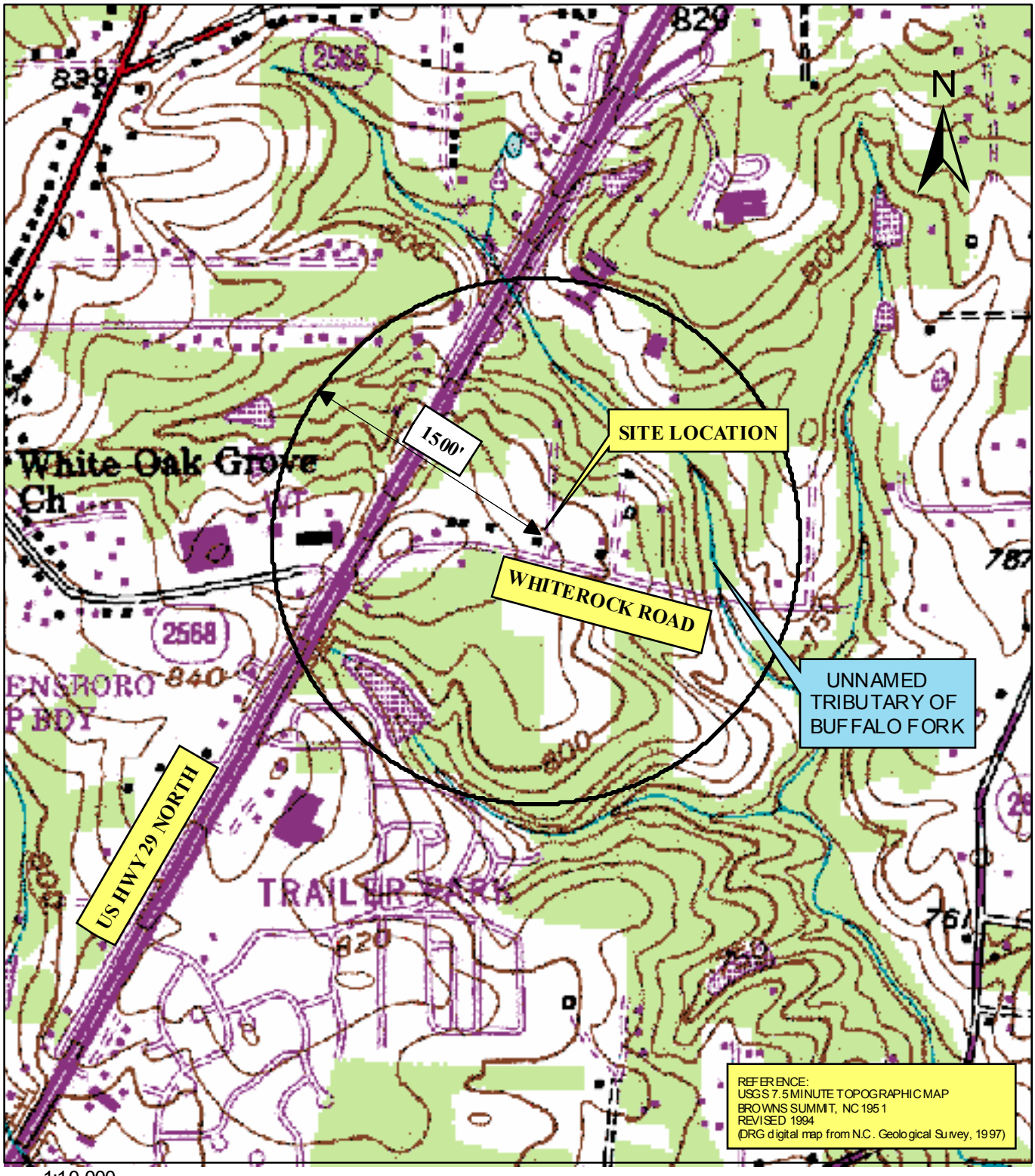
Notes:

1) Top of Casing is 2.75 ft. above ground surface

2) ft bgs - feet below ground surface

3) MW-1 was set with a GeoProbe drill rig, and installed as a 1-inch diameter well, completed at the surface with a steel "stick-up" well cover.

FIGURES



1:10,000

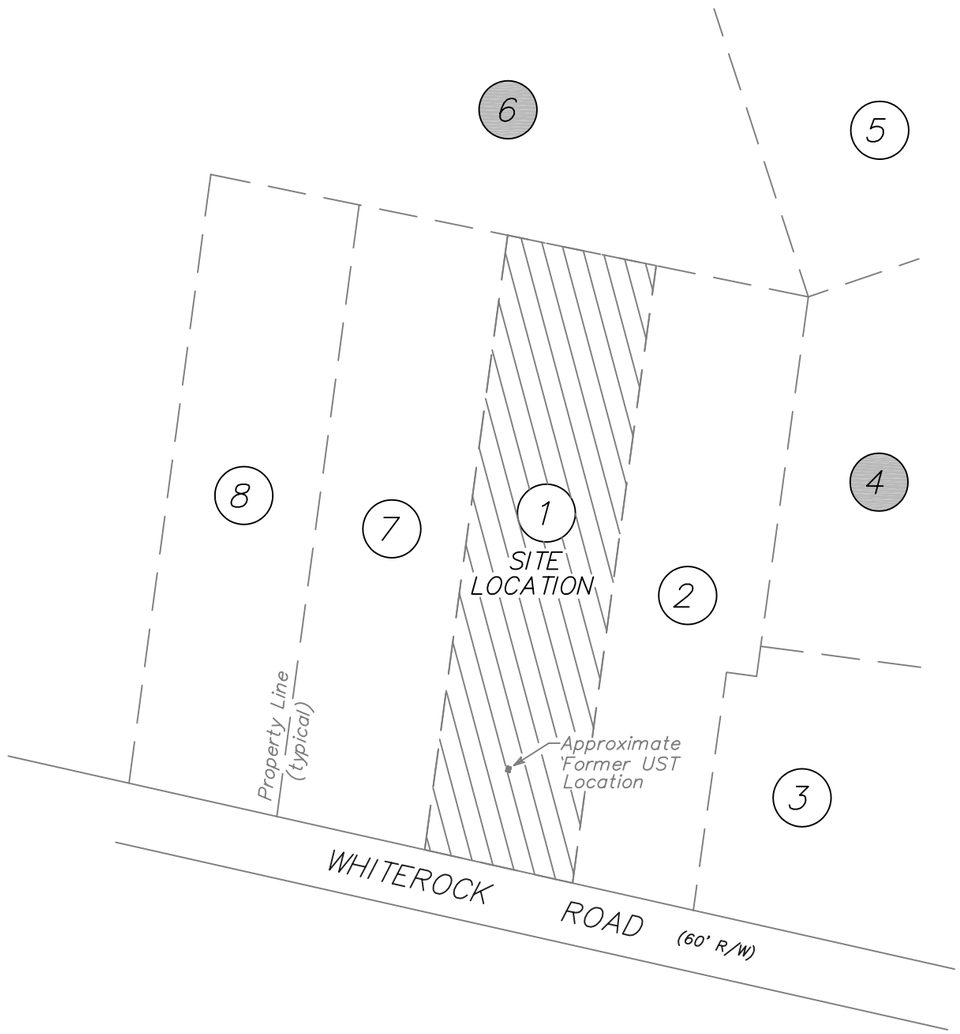
SITE LOCATION MAP

PARCEL 902 - FORMER M.T. GAINES PROPERTY
2937 WHITEROCK ROAD
GREENSBORO, GUILFORD COUNTY, NORTH CAROLINA
WBS ELEMENT 34821.1.1

Solutions-IES
Industrial & Environmental Services

1101 Nowell Road, Raleigh, NC 27609
Phone (919) 873-1060, Fax (919) 873-1074

Created by:	RT	Project:	3130.06A3.NDOT
Checked by:	SK	Date:	OCTOBER 2006
File:	Topo Location.mxd		
Software:	ESRI ArcMap 9.1	FIGURE	1



Property	Parcel Number	Owner(s)	Zoning
1	07030140005050021	NC Department of Transportation	Agricultural
2	07030140005050087	NC Department of Transportation	Agricultural
3	07030140005050022	NC Department of Transportation	Agricultural
4	07040191D046000033	Minnie B. Andrews	Agricultural
5	07030140005000004	United Holy Church of America, Inc.	Agricultural
6	07030140005000076	Jerome O. & Marla M. Spruill	Agricultural
7	07030140005000088	NC Department of Transportation	Agricultural
8	07030140005000089	NC Department of Transportation	Agricultural

LEGEND

4 PROPERTIES WITH WATER SUPPLY WELL (IN-USE OR OUT-OF-USE) OR WITH SUPPLY WELL LIKELY PRESENT. (SEE TABLE B-5)

0 150 300

SCALE IN FEET

PROJECT MANAGER SK | CHECKED BY DS | DRAFTER RT | PROJECT NUMBER 3130.06A3.NDOT

DATE OCTOBER 2006

FILE FIG2.DWG

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

NOTES

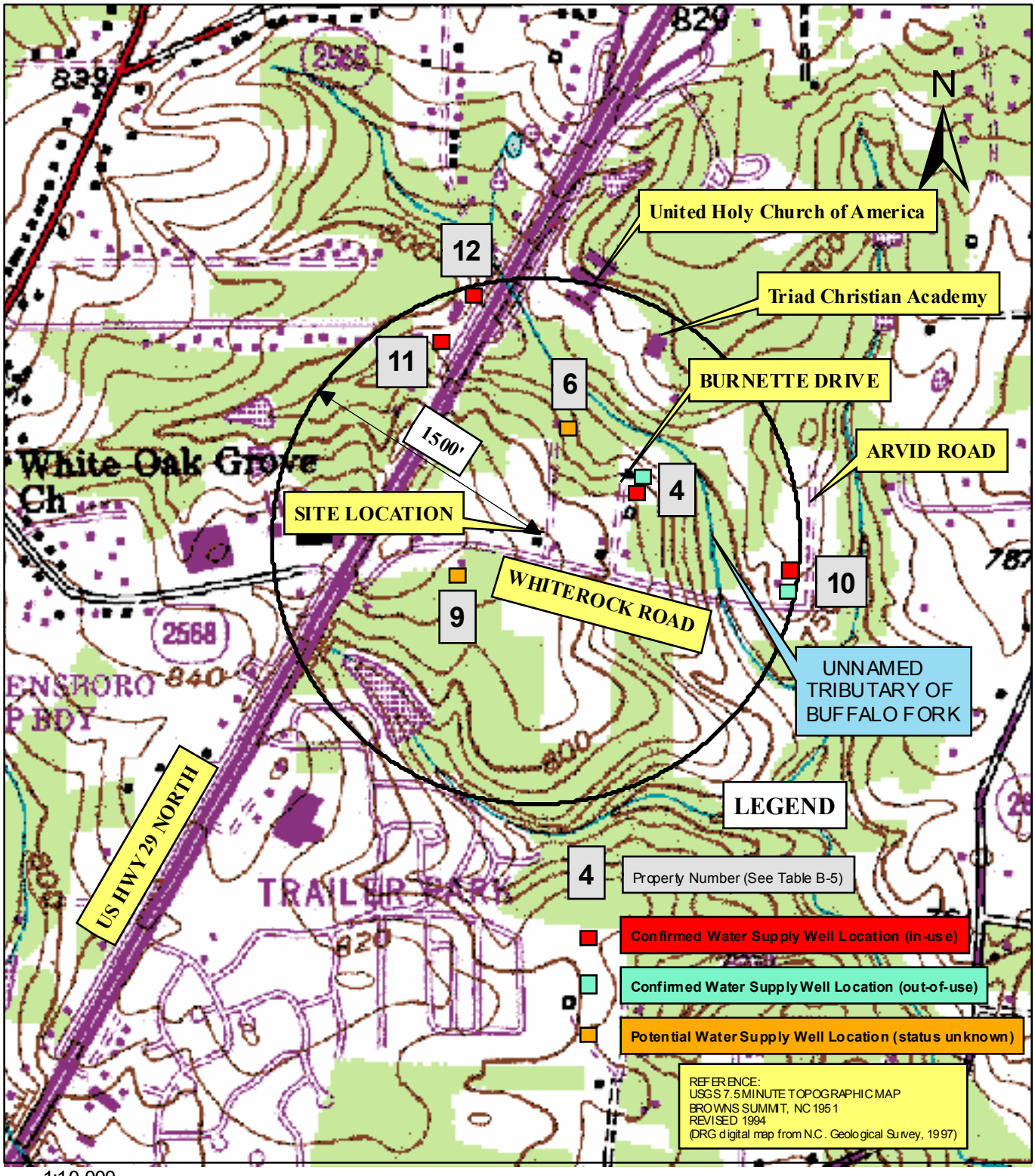
1.) PARCEL AND ZONING INFORMATION SHOWN HEREON BASED ON DATA OBTAINED FROM THE GUILFORD COUNTY, NORTH CAROLINA GIS WEB SERVER, SEPTEMBER 7, 2006.

2.) FIGURE DOES NOT SHOW WELL LOCATIONS BEYOND PROPERTY VICINITY; FOR ADDITIONAL INFORMATION ON WELL LOCATIONS SEE FIGURE 2A.

PARCEL 902 – FORMER M.T. GAINES PROPERTY
2937 WHITEROCK ROAD
GREENSBORO, GUILFORD COUNTY, NORTH CAROLINA
WBS ELEMENT: 34821.1.1; STATE PROJECT: U-2525B

SITE MAP AND ADJACENT PROPERTIES

FIGURE: 2



1:10,000

WATER SUPPLY WELL LOCATIONS
PARCEL 902 - FORMER M.T. GAINES PROPERTY
2937 WHITEROCK ROAD
GREENSBORO, GUILFORD COUNTY, NORTH CAROLINA
WBS ELEMENT 34821.1.1; STATE PROJECT U-2525B

Solutions-IES
Industrial & Environmental Services

1101 Nowell Road, Raleigh, NC 27609
Phone (919) 873-1060, Fax (919) 873-1074

Created by:	RT	Project:	3130.06A3.NDOT
Checked by:	SK	Date:	OCTOBER 2006
File:	Topo Location.mxd	FIGURE	2A
Software:	ESRI ArcMap 9.1		

