

UNDERGROUND STORAGE TANK CLOSURE REPORT

Robert Gregory Riddle Property - Parcel 50

1404 West 14th Avenue

Greenville, Pitt County, North Carolina

ATC Project No. 45.19873.0007

NCDOT Project U-3315

WBS Element 35781.1.2



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N.C. Engineering License No. C-1598

January 5, 2015

Mr. Gordon Box
NC Department of Transportation
GeoEnvironmental Section
1589 Mail Service Center
Raleigh, North Carolina, 27699-1589

Re: **UST CLOSURE**
Robert Gregory Riddle Property - Parcel 50
1404 West 14th Avenue
Greenville, Pitt County, North Carolina
State Project: U-3315
WBS Element: 35781.1.2
ATC Project No. 45.19873.0007

Dear Mr. Box:

ATC Associates of North Carolina, P.C., on behalf of NCDOT, is submitting this UST Closure Report for NCDOT Project U-3315, WBS Element 35781.1.2 located on 1404 West 14th Avenue in Greenville, Pitt County, North Carolina. The report documents a UST closure at the site.

If you have any questions or require additional information, please contact our office at (919) 871-0999.

Sincerely,

ATC Associates of North Carolina, P.C.

Garrett Stancil
Staff Scientist

Jeffrey A. Corson
Senior Project Manager

cc: Terry Farr

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I. SITE INFORMATION

Date of Report: 1/5/2015
Facility I.D.: N/A
UST Incident Number (if known): 38381 (Parcel 50)
Site Name: NCDOT U-3315 WBS Element 35781.1.2 Parcel 50
Site Location: 1404 West 14th Avenue
Nearest City/Town: Greenville County: Pitt
Description of Geographical Data Point (eg, diesel fill port): Multiple
Location Method (GPS, Topographical map, other): GPS
Latitude (decimal degrees): 35.608341 Longitude (decimal degrees): -77.385475

Contact Information Associated with the UST System

UST Owner: Abandoned in NCDOT Right of Way
Address: 1589 Mail Service Center Raleigh, NC 27699-1589 Phone: 919-707-6850
UST Operator: N/A
Address: _____ Phone: _____
Property Owner: NCDOT
Address: 1589 Mail Service Center Raleigh, NC 27699-1589 Phone: 919-707-6850
Property Occupant: N/A
Address: _____ Phone: _____
Consultant/Contractor: ATC Associates of North Carolina, P.C.
Address: 2725 E. Millbrook Road, Raleigh, NC 27604 Phone: 919-871-0999
Analytical Laboratory: Pace Analytical Services, Inc.
Address: 9800 Kinsey Avenue, Suite 100 Huntersville, NC 28078 Phone: 704-875-9092

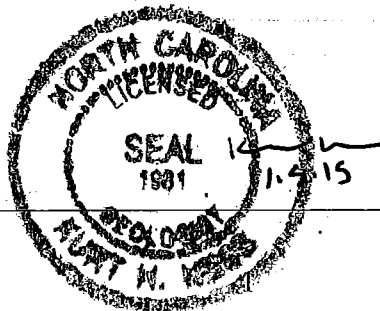
Release Information

Date Discovered: N/A
Estimated Quantity of Release: N/A
Cause of Release: N/A
Source of Release (Piping/UST): N/A
Sizes and contents of UST system(s) from which the release occurred: N/A

Certification

I, Kurt Ness a Professional Geologist for ATC Associates of North Carolina, P.C., do certify that the information contained in this report is correct and accurate to the best of my knowledge. *(Affix Seal and Signature)*

ATC Associates of North Carolina, P.C. is licensed to practice geology/engineering *(circle one or both)* in North Carolina. The certification number of the company or corporation is C-1598.



II. INTRODUCTION

ATC Associates of North Carolina, P.C. (ATC) was retained by NCDOT to supervise the closure of multiple underground storage tanks (USTs) at 1404 West 14th Avenue in Greenville, Pitt County, North Carolina from September 15 to September 18, 2014 and from September 29 to October 3, 2014. The site location is shown on a topographic map in *Figure 1*.

The scope of services provided by ATC included the following:

- Supervision of search and excavation of possible UST locations
- Supervision of the removal of two USTs
- Soil sampling and analyses
- Report preparation

This UST Closure Report presents a summary of field activities and observations and provides documentation of UST disposal and soil analytical results. As required by North Carolina Department of Environment and Natural Resources (NCDENR) guidelines, this UST closure report follows the GW/UST-12 format.

A. Site History

As per the Technical and Cost Proposal, ATC obtained a report provided by Environmental Data Resources, Inc. (EDR) of Milford, Connecticut. The report was reviewed for information regarding reported releases of hazardous substances and petroleum products on or near the site. ATC also reviewed the “unmappable” (also referred to as “orphan”) listings within the database report, cross-referencing available address information and facility names. Unmappable sites are listings that could not be plotted with confidence, but are potentially in the general area of the property in question based on the partial street address, city, or zip code. No unmappable sites were identified by ATC as being within the approximate minimum search distance from Parcel 50 based on the site reconnaissance and/or cross-referencing to mapped listings. In addition, Parcel 50 was not listed on any federal or state databases reviewed for this part of the historical assessment. The 1923, 1929, and 1946 Sanborn Maps for the site depict the property with a road (Farmville Boulevard). The 1958 Sanborn Map depicts the road configuration changed for the adjacent Growers Warehouse. The most recent building on the property first appears in the 1958 Sanborn Map and is identified as a store.

GPS coordinates of anomalies identified as possible or known USTs were collected by Stantec during the preliminary site assessment (PSA) conducted by ATC for Parcel 50. On September

10, 2014 ATC contracted Stantec to conduct a utility locate and explore and mark out the coordinates of the previous anomalies identified as possible or known USTs using Ground Penetrating Radar (GPR) and Electromagnetic Equipment (EM).

On September 15, 2014 ATC contracted A&D Environmental Services, Inc. (A&D) to perform search, excavation and removal of the possible or known USTs. ATC supervised A&D in the search and excavation of Parcel 50.

Two suspected UST locations were explored on Parcel 50. A&D located the USTs and found they contained a gasoline/water mixture. A&D decided to explore the other Parcels before moving forward with the tank removal for the purpose of scheduling a vacuum truck.

On September 17, 2014 ATC supervised A&D during the excavation of the two USTs on Parcel 50. This report documents the removal and closure assessment of the USTs.

III. GENERAL INFORMATION

A. UST Information

Table 1

UST #	Installation Date	Size in Gallons	Tank Dimensions	Last Contents	Previous Contents (if any)
1 (50)	Unknown	550	4' x 8'	Gasoline	Unknown
2 (50)	Unknown	550	4' x 8'	Gasoline	Unknown

B. Site Characteristics

1. Describe any past releases at this site:

According to a Notice of Regulatory Requirements letter from NCDENR dated May 6, 2013 a release was confirmed on Parcel 50 under incident number 38381.