PROJECT NUMBER 3130.06A3.NDOT
DRAFTER RT
CHECKED BY DS
PROJECT MANAGER SK
DATE OCTOBER 2006
FILE FIG3.DWG

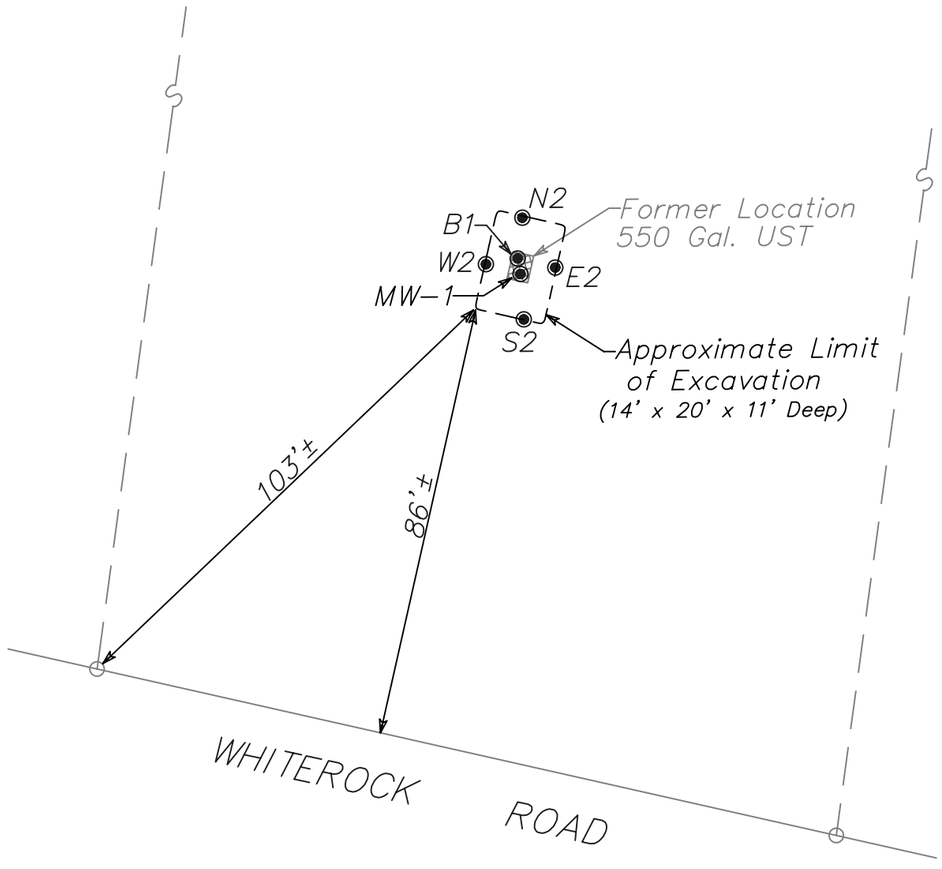
Analytical Data – Soils

			Closure Sample	Corrective Action Samples					LSA Sample
Sample ID			**T1**	**N2**	**E2**	**S2**	**W2**	**B1**	**MW-1**
Depth (ft bgs)			**5**	**11**	**11**	**11**	**11**	**11**	**32-34'**
Date Collected			**05/31/06**	**05/31/06**	**05/31/06**	**05/31/06**	**05/31/06**	**05/31/06**	**09/13/06**
Parameter	**MSCCs**	**Units**							
SVOCs									
Fluorene	44	mg/kg	NA	<0.47	<0.41	<0.47	<0.46	**12**	<0.53
2-Methylnaphthalene	3	mg/kg	NA	<0.47	<0.41	<0.47	<0.46	**79**	<0.53
Naphthalene	0.58	mg/kg	NA	<0.47	<0.41	<0.47	<0.46	**16**	<0.53
Phenanthrene	60	mg/kg	NA	<0.47	<0.41	<0.47	<0.46	**34**	<0.53
Pyrene	286	mg/kg	NA	<0.47	<0.41	<0.47	<0.46	**4.1**	<0.53
EPH/VPH									
C5 - C8 Aliphatics	72	mg/kg	NA	<9.9	<8.6	<10	<9.6	**300**	<11
C9 - C18 Aliphatics	3255	mg/kg	NA	<15	<13	<15	<14	**14100**	<16
C9 - C22 Aromatics	34	mg/kg	NA	<15	<13	<15	<14	**4700**	<16
C19 - C36 Aliphatics	NS	mg/kg	NA	<15	<13	<15	<14	**3900**	<16
VOCs									
Benzene	0.0056	mg/kg	NA	<0.0043	<0.0034	<0.0044	<0.0039	**0.011**	<0.0045
n-Butylbenzene	4	mg/kg	NA	<0.0072	<0.0057	<0.0073	<0.0065	**0.24**	<0.0075
sec-Butylbenzene	3	mg/kg	NA	<0.0072	<0.0057	<0.0073	<0.0065	**3.8**	<0.0075
tert-Butylbenzene	3	mg/kg	NA	<0.0072	<0.0057	<0.0073	<0.0065	**0.020**	<0.0075
Ethylbenzene	0.24	mg/kg	NA	<0.0072	<0.0057	<0.0073	<0.0065	**4.7**	<0.0075
Isopropylbenzene	2	mg/kg	NA	<0.0072	<0.0057	<0.0073	<0.0065	**0.22**	<0.0075
p-Isopropyltoluene	NS	mg/kg	NA	<0.0072	<0.0057	<0.0073	<0.0065	**3.7**	<0.0075
Naphthalene	0.58	mg/kg	NA	<0.014	<0.011	<0.015	<0.013	**34**	<0.015
n-Propylbenzene	2	mg/kg	NA	<0.0072	<0.0057	<0.0073	<0.0065	**0.086**	<0.0075
Toluene	7	mg/kg	NA	<0.0072	<0.0057	<0.0073	<0.0065	**0.029**	<0.0075
1,2,4-Trimethylbenzene	8	mg/kg	NA	<0.0072	<0.0057	<0.0073	<0.0065	**29**	<0.0075
1,3,5-Trimethylbenzene	7	mg/kg	NA	<0.0072	<0.0057	<0.0073	<0.0065	**11**	<0.0075
Total Xylenes	5	mg/kg	NA	15.4	<0.011	<0.015	<0.013	**15.4**	<0.015
OTHER ANALYSES									
DRO	10	mg/kg	**5200**	NA	NA	NA	NA	NA	NA
GRO	10	mg/kg	**280**	NA	NA	NA	NA	NA	NA

NOTES:

DRO = Diesel Range Organics EPH = Extractable Petroleum Hydrocarbons
GRO = Gasoline Range Organics SVOCs - Semi Volatile Organic Compounds
VOCs - Volatile Organic Compounds VPH = Volatile Petroleum Hydrocarbons
ft bgs - Feet Below Ground Surface mg/kg - Milligrams per Kilogram
NA = Not Analyzed NS = No Standard
MSCCs = NC DENR Soil-to-Groundwater Maximum Soil Contamination Concentrations, April 2001.
Shaded values exceed the NCDENR soil-to-groundwater MSCCs

Laboratory data from EPH and VPH analyses for the following ranges have been combined to reflect the comparable standards from Table 4
C9-C18 Aliphatics & C9-C12Aliphatics - C9-C18 Aliphatics
C11-C22 Aromatics & C9-C10 Aromatics - C9-C22 Aromatics



LEGEND

N2 SAMPLE LOCATION

0 30 60

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.) ANALYTICAL DATA FOR SOIL SAMPLE MW–1 DID NOT REVEAL THE PRESENCE OF COMPOUNDS TARGETED BY EPA METHODS 8260, 8270, OR THE MADEP–VPH OR EPH METHODS AT LEVELS IN EXCESS OF THE RESPECTIVE REPORTABLE CONCENTRATIONS FOR THESE ANALYSES.

2.) ANALYTICAL DATA FOR GROUNDWATER SAMPLE MW–1 DID NOT REVEAL THE PRESENCE OF COMPOUNDS TARGETED BY EPA METHODS 602, 625, OR THE MADEP–VPH OR EPH METHODS AT LEVELS IN EXCESS OF THE 625, OR THE THE MADEP–VPH OR EPH METHODS AT LEVELS IN EXCESS OF THE RESPECTIVE REPORTABLE CONCENTRATIONS FOR THESE ANALYSES.

PARCEL 902 – FORMER M.T. GAINES PROPERTY
2937 WHITEROCK ROAD
GREENSBORO, GUILFORD COUNTY, NORTH CAROLINA
WBS ELEMENT: 34821.1.1; STATE PROJECT: U–2525B

SOIL AND GROUNDWATER SAMPLING RESULTS

FIGURE: 3

APPENDIX A

Well Construction Record (MW-1)

Boring Log (MW-1)

NON RESIDENTIAL WELL CONSTRUCTION RECORD

North Carolina Department of Environment and Natural Resources- Division of Water Quality

WELL CONTRACTOR CERTIFICATION # 3381

1. WELL CONTRACTOR:

Kevin Buchanan
Well Contractor (Individual) Name

Solutions-IES, Inc.
Well Contractor Company Name

STREET ADDRESS 1101 Nowell Road

Raleigh | NC | 27607
City or Town | State | Zip Code

(919)- 873-1060
Area code- Phone number

2. WELL INFORMATION:

SITE WELL ID #(if applicable) MW-1

STATE WELL PERMIT#(if applicable) N/A

DWQ or OTHER PERMIT #(if applicable) N/A

WELL USE (Check Applicable Box) Monitoring ☒ Municipal/Public ☐
Industrial/Commercial ☐ Agricultural ☐ Recovery ☐ Injection ☐
Irrigation ☐ Other ☐ (list use) _____

DATE DRILLED 09/13/06

TIME COMPLETED 1330 AM ☐ PM ☒

3. WELL LOCATION:

CITY: Greensboro COUNTY Guilford

2937 Whiterock Road Greensboro, NC 27405
(Street Name, Numbers, Community, Subdivision, Lot No., Parcel, Zip Code)

TOPOGRAPHIC / LAND SETTING:
☐ Slope ☐ Valley ☒ Flat ☐ Ridge ☐ Other _____
(check appropriate box)

LATITUDE 36° 08.568 N

LONGITUDE 79° 43.888 W

May be in degrees, minutes, seconds or in a decimal format

Latitude/longitude source: ☒ GPS ☐ Topographic map
(location of well must be shown on a USGS topo map and attached to this form if not using GPS)

4. FACILITY- is the name of the business where the well is located.

FACILITY ID #(if applicable) N/A

NAME OF FACILITY NCDOT Parcel 903 (Fmr. M.T. Gaines Prop.)

STREET ADDRESS 2937 Whiterock Road

Greensboro | NC | 27405
City or Town | State | Zip Code

CONTACT PERSON NCDOT Geotechnical Unit, Attn: Terry Fox

MAILING ADDRESS 1589 Mail Service Center

Raleigh, | NC | 27699-1589
City or Town | State | Zip Code

(919)- 250-4088
Area code - Phone number

5. WELL DETAILS:

a. **TOTAL DEPTH:** 44 feet

b. **DOES WELL REPLACE EXISTING WELL?** YES ☐ NO ☒

c. **WATER LEVEL** Below Top of Casing: 35 FT.
(Use "+" if Above Top of Casing)

d. **TOP OF CASING IS** 2.75 FT. Above Land Surface*
*Top of casing terminated at/or below land surface may require a variance in accordance with 15A NCAC 2C .0118.

e. **YIELD (gpm):** N/A **METHOD OF TEST** N/A

f. **DISINFECTION: Type** N/A **Amount** N/A

g. **WATER ZONES** (depth):

From ____ To ____ From ____ To ____
From ____ To ____ From ____ To ____
From ____ To ____ From ____ To ____

6. CASING:

	Depth		Diameter	Thickness/ Weight	Material
From 0.0	To 29.0	Ft.	1"	0.10	PVC
From ____	To ____	Ft.	____	____	____
From ____	To ____	Ft.	____	____	____

7. GROUT:

	Depth		Material	Method
From 0.0	To 5.0	Ft.	Neat Cement	Pour
From ____	To ____	Ft.	____	____
From ____	To ____	Ft.	____	____

8. SCREEN:

	Depth		Diameter		Slot Size		Material
From 29.0	To 44.0	Ft.	1"	in.	0.010	in.	PVC
From ____	To ____	Ft.	____	in.	____	in.	____
From ____	To ____	Ft.	____	in.	____	in.	____

9. SAND/GRAVEL PACK:

Depth			Size	Material
From 28.0	To 44.0	Ft.	#2	Washed Well Sand
From ____	To ____	Ft.	____	____
From ____	To ____	Ft.	____	____

10. DRILLING LOG

From	To	Formation Description
0.0	11.5	Dry to moist orange fine clayey SILT
11.5	18.4	Dry, orange & yellow fine weathered SILT
18.4	23.5	Moist, orange & yellow fine weathered SILT
23.5	32.5	Damp, orange, tan & pink weathered fine SILT
32.5	36.0	Damp, orange & tan weathered fine SILT
36.0	41.5	Wet, orange & tan weathered fine SILT
41.5	44.0	Wet, tan & orange weathered fine SILT

11. REMARKS:

Well finished at surface grade with lockable steel "stick-up" cover. Well completion tag affixed with rivets to "stick-up".

I DO HEREBY CERTIFY THAT THIS WELL WAS CONSTRUCTED IN ACCORDANCE WITH 15A NCAC 2C, WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.

Kevin B. Buchanan — 09/15/2006
SIGNATURE OF CERTIFIED WELL CONTRACTOR — DATE

KEVIN B. BUCHANAN
PRINTED NAME OF PERSON CONSTRUCTING THE WELL

Submit the original to the Division of Water Quality within 30 days. Attn: Information Mgt., 1617 Mail Service Center – Raleigh, NC 27699-1617 Phone No. (919) 733-7015 ext 568.

Form GW-1b
Rev. 7/05

COPY

Log of Soil Boring: B-1 (MW-1)

Project: NCDOT Parcel 902 | *Solutions-IES Project No.:* 3130.06A3.NDOT | *Boring Number:* 1

Client: NCDOT

WBS # 34821.1.1 | *Initial Water Level:* NA

State Project # 2525B | *County:* Guilford | *Stabilized Water Level:* 35.0' bgs

Drilling Method: Direct Push | *Boring Date:* 9/13/2006 | *Cave In Depth:* NA

Sampler Type: Macro Core | *Site:* Parcel 902

Logged By: K.B | *Checked By:* | *Total Depth of Boring:* 44.0' bgs

Depth ft. bgs	USCS Symbol	Description	Sample Interval	% Recovery	PID Field Screen ppm 250 500 750 / FID Field Screen ppm 250 500 750	Lab Sample Depth	Well Data
0		Ground Surface					
1–11		***ML*** Dry to moist, orange, clayey silt			Grout		
12–18		***MH*** Dry, orange and yellow, weathered silt			Bentonite (5-28' bgs)		
19–23		***MH*** Moist, orange and yellow, weathered silt		100			
24–32		***MH*** Damp, orange, tan, and pink, weathered silt					
33–41		***MH*** Damp, orange and tan, weathered silt			Sand		
42–44		***MH*** Wet, tan and orange, weathered silt					
45–46							

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

Solutions-IES
Industrial & Environmental Services

APPENDIX B

Sample Collection Details

SAMPLE COLLECTION DETAILS
PARCEL 902 – FORMER M.T. GAINES PROPERTY
2937 WHITEROCK ROAD
GREENSBORO, GUILFORD COUNTY, N.C.
SOLUTIONS-IES PROJECT NO. 3130.06A3.NDOT
WBS ELEMENT 34821.1.1
STATE PROJECT: U-2525B

Soil Sampling- Soil sampling activities conducted at the site were performed by Solutions-IES Personnel during the underground storage tank (UST) closure activities performed on May 31, 2006, and during the installation of monitoring well MW-1 on September 13, 2006. With the exception of soil sample MW-1, all soil samples were collected from the bucket of a backhoe during the closure activities. Closure sample T1 was collected from directly beneath the former tank. Corrective action samples N2, S2, E2 and W2 were collected from the north, south, east and western sidewalls of the excavation created in the removal of petroleum-impacted soils. Corrective action sample B1 was collected from the middle (base) of the resulting excavation at a depth of approximately 11-feet beneath bgs. These soil samples were submitted to Prism Laboratories under Chain-of-Custody control procedures for laboratory analysis.

Subsequently, on September 13, 2006 an additional soil sample (MW-1) was collected using a MacroCore sampling apparatus with a Geoprobe® drill rig. Soil samples were collected at four-foot intervals from 11 ft bgs to 44 ft bgs and screened for volatile vapor content with a Flame Ionization Detector (FID). No volatile vapors were detected with the FID. Soil sample MW-1 was collected from the depth interval of 32 to 34 ft bgs and submitted to Prism Laboratories, Inc. under Chain-of-Custody procedures. Soil sample MW-1 was analyzed for petroleum impacts using EPA Methods 8260B, 8270C, and the MADEP-VPH and EPH Methods. Analytical results for soil sample MW-1 did not indicate the presence of targeted compounds at levels in excess of the laboratory reporting limits.

Groundwater Sampling- In preparation for sampling, monitoring well MW-1 was developed using a ¾ inch diameter air operated bladder pump and disposable polyethylene tubing. Development/purge water removed from the well was discarded on site. On September 14, 2006 a groundwater sample was collected in laboratory-prepared glassware with the ¾ inch diameter air operated bladder pump, stored on ice and delivered by courier to Prism Laboratories, Inc. under Chain-of-Custody procedures.

APPENDIX C

Laboratory Reports – Soil and Groundwater Sample, MW-1

Chain of Custody Form

PRISM
LABORATORIES,INC.

Case Narrative (Revised)

Date: 10/11/06
Company: N. C. Department of Transportation
Contact: Sheri Knox
Address: c/o Solution - IES
1101 Nowell Road
Raleigh, NC 27607

Client Project ID: NCDOT Parcel 902
Prism COC Group No: G0906427
Collection Date(s): 09/13/06 thru 09/14/06
Lab Submittal Date(s): 09/15/06

Client Project Name Or No: Greensboro,NC WBS# 34821.1.1

This is a revised report and supersedes our original laboratory report dated 10/3/06. Client revised Project ID.

This data package contains the analytical results for the project identified above and includes a Case Narrative, Laboratory Report and Quality Control Data totaling 28 pages. A chain-of-custody is also attached for the samples submitted to Prism for this project.

Data qualifiers are flagged individually on each sample. A key reference for the data qualifiers appears at the end of this case narrative. Quality control statements and/or sample specific remarks are included in the sample comments section of the laboratory report for each sample affected.

Semi Volatile Analysis

Analysis Note for Q17967 MSD Pyrene: Recovery was outside of the control limits.

Volatile Analysis

No Anomalies Reported

Metals Analysis

N/A

Wet Lab and Micro Analysis

N/A

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

Date Reviewed by: Robbi A. Jones
Signature: Robbi A. Jones
Review Date: 10/11/06

Project Manager: Angela D. Overcash
Signature:
Approval Date: 10/11/06

Data Qualifiers Key Reference:

B: Compound also detected in the method blank.
#: Result outside of the QC limits.
DO: Compound diluted out.
E: Estimated concentration, calibration range exceeded.
J: The analyte was positively identified but the value is estimated below the reporting limit.
H: Estimated concentration with a high bias.
L: Estimated concentration with a low bias.
M: A matrix effect is present.

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

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

Laboratory Report

10/10/06

N. C. Department of Transportation
Attn: Sheri Knox
c/o Solution - IES
1101 Nowell Road
Raleigh, NC 27607

Project Name: Greensboro,NC
Project ID: NCDOT Parcel 902
Project No.: WBS# 34821.1.1
Sample Matrix: Soil

Client Sample ID: MW-1
Prism Sample ID: 161268
COC Group: G0906427
Time Collected: 09/13/06 13:30
Time Submitted: 09/15/06 16:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Percent Solids Determination									
Percent Solids	**62.8**	%			1	SM2540 G	09/20/06 16:15	lthao	
Sample Weight Determination									
Weight Bisulfate 1	**5.29**	g			1	5035	09/20/06 0:00	lbrown	
Weight Bisulfate 2	**5.30**	g			1	5035	09/20/06 0:00	lbrown	
Weight Methanol	**4.90**	g			1	5035	09/20/06 0:00	lbrown	
Volatile Organic Compounds by GC/MS									
1,1,1-Trichloroethane	**BRL**	mg/kg	0.0075	0.00042	1	8260B	09/21/06 1:02	erussell	Q17891
1,1,2,2-Tetrachloroethane	**BRL**	mg/kg	0.0075	0.00077	1	8260B	09/21/06 1:02	erussell	Q17891
1,1,2-Trichloroethane	**BRL**	mg/kg	0.0075	0.00047	1	8260B	09/21/06 1:02	erussell	Q17891
1,1-Dichloroethane	**BRL**	mg/kg	0.0075	0.00054	1	8260B	09/21/06 1:02	erussell	Q17891
1,1-Dichloroethene	**BRL**	mg/kg	0.0075	0.00057	1	8260B	09/21/06 1:02	erussell	Q17891
1,1-Dichloropropene	**BRL**	mg/kg	0.0075	0.00066	1	8260B	09/21/06 1:02	erussell	Q17891
1,2,3-Trichlorobenzene	**BRL**	mg/kg	0.0075	0.00083	1	8260B	09/21/06 1:02	erussell	Q17891
1,2,3-Trichloropropane	**BRL**	mg/kg	0.0075	0.00066	1	8260B	09/21/06 1:02	erussell	Q17891
1,2,4-Trichlorobenzene	**BRL**	mg/kg	0.0075	0.00072	1	8260B	09/21/06 1:02	erussell	Q17891
1,2,4-Trimethylbenzene	**BRL**	mg/kg	0.0075	0.00057	1	8260B	09/21/06 1:02	erussell	Q17891
1,2-Dibromoethane (EDB)	**BRL**	mg/kg	0.0075	0.00014	1	8260B	09/21/06 1:02	erussell	Q17891
1,2-Dichlorobenzene	**BRL**	mg/kg	0.0075	0.00041	1	8260B	09/21/06 1:02	erussell	Q17891
1,2-Dichloroethane	**BRL**	mg/kg	0.0075	0.00075	1	8260B	09/21/06 1:02	erussell	Q17891
1,2-Dichloropropane	**BRL**	mg/kg	0.0075	0.00056	1	8260B	09/21/06 1:02	erussell	Q17891
1,3,5-Trimethylbenzene	**BRL**	mg/kg	0.0075	0.00063	1	8260B	09/21/06 1:02	erussell	Q17891
1,3-Dichlorobenzene	**BRL**	mg/kg	0.0075	0.00065	1	8260B	09/21/06 1:02	erussell	Q17891
1,3-Dichloropropane	**BRL**	mg/kg	0.0075	0.00051	1	8260B	09/21/06 1:02	erussell	Q17891
1,4-Dichlorobenzene	**BRL**	mg/kg	0.0075	0.00059	1	8260B	09/21/06 1:02	erussell	Q17891
2,2-Dichloropropane	**BRL**	mg/kg	0.0075	0.00038	1	8260B	09/21/06 1:02	erussell	Q17891
2-Chlorotoluene	**BRL**	mg/kg	0.0075	0.00056	1	8260B	09/21/06 1:02	erussell	Q17891

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NC Drinking Water Cert. No. 37735

Laboratory Report

10/10/06

N. C. Department of Transportation
Attn: Sheri Knox
c/o Solution - IES
1101 Nowell Road
Raleigh, NC 27607

Project Name: Greensboro,NC
Project ID: NCDOT Parcel 902
Project No.: WBS# 34821.1.1
Sample Matrix: Soil

Client Sample ID: MW-1
Prism Sample ID: 161268
COC Group: G0906427
Time Collected: 09/13/06 13:30
Time Submitted: 09/15/06 16:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
2-Hexanone	BRL	mg/kg	0.075	0.00078	1	8260B	09/21/06 1:02	erussell	Q17891
4-Chlorotoluene	BRL	mg/kg	0.0075	0.00039	1	8260B	09/21/06 1:02	erussell	Q17891
4-Methyl-2-pentanone (MIBK)	BRL	mg/kg	0.075	0.00075	1	8260B	09/21/06 1:02	erussell	Q17891
Acetone	BRL	mg/kg	0.075	0.0029	1	8260B	09/21/06 1:02	erussell	Q17891
Benzene	BRL	mg/kg	0.0045	0.0006	1	8260B	09/21/06 1:02	erussell	Q17891
Bromobenzene	BRL	mg/kg	0.0075	0.00053	1	8260B	09/21/06 1:02	erussell	Q17891
Bromochloromethane	BRL	mg/kg	0.0075	0.00045	1	8260B	09/21/06 1:02	erussell	Q17891
Bromodichloromethane	BRL	mg/kg	0.0075	0.00066	1	8260B	09/21/06 1:02	erussell	Q17891
Bromoform	BRL	mg/kg	0.0075	0.00056	1	8260B	09/21/06 1:02	erussell	Q17891
Bromomethane	BRL	mg/kg	0.015	0.00087	1	8260B	09/21/06 1:02	erussell	Q17891
Carbon tetrachloride	BRL	mg/kg	0.0075	0.00044	1	8260B	09/21/06 1:02	erussell	Q17891
Chlorobenzene	BRL	mg/kg	0.0075	0.00057	1	8260B	09/21/06 1:02	erussell	Q17891
Chlorodibromomethane	BRL	mg/kg	0.0075	0.00051	1	8260B	09/21/06 1:02	erussell	Q17891
Chloroethane	BRL	mg/kg	0.015	0.00062	1	8260B	09/21/06 1:02	erussell	Q17891
Chloroform	BRL	mg/kg	0.0075	0.00056	1	8260B	09/21/06 1:02	erussell	Q17891
Chloromethane	BRL	mg/kg	0.0075	0.00053	1	8260B	09/21/06 1:02	erussell	Q17891
cis-1,2-Dichloroethene	BRL	mg/kg	0.0075	0.00033	1	8260B	09/21/06 1:02	erussell	Q17891
cis-1,3-Dichloropropene	BRL	mg/kg	0.0075	0.00048	1	8260B	09/21/06 1:02	erussell	Q17891
Dichlorodifluoromethane	BRL	mg/kg	0.0075	0.0017	1	8260B	09/21/06 1:02	erussell	Q17891
Ethylbenzene	BRL	mg/kg	0.0075	0.00053	1	8260B	09/21/06 1:02	erussell	Q17891
Isopropyl ether (IPE)	BRL	mg/kg	0.0075	0.00026	1	8260B	09/21/06 1:02	erussell	Q17891
Isopropylbenzene	BRL	mg/kg	0.0075	0.0006	1	8260B	09/21/06 1:02	erussell	Q17891
m,p-Xylenes	BRL	mg/kg	0.015	0.0011	1	8260B	09/21/06 1:02	erussell	Q17891
Methyl ethyl ketone (MEK)	BRL	mg/kg	0.15	0.0021	1	8260B	09/21/06 1:02	erussell	Q17891
Methyl t-butyl ether (MTBE)	BRL	mg/kg	0.015	0.00044	1	8260B	09/21/06 1:02	erussell	Q17891
Methylene chloride	BRL	mg/kg	0.0075	0.00062	1	8260B	09/21/06 1:02	erussell	Q17891
n-Butylbenzene	BRL	mg/kg	0.0075	0.0006	1	8260B	09/21/06 1:02	erussell	Q17891
n-Propylbenzene	BRL	mg/kg	0.0075	0.00045	1	8260B	09/21/06 1:02	erussell	Q17891

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NC Drinking Water Cert. No. 37735

Laboratory Report

10/10/06

N. C. Department of Transportation
Attn: Sheri Knox
c/o Solution - IES
1101 Nowell Road
Raleigh, NC 27607

Project Name: Greensboro,NC
Project ID: NCDOT Parcel 902
Project No.: WBS# 34821.1.1
Sample Matrix: Soil

Client Sample ID: MW-1
Prism Sample ID: 161268
COC Group: G0906427
Time Collected: 09/13/06 13:30
Time Submitted: 09/15/06 16:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Naphthalene	BRL	mg/kg	0.015	0.00087	1	8260B	09/21/06 1:02	erussell	Q17891
o-Xylene	BRL	mg/kg	0.0075	0.00045	1	8260B	09/21/06 1:02	erussell	Q17891
p-Isopropyltoluene	BRL	mg/kg	0.0075	0.00062	1	8260B	09/21/06 1:02	erussell	Q17891
sec-Butylbenzene	BRL	mg/kg	0.0075	0.0005	1	8260B	09/21/06 1:02	erussell	Q17891
Styrene	BRL	mg/kg	0.0075	0.00075	1	8260B	09/21/06 1:02	erussell	Q17891
tert-Butylbenzene	BRL	mg/kg	0.0075	0.00047	1	8260B	09/21/06 1:02	erussell	Q17891
Tetrachloroethene	BRL	mg/kg	0.0075	0.0013	1	8260B	09/21/06 1:02	erussell	Q17891
Toluene	BRL	mg/kg	0.0075	0.00051	1	8260B	09/21/06 1:02	erussell	Q17891
trans-1,2-Dichloroethene	BRL	mg/kg	0.0075	0.00057	1	8260B	09/21/06 1:02	erussell	Q17891
trans-1,3-Dichloropropene	BRL	mg/kg	0.0075	0.00053	1	8260B	09/21/06 1:02	erussell	Q17891
Trichloroethene	BRL	mg/kg	0.0075	0.00045	1	8260B	09/21/06 1:02	erussell	Q17891
Trichlorofluoromethane	BRL	mg/kg	0.0075	0.00062	1	8260B	09/21/06 1:02	erussell	Q17891
Vinyl acetate	BRL	mg/kg	0.038	0.0027	1	8260B	09/21/06 1:02	erussell	Q17891
Vinyl chloride	BRL	mg/kg	0.0075	0.00096	1	8260B	09/21/06 1:02	erussell	Q17891

Surrogate	% Recovery	Control Limits
Toluene-d8	101	81 - 128
Dibromofluoromethane	106	67 - 143
Bromofluorobenzene	106	77 - 128

Semi-volatile Organic Compounds by GC/MS

1,2,4-Trichlorobenzene	BRL	mg/kg	0.53	0.088	1	8270C	09/20/06 18:35	kelliot	Q17867
1,2-Dichlorobenzene	BRL	mg/kg	0.53	0.072	1	8270C	09/20/06 18:35	kelliot	Q17867
1,3-Dichlorobenzene	BRL	mg/kg	0.53	0.055	1	8270C	09/20/06 18:35	kelliot	Q17867
1,4-Dichlorobenzene	BRL	mg/kg	0.53	0.043	1	8270C	09/20/06 18:35	kelliot	Q17867
2,4,5-Trichlorophenol	BRL	mg/kg	0.53	0.12	1	8270C	09/20/06 18:35	kelliot	Q17867
2,4,6-Trichlorophenol	BRL	mg/kg	0.53	0.11	1	8270C	09/20/06 18:35	kelliot	Q17867
2,4-Dichlorophenol	BRL	mg/kg	0.53	0.11	1	8270C	09/20/06 18:35	kelliot	Q17867

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Laboratory Report

10/10/06

N. C. Department of Transportation
Attn: Sheri Knox
c/o Solution - IES
1101 Nowell Road
Raleigh, NC 27607

Project Name: Greensboro,NC
Project ID: NCDOT Parcel 902
Project No.: WBS# 34821.1.1
Sample Matrix: Soil

Client Sample ID: MW-1
Prism Sample ID: 161268
COC Group: G0906427
Time Collected: 09/13/06 13:30
Time Submitted: 09/15/06 16:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
2,4-Dimethylphenol	BRL	mg/kg	0.53	0.10	1	8270C	09/20/06 18:35	kelliot	Q17867
2,4-Dinitrophenol	BRL	mg/kg	2.6	0.13	1	8270C	09/20/06 18:35	kelliot	Q17867
2,4-Dinitrotoluene	BRL	mg/kg	0.53	0.082	1	8270C	09/20/06 18:35	kelliot	Q17867
2,6-Dinitrotoluene	BRL	mg/kg	0.53	0.063	1	8270C	09/20/06 18:35	kelliot	Q17867
2-Chloronaphthalene	BRL	mg/kg	0.53	0.087	1	8270C	09/20/06 18:35	kelliot	Q17867
2-Chlorophenol	BRL	mg/kg	0.53	0.053	1	8270C	09/20/06 18:35	kelliot	Q17867
2-Methylnaphthalene	BRL	mg/kg	0.53	0.090	1	8270C	09/20/06 18:35	kelliot	Q17867
2-Methylphenol	BRL	mg/kg	0.53	0.085	1	8270C	09/20/06 18:35	kelliot	Q17867
2-Nitrophenol	BRL	mg/kg	0.53	0.067	1	8270C	09/20/06 18:35	kelliot	Q17867
3&4-Methylphenol	BRL	mg/kg	0.53	0.083	1	8270C	09/20/06 18:35	kelliot	Q17867
3,3'-Dichlorobenzidine	BRL	mg/kg	1.1	0.18	1	8270C	09/20/06 18:35	kelliot	Q17867
4,6-Dinitro-2-methylphenol	BRL	mg/kg	2.6	0.12	1	8270C	09/20/06 18:35	kelliot	Q17867
4-Bromophenylphenylether	BRL	mg/kg	0.53	0.088	1	8270C	09/20/06 18:35	kelliot	Q17867
4-Chloro-3-methylphenol	BRL	mg/kg	1.1	0.10	1	8270C	09/20/06 18:35	kelliot	Q17867
4-Chloroaniline	BRL	mg/kg	0.53	0.12	1	8270C	09/20/06 18:35	kelliot	Q17867
4-Chlorophenylphenylether	BRL	mg/kg	0.53	0.080	1	8270C	09/20/06 18:35	kelliot	Q17867
4-Nitrophenol	BRL	mg/kg	2.6	0.13	1	8270C	09/20/06 18:35	kelliot	Q17867
Acenaphthene	BRL	mg/kg	0.53	0.10	1	8270C	09/20/06 18:35	kelliot	Q17867
Acenaphthylene	BRL	mg/kg	0.53	0.10	1	8270C	09/20/06 18:35	kelliot	Q17867
Anthracene	BRL	mg/kg	0.53	0.064	1	8270C	09/20/06 18:35	kelliot	Q17867
Azobenzene	BRL	mg/kg	2.6	0.27	1	8270C	09/20/06 18:35	kelliot	Q17867
Benzo(a)anthracene	BRL	mg/kg	0.53	0.10	1	8270C	09/20/06 18:35	kelliot	Q17867
Benzo(a)pyrene	BRL	mg/kg	0.53	0.053	1	8270C	09/20/06 18:35	kelliot	Q17867
Benzo(b)fluoranthene	BRL	mg/kg	0.53	0.071	1	8270C	09/20/06 18:35	kelliot	Q17867
Benzo(g,h,i)perylene	BRL	mg/kg	0.53	0.12	1	8270C	09/20/06 18:35	kelliot	Q17867
Benzo(k)fluoranthene	BRL	mg/kg	0.53	0.063	1	8270C	09/20/06 18:35	kelliot	Q17867
Benzoic acid	BRL	mg/kg	2.6	0.22	1	8270C	09/20/06 18:35	kelliot	Q17867
Benzyl alcohol	BRL	mg/kg	1.1	0.087	1	8270C	09/20/06 18:35	kelliot	Q17867

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NC Drinking Water Cert. No. 37735

Laboratory Report

10/10/06

N. C. Department of Transportation
Attn: Sheri Knox
c/o Solution - IES
1101 Nowell Road
Raleigh, NC 27607

Project Name: Greensboro,NC
Project ID: NCDOT Parcel 902
Project No.: WBS# 34821.1.1
Sample Matrix: Soil