2. Is the facility active or inactive at this time? If the facility is inactive, note the last time the UST(s) were in operation:

Parcel 50 is inactive and currently vacant. The last time these USTs were in operation is unknown.

3. *Describe surrounding property use (for example, residential, commercial, farming, etc.):*
Parcel 50 is surrounded by Sadie Saulter Public School to the north, W. 14th Avenue to the west, Farmville Boulevard to the south and Spruce Street to the east, which includes residential and retail commercial properties.

4. *Describe site geology/hydrogeology:*

The site lies within the coastal plain of North Carolina and is underlain by the Yorktown formation, which generally consists of fossiliferous clays and sands. The site lies in the Tar-Pamlico river basin.

During UST closure activities, the subsurface soils encountered consisted of light brown/orange, sandy clay. Groundwater was encountered at approximately 12 feet below ground surface during excavation activities.

5. *Describe results of receptor survey:*

ATC did not perform a receptor survey and there is no known completed survey.

IV. CLOSURE PROCEDURES

A. Preparations for Closure

In preparation of UST closure activities, ATC completed a Notice of Intent: UST Permanent Closure or Change-in-Service Form (GW/UST-3). A copy of the GW/UST-3 form is included in *Appendix A*. UST Information is included in *Table 1*.

ATC contacted the North Carolina One Call Center (ULOCO), as well as Stantec to mark underground utilities at the sites prior to tank closure activities. The Fire Marshall for the City of Greenville was also notified by the tank removal subcontractor, A&D, prior to removal activities.

B. Amount of Residual Material

Approximately 982 gallons of residual liquid (water/gasoline mixture) was removed from the USTs on Parcel 50 on September 17, 2014 prior to closure.

C. Storage, Sampling, and Disposal of Residual Material

Residual liquid removed from the USTs was disposed of by A&D. Copies of the waste disposal manifests are included in *Appendix B*.

D. Excavation

1. *Describe excavation procedures noting the condition of the soil encountered and the dimensions of the excavation in relation to the tanks, piping, and/or pumps:*

On September 17, 2014, two 550-gallon gasoline USTs were removed from Parcel 50. The UST pit was excavated approximately 20 feet by 10 feet by 10 feet deep, just large enough to remove the tanks. Groundwater was encountered at approximately 12 feet bgs. Impacted soils from beneath the tanks were not excavated per direction of NCDOT Request for Proposal because clean closure did not appear possible.

2. *Note the depth of tank burial(s) (from land surface to top of tank):*

The top of the USTs were buried to a depth of approximately four (4) feet bgs. The bottom of the tanks rested at approximately eight (8) feet bgs.

3. *Note volume of soil excavated:*

Soils that were excavated to remove the tanks were clean per photoionization detector (PID) field screening measurements. Impacted soil beneath the tanks was retained in the tank pit per direction of NCDOT.

4. *Describe soil type(s) encountered:*

Soils encountered during excavation at the site consisted of light brown/ orange, sandy clays.

5. *Describe type and source of backfill used:*

Following the removal of the USTs, A&D backfilled the tank pits with clean soil consisting of brown silty sand.

6. *Describe condition of UST system(s) (i.e., pitting, holes, etc.):*

Upon removal of the tanks, the tanks were visually inspected and both had multiple small rust holes throughout. Soils underneath the tanks appeared to be impacted.

E. Contaminated Soil

1. *Describe how it was determined to what extent to excavate the soil:*

Soil was excavated to the extent necessary to remove the USTs and no other soil was excavated per direction of NCDOT.

2. *Describe method of temporary storage, sampling, and treatment/disposal of soil:*

Soils that were excavated to remove the tanks were clean per PID field screening measurements. Following the removal of the USTs, the excavated soil along with clean material provided by A&D was used to backfill the tank pit.

V. SITE INVESTIGATION

A. Field Screening

Following the removal of the USTs, soil samples were collected beneath the tanks for field screening by use of a PID. Sampling intervals were consistent with the Guidelines for Site Checks, Tank Closures, and Initial Response and Abatement for UST Releases (NCDENR, 2008). The highest PID field screening results was recorded from tank pit sample T1A-50 at 1104 parts per million (ppm).

B. Soil Sampling

On September 17, 2014 soil closure samples were collected from a total of four locations in the tank pits following the UST removal activities. Two samples were collected beneath each tank on Parcel 50 (T1A-50 through T2B-50). The samples were submitted for Total Petroleum Hydrocarbons– Gasoline Range Organics (TPH-GRO, EPA Method 8015-5030) and Total Petroleum Hydrocarbons – Diesel Range Organics (TPH-DRO, EPA Method 8015-5030).

The results of the laboratory analyses indicated concentrations of TPH-DRO above the NCDENR Action Level of 10 parts per million (ppm) in soil sample T1A-50 and T1B-50. The highest concentration of TPH-DRO was detected in sample T1A-50 at 293 mg/kg. Laboratory analyses also indicated concentrations of TPH-GRO above the NCDENR Action Level of 10 parts per million (ppm) in soil sample T1A-50, T1B-50 and T2B-50. The highest concentration of TPH-GRO was detected in sample T1B-50 at 2490 mg/kg. UST soil sample analytical results and locations are included in *Table 2* and *Figure 2*, respectively. The laboratory analytical report is provided in *Appendix C*. No piping was associated with the UST system, therefore no pipe run samples were collected.

C. Quality Control Measures

Laboratory samples were placed in laboratory supplied containers and shipped in an ice-filled cooler to Pace Analytical Laboratories (Pace) in Huntersville, North Carolina under proper chain of custody procedure. Pace is approved by the State of North Carolina under Certification No. 5342.

D. Investigation Results

The applicable action levels for the following compounds were exceeded:

- DRO: T1A-50, T1B-50
- GRO: T1A-50, T1B-50, T2B-50

VI. CONCLUSIONS

ATC supervised the removal of two gasoline USTs on Parcel 50 on NCDOT Project U-3315 located in Greenville, North Carolina on September 17, 2014. Based on field activities, observations, and soil analytical results, tank pit samples exceeded the NCDENR Action Levels for TPH-DRO and TPH-GRO. Impacted soil beneath the tanks was retained in the tank pit per direction of NCDOT. If impacted soil or groundwater is encountered during construction activities, appropriate measures should be taken to ensure worker safety. In addition, any impacted soil or groundwater disturbed during construction should be handled and disposed of in accordance with applicable regulations.

ATC appreciates the opportunity to assist the NCDOT with this project. If you have questions or require additional information, please do not hesitate to contact us at (919) 871-0999.