Client Sample ID: MW-1
Prism Sample ID: 161268
COC Group: G0906427
Time Collected: 09/13/06 13:30
Time Submitted: 09/15/06 16:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Bis(2-chloroethoxy)methane	BRL	mg/kg	0.53	0.10	1	8270C	09/20/06 18:35	kelliot	Q17867
Bis(2-chloroethyl)ether	BRL	mg/kg	0.53	0.037	1	8270C	09/20/06 18:35	kelliot	Q17867
Bis(2-chloroisopropyl)ether	BRL	mg/kg	0.53	0.074	1	8270C	09/20/06 18:35	kelliot	Q17867
Bis(2-ethylhexyl)phthalate	BRL	mg/kg	0.53	0.058	1	8270C	09/20/06 18:35	kelliot	Q17867
Butylbenzylphthalate	BRL	mg/kg	0.53	0.055	1	8270C	09/20/06 18:35	kelliot	Q17867
Chrysene	BRL	mg/kg	0.53	0.10	1	8270C	09/20/06 18:35	kelliot	Q17867
Di-n-butylphthalate	BRL	mg/kg	0.53	0.072	1	8270C	09/20/06 18:35	kelliot	Q17867
Di-n-octylphthalate	BRL	mg/kg	0.53	0.091	1	8270C	09/20/06 18:35	kelliot	Q17867
Dibenzo(a,h)anthracene	BRL	mg/kg	0.53	0.13	1	8270C	09/20/06 18:35	kelliot	Q17867
Dibenzofuran	BRL	mg/kg	0.53	0.098	1	8270C	09/20/06 18:35	kelliot	Q17867
Diethylphthalate	BRL	mg/kg	0.53	0.053	1	8270C	09/20/06 18:35	kelliot	Q17867
Dimethylphthalate	BRL	mg/kg	0.53	0.072	1	8270C	09/20/06 18:35	kelliot	Q17867
Fluoranthene	BRL	mg/kg	0.53	0.064	1	8270C	09/20/06 18:35	kelliot	Q17867
Fluorene	BRL	mg/kg	0.53	0.10	1	8270C	09/20/06 18:35	kelliot	Q17867
Hexachlorobenzene	BRL	mg/kg	0.53	0.077	1	8270C	09/20/06 18:35	kelliot	Q17867
Hexachlorobutadiene	BRL	mg/kg	0.53	0.069	1	8270C	09/20/06 18:35	kelliot	Q17867
Hexachlorocyclopentadiene	BRL	mg/kg	0.53	0.12	1	8270C	09/20/06 18:35	kelliot	Q17867
Hexachloroethane	BRL	mg/kg	0.53	0.071	1	8270C	09/20/06 18:35	kelliot	Q17867
Indeno(1,2,3-cd)pyrene	BRL	mg/kg	0.53	0.13	1	8270C	09/20/06 18:35	kelliot	Q17867
Isophorone	BRL	mg/kg	0.53	0.098	1	8270C	09/20/06 18:35	kelliot	Q17867
N-Nitrosodi-n-propylamine	BRL	mg/kg	0.53	0.096	1	8270C	09/20/06 18:35	kelliot	Q17867
N-Nitrosodiphenylamine	BRL	mg/kg	0.53	0.077	1	8270C	09/20/06 18:35	kelliot	Q17867
Naphthalene	BRL	mg/kg	0.53	0.074	1	8270C	09/20/06 18:35	kelliot	Q17867
Nitrobenzene	BRL	mg/kg	0.53	0.096	1	8270C	09/20/06 18:35	kelliot	Q17867
Pentachlorophenol	BRL	mg/kg	2.6	0.069	1	8270C	09/20/06 18:35	kelliot	Q17867
Phenanthrene	BRL	mg/kg	0.53	0.059	1	8270C	09/20/06 18:35	kelliot	Q17867
Phenol	BRL	mg/kg	0.53	0.064	1	8270C	09/20/06 18:35	kelliot	Q17867
Pyrene	BRL	mg/kg	0.53	0.042	1	8270C	09/20/06 18:35	kelliot	Q17867

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Laboratory Report

10/10/06

N. C. Department of Transportation
Attn: Sheri Knox
c/o Solution - IES
1101 Nowell Road
Raleigh, NC 27607

Project Name: Greensboro,NC
Project ID: NCDOT Parcel 902
Project No.: WBS# 34821.1.1
Sample Matrix: Soil

Client Sample ID: MW-1
Prism Sample ID: 161268
COC Group: G0906427
Time Collected: 09/13/06 13:30
Time Submitted: 09/15/06 16:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Sample Preparation:			29.76 g / 1 mL			3550B	09/20/06 9:00	dpope	P16379

Surrogate	% Recovery	Control Limits
Terphenyl-d14	95	41 - 136
Phenol-d5	57	13 - 95
Nitrobenzene-d5	62	14 - 103
2-Fluorophenol	61	14 - 89
2-Fluorobiphenyl	70	21 - 108
2,4,6-Tribromophenol	97	25 - 123

Extractable Petroleum Hydrocarbons by GC-FID

C11-C22 Aromatics	BRL	mg/kg	16	16	1	MADEP EPH	09/21/06 22:12	grappaccioli	Q17907
C19-C36 Aliphatics	BRL	mg/kg	16	10	1	MADEP EPH	09/21/06 22:12	grappaccioli	Q17907
C9-C18 Aliphatics	BRL	mg/kg	16	14	1	MADEP EPH	09/21/06 22:12	grappaccioli	Q17907

* Analysis Note for C11-C22 Aromatics: Adjusted value.

Sample Preparation:	9.66 g / 2 mL		EPH	09/21/06 12:00	dpope	P16382		

Surrogate	% Recovery	Control Limits
o-Terphenyl	108	40 - 140
2-Fluorobiphenyl	120	40 - 140
2-Bromonaphthalene	55	40 - 140
1-Chloro-octadecane	112	40 - 140

Volatile Petroleum Hydrocarbons by GC-PID/FID

C5-C8 Aliphatics	BRL	mg/kg	11	5.6	1	MADEP VPH	09/23/06 10:21	erussell	Q17834
C9-C10 Aromatics	BRL	mg/kg	11	5.6	1	MADEP VPH	09/23/06 10:21	erussell	Q17834
C9-C12 Aliphatics	BRL	mg/kg	11	5.6	1	MADEP VPH	09/23/06 10:21	erussell	Q17834

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Project Name: Greensboro,NC
Project ID: NCDOT Parcel 902
Project No.: WBS# 34821.1.1
Sample Matrix: Soil

Client Sample ID: MW-1
Prism Sample ID: 161268
COC Group: G0906427
Time Collected: 09/13/06 13:30
Time Submitted: 09/15/06 16:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID

* Analysis Note for C5-C8 Aliphatics: Adjusted value.
* Analysis Note for C9-C12 Aliphatics: Adjusted value.

Surrogate	% Recovery	Control Limits
2,5-Dibromotoluene-PID	83	70 - 130
2,5-Dibromotoluene-FID	88	70 - 130

Sample Weight Determination

Weight 1	**16.03**	g	1	MADEP VPH	09/20/06 0:00	lbrown
Weight 2	**17.01**	g	1	MADEP VPH	09/20/06 0:00	lbrown

Sample Comment(s):

BRL = Below Reporting Limit

J = Estimated value between the Reporting Limit and the MDL

The results in this report relate only to the samples submitted for analysis and meet state certification requirements other than NELAC certification except for those instances indicated in the case narrative and/or test comments.

All results are reported on a dry-weight basis

Angela D. Overcash, V.P. Laboratory Services

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PRISM LABORATORIES
Full Service Analytical & Environmental Solutions

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

Laboratory Report

10/10/06

N. C. Department of Transportation
Attn: Sheri Knox
c/o Solution - IES
1101 Nowell Road
Raleigh, NC 27607

Project Name: Greensboro,NC
Project ID: NCDOT Parcel 902
Project No.: WBS# 34821.1.1
Sample Matrix: Water

Client Sample ID: MW-1
Prism Sample ID: 161269
COC Group: G0906427
Time Collected: 09/14/06 11:30
Time Submitted: 09/15/06 16:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Purgeable Aromatics by GC-PID									
Benzene	BRL	µg/L	0.50	0.090	1	601/602	09/23/06 14:09	erussell	Q17934
Ethylbenzene	BRL	µg/L	1.0	0.13	1	601/602	09/23/06 14:09	erussell	Q17934
Isopropyl ether (IPE)	BRL	µg/L	5.0	0.041	1	601/602	09/23/06 14:09	erussell	Q17934
m,p-Xylenes	BRL	µg/L	2.0	0.43	1	601/602	09/23/06 14:09	erussell	Q17934
Methyl t-butyl ether (MTBE)	BRL	µg/L	5.0	0.28	1	601/602	09/23/06 14:09	erussell	Q17934
Naphthalene	BRL	µg/L	1.0	0.28	1	601/602	09/23/06 14:09	erussell	Q17934
o-Xylene	BRL	µg/L	1.0	0.29	1	601/602	09/23/06 14:09	erussell	Q17934
Toluene	BRL	µg/L	1.0	0.13	1	601/602	09/23/06 14:09	erussell	Q17934

Surrogate	% Recovery	Control Limits
1,4-Difluorobenzene-PID	100	69 - 140

Semivolatile Organic Compounds by GC/MS									
1,2,4-Trichlorobenzene	BRL	µg/L	10	3.3	1	625	09/26/06 5:30	kelliot	Q17967
1,2-Dichlorobenzene	BRL	µg/L	10	2.9	1	625	09/26/06 5:30	kelliot	Q17967
1,3-Dichlorobenzene	BRL	µg/L	10	2.9	1	625	09/26/06 5:30	kelliot	Q17967
1,4-Dichlorobenzene	BRL	µg/L	10	3.1	1	625	09/26/06 5:30	kelliot	Q17967
2,4,5-Trichlorophenol	BRL	µg/L	10	2.9	1	625	09/26/06 5:30	kelliot	Q17967
2,4,6-Trichlorophenol	BRL	µg/L	10	3.0	1	625	09/26/06 5:30	kelliot	Q17967
2,4-Dichlorophenol	BRL	µg/L	10	3.1	1	625	09/26/06 5:30	kelliot	Q17967
2,4-Dimethylphenol	BRL	µg/L	10	3.0	1	625	09/26/06 5:30	kelliot	Q17967
2,4-Dinitrophenol	BRL	µg/L	50	1.3	1	625	09/26/06 5:30	kelliot	Q17967
2,4-Dinitrotoluene	BRL	µg/L	10	1.4	1	625	09/26/06 5:30	kelliot	Q17967
2,6-Dinitrotoluene	BRL	µg/L	10	2.4	1	625	09/26/06 5:30	kelliot	Q17967
2-Chloronaphthalene	BRL	µg/L	10	3.0	1	625	09/26/06 5:30	kelliot	Q17967
2-Chlorophenol	BRL	µg/L	10	3.2	1	625	09/26/06 5:30	kelliot	Q17967
2-Methylphenol	BRL	µg/L	10	3.0	1	625	09/26/06 5:30	kelliot	Q17967

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Laboratory Report

10/10/06

N. C. Department of Transportation
Attn: Sheri Knox
c/o Solution - IES
1101 Nowell Road
Raleigh, NC 27607

Project Name: Greensboro,NC
Project ID: NCDOT Parcel 902
Project No.: WBS# 34821.1.1
Sample Matrix: Water

Client Sample ID: MW-1
Prism Sample ID: 161269
COC Group: G0906427
Time Collected: 09/14/06 11:30
Time Submitted: 09/15/06 16:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
2-Nitrophenol	BRL	µg/L	10	3.2	1	625	09/26/06 5:30	kelliot	Q17967
3&4-Methylphenol	BRL	µg/L	10	2.9	1	625	09/26/06 5:30	kelliot	Q17967
3,3´-Dichlorobenzidine	BRL	µg/L	50	1.3	1	625	09/26/06 5:30	kelliot	Q17967
4,6-Dinitro-2-methylphenol	BRL	µg/L	50	0.89	1	625	09/26/06 5:30	kelliot	Q17967
4-Bromophenylphenylether	BRL	µg/L	10	1.9	1	625	09/26/06 5:30	kelliot	Q17967
4-Chloro-3-methylphenol	BRL	µg/L	10	2.7	1	625	09/26/06 5:30	kelliot	Q17967
4-Chlorophenylphenylether	BRL	µg/L	10	2.8	1	625	09/26/06 5:30	kelliot	Q17967
4-Nitrophenol	BRL	µg/L	50	1.9	1	625	09/26/06 5:30	kelliot	Q17967
Acenaphthene	BRL	µg/L	10	2.8	1	625	09/26/06 5:30	kelliot	Q17967
Acenaphthylene	BRL	µg/L	10	3.2	1	625	09/26/06 5:30	kelliot	Q17967
Anthracene	BRL	µg/L	10	1.4	1	625	09/26/06 5:30	kelliot	Q17967
Benzo(a)anthracene	BRL	µg/L	10	1.2	1	625	09/26/06 5:30	kelliot	Q17967
Benzo(a)pyrene	BRL	µg/L	10	1.1	1	625	09/26/06 5:30	kelliot	Q17967
Benzo(b)fluoranthene	BRL	µg/L	10	1.4	1	625	09/26/06 5:30	kelliot	Q17967
Benzo(g,h,i)perylene	BRL	µg/L	10	1.0	1	625	09/26/06 5:30	kelliot	Q17967
Benzo(k)fluoranthene	BRL	µg/L	10	1.3	1	625	09/26/06 5:30	kelliot	Q17967
Bis(2-chloroethoxy)methane	BRL	µg/L	10	3.3	1	625	09/26/06 5:30	kelliot	Q17967
Bis(2-chloroethyl)ether	BRL	µg/L	10	3.0	1	625	09/26/06 5:30	kelliot	Q17967
Bis(2-chloroisopropyl)ether	BRL	µg/L	10	3.2	1	625	09/26/06 5:30	kelliot	Q17967
Bis(2-ethylhexyl)phthalate	BRL	µg/L	10	1.2	1	625	09/26/06 5:30	kelliot	Q17967
Butylbenzylphthalate	BRL	µg/L	10	0.94	1	625	09/26/06 5:30	kelliot	Q17967
Chrysene	BRL	µg/L	10	1.1	1	625	09/26/06 5:30	kelliot	Q17967
Di-n-butylphthalate	BRL	µg/L	10	1.1	1	625	09/26/06 5:30	kelliot	Q17967
Di-n-octylphthalate	BRL	µg/L	10	1.0	1	625	09/26/06 5:30	kelliot	Q17967
Dibenzo(a,h)anthracene	BRL	µg/L	10	0.72	1	625	09/26/06 5:30	kelliot	Q17967
Dibenzofuran	BRL	µg/L	10	2.9	1	625	09/26/06 5:30	kelliot	Q17967
Diethylphthalate	BRL	µg/L	10	1.9	1	625	09/26/06 5:30	kelliot	Q17967
Dimethylphthalate	BRL	µg/L	10	2.0	1	625	09/26/06 5:30	kelliot	Q17967

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Laboratory Report

10/10/06

N. C. Department of Transportation
Attn: Sheri Knox
c/o Solution - IES
1101 Nowell Road
Raleigh, NC 27607

Project Name: Greensboro,NC
Project ID: NCDOT Parcel 902
Project No.: WBS# 34821.1.1
Sample Matrix: Water

Client Sample ID: MW-1
Prism Sample ID: 161269
COC Group: G0906427
Time Collected: 09/14/06 11:30
Time Submitted: 09/15/06 16:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Fluoranthene	BRL	µg/L	10	1.2	1	625	09/26/06 5:30	kelliot	Q17967
Fluorene	BRL	µg/L	10	2.9	1	625	09/26/06 5:30	kelliot	Q17967
Hexachlorobenzene	BRL	µg/L	10	1.5	1	625	09/26/06 5:30	kelliot	Q17967
Hexachlorobutadiene	BRL	µg/L	10	3.3	1	625	09/26/06 5:30	kelliot	Q17967
Hexachlorocyclopentadiene	BRL	µg/L	10	3.3	1	625	09/26/06 5:30	kelliot	Q17967
Hexachloroethane	BRL	µg/L	10	3.1	1	625	09/26/06 5:30	kelliot	Q17967
Indeno(1,2,3-cd)pyrene	BRL	µg/L	10	1.3	1	625	09/26/06 5:30	kelliot	Q17967
Isophorone	BRL	µg/L	10	3.0	1	625	09/26/06 5:30	kelliot	Q17967
N-Nitrosodi-n-propylamine	BRL	µg/L	10	3.3	1	625	09/26/06 5:30	kelliot	Q17967
Naphthalene	BRL	µg/L	10	3.3	1	625	09/26/06 5:30	kelliot	Q17967
Nitrobenzene	BRL	µg/L	10	3.1	1	625	09/26/06 5:30	kelliot	Q17967
Pentachlorophenol	BRL	µg/L	10	0.53	1	625	09/26/06 5:30	kelliot	Q17967
Phenanthrene	BRL	µg/L	10	1.3	1	625	09/26/06 5:30	kelliot	Q17967
Phenol	BRL	µg/L	10	2.5	1	625	09/26/06 5:30	kelliot	Q17967
Pyrene	BRL	µg/L	10	1.3	1	625	09/26/06 5:30	kelliot	Q17967
Sample Preparation:			1000 mL	/	1 mL	625	09/21/06 10:00	smanivanh	P16402

Surrogate	% Recovery	Control Limits
Terphenyl-d14	93	10 - 154
Phenol-d5	14	10 - 48
Nitrobenzene-d5	58	22 - 103
2-Fluorophenol	22	10 - 59
2-Fluorobiphenyl	53	29 - 112
2,4,6-Tribromophenol	74	27 - 125

TIC's By 625 — **Est.Conc** — **Units**

No TICs were detected.

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Laboratory Report

10/10/06

N. C. Department of Transportation
Attn: Sheri Knox
c/o Solution - IES
1101 Nowell Road
Raleigh, NC 27607

Project Name: Greensboro,NC
Project ID: NCDOT Parcel 902
Project No.: WBS# 34821.1.1
Sample Matrix: Water

Client Sample ID: MW-1
Prism Sample ID: 161269
COC Group: G0906427
Time Collected: 09/14/06 11:30
Time Submitted: 09/15/06 16:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Extractable Petroleum Hydrocarbons by GC-FID									
C11-C22 Aromatics	**BRL**	µg/L	110	75	1	MADEP EPH	09/27/06 9:46	grappaccioli	Q17946
C19-C36 Aliphatics	**BRL**	µg/L	110	33	1	MADEP EPH	09/27/06 9:46	grappaccioli	Q17946
C9-C18 Aliphatics	**BRL**	µg/L	110	79	1	MADEP EPH	09/27/06 9:46	grappaccioli	Q17946

* Analysis Note for C11-C22 Aromatics: Adjusted value.

Sample Preparation:			950 mL / 2 mL			EPH	09/22/06 8:00	smanivanh	P16400

Surrogate	% Recovery	Control Limits
o-Terphenyl	103	40 - 140
2-Fluorobiphenyl	90	40 - 140
2-Bromonaphthalene	47	40 - 140
1-Chloro-octadecane	99	40 - 140

Volatile Petroleum Hydrocarbons by GC-PID/FID									
C5-C8 Aliphatics	**BRL**	µg/L	100	50	1	MADEP VPH	09/26/06 16:40	erussell	Q18009
C9-C10 Aromatics	**BRL**	µg/L	100	35	1	MADEP VPH	09/26/06 16:40	erussell	Q18009
C9-C12 Aliphatics	**BRL**	µg/L	100	50	1	MADEP VPH	09/26/06 16:40	erussell	Q18009

* Analysis Note for C5-C8 Aliphatics: Adjusted value.
* Analysis Note for C9-C12 Aliphatics: Adjusted value.

Surrogate	% Recovery	Control Limits
2,5-Dibromotoluene-PID	96	70 - 130
2,5-Dibromotoluene-FID	99	70 - 130

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Laboratory Report

10/10/06

N. C. Department of Transportation
Attn: Sheri Knox
c/o Solution - IES
1101 Nowell Road
Raleigh, NC 27607

Project Name: Greensboro,NC
Project ID: NCDOT Parcel 902
Project No.: WBS# 34821.1.1
Sample Matrix: Water

Client Sample ID: MW-1
Prism Sample ID: 161269
COC Group: G0906427
Time Collected: 09/14/06 11:30
Time Submitted: 09/15/06 16:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID

Sample Comment(s):

BRL = Below Reporting Limit

J = Estimated value between the Reporting Limit and the MDL

The results in this report relate only to the samples submitted for analysis and meet state certification requirements other than NELAC certification except for those instances indicated in the case narrative and/or test comments.

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Level II QC Report

10/10/2006

N. C. Department of Transportation
Attn: Sheri Knox
c/o Solution - IES
1101 Nowell Road
Raleigh, NC 27607

Project Name: Greensboro,NC
Project ID: NCDOT Parcel 902
Project No.: WBS# 34821.1.1

COC Group Number: G0906427
Date/Time Submitted: 9/15/2006 16:00

Volatile Petroleum Hydrocarbons by GC-PID/FID, method MADEP VPH

Method Blank

	Result	RL	Control Limit	Units	QC Batch ID
C5-C8 Aliphatics	ND	7	<3.5	mg/kg	Q17834
C9-C10 Aromatics	ND	7	<3.5	mg/kg	Q17834
C9-C12 Aliphatics	ND	7	<3.5	mg/kg	Q17834

Laboratory Control Sample

	Result	Spike Amount	Units	Recovery %	Recovery Range %	QC Batch ID
C5-C8 Aliphatics	17.844	15	mg/kg	119	70 - 130	Q17834
C9-C10 Aromatics	5.772	5	mg/kg	115	70 - 130	Q17834
C9-C12 Aliphatics	8.78	10	mg/kg	88	70 - 130	Q17834

Matrix Spike

Sample ID:		Result	Spike Amount	Units	Recovery %	Recovery Range %	QC Batch ID
160859	C5-C8 Aliphatics	16.207	15	mg/kg	108	70 - 130	Q17834
	C9-C10 Aromatics	5.409	5	mg/kg	108	70 - 130	Q17834
	C9-C12 Aliphatics	9.07	10	mg/kg	91	70 - 130	Q17834

Matrix Spike Duplicate

Sample ID:		Result	Spike Amount	Units	Recovery %	Recovery Range %	RPD %	RPD Range %	QC Batch ID
160859	C5-C8 Aliphatics	16.010	15	mg/kg	107	70 - 130	1	0 - 25	Q17834
	C9-C10 Aromatics	5.329	5	mg/kg	107	70 - 130	1	0 - 25	Q17834
	C9-C12 Aliphatics	9.626	10	mg/kg	96	70 - 130	6	0 - 25	Q17834

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Project ID: NCDOT Parcel 902
Project No.: WBS# 34821.1.1

COC Group Number: G0906427
Date/Time Submitted: 9/15/2006 16:00

Semi-volatile Organic Compounds by GC/MS, method 8270C

Method Blank

	Result	RL	Control Limit	Units	QC Batch ID
1,2,4-Trichlorobenzene	ND	0.33	<0.165	mg/kg	Q17867
1,2-Dichlorobenzene	ND	0.33	<0.165	mg/kg	Q17867
1,3-Dichlorobenzene	ND	0.33	<0.165	mg/kg	Q17867
1,4-Dichlorobenzene	ND	0.33	<0.165	mg/kg	Q17867
2,4,5-Trichlorophenol	ND	0.33	<0.165	mg/kg	Q17867
2,4,6-Trichlorophenol	ND	0.33	<0.165	mg/kg	Q17867
2,4-Dichlorophenol	ND	0.33	<0.165	mg/kg	Q17867
2,4-Dimethylphenol	ND	0.33	<0.165	mg/kg	Q17867
2,4-Dinitrophenol	ND	1.65	<0.825	mg/kg	Q17867
2,4-Dinitrotoluene	ND	0.33	<0.165	mg/kg	Q17867
2,6-Dinitrotoluene	ND	0.33	<0.165	mg/kg	Q17867
2-Chloronaphthalene	ND	0.33	<0.165	mg/kg	Q17867
2-Chlorophenol	ND	0.33	<0.165	mg/kg	Q17867
2-Methylnaphthalene	ND	0.33	<0.165	mg/kg	Q17867
2-Methylphenol	ND	0.33	<0.165	mg/kg	Q17867
2-Nitrophenol	ND	0.33	<0.165	mg/kg	Q17867
3&4-Methylphenol	ND	0.33	<0.165	mg/kg	Q17867
3,3'-Dichlorobenzidine	ND	0.66	<0.33	mg/kg	Q17867
4,6-Dinitro-2-methylphenol	ND	1.65	<0.825	mg/kg	Q17867
4-Bromophenylphenylether	ND	0.33	<0.165	mg/kg	Q17867
4-Chloro-3-methylphenol	ND	0.66	<0.33	mg/kg	Q17867
4-Chloroaniline	ND	0.33	<0.165	mg/kg	Q17867
4-Chlorophenylphenylether	ND	0.33	<0.165	mg/kg	Q17867
4-Nitrophenol	ND	1.65	<0.825	mg/kg	Q17867
Acenaphthene	ND	0.33	<0.165	mg/kg	Q17867
Acenaphthylene	ND	0.33	<0.165	mg/kg	Q17867
Anthracene	ND	0.33	<0.165	mg/kg	Q17867
Azobenzene	ND	1.65	<0.825	mg/kg	Q17867
Benzo(a)anthracene	ND	0.33	<0.165	mg/kg	Q17867
Benzo(a)pyrene	ND	0.33	<0.165	mg/kg	Q17867
Benzo(b)fluoranthene	ND	0.33	<0.165	mg/kg	Q17867
Benzo(g,h,i)perylene	ND	0.33	<0.165	mg/kg	Q17867
Benzo(k)fluoranthene	ND	0.33	<0.165	mg/kg	Q17867
Benzoic acid	ND	1.65	<0.825	mg/kg	Q17867
Benzyl alcohol	ND	0.66	<0.33	mg/kg	Q17867
Bis(2-chloroethoxy)methane	ND	0.33	<0.165	mg/kg	Q17867
Bis(2-chloroethyl)ether	ND	0.33	<0.165	mg/kg	Q17867
Bis(2-chloroisopropyl)ether	ND	0.33	<0.165	mg/kg	Q17867
Bis(2-ethylhexyl)phthalate	ND	0.33	<0.165	mg/kg	Q17867
Butylbenzylphthalate	ND	0.33	<0.165	mg/kg	Q17867
Chrysene	ND	0.33	<0.165	mg/kg	Q17867
Di-n-butylphthalate	ND	0.33	<0.165	mg/kg	Q17867

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Level II QC Report

10/10/2006

N. C. Department of Transportation
Attn: Sheri Knox
c/o Solution - IES
1101 Nowell Road
Raleigh, NC 27607

Project Name: Greensboro,NC
Project ID: NCDOT Parcel 902
Project No.: WBS# 34821.1.1

COC Group Number: G0906427
Date/Time Submitted: 9/15/2006 16:00

Method Blank

	Result	RL	Control Limit	Units	QC Batch ID
Di-n-octylphthalate	ND	0.33	<0.165	mg/kg	Q17867
Dibenzo(a,h)anthracene	ND	0.33	<0.165	mg/kg	Q17867
Dibenzofuran	ND	0.33	<0.165	mg/kg	Q17867
Diethylphthalate	ND	0.33	<0.165	mg/kg	Q17867
Dimethylphthalate	ND	0.33	<0.165	mg/kg	Q17867
Fluoranthene	ND	0.33	<0.165	mg/kg	Q17867
Fluorene	ND	0.33	<0.165	mg/kg	Q17867
Hexachlorobenzene	ND	0.33	<0.165	mg/kg	Q17867
Hexachlorobutadiene	ND	0.33	<0.165	mg/kg	Q17867
Hexachlorocyclopentadiene	ND	0.33	<0.165	mg/kg	Q17867
Hexachloroethane	ND	0.33	<0.165	mg/kg	Q17867
Indeno(1,2,3-cd)pyrene	ND	0.33	<0.165	mg/kg	Q17867
Isophorone	ND	0.33	<0.165	mg/kg	Q17867
N-Nitrosodi-n-propylamine	ND	0.33	<0.165	mg/kg	Q17867
N-Nitrosodiphenylamine	ND	0.33	<0.165	mg/kg	Q17867
Naphthalene	ND	0.33	<0.165	mg/kg	Q17867
Nitrobenzene	ND	0.33	<0.165	mg/kg	Q17867
Pentachlorophenol	ND	1.65	<0.825	mg/kg	Q17867
Phenanthrene	ND	0.33	<0.165	mg/kg	Q17867
Phenol	ND	0.33	<0.165	mg/kg	Q17867
Pyrene	ND	0.33	<0.165	mg/kg	Q17867

Laboratory Control Sample

	Result	Spike Amount	Units	Recovery %	Recovery Range %	QC Batch ID
1,2,4-Trichlorobenzene	0.97428	1.67	mg/kg	58	39 - 98	Q17867
1,4-Dichlorobenzene	1.04976	1.67	mg/kg	63	37 - 95	Q17867
2,4-Dinitrotoluene	1.38476	1.67	mg/kg	83	56 - 128	Q17867
2-Chlorophenol	1.03440	1.67	mg/kg	62	37 - 98	Q17867
4-Chloro-3-methylphenol	1.27221	1.67	mg/kg	76	45 - 111	Q17867
4-Nitrophenol	1.32932	1.67	mg/kg	80	20 - 157	Q17867
Acenaphthene	1.27588	1.67	mg/kg	76	44 - 110	Q17867
N-Nitrosodi-n-propylamine	1.00968	1.67	mg/kg	60	38 - 101	Q17867
Pentachlorophenol	1.45424	1.67	mg/kg	87	53 - 127	Q17867
Phenol	0.97828	1.67	mg/kg	59	34 - 102	Q17867
Pyrene	1.56112	1.67	mg/kg	93	54 - 131	Q17867

Matrix Spike

Sample ID:		Result	Spike Amount	Units	Recovery %	Recovery Range %	QC Batch ID
161268	1,2,4-Trichlorobenzene	1.010292	1.66	mg/kg	61	26 - 97	Q17867
	1,4-Dichlorobenzene	1.031208	1.66	mg/kg	62	23 - 92	Q17867
	2,4-Dinitrotoluene	1.432270	1.66	mg/kg	86	45 - 127	Q17867
	2-Chlorophenol	1.032204	1.66	mg/kg	62	25 - 94	Q17867
	4-Chloro-3-methylphenol	1.167330	1.66	mg/kg	70	31 - 113	Q17867

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

Level II QC Report

10/10/2006

N. C. Department of Transportation
Attn: Sheri Knox
c/o Solution - IES
1101 Nowell Road
Raleigh, NC 27607

Project Name: Greensboro,NC
Project ID: NCDOT Parcel 902
Project No.: WBS# 34821.1.1

COC Group Number: G0906427
Date/Time Submitted: 9/15/2006 16:00

Matrix Spike

Sample ID:		Result	Spike Amount	Units	Recovery %	Recovery Range %	QC Batch ID
	4-Nitrophenol	1.296812	1.66	mg/kg	78	17 - 150	Q17867
	Acenaphthene	1.296148	1.66	mg/kg	78	36 - 107	Q17867
	N-Nitrosodi-n-propylamine	0.957171	1.66	mg/kg	58	22 - 105	Q17867
	Pentachlorophenol	1.487383	1.66	mg/kg	90	39 - 137	Q17867
	Phenol	0.983067	1.66	mg/kg	59	23 - 97	Q17867
	Pyrene	1.554780	1.66	mg/kg	94	45 - 133	Q17867

Matrix Spike Duplicate

Sample ID:		Result	Spike Amount	Units	Recovery %	Recovery Range %	RPD %	RPD Range %	QC Batch ID
161268	1,2,4-Trichlorobenzene	1.07730	1.666	mg/kg	65	26 - 97	6	0 - 37	Q17867
	1,4-Dichlorobenzene	1.07930	1.666	mg/kg	65	23 - 92	5	0 - 36	Q17867
	2,4-Dinitrotoluene	1.44185	1.666	mg/kg	87	45 - 127	1	0 - 29	Q17867
	2-Chlorophenol	1.08997	1.666	mg/kg	65	25 - 94	5	0 - 37	Q17867
	4-Chloro-3-methylphenol	1.32155	1.666	mg/kg	79	31 - 113	12	0 - 32	Q17867
	4-Nitrophenol	1.33455	1.666	mg/kg	80	17 - 150	3	0 - 32	Q17867
	Acenaphthene	1.40119	1.666	mg/kg	84	36 - 107	8	0 - 32	Q17867
	N-Nitrosodi-n-propylamine	1.12695	1.666	mg/kg	68	22 - 105	16	0 - 37	Q17867
	Pentachlorophenol	1.47984	1.666	mg/kg	89	39 - 137	1	0 - 27	Q17867
	Phenol	1.02332	1.666	mg/kg	61	23 - 97	4	0 - 42	Q17867
	Pyrene	1.57114	1.666	mg/kg	94	45 - 133	1	0 - 27	Q17867

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COC Group Number: G0906427
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Volatile Organic Compounds by GC/MS, method 8260B

Method Blank

	Result	RL	Control Limit	Units	QC Batch ID
1,1,1-Trichloroethane	ND	0.005	<0.0025	mg/kg	Q17891
1,1,2,2-Tetrachloroethane	ND	0.005	<0.0025	mg/kg	Q17891
1,1,2-Trichloroethane	ND	0.005	<0.0025	mg/kg	Q17891
1,1-Dichloroethane	ND	0.005	<0.0025	mg/kg	Q17891
1,1-Dichloroethene	ND	0.005	<0.0025	mg/kg	Q17891
1,1-Dichloropropene	ND	0.005	<0.0025	mg/kg	Q17891
1,2,3-Trichlorobenzene	ND	0.005	<0.0025	mg/kg	Q17891
1,2,3-Trichloropropane	ND	0.005	<0.0025	mg/kg	Q17891
1,2,4-Trichlorobenzene	ND	0.005	<0.0025	mg/kg	Q17891
1,2,4-Trimethylbenzene	ND	0.005	<0.0025	mg/kg	Q17891
1,2-Dibromoethane (EDB)	ND	0.005	<0.0025	mg/kg	Q17891
1,2-Dichlorobenzene	ND	0.005	<0.0025	mg/kg	Q17891
1,2-Dichloroethane	ND	0.005	<0.0025	mg/kg	Q17891
1,2-Dichloropropane	ND	0.005	<0.0025	mg/kg	Q17891
1,3,5-Trimethylbenzene	ND	0.005	<0.0025	mg/kg	Q17891
1,3-Dichlorobenzene	ND	0.005	<0.0025	mg/kg	Q17891
1,3-Dichloropropane	ND	0.005	<0.0025	mg/kg	Q17891
1,4-Dichlorobenzene	ND	0.005	<0.0025	mg/kg	Q17891
2,2-Dichloropropane	ND	0.005	<0.0025	mg/kg	Q17891
2-Chlorotoluene	ND	0.005	<0.0025	mg/kg	Q17891
2-Hexanone	ND	0.05	<0.025	mg/kg	Q17891
4-Chlorotoluene	ND	0.005	<0.0025	mg/kg	Q17891
4-Methyl-2-pentanone (MIBK)	ND	0.05	<0.025	mg/kg	Q17891
Acetone	ND	0.05	<0.025	mg/kg	Q17891
Benzene	ND	0.003	<0.0015	mg/kg	Q17891
Bromobenzene	ND	0.005	<0.0025	mg/kg	Q17891
Bromochloromethane	ND	0.005	<0.0025	mg/kg	Q17891
Bromodichloromethane	ND	0.005	<0.0025	mg/kg	Q17891
Bromoform	ND	0.005	<0.0025	mg/kg	Q17891
Bromomethane	ND	0.01	<0.005	mg/kg	Q17891
Carbon tetrachloride	ND	0.005	<0.0025	mg/kg	Q17891
Chlorobenzene	ND	0.005	<0.0025	mg/kg	Q17891
Chlorodibromomethane	ND	0.005	<0.0025	mg/kg	Q17891
Chloroethane	ND	0.01	<0.005	mg/kg	Q17891
Chloroform	ND	0.005	<0.0025	mg/kg	Q17891
Chloromethane	ND	0.005	<0.0025	mg/kg	Q17891
cis-1,2-Dichloroethene	ND	0.005	<0.0025	mg/kg	Q17891
cis-1,3-Dichloropropene	ND	0.005	<0.0025	mg/kg	Q17891
Dichlorodifluoromethane	ND	0.005	<0.0025	mg/kg	Q17891
Ethylbenzene	ND	0.005	<0.0025	mg/kg	Q17891
Isopropyl ether (IPE)	ND	0.005	<0.0025	mg/kg	Q17891
Isopropylbenzene	ND	0.005	<0.0025	mg/kg	Q17891