TABLES

TABLE 1

OWNER/OPERATOR AND UST SYSTEM INFORMATION

Robert Gregory Riddle Property - Parcel 50
 1404 West 14th Avenue
 Greenville, Pitt County, North Carolina
 ATC Project No. 45.19873.0007
 NCDOT Project U-3315

UST ID Number	Current/Last Product	Previous Contents	Capacity (gallons)	Tank Construction Details	Piping Construction Details	Date Installed - Tank-	Date Installed - Piping-	Status of UST/s	Was Release Associated With UST System? (Yes / No)
1 (50)	Gasoline	Unknown	550	Steel	NA	Unknown	NA	Permanently removed 9/17/14	Yes
2 (50)	Gasoline	Unknown	550	Steel	NA	Unknown	NA	Permanently removed 9/17/14	Yes

UST ID Number	Facility ID	Dates of Operation	Owner Information (Name/Address/Phone)	
		Unknown	NCDOT: 1589 Mail Service Center Raleigh, NC 27699-1589	
Operator Information			Other Responsible Party Information	
NA			NA	
Incident No/s	Date/s of Release or Discover	Material/s Released	Description of Release/s	
38381	NA	NA	NA	

TABLE 2

**UST CLOSURE
SOIL ANALYTICAL DATA**

**Robert Gregory Riddle Property - Parcel 50
1404 West 14th Avenue
Greenville, Pitt County, North Carolina
ATC Project No. 45.19873.0007
NCDOT Project U-3315**

EPA Method:				5030/8015	3550/8015
Sample I.D.	Depth (feet)	Sampling Date	PID Reading (ppm)	TPH-GRO	TPH-DRO
T1A-50	NA	9/17/2014	1104	1130	293
T1B-50	NA	9/17/2014	996	2490	145
T2A-50	NA	9/17/2014	103	<7.0	8.8
T2B-50	NA	9/17/2014	127	207	<6.9
NCDENR Action Level				10	10
Soil-to-Groundwater MSCC				--	--
Residential MSCC				--	--
Industrial/Commercial MSCC				--	--

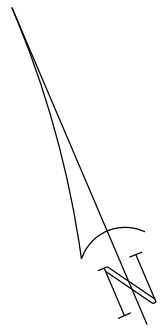
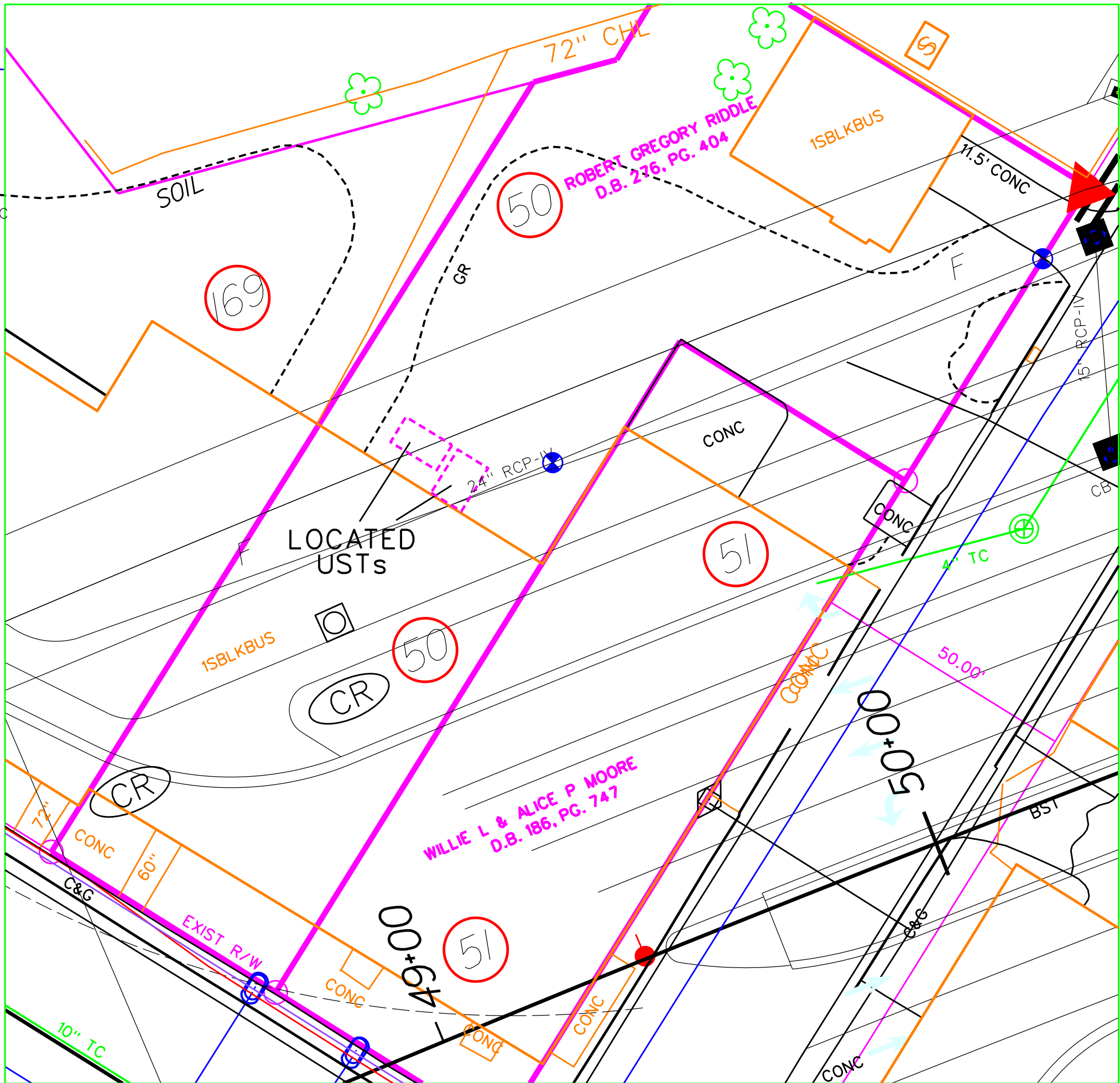
Notes:

1. TPH = Total petroleum hydrocarbons.
2. GRO = Gasoline range organics.
3. DRO = Diesel range organics.
4. Concentrations reported in milligrams per kilogram (mg/kg).
5. "<" = not detected at or above the laboratory detection limit.
6. MSCC = Maximum Soil Contaminant Concentration Levels.
7. NE = Not established.
8. MTBE = Methyl tertiary butyl ether.
9. Values in **BOLD** indicate levels above Soil-to-Groundwater MSCCs and/or the NCDENR Action Level.
10. # = Health based level > 100%.