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Level II QC Report

10/10/2006

N. C. Department of Transportation
Attn: Sheri Knox
c/o Solution - IES
1101 Nowell Road
Raleigh, NC 27607

Project Name: Greensboro,NC
Project ID: NCDOT Parcel 902
Project No.: WBS# 34821.1.1

COC Group Number: G0906427
Date/Time Submitted: 9/15/2006 16:00

Method Blank

	Result	RL	Control Limit	Units	QC Batch ID
m,p-Xylenes	ND	0.01	<0.005	mg/kg	Q17891
Methyl ethyl ketone (MEK)	ND	0.1	<0.05	mg/kg	Q17891
Methyl t-butyl ether (MTBE)	ND	0.01	<0.005	mg/kg	Q17891
Methylene chloride	ND	0.005	<0.0025	mg/kg	Q17891
n-Butylbenzene	ND	0.005	<0.0025	mg/kg	Q17891
n-Propylbenzene	ND	0.005	<0.0025	mg/kg	Q17891
Naphthalene	ND	0.01	<0.005	mg/kg	Q17891
o-Xylene	ND	0.005	<0.0025	mg/kg	Q17891
p-Isopropyltoluene	ND	0.005	<0.0025	mg/kg	Q17891
sec-Butylbenzene	ND	0.005	<0.0025	mg/kg	Q17891
Styrene	ND	0.005	<0.0025	mg/kg	Q17891
tert-Butylbenzene	ND	0.005	<0.0025	mg/kg	Q17891
Tetrachloroethene	ND	0.005	<0.0025	mg/kg	Q17891
Toluene	ND	0.005	<0.0025	mg/kg	Q17891
trans-1,2-Dichloroethene	ND	0.005	<0.0025	mg/kg	Q17891
trans-1,3-Dichloropropene	ND	0.005	<0.0025	mg/kg	Q17891
Trichloroethene	ND	0.005	<0.0025	mg/kg	Q17891
Trichlorofluoromethane	ND	0.005	<0.0025	mg/kg	Q17891
Vinyl acetate	ND	0.025	<0.0125	mg/kg	Q17891
Vinyl chloride	ND	0.005	<0.0025	mg/kg	Q17891

Laboratory Control Sample

	Result	Spike Amount	Units	Recovery %	Recovery Range %	QC Batch ID
1,1-Dichloroethene	56.96	50	µg/kg	114	57 - 122	Q17891
Benzene	53.85	50	µg/kg	108	62 - 119	Q17891
Chlorobenzene	53.92	50	µg/kg	108	61 - 124	Q17891
Toluene	53.12	50	µg/kg	106	57 - 122	Q17891
Trichloroethene	54.48	50	µg/kg	109	59 - 129	Q17891

Matrix Spike

Sample ID:		Result	Spike Amount	Units	Recovery %	Recovery Range %	QC Batch ID
160923	1,1-Dichloroethene	35.58	50	µg/kg	71	44 - 140	Q17891
	Benzene	38.58	50	µg/kg	77	46 - 136	Q17891
	Chlorobenzene	28	50	µg/kg	56	47 - 135	Q17891
	Toluene	28.48	50	µg/kg	57	47 - 136	Q17891
	Trichloroethene	31.21	50	µg/kg	62	45 - 141	Q17891

Matrix Spike Duplicate

Sample ID:		Result	Spike Amount	Units	Recovery %	Recovery Range %	RPD %	RPD Range %	QC Batch ID
160923	1,1-Dichloroethene	35.88	50	µg/kg	72	44 - 140	1	0 - 23	Q17891
	Benzene	37.96	50	µg/kg	76	46 - 136	2	0 - 22	Q17891
	Chlorobenzene	28.6	50	µg/kg	57	47 - 135	2	0 - 22	Q17891
	Toluene	29.95	50	µg/kg	60	47 - 136	5	0 - 22	Q17891

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COC Group Number: G0906427
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Matrix Spike Duplicate

Sample ID:		Result	Spike Amount	Units	Recovery %	Recovery Range %	RPD %	RPD Range %	QC Batch ID
	Trichloroethene	32.09	50	µg/kg	64	45 - 141	3	0 - 23	Q17891

Extractable Petroleum Hydrocarbons by GC-FID, method MADEP EPH

Method Blank

	Result	RL	Control Limit	Units	QC Batch ID
C11-C22 Aromatics	ND	10	<5	mg/kg	Q17907
C19-C36 Aliphatics	ND	10	<5	mg/kg	Q17907
C9-C18 Aliphatics	ND	10	<5	mg/kg	Q17907

Laboratory Control Sample

	Result	Spike Amount	Units	Recovery %	Recovery Range %	QC Batch ID
C11-C22 Aromatics	150.54	170	mg/kg	89	40 - 140	Q17907
C19-C36 Aliphatics	53.92	80	mg/kg	67	40 - 140	Q17907
C9-C18 Aliphatics	44.02	60	mg/kg	73	40 - 140	Q17907

Matrix Spike

Sample ID:		Result	Spike Amount	Units	Recovery %	Recovery Range %	QC Batch ID
161268	C11-C22 Aromatics	176.86	170	mg/kg	104	40 - 140	Q17907
	C19-C36 Aliphatics	59.64	80	mg/kg	75	40 - 140	Q17907
	C9-C18 Aliphatics	46.46	60	mg/kg	77	40 - 140	Q17907

Matrix Spike Duplicate

Sample ID:		Result	Spike Amount	Units	Recovery %	Recovery Range %	RPD %	RPD Range %	QC Batch ID
161268	C11-C22 Aromatics	157.28	170	mg/kg	93	40 - 140	12	0 - 50	Q17907
	C19-C36 Aliphatics	63	80	mg/kg	79	40 - 140	5	0 - 50	Q17907
	C9-C18 Aliphatics	47.84	60	mg/kg	80	40 - 140	3	0 - 50	Q17907

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1101 Noweil Road
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Project Name: Greensboro,NC
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COC Group Number: G0906427
Date/Time Submitted: 9/15/2006 16:00

Purgeable Aromatics by GC-PID, method 601/602

Method Blank

	Result	RL	Control Limit	Units	QC Batch ID
Benzene	ND	0.5	<0.25	µg/L	Q17934
Ethylbenzene	ND	1	<0.5	µg/L	Q17934
Isopropyl ether (IPE)	ND	5	<2.5	µg/L	Q17934
m,p-Xylenes	ND	2	<1	µg/L	Q17934
Methyl t-butyl ether (MTBE)	ND	5	<2.5	µg/L	Q17934
Naphthalene	ND	1	<0.5	µg/L	Q17934
o-Xylene	ND	1	<0.5	µg/L	Q17934
Toluene	ND	1	<0.5	µg/L	Q17934

Laboratory Control Sample

	Result	Spike Amount	Units	Recovery %	Recovery Range %	QC Batch ID
Benzene	19.842	20	µg/L	99	39 - 150	Q17934
Ethylbenzene	19.254	20	µg/L	96	32 - 160	Q17934
Isopropyl ether (IPE)	19.748	20	µg/L	99	61 - 134	Q17934
m,p-Xylenes	38.241	40	µg/L	96	65 - 130	Q17934
Methyl t-butyl ether (MTBE)	20.852	20	µg/L	104	74 - 130	Q17934
Naphthalene	20.598	20	µg/L	103	60 - 136	Q17934
o-Xylene	18.772	20	µg/L	94	66 - 129	Q17934
Toluene	19.086	20	µg/L	95	46 - 148	Q17934

Matrix Spike

Sample ID:		Result	Spike Amount	Units	Recovery %	Recovery Range %	QC Batch ID
161366	Benzene	80.916	80	µg/L	101	39 - 150	Q17934
	Ethylbenzene	79.104	80	µg/L	99	32 - 160	Q17934
	Isopropyl ether (IPE)	80.04	80	µg/L	100	60 - 132	Q17934
	m,p-Xylenes	156.564	160	µg/L	98	65 - 130	Q17934
	Methyl t-butyl ether (MTBE)	86.672	80	µg/L	108	73 - 130	Q17934
	Naphthalene	84.168	80	µg/L	105	58 - 132	Q17934
	o-Xylene	80.584	80	µg/L	101	66 - 129	Q17934
	Toluene	77.736	80	µg/L	97	46 - 148	Q17934

Matrix Spike Duplicate

Sample ID:		Result	Spike Amount	Units	Recovery %	Recovery Range %	RPD %	RPD Range %	QC Batch ID
161366	Benzene	78.18	80	µg/L	98	39 - 150	3	0 - 11	Q17934
	Ethylbenzene	75.78	80	µg/L	95	32 - 160	4	0 - 10	Q17934
	Isopropyl ether (IPE)	79.716	80	µg/L	100	60 - 132	0	0 - 15	Q17934
	m,p-Xylenes	151.13	160	µg/L	94	65 - 130	4	0 - 11	Q17934
	Methyl t-butyl ether (MTBE)	87.02	80	µg/L	109	73 - 130	0	0 - 16	Q17934
	Naphthalene	82.788	80	µg/L	103	58 - 132	2	0 - 17	Q17934
	o-Xylene	76.732	80	µg/L	96	66 - 129	5	0 - 13	Q17934
	Toluene	74.78	80	µg/L	93	46 - 148	4	0 - 11	Q17934

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COC Group Number: G0906427
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Extractable Petroleum Hydrocarbons by GC-FID, method MADEP EPH

Method Blank

	Result	RL	Control Limit	Units	QC Batch ID
C11-C22 Aromatics	ND	100	<50	µg/L	Q17946
C19-C36 Aliphatics	ND	100	<50	µg/L	Q17946
C9-C18 Aliphatics	ND	100	<50	µg/L	Q17946

Laboratory Control Sample

	Result	Spike Amount	Units	Recovery %	Recovery Range %	QC Batch ID
C11-C22 Aromatics	1754.4	1700	µg/L	103	40 - 140	Q17946
C19-C36 Aliphatics	685.2	800	µg/L	86	40 - 140	Q17946
C9-C18 Aliphatics	486.4	600	µg/L	81	40 - 140	Q17946

Matrix Spike

Sample ID:		Result	Spike Amount	Units	Recovery %	Recovery Range %	QC Batch ID
161369	C11-C22 Aromatics	1782.8	1700	µg/L	101	40 - 140	Q17946
	C19-C36 Aliphatics	645	800	µg/L	81	40 - 140	Q17946
	C9-C18 Aliphatics	588.8	600	µg/L	65	40 - 140	Q17946

Matrix Spike Duplicate

Sample ID:		Result	Spike Amount	Units	Recovery %	Recovery Range %	RPD %	RPD Range %	QC Batch ID
161369	C11-C22 Aromatics	1751	1700	µg/L	99	40 - 140	2	0 - 50	Q17946
	C19-C36 Aliphatics	659.2	800	µg/L	82	40 - 140	2	0 - 50	Q17946
	C9-C18 Aliphatics	594	600	µg/L	66	40 - 140	1	0 - 50	Q17946

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COC Group Number: G0906427
Date/Time Submitted: 9/15/2006 16:00

Semivolatile Organic Compounds by GC/MS, method 625

Method Blank

	Result	RL	Control Limit	Units	QC Batch ID
1,2,4-Trichlorobenzene	ND	10	<5	µg/L	Q17967
1,2-Dichlorobenzene	ND	10	<5	µg/L	Q17967
1,3-Dichlorobenzene	ND	10	<5	µg/L	Q17967
1,4-Dichlorobenzene	ND	10	<5	µg/L	Q17967
2,4,6-Trichlorophenol	ND	10	<5	µg/L	Q17967
2,4-Dichlorophenol	ND	10	<5	µg/L	Q17967
2,4-Dimethylphenol	ND	10	<5	µg/L	Q17967
2,4-Dinitrophenol	ND	50	<25	µg/L	Q17967
2,4-Dinitrotoluene	ND	10	<5	µg/L	Q17967
2,6-Dinitrotoluene	ND	10	<5	µg/L	Q17967
2-Chloronaphthalene	ND	10	<5	µg/L	Q17967
2-Chlorophenol	ND	10	<5	µg/L	Q17967
2-Nitrophenol	ND	10	<5	µg/L	Q17967
3,3'-Dichlorobenzidine	ND	50	<25	µg/L	Q17967
4,6-Dinitro-2-methylphenol	ND	50	<25	µg/L	Q17967
4-Bromophenylphenylether	ND	10	<5	µg/L	Q17967
4-Chloro-3-methylphenol	ND	10	<5	µg/L	Q17967
4-Chlorophenylphenylether	ND	10	<5	µg/L	Q17967
4-Nitrophenol	ND	50	<25	µg/L	Q17967
Acenaphthene	ND	10	<5	µg/L	Q17967
Acenaphthylene	ND	10	<5	µg/L	Q17967
Anthracene	ND	10	<5	µg/L	Q17967
Benzo(a)anthracene	ND	10	<5	µg/L	Q17967
Benzo(a)pyrene	ND	10	<5	µg/L	Q17967
Benzo(b)fluoranthene	ND	10	<5	µg/L	Q17967
Benzo(g,h,i)perylene	ND	10	<5	µg/L	Q17967
Benzo(k)fluoranthene	ND	10	<5	µg/L	Q17967
Bis(2-chloroethoxy)methane	ND	10	<5	µg/L	Q17967
Bis(2-chloroethyl)ether	ND	10	<5	µg/L	Q17967
Bis(2-chloroisopropyl)ether	ND	10	<5	µg/L	Q17967
Bis(2-ethylhexyl)phthalate	ND	10	<5	µg/L	Q17967
Butylbenzylphthalate	ND	10	<5	µg/L	Q17967
Chrysene	ND	10	<5	µg/L	Q17967
Di-n-butylphthalate	ND	10	<5	µg/L	Q17967
Di-n-octylphthalate	ND	10	<5	µg/L	Q17967
Dibenzo(a,h)anthracene	ND	10	<5	µg/L	Q17967
Diethylphthalate	ND	10	<5	µg/L	Q17967
Dimethylphthalate	ND	10	<5	µg/L	Q17967
Fluoranthene	ND	10	<5	µg/L	Q17967
Fluorene	ND	10	<5	µg/L	Q17967
Hexachlorobenzene	ND	10	<5	µg/L	Q17967
Hexachlorobutadiene	ND	10	<5	µg/L	Q17967

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

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

Level II QC Report

10/10/2006

N. C. Department of Transportation
Attn: Sheri Knox
c/o Solution - IES
1101 Nowell Road
Raleigh, NC 27607

Project Name: Greensboro,NC
Project ID: NCDOT Parcel 902
Project No.: WBS# 34821.1.1

COC Group Number: G0906427
Date/Time Submitted: 9/15/2006 16:00

Method Blank

	Result	RL	Control Limit	Units	QC Batch ID
Hexachlorocyclopentadiene	ND	10	<5	µg/L	Q17967
Hexachloroethane	ND	10	<5	µg/L	Q17967
Indeno(1,2,3-cd)pyrene	ND	10	<5	µg/L	Q17967
Isophorone	ND	10	<5	µg/L	Q17967
N-Nitrosodi-n-propylamine	ND	10	<5	µg/L	Q17967
Naphthalene	ND	10	<5	µg/L	Q17967
Nitrobenzene	ND	10	<5	µg/L	Q17967
Pentachlorophenol	ND	10	<5	µg/L	Q17967
Phenanthrene	ND	10	<5	µg/L	Q17967
Phenol	ND	10	<5	µg/L	Q17967
Pyrene	ND	10	<5	µg/L	Q17967

Laboratory Control Sample

	Result	Spike Amount	Units	Recovery %	Recovery Range %	QC Batch ID
1,2,4-Trichlorobenzene	63.21	100	µg/L	63	44 - 142	Q17967
1,2-Dichlorobenzene	57.04	100	µg/L	57	32 - 129	Q17967
1,3-Dichlorobenzene	58.15	100	µg/L	58	20 - 124	Q17967
1,4-Dichlorobenzene	59.06	100	µg/L	59	20 - 124	Q17967
2,4,6-Trichlorophenol	79.28	100	µg/L	79	37 - 144	Q17967
2,4-Dichlorophenol	72.12	100	µg/L	72	39 - 135	Q17967
2,4-Dimethylphenol	69.29	100	µg/L	69	32 - 119	Q17967
2,4-Dinitrophenol	79.55	100	µg/L	80	10 - 191	Q17967
2,4-Dinitrotoluene	79.21	100	µg/L	79	39 - 139	Q17967
2,6-Dinitrotoluene	79.37	100	µg/L	79	50 - 158	Q17967
2-Chloronaphthalene	71.54	100	µg/L	72	60 - 118	Q17967
2-Chlorophenol	59.44	100	µg/L	59	23 - 134	Q17967
2-Nitrophenol	77.51	100	µg/L	78	29 - 182	Q17967
3,3´-Dichlorobenzidine	93.41	100	µg/L	93	10 - 262	Q17967
4,6-Dinitro-2-methylphenol	96.93	100	µg/L	97	10 - 181	Q17967
4-Bromophenylphenylether	82.95	100	µg/L	83	53 - 127	Q17967
4-Chloro-3-methylphenol	68.66	100	µg/L	69	22 - 147	Q17967
4-Chlorophenylphenylether	83.74	100	µg/L	84	25 - 158	Q17967
4-Nitrophenol	23.49	100	µg/L	23	10 - 132	Q17967
Acenaphthene	90.57	100	µg/L	91	47 - 145	Q17967
Acenaphthylene	72.52	100	µg/L	73	33 - 145	Q17967
Anthracene	112.12	100	µg/L	112	27 - 133	Q17967
Benzo(a)anthracene	82.42	100	µg/L	82	33 - 143	Q17967
Benzo(a)pyrene	83.18	100	µg/L	83	17 - 163	Q17967
Benzo(b)fluoranthene	88.65	100	µg/L	89	24 - 159	Q17967
Benzo(g,h,i)perylene	74.44	100	µg/L	74	10 - 219	Q17967
Benzo(k)fluoranthene	81.85	100	µg/L	82	11 - 162	Q17967
Bis(2-chloroethoxy)methane	73.11	100	µg/L	73	33 - 184	Q17967
Bis(2-chloroethyl)ether	62.16	100	µg/L	62	12 - 158	Q17967
Bis(2-chloroisopropyl)ether	63.68	100	µg/L	64	36 - 166	Q17967

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

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

Level II QC Report

10/10/2006

N. C. Department of Transportation
Attn: Sheri Knox
c/o Solution - IES
1101 Nowell Road
Raleigh, NC 27607

Project Name: Greensboro,NC
Project ID: NCDOT Parcel 902
Project No.: WBS# 34821.1.1

COC Group Number: G0906427
Date/Time Submitted: 9/15/2006 16:00

Laboratory Control Sample

	Result	Spike Amount	Units	Recovery %	Recovery Range %	QC Batch ID
Bis(2-ethylhexyl)phthalate	86.77	100	µg/L	87	10 - 158	Q17967
Butylbenzylphthalate	93.8	100	µg/L	94	10 - 152	Q17967
Chrysene	80.65	100	µg/L	81	17 - 168	Q17967
Di-n-butylphthalate	76.5	100	µg/L	77	10 - 118	Q17967
Di-n-octylphthalate	97.88	100	µg/L	98	10 - 146	Q17967
Dibenzo(a,h)anthracene	77.41	100	µg/L	77	10 - 227	Q17967
Diethylphthalate	87.61	100	µg/L	88	10 - 114	Q17967
Dimethylphthalate	85.53	100	µg/L	86	10 - 112	Q17967
Fluoranthene	88.51	100	µg/L	89	26 - 137	Q17967
Fluorene	84.56	100	µg/L	85	59 - 121	Q17967
Hexachlorobenzene	84	100	µg/L	84	10 - 152	Q17967
Hexachlorobutadiene	65.21	100	µg/L	65	24 - 116	Q17967
Hexachlorocyclopentadiene	77.12	100	µg/L	77	32 - 103	Q17967
Hexachloroethane	59.37	100	µg/L	59	40 - 113	Q17967
Indeno(1,2,3-cd)pyrene	77.36	100	µg/L	77	10 - 171	Q17967
Isophorone	71.5	100	µg/L	72	21 - 196	Q17967
N-Nitrosodi-n-propylamine	64.73	100	µg/L	65	10 - 230	Q17967
Naphthalene	74.76	100	µg/L	75	21 - 133	Q17967
Nitrobenzene	61.54	100	µg/L	62	35 - 180	Q17967
Pentachlorophenol	115.5	100	µg/L	116	14 - 176	Q17967
Phenanthrene	95.38	100	µg/L	95	54 - 120	Q17967
Phenol	20.66	100	µg/L	21	10 - 112	Q17967
Pyrene	89.99	100	µg/L	90	52 - 115	Q17967

Matrix Spike

Sample ID:		Result	Spike Amount	Units	Recovery %	Recovery Range %	QC Batch ID
161369	1,2,4-Trichlorobenzene	73.77	100	µg/L	74	44 - 142	Q17967
	1,2-Dichlorobenzene	61.11	100	µg/L	61	32 - 129	Q17967
	1,3-Dichlorobenzene	59.93	100	µg/L	60	20 - 124	Q17967
	1,4-Dichlorobenzene	65.70	100	µg/L	66	20 - 124	Q17967
	2,4,6-Trichlorophenol	79.23	100	µg/L	79	37 - 144	Q17967
	2,4-Dichlorophenol	75.22	100	µg/L	75	39 - 135	Q17967
	2,4-Dimethylphenol	68.2	100	µg/L	68	32 - 119	Q17967
	2,4-Dinitrophenol	73.27	100	µg/L	73	10 - 191	Q17967
	2,4-Dinitrotoluene	77.02	100	µg/L	77	39 - 139	Q17967
	2,6-Dinitrotoluene	85.50	100	µg/L	86	50 - 158	Q17967
	2-Chloronaphthalene	112.76	100	µg/L	113	60 - 118	Q17967
	2-Chlorophenol	56.06	100	µg/L	56	23 - 134	Q17967
	2-Nitrophenol	68.54	100	µg/L	69	29 - 182	Q17967
	3,3'-Dichlorobenzidine	83.91	100	µg/L	84	10 - 262	Q17967
	4,6-Dinitro-2-methylphenol	78.96	100	µg/L	79	10 - 181	Q17967
	4-Bromophenylphenylether	97.63	100	µg/L	98	53 - 127	Q17967
	4-Chloro-3-methylphenol	67.67	100	µg/L	68	22 - 147	Q17967
	4-Chlorophenylphenylether	87.54	100	µg/L	88	25 - 158	Q17967

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

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

Level II QC Report

10/10/2006

N. C. Department of Transportation
Attn: Sheri Knox
c/o Solution - IES
1101 Nowell Road
Raleigh, NC 27607

Project Name: Greensboro,NC
Project ID: NCDOT Parcel 902
Project No.: WBS# 34821.1.1

COC Group Number: G0906427
Date/Time Submitted: 9/15/2006 16:00

Matrix Spike

Sample ID:		Result	Spike Amount	Units	Recovery %	Recovery Range %	QC Batch ID
	4-Nitrophenol	34.81	100	µg/L	35	10 - 132	Q17967
	Acenaphthene	93.42	100	µg/L	93	47 - 145	Q17967
	Acenaphthylene	87.35	100	µg/L	87	33 - 145	Q17967
	Anthracene	111.58	100	µg/L	112	27 - 133	Q17967
	Benzo(a)anthracene	96.94	100	µg/L	97	33 - 143	Q17967
	Benzo(a)pyrene	96.94	100	µg/L	97	17 - 163	Q17967
	Benzo(b)fluoranthene	119.98	100	µg/L	120	24 - 159	Q17967
	Benzo(g,h,i)perylene	80.36	100	µg/L	80	10 - 219	Q17967
	Benzo(k)fluoranthene	81.59	100	µg/L	82	11 - 162	Q17967
	Bis(2-chloroethoxy)methane	70.88	100	µg/L	71	33 - 184	Q17967
	Bis(2-chloroethyl)ether	61.41	100	µg/L	61	12 - 158	Q17967
	Bis(2-chloroisopropyl)ether	54.64	100	µg/L	55	36 - 166	Q17967
	Bis(2-ethylhexyl)phthalate	104.28	100	µg/L	104	10 - 158	Q17967
	Butylbenzylphthalate	107.96	100	µg/L	108	10 - 152	Q17967
	Chrysene	83.12	100	µg/L	83	17 - 168	Q17967
	Di-n-butylphthalate	84.73	100	µg/L	85	10 - 118	Q17967
	Di-n-octylphthalate	102.88	100	µg/L	103	10 - 146	Q17967
	Dibenzo(a,h)anthracene	80.21	100	µg/L	80	10 - 227	Q17967
	Diethylphthalate	96.54	100	µg/L	97	10 - 114	Q17967
	Dimethylphthalate	85.79	100	µg/L	86	10 - 112	Q17967
	Fluoranthene	102.47	100	µg/L	102	26 - 137	Q17967
	Fluorene	96.46	100	µg/L	96	59 - 121	Q17967
	Hexachlorobenzene	99.71	100	µg/L	100	10 - 152	Q17967
	Hexachlorobutadiene	84	100	µg/L	84	24 - 116	Q17967
	Hexachlorocyclopentadiene	66.56	100	µg/L	67	48 - 94	Q17967
	Hexachloroethane	60.17	100	µg/L	60	40 - 113	Q17967
	Indeno(1,2,3-cd)pyrene	80.34	100	µg/L	80	10 - 171	Q17967
	Isophorone	70.99	100	µg/L	71	21 - 196	Q17967
	N-Nitrosodi-n-propylamine	66.33	100	µg/L	66	10 - 230	Q17967
	Naphthalene	83.96	100	µg/L	69	21 - 133	Q17967
	Nitrobenzene	77.82	100	µg/L	78	35 - 180	Q17967
	Pentachlorophenol	116.24	100	µg/L	116	14 - 176	Q17967
	Phenanthrene	98.65	100	µg/L	99	54 - 120	Q17967
	Phenol	24.82	100	µg/L	25	10 - 112	Q17967
	Pyrene	112.23	100	µg/L	112	52 - 115	Q17967

Matrix Spike Duplicate

Sample ID:		Result	Spike Amount	Units	Recovery %	Recovery Range %	RPD %	RPD Range %	QC Batch ID
161369	1,2,4-Trichlorobenzene	72.43	100	µg/L	72	44 - 142	2	0 - 36	Q17967
	1,2-Dichlorobenzene	61.67	100	µg/L	62	32 - 129	1	0 - 38	Q17967
	1,3-Dichlorobenzene	63.32	100	µg/L	63	20 - 124	6	0 - 41	Q17967
	1,4-Dichlorobenzene	66.26	100	µg/L	66	20 - 124	1	0 - 36	Q17967
	2,4,6-Trichlorophenol	80.72	100	µg/L	81	37 - 144	2	0 - 30	Q17967
	2,4-Dichlorophenol	69.49	100	µg/L	69	39 - 135	8	0 - 31	Q17967

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

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

Level II QC Report

10/10/2006

N. C. Department of Transportation
Attn: Sheri Knox
c/o Solution - IES
1101 Nowell Road
Raleigh, NC 27607

Project Name: Greensboro,NC
Project ID: NCDOT Parcel 902
Project No.: WBS# 34821.1.1

COC Group Number: G0906427
Date/Time Submitted: 9/15/2006 16:00

Matrix Spike Duplicate

Sample ID:	Result	Spike Amount	Units	Recovery %	Recovery Range %	RPD %	RPD Range %	QC Batch ID
2,4-Dimethylphenol	68.07	100	µg/L	68	32 - 119	0	0 - 26	Q17967
2,4-Dinitrophenol	65.63	100	µg/L	66	10 - 191	11	0 - 30	Q17967
2,4-Dinitrotoluene	84.22	100	µg/L	84	39 - 139	9	0 - 29	Q17967
2,6-Dinitrotoluene	87.79	100	µg/L	88	50 - 158	3	0 - 15	Q17967
2-Chlorophenol	54.75	100	µg/L	55	23 - 134	2	0 - 35	Q17967
2-Nitrophenol	68.15	100	µg/L	68	29 - 182	1	0 - 34	Q17967
3,3'-Dichlorobenzidine	85.45	100	µg/L	85	10 - 262	2	0 - 50	Q17967
4,6-Dinitro-2-methylphenol	84.44	100	µg/L	84	10 - 181	7	0 - 19	Q17967
4-Bromophenylphenylether	88.11	100	µg/L	88	53 - 127	10	0 - 18	Q17967
4-Chloro-3-methylphenol	65.32	100	µg/L	65	22 - 147	4	0 - 33	Q17967
4-Chlorophenylphenylether	87.59	100	µg/L	88	25 - 158	0	0 - 19	Q17967
4-Nitrophenol	31.28	100	µg/L	31	10 - 132	11	0 - 50	Q17967
Acenaphthene	93.5	100	µg/L	94	47 - 145	0	0 - 20	Q17967
Acenaphthylene	87.98	100	µg/L	88	33 - 145	1	0 - 24	Q17967
Anthracene	116.83	100	µg/L	117	27 - 133	5	0 - 30	Q17967
Benzo(a)anthracene	76.13	100	µg/L	76	33 - 143	24	0 - 26	Q17967
Benzo(a)pyrene	92.11	100	µg/L	92	17 - 163	5	0 - 25	Q17967
Benzo(b)fluoranthene	99.19	100	µg/L	99	24 - 159	19	0 - 29	Q17967
Benzo(g,h,i)perylene	61.76	100	µg/L	62	10 - 219	26	0 - 27	Q17967
Bis(2-chloroethoxy)methane	74.57	100	µg/L	75	33 - 184	5	0 - 31	Q17967
Bis(2-chloroethyl)ether	60.99	100	µg/L	61	12 - 158	1	0 - 36	Q17967
Bis(2-chloroisopropyl)ether	57.72	100	µg/L	58	36 - 166	5	0 - 40	Q17967
Bis(2-ethylhexyl)phthalate	102	100	µg/L	102	10 - 158	2	0 - 17	Q17967
Butylbenzylphthalate	115.33	100	µg/L	115	10 - 152	7	0 - 15	Q17967
Chrysene	72.53	100	µg/L	73	17 - 168	14	0 - 25	Q17967
Di-n-butylphthalate	82.55	100	µg/L	83	10 - 118	3	0 - 27	Q17967
Di-n-octylphthalate	99.93	100	µg/L	100	10 - 146	3	0 - 17	Q17967
Dibenzo(a,h)anthracene	65.60	100	µg/L	66	10 - 227	20	0 - 28	Q17967
Diethylphthalate	95.56	100	µg/L	96	10 - 114	1	0 - 16	Q17967
Dimethylphthalate	89.76	100	µg/L	90	10 - 112	5	0 - 15	Q17967
Fluoranthene	91.07	100	µg/L	91	26 - 137	12	0 - 24	Q17967
Fluorene	92.84	100	µg/L	93	59 - 121	4	0 - 15	Q17967
Hexachlorobenzene	88.79	100	µg/L	89	10 - 152	12	0 - 18	Q17967
Hexachlorobutadiene	81.49	100	µg/L	81	24 - 116	3	0 - 34	Q17967
Hexachlorocyclopentadiene	71.07	100	µg/L	71	48 - 94	7	0 - 30	Q17967
Hexachloroethane	63.18	100	µg/L	63	40 - 113	5	0 - 38	Q17967
Indeno(1,2,3-cd)pyrene	64.61	100	µg/L	65	10 - 171	22	0 - 29	Q17967
Isophorone	71.02	100	µg/L	71	21 - 196	0	0 - 32	Q17967
N-Nitrosodi-n-propylamine	65.08	100	µg/L	65	10 - 230	2	0 - 36	Q17967
Naphthalene	88.25	100	µg/L	74	21 - 133	5	0 - 42	Q17967
Nitrobenzene	76.43	100	µg/L	76	35 - 180	2	0 - 25	Q17967
Pentachlorophenol	116.46	100	µg/L	116	14 - 176	0	0 - 21	Q17967
Phenanthrene	99.45	100	µg/L	99	54 - 120	1	0 - 29	Q17967
Phenol	24.19	100	µg/L	24	10 - 112	3	0 - 39	Q17967

PRISM LABORATORIES, INC
Full Service Analytical & Environmental Solutions

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

Level II QC Report

10/10/2006

N. C. Department of Transportation
Attn: Sheri Knox
c/o Solution - IES
1101 Nowell Road
Raleigh, NC 27607

Project Name: Greensboro,NC
Project ID: NCDOT Parcel 902
Project No.: WBS# 34821.1.1

COC Group Number: G0906427
Date/Time Submitted: 9/15/2006 16:00

Matrix Spike Duplicate

Sample ID:		Result	Spike Amount	Units	Recovery %	Recovery Range %	RPD %	RPD Range %	QC Batch ID
	Pyrene	116.17	100	µg/L	116 #	52 - 115	3	0 - 15	Q17967

Volatile Petroleum Hydrocarbons by GC-PID/FID, method MADEP VPH

Method Blank

	Result	RL	Control Limit	Units	QC Batch ID
C5-C8 Aliphatics	ND	100	<50	µg/L	Q18009
C9-C10 Aromatics	ND	100	<50	µg/L	Q18009
C9-C12 Aliphatics	ND	100	<50	µg/L	Q18009

Laboratory Control Sample

	Result	Spike Amount	Units	Recovery %	Recovery Range %	QC Batch ID
C5-C8 Aliphatics	188.13	150	µg/L	125	70 - 130	Q18009
C9-C10 Aromatics	60.62	50	µg/L	121	70 - 130	Q18009
C9-C12 Aliphatics	102.11	100	µg/L	102	70 - 130	Q18009