FIGURES

LEGEND

- EXISTING RIGHT OF WAY
- PROPOSED RIGHT OF WAY
- PROPERTY LINE
- U/G CABLE TV
- U/G CABLE TELEPHONE
- U/G CABLE TELEPHONE FIBER OPTIC
- U/G ELECTRIC
- EXISTING HYDRO
- U/G CABLE TV FIBER OPTIC
- PERMANENT UTILITY EASEMENT
- FILL LINE
- CUT LINE
- CHAIN LINK
- CATCH BASIN
- REINFORCED CONCRETE PIPE
- EDGE OF TRAVEL
- MANHOLE
- TERRA COTTA PIPE
- TRAFFIC SIGNAL POLE
- UTILITY POLE
- LIGHT POLE
- SOIL BORING LOCATION
- TEMPORARY WELL LOCATION
- LOCATED UST



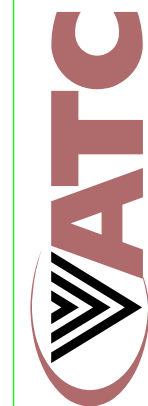
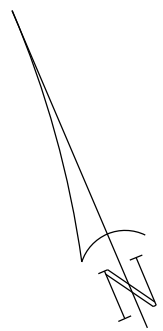
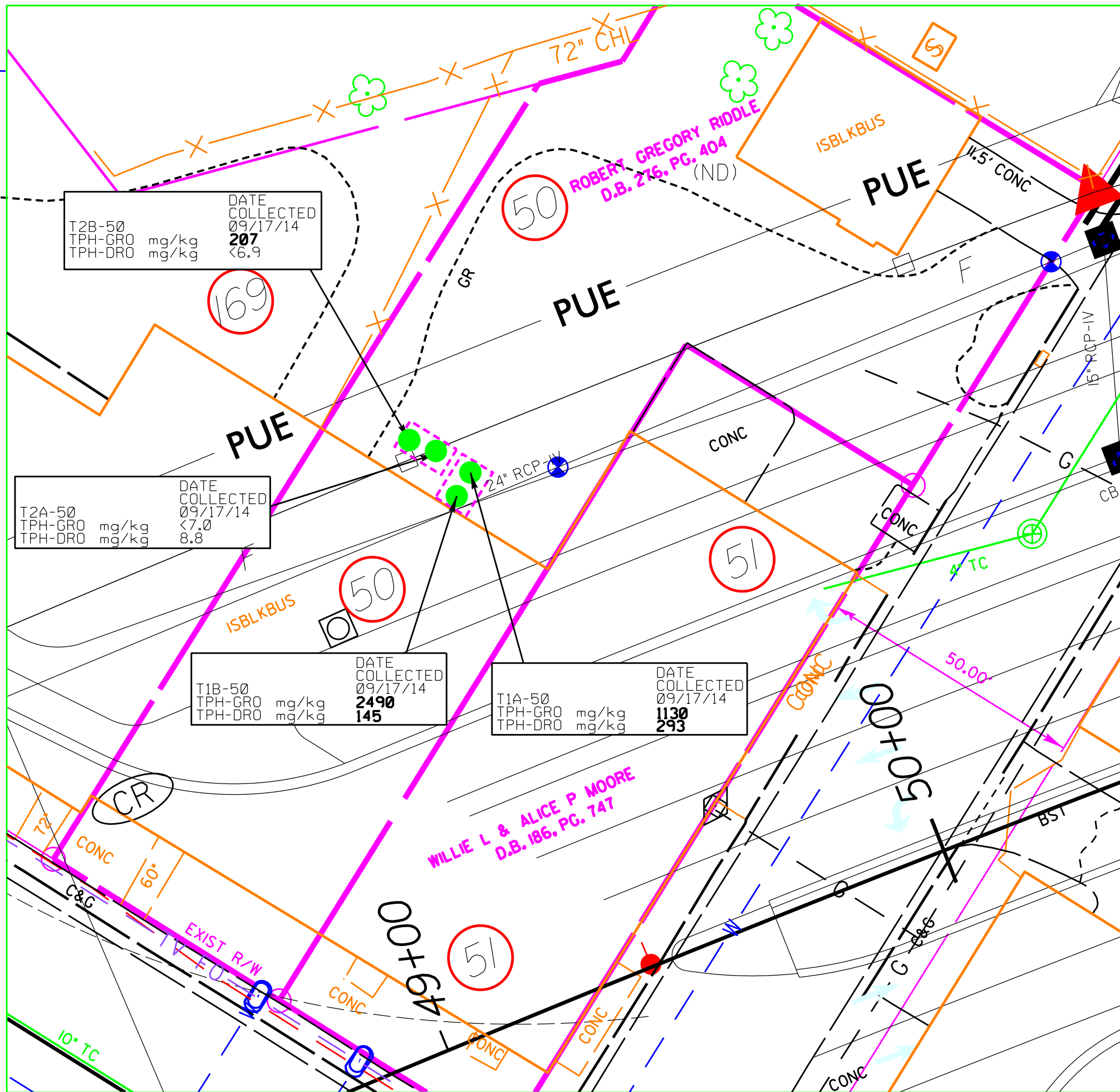
ATC Associates of North Carolina, P.C.
 RALEIGH, NORTH CAROLINA (919) 871-0999 FAX (919) 871-0335
 PROJECT NO. 45.19873.0007
 DATE 11-26-2014
 SCALE 1"=20'-0"
 REV. BY JC
 PREP. BY GS
 WBS ELEMENT 35781.1.2
 CAD FILE

TITLE **FIGURE 1**
 SITE MAP
 ROBERT GREGORY RIDDLE PROPERTY - PARCEL 50
 1404 W 14TH AVE
 GREENVILLE NC 27858

NOTES:
 1. TWO UST'S WERE LOCATED AND REMOVED FROM THIS PARCEL.

LEGEND

- EXISTING RIGHT OF WAY
- PROPOSED RIGHT OF WAY
- PROPERTY LINE
- - - TV U/G CABLE TV
- - - T U/G CABLE TELEPHONE
- - - T FO U/G CABLE TELEPHONE FIBER OPTIC
- U/G ELECTRIC
- EXISTING HYDRO
- - - TV FO U/G CABLE TV FIBER OPTIC
- PUE PERMANENT UTILITY EASEMENT
- F FILL LINE
- C CUT LINE
- CHL CHAIN LINK
- CB CATCH BASIN
- RCP REINFORCED CONCRETE PIPE
- EOT EDGE OF TRAVEL
- MH MANHOLE
- TC TERRA COTTA PIPE
- TRAFFIC SIGNAL POLE
- UTILITY POLE
- LIGHT POLE
- SOIL BORING LOCATION
- SOIL SAMPLE LOCATIONS
- LOCATED UST



ATC Associates of North Carolina, P.C.
 RALEIGH, NORTH CAROLINA (919) 871-0999 FAX (919) 871-0335
 SCALE 1"=20'-0" DATE 11-26-2014 PROJECT NO. 45.19873.0007

TITLE **FIGURE 2**
 SAMPLE LOCATION MAP
 ROBERT GREGORY RIDDLE PROPERTY - PARCEL 50
 1404 W 14TH AVE
 GREENVILLE NC 27858

CAD FILE	MBS ELEMENT	PREP. BY	REV. BY
	3578 I.1.2	GS	JC

NOTES:
 1) VALUES IN BOLD INDICATE LEVELS ABOVE NC DENR ACTION LEVELS.

APPENDIX A

FORM GW/UST-3

UST-3 Notice of Intent: UST Permanent Closure or Change-in-Service

Return completed form to:

The DWM Regional Office located in the area where the facility is located. Send a copy to the Central Office in Raleigh so that the status of the tank may be changed to "PERMANENTLY CLOSED" and your tank fee account can be closed out. SEE MAP ON THE BACK OF THIS FORM FOR THE CENTRAL AND REGIONAL OFFICE ADDRESSES.

STATE USE ONLY
I.D. # _____
Date Received _____

INSTRUCTIONS (READ THIS FIRST)

Complete and return at least **thirty (30) days** prior to closure or change-in-service activities. If a Professional Engineer (P.E.) or a Licensed Geologist (L.G.) provides supervision for closure or change-in-service site assessment activities and signs and seals all closure reports then at least a **five (5) working days** notice is acceptable.

Completed UST closure or change-in-service site assessment reports, along with a copy of the UST-2 form, should be submitted to the appropriate Division of Waste Management (DWM) Regional Office within thirty (30) days following closure activities. The UST-2 form should also be submitted to the Central Office in Raleigh so that the status of the tanks may be changed to permanently closed and your tank fee account can be closed out.

UST closure and change-in-service site assessments must be completed in accordance with the latest version of the *Guidelines for Tank Closure*. The *Guidelines for Tank Closure* can be obtained at www.wastenotnc.org.

You must make sure that USTs removed from your property are disposed of properly. When choosing a closure contractor, ask where the tank(s) will be taken for disposal. Usually, USTs are cleaned and cut up for scrap metal. This is dangerous work and must be performed by a qualified company. Tanks disposed of illegally in fields or other dumpsites can leak petroleum products and sludge into the environment. If your tanks are disposed of improperly, you could be held responsible for the cleanup of any environmental damage that occurs.

I. OWNERSHIP OF TANKS		II. LOCATION		
Owner Name (Corporation, Individual, Public Agency, or Other Entity) Abandoned in NCDOT Right of Way		Facility Name or Company Parcel 50 (NCDOT)		
Street Address 1589 Mail Service Center		Facility ID # (if known) Unknown		
City Raleigh	County Wake	Street Address 1404 W. 14 th Avenue		
State NC	Zip Code 27699	City Greenville	County Pitt	Zip Code 27834
Phone Number 919-707-6850		Phone Number 707-6850		

III. CONTACT PERSONNEL

Name: Jeff Corson	Company Name: ATC Associates	Job Title: Project Manager	Phone Number: 871-0999
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IV. TANK REMOVAL, CLOSURE IN PLACE, CHANGE-IN SERVICE

- | | | |
|--|--|---|
| <ol style="list-style-type: none"> Contact local fire marshal. Plan entire closure event. Conduct Site Soil Assessment. If removing tanks or closing in place, refer to API Publication 2015 <i>Cleaning Petroleum Storage Tanks</i> and 1604 <i>Removal and Disposal of Used Underground Petroleum Storage Tanks</i>. | <ol style="list-style-type: none"> Provide a sketch locating piping, tanks and soil sampling locations. Submit a closure report in the format of UST-12 (including the form UST-2) within thirty (30) days following the site investigation. If a release from the tanks has occurred, the site assessment portion of the tank closure must be conducted under the supervision of | <ol style="list-style-type: none"> a P.E. or L.G., with all closure site assessment reports bearing the signature and seal of the P.E. or L.G. If a release has not occurred, the supervision, signature or seal of a P.E. or L.G. is not required. Keep closure records for three (3) years. |
|--|--|---|

V. WORK TO BE PERFORMED BY

Contractor Name: A & D Environmental Services, Inc.		Contractor Company Name: A & D Environmental Services, Inc.		
Address: P.O. Box 484 High Point		State: NC	Zip Code: 27261	Phone No: 336-289-2835
Primary Consultant Name: ATC Associates		Primary Consultant Company Name: ATC Associates		Consultant Phone No: 919-871-0999

VI. TANKS SCHEDULED FOR CLOSURE OR CHANGE-IN-SERVICE

Tank ID No.	Size in Gallons	Last Contents	Proposed Activity		
			Closure		Change-In-Service New Contents Stored
			Removal	Abandonment in Place *	
6		Unknown	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
7		Unknown	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
8		Unknown	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
			<input type="checkbox"/>	<input type="checkbox"/>	
			<input type="checkbox"/>	<input type="checkbox"/>	

* Prior written approval to abandon a tank in place must be received from a DWM Regional Office.

VII. OWNER OR OWNER'S AUTHORIZED REPRESENTATIVE

I understand that I can be held responsible for environmental damage resulting from the improper disposal of my USTs.

Print name and official title: Garrett Stancil - Staff Scientist

Signature <u>Garrett Stancil (of NCDOT)</u>	Date Signed <u>2/13/15</u>	SCHEDULED REMOVAL DATE <u>9/16/14</u>	Notify your DWM Regional Office 48 hours before this date if scheduled removal date changes
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APPENDIX B
DISPOSAL MANIFESTS



A&D Environmental Services

Bill of Lading / Material Manifest

A&D Job No: 72332	Generator ID Number Not Applicable	Page 1 of 1	Emergency Response Phone 800-434-7750	Tracking Number 29620
-----------------------------	--	-----------------------	---	---------------------------------

Generator's Name and Mailing Address NC DOT 1589 Mail Service Center Raleigh, NC 27604	Generator's site address (if different from mailing address) Corner of 14th & Farmville Rd Greenville, NC
--	---

Transporter 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> Company Name A&D Environmental Services, Inc.	US EPA ID No: NCD986232221
--	-----------------------------------

Transporter 1 <input type="checkbox"/> 2 <input type="checkbox"/> Company Name A&D Environmental Services (SC), LLC	US EPA ID No: SCD987598331
---	-----------------------------------

<input checked="" type="checkbox"/> Designated Facility A&D Environmental Services, Inc. 2718 Uwharrie Road Archdale, NC 27263 336-434-7750 NCD986232221	<input type="checkbox"/> Designated Facility A&D Environmental Services, Inc. 3149 Lear Drive Burlington, NC 27215 336-229-0058 NCR000138628	<input type="checkbox"/> Designated Facility A&D Environmental Services (SC), LLC 1741 Calks Ferry Road Lexington, SC 29073 803-957-9175 SCD987598331	<input type="checkbox"/> Designated Facility A&D Environmental Services (SC), LLC 1321 White Horse Road, Suite C Greenville, SC 29605 864-234-6055
--	--	---	--

HM	Hazardous Materials Shipping Name and Description (if applicable)	No.	Type	QTY	Wt/Vol	Profile Number
	NON REGULATED LIQUIDS (water/fuel mixture)	1	TT	982	6	2014136
Petroleum Products for Recycle						
X	NA1993, Diesel fuel, 3, III					ERG# 128
X	NA1993, Fuel oil (No. 1, 2, 4, 5 or 6), 3, III					ERG# 128
X	UN1203, Gasoline, 3, II					ERG# 128
	USED OIL (Not a USDOT Hazardous Material)					
	Petroleum Contact Water (Not a USDOT Hazardous Material)					