Matrix Spike

Sample ID:		Result	Spike Amount	Units	Recovery %	Recovery Range %	QC Batch ID
161369	C5-C8 Aliphatics	163.80	150	µg/L	109	70 - 130	Q18009
	C9-C10 Aromatics	63.88	50	µg/L	128	70 - 130	Q18009
	C9-C12 Aliphatics	129.90	100	µg/L	130	70 - 130	Q18009

Matrix Spike Duplicate

Sample ID:		Result	Spike Amount	Units	Recovery %	Recovery Range %	RPD %	RPD Range %	QC Batch ID
161369	C5-C8 Aliphatics	159.09	150	µg/L	106	70 - 130	3	0 - 25	Q18009
	C9-C10 Aromatics	57.45	50	µg/L	115	70 - 130	11	0 - 25	Q18009
	C9-C12 Aliphatics	111.17	100	µg/L	111	70 - 130	16	0 - 25	Q18009

#-See Case Narrative

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name:	N. C. Department of Transportation	Laboratory Name:	Prism Laboratories, Inc.
Project Name:	NCDOT Parcel 902	NC Certification # (Lab):	402
Site Location:	Greensboro, NC	Sample Matrix:	Soil

Sample Information and Analytical Results							
Method for Ranges: MADEP VPH							
VPH Surrogate Standards: Aliphatic - 2,5-Dibromotoluene / Aromatic - 2,5-Dibromotoluene							
Sample Identification:			161268				
Collection Option (for soil*):			1				
Date Collected:			09/13/06				
Date Received:			09/15/06				
Date Extracted:			09/23/06				
Date Analyzed:			09/23/06				
% Dry Solids:			62.8				
Dilution Factor:			1				
Hydrocarbon Ranges in mg/kg:			Sample Results	Sample Results	Sample Results	Sample Results	Sample Results
C5-C8 Aliphatics ***			<11				
C9-C12 Aliphatics ***			<11				
C9-C10 Aromatics **			<11				
Blank:	C5-C8 Aliphatics		<7.0	<7.0	<7.0	<7.0	<7.0
	C9-C12 Aliphatics		<7.0	<7.0	<7.0	<7.0	<7.0
	C9-C10 Aromatics		<7.0	<7.0	<7.0	<7.0	<7.0
RL:	C5-C8 Aliphatics		11				
	C9-C12 Aliphatics		11				
	C9-C10 Aromatics		11				
MDL:	C5-C8 Aliphatics		5.6				
	C9-C12 Aliphatics		5.6				
	C9-C10 Aromatics		5.6				
Surrogate Acceptance Range:		Blank	70-130 %	70-130 %	70-130 %	70-130 %	70-130 %
Aliphatic Surrogate % Rec. - FID:		105	88				
Aromatic Surrogate % Rec. - PID:		109	83				

* Option 1 = Established fill line on vial
* Option 2 = Sampling device (indicate brand, e.g., EnCore TM)
* Option 3 = Field weight of soil

** Unadjusted value - should exclude the concentration of any surrogate(s), internal standards and/or concentrations of other ranges that elute within the specified range.
*** Adjusted value

MDL = Method Detection Limit RL = Reporting Limit Blank = Laboratory Method Blank or Trip Blank (whichever is higher - indicate type)

Were all performance/acceptance standards for required QA/QC procedures achieved?	**YES**	No - Details Attached
Were any significant modifications to the VPH method made?	**NO**	Yes - Details Attached

Comments: VPH trip blank was not submitted to the laboratory.

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name:	N. C. Department of Transportation	Laboratory Name:	Prism Laboratories, Inc.
Project Name:	NCDOT Parcel 902	NC Certification # (Lab):	402
Site Location:	Greensboro, NC	Sample Matrix:	Water

Sample Information and Analytical Results							
Method for Ranges: MADEP VPH							
VPH Surrogate Standards: Aliphatic - 2,5-Dibromotoluene / Aromatic - 2,5-Dibromotoluene							
Sample Identification:			161269				
Collection Option (for soil*):			NA	NA	NA	NA	NA
Date Collected:			09/14/06				
Date Received:			09/15/06				
Date Extracted:			NA	NA	NA	NA	NA
Date Analyzed:			09/26/06				
% Dry Solids:			NA	NA	NA	NA	NA
Dilution Factor:			1				
Hydrocarbon Ranges in ug/L:			Sample Results	Sample Results	Sample Results	Sample Results	Sample Results
C5-C8 Aliphatics ***			<100				
C9-C12 Aliphatics ***			<100				
C9-C10 Aromatics **			<100				
Blank:	C5-C8 Aliphatics		<100	<100	<100	<100	<100
	C9-C12 Aliphatics		<100	<100	<100	<100	<100
	C9-C10 Aromatics		<100	<100	<100	<100	<100
RL:	C5-C8 Aliphatics		100				
	C9-C12 Aliphatics		100				
	C9-C10 Aromatics		100				
MDL:	C5-C8 Aliphatics		50				
	C9-C12 Aliphatics		50				
	C9-C10 Aromatics		35				
Surrogate Acceptance Range:		Blank	70-130 %	70-130 %	70-130 %	70-130 %	70-130 %
Aliphatic Surrogate % Rec. - FID:		100	99				
Aromatic Surrogate % Rec. - PID:		100	96				

* Option 1 = Established fill line on vial
* Option 2 = Sampling device (indicate brand, e.g., EnCore TM)
* Option 3 = Field weight of soil

** Unadjusted value - should exclude the concentration of any surrogate(s), internal standards and/or concentrations of other ranges that elute within the specified range.
*** Adjusted value

MDL = Method Detection Limit RL = Reporting Limit Blank = Laboratory Method Blank or Trip Blank (whichever is higher - indicate type)

Were all performance/acceptance standards for required QA/QC procedures achieved?	**YES**	No - Details Attached
Were any significant modifications to the VPH method made?	**NO**	Yes - Details Attached

Comments: VPH trip blank was not submitted to the laboratory.

EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name:	N. C. Department of Transportation	Laboratory Name:	Prism Laboratories, Inc.
Project Name:	NCDOT Parcel 902	NC Certification # (Lab):	402
Site Location:	Greensboro, NC	Sample Matrix:	Soil

Sample Information and Analytical Results							
Method for Ranges: MADEP EPH							
EPH Surrogate Standards: Aliphatic - 1-Chloro-octadecane / Aromatic - o-Terphenyl							
EPH Fractionation Surrogates: #1 - 2-Bromonaphthalene / #2 - Fluorobiphenyl							
Sample Identification:			161268				
Date Collected:			09/13/06				
Date Received:			09/15/06				
Date Extracted:			09/21/06				
Date Analyzed:			09/21/06				
% Dry Solids:			62.8				
Dilution Factor:			1				
Hydrocarbon Ranges in mg/kg:			Sample Results	Sample Results	Sample Results	Sample Results	Sample Results
C9-C18 Aliphatics *			<16				
C19-C36 Aliphatics *			<16				
C11-C22 Aromatics **			<16				
Blank:	C9-C18 Aliphatics		<10	<10	<10	<10	<10
	C19-C36 Aliphatics		<10	<10	<10	<10	<10
	C11-C22 Aromatics		<10	<10	<10	<10	<10
RL:	C9-C18 Aliphatics		16				
	C19-C36 Aliphatics		16				
	C11-C22 Aromatics		16				
MDL:	C9-C18 Aliphatics		14				
	C19-C36 Aliphatics		10				
	C11-C22 Aromatics		16				
Surrogate Acceptance Range:		Blank	40-140 %	40-140 %	40-140 %	40-140 %	40-140 %
Aliphatic Surrogate % Rec.:		105	112				
Aromatic Surrogate % Rec.:		86	108				
Fractionation Surrogate Accep. Range:		Blank	40-140 %	40-140 %	40-140 %	40-140 %	40-140 %
Frac. Surrogate #1 % Rec.:		112	55				
Frac. Surrogate #2 % Rec.:		102	120				

* Unadjusted value - should exclude the concentration of any surrogate(s), internal standards and/or concentrations of other ranges that elute within the specified range.

** Adjusted value

MDL = Method Detection Limit RL = Reporting Limit Blank = Laboratory Method Blank

Were all performance/acceptance standards for required QA/QC procedures achieved?	**YES**	No - Details Attached
Was blank correction applied as a significant modification of the method?	Yes	**NO**
Were any significant modifications to the EPH method made?	**NO**	Yes - Details Attached

Comments:

EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name:	N. C. Department of Transportation	Laboratory Name:	Prism Laboratories, Inc.
Project Name:	NCDOT Parcel 902	NC Certification # (Lab):	402
Site Location:	Greensboro, NC	Sample Matrix:	Water

Sample Information and Analytical Results							
Method for Ranges: MADEP EPH							
EPH Surrogate Standards: Aliphatic - 1-Chloro-octadecane / Aromatic - o-Terphenyl							
EPH Fractionation Surrogates: #1 - 2-Bromonaphthalene / #2 - Fluorobiphenyl							
Sample Identification:			161269				
Date Collected:			09/14/06				
Date Received:			09/15/06				
Date Extracted:			09/22/06				
Date Analyzed:			09/27/06				
% Dry Solids:			NA	NA	NA	NA	NA
Dilution Factor:			1				
Hydrocarbon Ranges in ug/L:			Sample Results	Sample Results	Sample Results	Sample Results	Sample Results
C9-C18 Aliphatics *			<110				
C19-C36 Aliphatics *			<110				
C11-C22 Aromatics **			<110				
Blank:	C9-C18 Aliphatics		<100	<100	<100	<100	<100
	C19-C36 Aliphatics		<100	<100	<100	<100	<100
	C11-C22 Aromatics		<100	<100	<100	<100	<100
RL:	C9-C18 Aliphatics		110				
	C19-C36 Aliphatics		110				
	C11-C22 Aromatics		110				
MDL:	C9-C18 Aliphatics		79				
	C19-C36 Aliphatics		33				
	C11-C22 Aromatics		75				
Surrogate Acceptance Range:		Blank	40-140 %	40-140 %	40-140 %	40-140 %	40-140 %
Aliphatic Surrogate % Rec.:		98	99				
Aromatic Surrogate % Rec.:		103	103				
Fractionation Surrogate Accep. Range:		Blank	40-140 %	40-140 %	40-140 %	40-140 %	40-140 %
Frac. Surrogate #1 % Rec.:		68	47				
Frac. Surrogate #2 % Rec.:		93	90				

* Unadjusted value - should exclude the concentration of any surrogate(s), internal standards and/or concentrations of other ranges that elute within the specified range.

** Adjusted value

MDL = Method Detection Limit RL = Reporting Limit Blank = Laboratory Method Blank

Were all performance/acceptance standards for required QA/QC procedures achieved?	**YES**	No - Details Attached
Was blank correction applied as a significant modification of the method?	Yes	**NO**
Were any significant modifications to the EPH method made?	**NO**	Yes - Details Attached

Comments:

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 PARKER 902

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# 34821.1.1

Address: TIP# U-2525B

Client Company Name: SOLUTIONS - IES

Report To/Contact Name: Sheri Knox

Reporting Address: 1101 Nowell Road
Raleigh NC 27607

Phone: 9198731060 Fax (Yes) (No): 9198731074

Email (Yes) (No) Email Address SKnox@Solutions-IES

EDD Type: ___ PDF ___ Excel ___ Other

Site Location Name: NCDOT PARKER 902

Site Location Physical Address: GREENSBORO, NC

Purchase Order No./Billing Reference 3130.06A3. NDOT

Requested Due Date ☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 4 Days ☐ 5 Days

"Working Days" ☐ 6-9 Days ☐ Standard 10 days

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 24	✓		
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 ___

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	SAMPLE CONTAINER NO.	SAMPLE CONTAINER SIZE	PRESERVATIVES	ANALYSES REQUESTED: 8260 + IPE, MTBE	8260	VPH EPH	602 + naphth	625 + 610	VPH EPH	REMARKS	PRISM LAB ID NO.
MW-1	9/13/06	1330	Soil	G	7		VARIES	X	X	X					161268
MW-1	9/14/06	1130	H2O	G	8		VARIES				X	X	X		161269

Sampler's Signature _____ Sampled By (Print Name) KEVIN BUCHANAN Affiliation SOLUTIONS - IES

PRESS DOWN FIRMLY - 3 COPIES

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)	Received By: (Signature)	9/14/06	1535
Relinquished By: (Signature)	Received By: (Signature)	9/15/06	12:16
Relinquished By: (Signature)	Received For Prism Laboratories By:	9-15-06	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 _____

Log-In Group No. GD9906427

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 ☐ _____

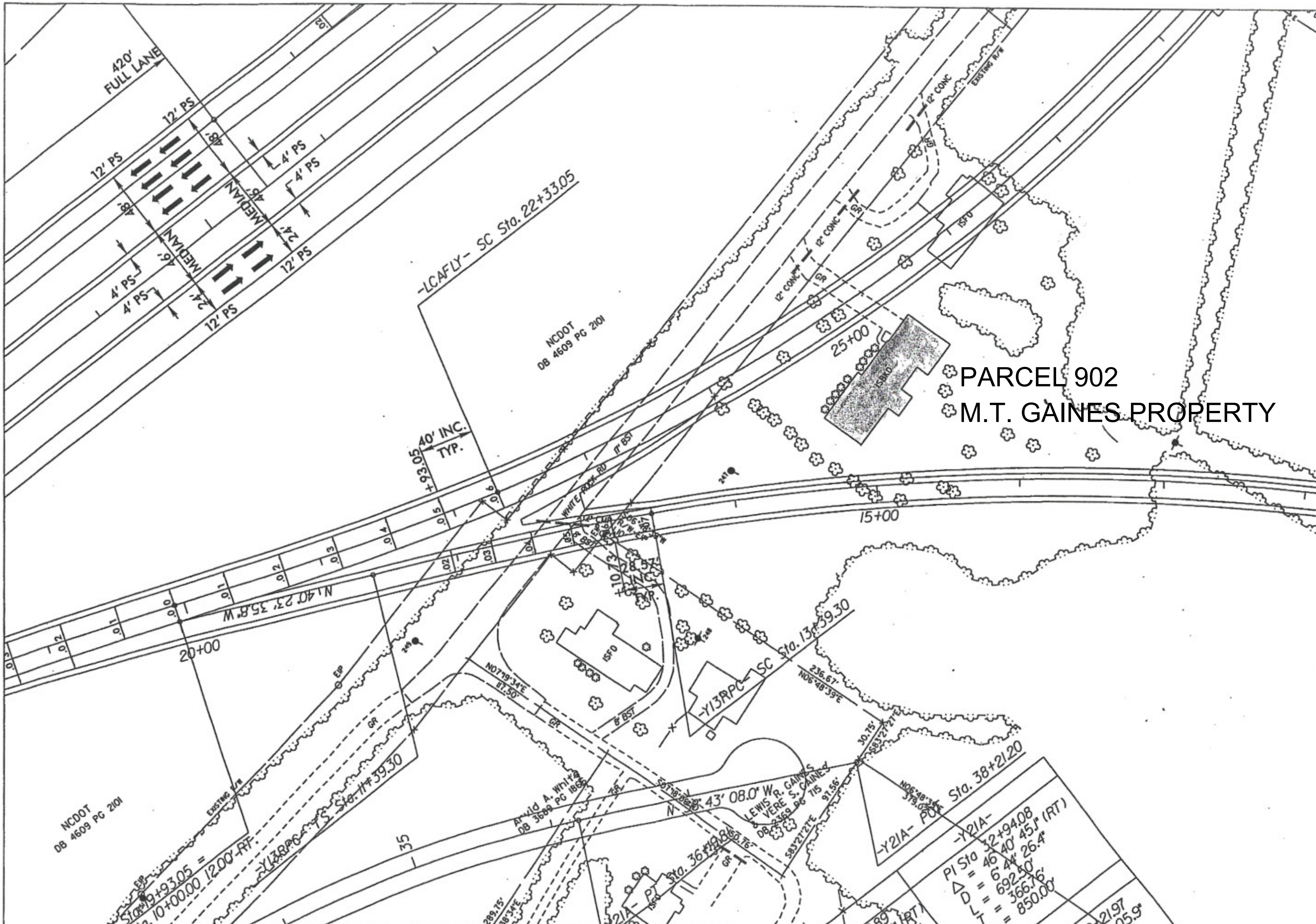
*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic TL = Teflon-lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

ORIGINAL

APPENDIX D

Proposed location of Interstate 840


PARCEL 902
M.T. GAINES PROPERTY
420' FULL LANE
12' PS
4' PS
MEDIAN
-LCAFLY- SC Sta. 22+33.05
NCDOT
DB 4609 PG 2101
40' INC. TYP.
+93.05
WHITE ROCK RD
N 40 23' 35.8" W
20+00
15+00
25+00
ISFD
-Y13RPC- SC Sta. 13+39.30
-Y13RPC- TS Sta. 11+39.30
-Y21A- POT Sta. 38+21.20
-Y21A-
PI Sta 32+94.08
Δ = 46 40' 45.1" (RT)
D = 6 44' 26.4"
L = 692.50'
T = 366.76'
R = 850.00'
LEWIS R. GAINES
VERE S. GAINES
DB 2369 PG 715
Arvid A. White
DB 3689 PG 1866
NCDOT
DB 4609 PG 2101
EXISTING R/W
12' CONC
35