Universal Waste Lamps, Batteries, Ballasts, and Electronics for Recycle							
HM	No.	Type	Est. Wt.	Count	Shipping Name and Description (if applicable)	Common Name	Discrepancy
X					RQ, UN2809, Mercury contained in manufactured articles, 8, III	ERG# 172 Mercury Containing Articles	
X					RQ, UN3432, Polychlorinated biphenyls, solid, 9, II	ERG# 171 TSCA Exempt PCB Lamp Ballasts	
X					UN2800, Batteries, wet, nonspillable, 8, III	ERG# 154 Sealed Lead Acid Batteries	
X					UN2794, Batteries, wet, filled with acid, 8, III	ERG# 154 Lead Acid Batteries	
X					UN2795, Batteries, wet, filled with alkali, 8, III	ERG# 154 Wet NiCad Batteries	
X					UN3090, Lithium batteries, 9, II	ERG# 138 Lithium Batteries	
X					UN3028, Batteries, dry, containing potassium hydroxide solid, 8, III	ERG# 154 Alkaline Batteries	
X					UN3028, Batteries, dry, containing potassium hydroxide solid, 8, III	ERG# 154 NiCad Batteries	
					Universal Waste Lamps (Not DOT-Regulated per 49 CFR 173.164(e))	Fluorescent lamps 4' or <	
					Universal Waste Lamps (Not DOT-Regulated per 49 CFR 173.164(e))	Fluorescent lamps 4'	
					Universal Waste Lamps (Not DOT-Regulated per 49 CFR 173.164(e))	Circular/U-tube lamps	
					Universal Waste Lamps (Not DOT-Regulated per 49 CFR 173.164(e))	Compact Lamps	
					Universal Waste Lamps (Not DOT-Regulated per 49 CFR 173.164(e))	Shattershield	
					Universal Waste Lamps (Not DOT-Regulated per 49 CFR 173.164(e))	HID/MV/UV Lamps	
					Universal Waste Lamps (Not DOT-Regulated per 49 CFR 173.164(e))	Incandescent Lamps	
					Non-PCB Light Ballasts for Recycle (Not DOT-Regulated)	Non-PCB Light Ballasts	
					Electronic Equipment for Recycle (Not DOT-Regulated)	Electronics	

Generator's Certification: This is to certify that the above-named materials are properly classified, described, packaged, marked, and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. I further certify that none of the materials described above are a hazardous waste as defined by EPA 40CFR Part 261 or any applicable state law, and unless specifically identified above the materials contain less than 1,000 ppm total halogens and do not contain quantifiable levels (2ppm) of PCBs as defined by EPA 40 CFR Parts 279 and 761.

Generator's/Officer's Printed/Typed Name Garrett Stancil (agent for ATC & DOT)	Signature <i>Garrett Stancil</i>	Month 9	Day 17	Year 14
--	-------------------------------------	-------------------	------------------	-------------------

Transporter 1 Printed/Typed Name CHARLIE SCHAFER	Signature <i>Charlie Schaffer</i>	Month 9	Day 17	Year 14
--	--------------------------------------	-------------------	------------------	-------------------

Transporter 2 Printed/Typed Name	Signature	Month	Day	Year
----------------------------------	-----------	-------	-----	------

Discrepancy Indication / Additional Information:

Designated Facility Certification: I hereby acknowledge receipt of the materials covered by this manifest except for any discrepancy indicated above.

Printed/Typed Name Michael Stone	Signature <i>Michael Stone</i>	Month 9	Day 18	Year 14
--	-----------------------------------	-------------------	------------------	-------------------

DESIGNATED FACILITY TO GENERATOR



Environmental Services, Inc.

P.O. Box 484 • High Point, NC • Phone (336) 434-7750 • FAX (336) 434-7752

TANK DISPOSAL MANIFEST

1) Tank Owner/Authorized Representative: Name and Mailing Address NC DOT
1589 Mail Service Center
Raleigh, NC 27604

2) Tank Owner/Authorized Representative: Contact Jeff Corson
Phone#: (919) 871-0999

3) Description Of Tanks:

<u>Tank No.</u>	<u>Capacity</u>	<u>Previous Contents</u>	<u>Comments</u>
<u># 1</u>	<u>550</u>	<u>Gasoline</u>	
<u># 2</u>	<u>550</u>	<u>Gasoline</u>	

4) Tank Owner/Authorized Representative Certification: The undersigned certifies that the above listed storage tanks have been removed from the premises of the tank owner.

Garrett Stancil (for ATZ & DOT) Garrett Stancil 9/17/14
Printed/Typed Name Signature Month/Day/Year

5) Transporter: The undersigned certifies that the above listed storage tanks have been transported to A&D Environmental and Industrial Services, 2718 Uwharrie Road, Archdale, N.C. 27263.

Jeson Freeman Jeson Freeman 9/17/14
Printed/Typed Name Signature Month/Day/Year

6) Disposal Certification: The undersigned certifies that the above-named storage tank(s) have been cut into scrap pieces and accepted by the metal recycling facility.

Recycling Facility: D.H Griffin Recycling
Michael Stoveman Michael Stoveman 9-19-14
Printed/Typed Name Signature Month/Day/Year

APPENDIX C

LABORATORY ANALYTICAL REPORTS

October 03, 2014

Chemical Testing Engineer
NCDOT
Materials & Tests Unit
1801 Blue Ridge Road
Raleigh, NC 27607

RE: Project: Greenville DOT U3315 35781.12
Pace Project No.: 92218202

Dear Chemical Engineer:

Enclosed are the analytical results for sample(s) received by the laboratory on September 19, 2014. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

Analyses were performed at the Pace Analytical Services location indicated on the sample analyte page for analysis unless otherwise footnoted.

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

Sincerely,



Kevin Godwin
kevin.godwin@pacelabs.com
Project Manager

Enclosures

cc: Jeff Corson, Cardno ATC



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Greenville DOT U3315 35781.12

Pace Project No.: 92218202

Charlotte Certification IDs

9800 Kincey Ave. Ste 100, Huntersville, NC 28078
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Certification #: 99006001

Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
West Virginia Certification #: 357
Virginia/VELAP Certification #: 460221

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Greenville DOT U3315 35781.12

Pace Project No.: 92218202

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92218202001	T1A-50	EPA 8015 Modified	RES	2	PASI-C
		EPA 8015 Modified	BFW	2	PASI-C
		ASTM D2974-87	ACS	1	PASI-C
92218202002	T2A-50	EPA 8015 Modified	RES	2	PASI-C
		EPA 8015 Modified	BFW	2	PASI-C
		ASTM D2974-87	ACS	1	PASI-C
92218202003	T2B-50	EPA 8015 Modified	RES	2	PASI-C
		EPA 8015 Modified	BFW	2	PASI-C
		ASTM D2974-87	ACS	1	PASI-C
92218202004	T1B-50	EPA 8015 Modified	RES	2	PASI-C
		EPA 8015 Modified	BFW	2	PASI-C
		ASTM D2974-87	ACS	1	PASI-C

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: Greenville DOT U3315 35781.12

Pace Project No.: 92218202

Method: EPA 8015 Modified
Description: 8015 GCS THC-Diesel
Client: NCDOT North East
Date: October 03, 2014

General Information:

4 samples were analyzed for EPA 8015 Modified. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3546 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: OEXT/30059

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92218249002

M3: Matrix spike recovery was outside laboratory control limits due to matrix interferences.

- MS (Lab ID: 1290159)
 - Diesel Range Organics(C10-C28)
- MSD (Lab ID: 1290160)
 - Diesel Range Organics(C10-C28)

R1: RPD value was outside control limits.

- MSD (Lab ID: 1290160)
 - Diesel Range Organics(C10-C28)

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: Greenville DOT U3315 35781.12

Pace Project No.: 92218202

Method: EPA 8015 Modified

Description: Gasoline Range Organics

Client: NCDOT North East

Date: October 03, 2014

General Information:

4 samples were analyzed for EPA 8015 Modified. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

H5: Reanalysis conducted in excess of EPA method holding time. Results confirm original analysis performed in hold time.

- T1B-50 (Lab ID: 92218202004)

Sample Preparation:

The samples were prepared in accordance with EPA 5035A/5030B with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Greenville DOT U3315 35781.12

Pace Project No.: 92218202

Sample: T1A-50 **Lab ID: 92218202001** Collected: 09/17/14 13:15 Received: 09/19/14 15:20 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel		Analytical Method: EPA 8015 Modified Preparation Method: EPA 3546						
Diesel Range Organics(C10-C28)	293	mg/kg	7.3	1	09/22/14 09:39	09/23/14 01:24		
Surrogates								
n-Pentacosane (S)	79	%	41-119	1	09/22/14 09:39	09/23/14 01:24	629-99-2	
Gasoline Range Organics		Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B						
Gas Range Organics (C6-C10)	1130	mg/kg	64.6	10	10/01/14 11:20	10/01/14 23:42		
Surrogates								
4-Bromofluorobenzene (S)	87	%	70-167	10	10/01/14 11:20	10/01/14 23:42	460-00-4	
Percent Moisture		Analytical Method: ASTM D2974-87						
Percent Moisture	31.3	%	0.10	1		09/23/14 14:58		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Greenville DOT U3315 35781.12

Pace Project No.: 92218202

Sample: T2A-50 **Lab ID: 9221820202** Collected: 09/17/14 14:30 Received: 09/19/14 15:20 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel		Analytical Method: EPA 8015 Modified Preparation Method: EPA 3546						
Diesel Range Organics(C10-C28)	8.8	mg/kg	7.2	1	09/22/14 09:39	09/23/14 01:24		
Surrogates								
n-Pentacosane (S)	65	%	41-119	1	09/22/14 09:39	09/23/14 01:24	629-99-2	
Gasoline Range Organics		Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B						
Gas Range Organics (C6-C10)	ND	mg/kg	7.0	1	10/01/14 11:20	10/01/14 18:45		
Surrogates								
4-Bromofluorobenzene (S)	89	%	70-167	1	10/01/14 11:20	10/01/14 18:45	460-00-4	
Percent Moisture		Analytical Method: ASTM D2974-87						
Percent Moisture	30.4	%	0.10	1		09/23/14 14:59		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Greenville DOT U3315 35781.12

Pace Project No.: 92218202

Sample: T2B-50 **Lab ID: 9221820203** Collected: 09/17/14 14:45 Received: 09/19/14 15:20 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel		Analytical Method: EPA 8015 Modified Preparation Method: EPA 3546						
Diesel Range Organics(C10-C28)	ND	mg/kg	6.9	1	09/22/14 09:39	09/23/14 01:47		
Surrogates								
n-Pentacosane (S)	72	%	41-119	1	09/22/14 09:39	09/23/14 01:47	629-99-2	
Gasoline Range Organics		Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B						
Gas Range Organics (C6-C10)	207	mg/kg	7.2	1	10/01/14 11:20	10/01/14 19:08		
Surrogates								
4-Bromofluorobenzene (S)	116	%	70-167	1	10/01/14 11:20	10/01/14 19:08	460-00-4	
Percent Moisture		Analytical Method: ASTM D2974-87						
Percent Moisture	27.4	%	0.10	1		09/23/14 14:59		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Greenville DOT U3315 35781.12

Pace Project No.: 92218202

Sample: T1B-50 **Lab ID: 92218202004** Collected: 09/17/14 13:30 Received: 09/19/14 15:20 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel		Analytical Method: EPA 8015 Modified Preparation Method: EPA 3546						
Diesel Range Organics(C10-C28)	145	mg/kg	7.2	1	09/22/14 09:39	09/23/14 01:47		
Surrogates								
n-Pentacosane (S)	54	%	41-119	1	09/22/14 09:39	09/23/14 01:47	629-99-2	
Gasoline Range Organics		Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B						
Gas Range Organics (C6-C10)	2490	mg/kg	142	20	10/01/14 11:20	10/03/14 11:25		
Surrogates								
4-Bromofluorobenzene (S)	92	%	70-167	20	10/01/14 11:20	10/03/14 11:25	460-00-4	H5
Percent Moisture		Analytical Method: ASTM D2974-87						
Percent Moisture	30.9	%	0.10	1		09/23/14 14:59		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Greenville DOT U3315 35781.12

Pace Project No.: 92218202

QC Batch: GCV/8608 Analysis Method: EPA 8015 Modified
 QC Batch Method: EPA 5035A/5030B Analysis Description: Gasoline Range Organics
 Associated Lab Samples: 92218202001, 92218202002, 92218202003, 92218202004

METHOD BLANK: 1297105 Matrix: Solid
 Associated Lab Samples: 92218202001, 92218202002, 92218202003, 92218202004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Gas Range Organics (C6-C10)	mg/kg	ND	6.0	10/01/14 17:14	
4-Bromofluorobenzene (S)	%	86	70-167	10/01/14 17:14	

LABORATORY CONTROL SAMPLE: 1297106

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Gas Range Organics (C6-C10)	mg/kg	50	56.1	112	70-165	
4-Bromofluorobenzene (S)	%			89	70-167	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1297107 1297108

Parameter	Units	92218846009		1297107		1297108		% Rec Limits	RPD	Qual	
		MS Result	MSD Spike Conc.	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result				MS % Rec
Gas Range Organics (C6-C10)	mg/kg	ND	38.4	38.4	38.4	52.5	53.0	136	137	47-187	1
4-Bromofluorobenzene (S)	%							89	86	70-167	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Greenville DOT U3315 35781.12

Pace Project No.: 92218202

QC Batch: OEXT/30059 Analysis Method: EPA 8015 Modified
QC Batch Method: EPA 3546 Analysis Description: 8015 Solid GCSV
Associated Lab Samples: 92218202001, 92218202002, 92218202003, 92218202004

METHOD BLANK: 1290157 Matrix: Solid
Associated Lab Samples: 92218202001, 92218202002, 92218202003, 92218202004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diesel Range Organics(C10-C28)	mg/kg	ND	5.0	09/22/14 13:40	
n-Pentacosane (S)	%	61	41-119	09/22/14 13:40	

LABORATORY CONTROL SAMPLE: 1290158

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Diesel Range Organics(C10-C28)	mg/kg	66.7	48.3	72	49-113	
n-Pentacosane (S)	%			66	41-119	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1290159 1290160

Parameter	Units	92218249002		1290159		1290160		% Rec Limits	RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec			
Diesel Range Organics(C10-C28)	mg/kg	590	77.4	77.4	249	440	-442	-195	10-146	55 M3,R1
n-Pentacosane (S)	%						75	67	41-119	

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QUALITY CONTROL DATA

Project: Greenville DOT U3315 35781.12

Pace Project No.: 92218202

QC Batch: PMST/7055

Analysis Method: ASTM D2974-87

QC Batch Method: ASTM D2974-87

Analysis Description: Dry Weight/Percent Moisture

Associated Lab Samples: 92218202001, 92218202002, 92218202003, 92218202004

SAMPLE DUPLICATE: 1290526

Parameter	Units	92218203001 Result	Dup Result	RPD	Qualifiers
Percent Moisture	%	15.3	13.8	10	

SAMPLE DUPLICATE: 1290527

Parameter	Units	92218228001 Result	Dup Result	RPD	Qualifiers
Percent Moisture	%	19.4	17.6	10	

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: Greenville DOT U3315 35781.12

Pace Project No.: 92218202

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Acid preservation may not be appropriate for 2-Chloroethylvinyl ether, Styrene, and Vinyl chloride.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-C Pace Analytical Services - Charlotte

ANALYTE QUALIFIERS

H5 Reanalysis conducted in excess of EPA method holding time. Results confirm original analysis performed in hold time.

M3 Matrix spike recovery was outside laboratory control limits due to matrix interferences.

R1 RPD value was outside control limits.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Greenville DOT U3315 35781.12

Pace Project No.: 92218202

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92218202001	T1A-50	EPA 3546	OEXT/30059	EPA 8015 Modified	GCSV/18966
92218202002	T2A-50	EPA 3546	OEXT/30059	EPA 8015 Modified	GCSV/18966
92218202003	T2B-50	EPA 3546	OEXT/30059	EPA 8015 Modified	GCSV/18966
92218202004	T1B-50	EPA 3546	OEXT/30059	EPA 8015 Modified	GCSV/18966
92218202001	T1A-50	EPA 5035A/5030B	GCV/8608	EPA 8015 Modified	GCV/8611
92218202002	T2A-50	EPA 5035A/5030B	GCV/8608	EPA 8015 Modified	GCV/8611
92218202003	T2B-50	EPA 5035A/5030B	GCV/8608	EPA 8015 Modified	GCV/8611
92218202004	T1B-50	EPA 5035A/5030B	GCV/8608	EPA 8015 Modified	GCV/8611
92218202001	T1A-50	ASTM D2974-87	PMST/7055		
92218202002	T2A-50	ASTM D2974-87	PMST/7055		
92218202003	T2B-50	ASTM D2974-87	PMST/7055		
92218202004	T1B-50	ASTM D2974-87	PMST/7055		

REPORT OF LABORATORY ANALYSIS

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Client Name: ATC

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____
Custody Seal on Cooler/Box Present: yes no **Seals intact:** yes no
Packing Material: Bubble Wrap Bubble Bags None Other _____
Thermometer Used: IR Gun T1102 T1401 **Type of Ice:** Wet Blue None Samples on ice, cooling process has begun
Temp Correction Factor: T1102: No Correction T1101: No Correction
Corrected Cooler Temp.: 5.0 °C **Biological Tissue is Frozen:** Yes No N/A
 Temp should be above freezing to 6°C

Optional
Proj. Due Date: _____
Proj. Name: _____

Date and Initials of person examining contents: DM/19

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Short Hold Time Analysis (<72hr):	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Rush Turn Around Time Requested:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Sufficient Volume:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Correct Containers Used:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Containers Intact:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Filtered volume received for Dissolved tests	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
-Includes date/time/ID/Analysis Matrix:	<u>12 no gro vit</u>		
All containers needing preservation have been checked:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
All containers needing preservation are found to be in compliance with EPA recommendation. exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
Samples checked for dechlorination:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
Trip Blank Present:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
Pace Trip Blank Lot # (if purchased):			

Client Notification/ Resolution: _____ **Field Data Required?** Y / I / N
Person Contacted: Jeff Corson **Date/Time:** 9/19/14
Comments/ Resolution: PA informed of missing Gro Seal Kit. KG 9/19/14 Gro Kit found. KG.

SCURF Review: [Signature] **Date:** 9/19/14
SRF Review: [Signature] **Date:** 9/22/14

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

WO# : 92218202

92218202

CHAIN-OF-CUSTODY / Analytical Request Document

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

Handwritten: + Passed up

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1641192

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:		REGULATORY AGENCY			
Company: <i>ATC Associates</i>		Report To: <i>Jeff. Corson @ cardno.com</i>		Attention:		<input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER			
Address: <i>2725 E. Millbrook Rd.</i>		Copy To: <i>Garrett. Stancil @ cardno.com</i>		Company Name:		<input checked="" type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER _____			
Suite: <i>121 Raleigh, NC 27604</i>		Purchase Order No.:		Address:		Site Location			
Email To: <i>Jeff. Corson @ cardno.com</i>				Pace Quote Reference:		STATE: <u>NC</u>			
Phone: <i>(919) 871-0999</i> Fax:		Project Name: <i>Greenville NCDOT</i>		Pace Project Manager:					
Requested Due Date/TAT:		Project Number: <i>45.19873.0007</i>		Pace Profile #:					

ITEM #	Section D Required Client Information	Matrix Codes MATRIX / CODE	Matrix Codes (see valid codes to left)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives								Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	Pace Project No. / Lab I.D.					
				COMPOSITE START		COMPOSITE END/GRAB				Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other								
				DATE	TIME	DATE	TIME																		
1	SAMPLE ID (A-Z, 0-9 / , -) Sample IDs MUST BE UNIQUE		SL	G	9/17/14	13:15													X	X				92218202	
2	T1A-50					13:30																			001
3	T1B-50					14:30																			002
4	T2A-50					14:45																			003
5	T2B-50																								
6																									
7																									
8																									
9																									
10																									
11																									
12																									

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS		
	<i>Garrett Stancil</i>	9/18/14	15:15	<i>Garrett Stancil/Pace</i>	9-18-14	15:15			
	<i>Wanjun Zheng/Pace</i>	9-18-14	15:50	<i>Wanjun Zheng/Pace</i>	9-18-14	15:50			
	<i>Robert Pace</i>	9/19	15:20	<i>Robert Pace</i>	9-18	9:50			
				<i>Wanjun Zheng/Pace</i>	9/19	15:20	50	4	W 4

ORIGINAL

SAMPLER NAME AND SIGNATURE		Temp in °C	Received on ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER: <i>Garrett Stancil</i>					
SIGNATURE of SAMPLER: <i>Garrett Stancil</i>					