August 27, 2025
Kleinfelder File No. RAL25R186007

Ms. Cheryl A. Youngblood, LG, CPG
North Carolina Department of Transportation
Assistant State Geotechnical Engineer
1589 Mail Service Center
Raleigh, North Carolina 27699-1589

SUBJECT: UST CLOSURE REPORT
WBS ELEMENT NO. 39078.1.2, TIP NO. U-4717AC aka U-4714A
SR 1009 (JOHN STREET/OLD MONROE ROAD), SR 3448/SR3474 (TRADE STREET) TO SR 1377 (WESLEY CHAPEL - STOUTS ROAD)
PARCEL 129, STALLINGS TOWNCENTER LLC
KLEINFELDER PROJECT NO. 26000454.001A

Dear Ms. Youngblood:

Please find enclosed Kleinfelder, Inc.'s (Kleinfelder) report summarizing the underground storage tank (UST) removal activities performed at the subject site. This report summarizes Kleinfelder's field activities, observations, and includes the laboratory reports.

Should questions arise or additional information be required, please contact the undersigned.

Sincerely,
KLEINFELDER, INC.

Michael J. Burns, LG
Environmental Program Manager

Michael Mastbaum, LG
Senior Professional

MJB:jrm
Enclosure

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KLEINFELDER 200 Regency Forest Drive, Suite 225, Cary, NC 27518 p | 919.755.5011

UST CLOSURE REPORT
WBS ELEMENT NO. 39078.1.2, TIP NO. U-4717AC aka U-4714A
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KLEINFELDER PROJECT NO. 26000454.001A

AUGUST 27, 2025

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ONLY THE CLIENT OR ITS DESIGNATED REPRESENTATIVES MAY USE THIS DOCUMENT AND ONLY FOR THE SPECIFIC PROJECT FOR WHICH THIS REPORT WAS PREPARED.

A Report Prepared for:

North Carolina Department of Transportation
Geotechnical Unit
GeoEnvironmental Section
1020 Birch Ridge Drive
Raleigh, North Carolina 27610

UST CLOSURE REPORT
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KLEINFELDER, INC.
200 Regency Forest Drive. | Suite 225
Cary, North Carolina 27518

August 27, 2025
Kleinfelder Project No. 26000454.001A

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UST CLOSURE AND INITIAL ABATEMENT ACTION REPORT

1. SITE IDENTIFICATION

Facility I.D.:	Not Assigned
UST Incident Number (if known):	Not Assigned
Site Risk:	Not Determined
Site Name:	Not Assigned
Site Street Address:	2828 and 2900 Old Monroe Road
City/Town:	Stallings
Zip Code:	28104
County:	Union
Description of Geographical Data Point (e.g., diesel fill port):	Center of UST Basin
Location Method (GPS, topographical map, other):	Google Earth
Latitude (decimal degrees):	UST 129N 35.0854; UST 129S 35.0851
Longitude (decimal degrees):	UST 129N -80.6956; UST 129S -80.6954
Date of Report:	August 27, 2025

2. Information about Contacts Associated with the UST System

UST Owner:	Stallings Towncenter, LLC
Address:	2519 Maybank Drive Charlotte, North Carolina 28211
Phone:	Unknown
UST Operator:	See UST Owner
Property Owner:	Stallings Towncenter, LLC
Address:	2828 and 2900 Old Monroe Road Stallings, North Carolina 28104
Property Occupant:	No current occupant
Consultant:	Kleinfelder, Inc.
Address:	200 Regency Forest Drive. | Suite 225 Cary, North Carolina 27518
Phone:	919.755.5011

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Contact:	Michael J. Burns, LG
Analytical Laboratory:	Pace Analytical Services, LLC
Address:	9800 Kincey Avenue, Suite 100 Huntersville, NC 28078
Phone:	704.875.9092
State Certification No.	12

3. Information about Release

Date Discovered:	UST 129N: July 8, 2025
Estimated Quantity of Release:	Unknown
Cause of Release:	Unknown
Source of Release (Dispenser/Piping/UST):	UST
Sizes and Contents of Tanks or Other Containment from which the Release Occurred:	Two (2) 250-gallon steel heating oil USTs

Release Information: Release detected beneath UST 129 N based on laboratory results.

4. CERTIFICATION

SEAL AND SIGNATURE OF CERTIFYING LICENSED GEOLOGIST

I, Michael J. Burns, a Licensed Geologist for Kleinfelder, Inc., do certify that the information contained in this report is correct and accurate to the best of my knowledge.

Signed by: Michael Burns
7E53DC44AC794...

NORTH CAROLINA LICENSED SEAL 1645 GEOLOGIST MICHAEL JAMES BURNS

Michael J Burns, LG
NC License No. 1645

Kleinfelder, Inc. is permitted to practice geology | engineering in North Carolina. The certification number of the corporation is C521 | F-1312.

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EXECUTIVE SUMMARY

The site is located at 2828 and 2900 Old Monroe Road in Stallings, Union County, North Carolina. The site is identified as Union County Parcel Identification Number 07129293A. At the time of the closure activities, the site consisted of a vacant parcel with no structures. The two (2) underground storage tanks (USTs) had been associated with two (2) former residential homes that were demolished prior to the date of the closure activities.

On July 8, 2025, Kleinfelder, Inc. (Kleinfelder) provided oversight of the removal of two (2) approximately 250-gallon non-commercial heating oil USTs. The USTs are designated as UST 129N (2828 Old Monroe Road) and UST 129S (2900 Old Monroe Road). The USTs are assumed to have contained heating oil for residential use. The USTs contained a combined approximately 500-gallons of residual liquid. Upon the removal of the two (2) USTs, each tank had been damaged by the backhoe resulting in large holes in the top of the tanks. No obvious olfactory and/or photoionization detector (PID) evidence of petroleum-impacted soil was identified following removal of the two (2) USTs; although minor orders were detected beneath UST 129N. Soil in contact with the UST was loaded onto a dump truck and transported offsite for disposal. No petroleum concentrations were detected in the samples collected from the excavation that exceeded the total petroleum hydrocarbon (TPH) diesel range organics (DRO) and gasoline range organics (GRO) Action Levels, except the sample collected from beneath UST 129N that exceeded the TPH Action Level for TPH DRO of 100 milligrams per kilogram (mg/kg). The concentration detected above the TPH DRO Action Level beneath UST 129N was 116 mg/kg. The excavation was backfilled with clean fill soil. Groundwater was not encountered in the UST excavations. The USTs were hauled of site for disposal on July 11, 2025.

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A SITE HISTORY AND CHARACTERIZATION

The site is located at 2828 and 2900 Old Monroe Road in Stallings, Union County, North Carolina (Figure 1). The site is identified as Union County Parcel Identification Number 07129293A. At the time of the closure activities, the site consisted of a vacant parcel with no structures. The Two (2) USTs had been associated with two (2) former residential homes that were demolished prior to the date of the closure activities. The UST-2B form is provided in Appendix A.

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B SITE CHECK

There was no indication that a release had occurred from the UST prior to closure; therefore, site check assessment procedures were not performed.

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C UST CLOSURE PROCEDURES

Kleinfelder was contracted to remove two (2) 250-gallon non-commercial heating oil USTs on a vacant parcel with no structures located at 2828 (UST 129N) and 2900 (UST 129S) Old Monroe Road in Stallings, Union County, North Carolina. The UST information is included in Tables 1 and 2. The USTs were previously associated with two (2) residential homes that were demolished prior to the closure activities. Prior to the removal of the USTs, Kleinfelder obtained permits from the Union County Fire Marshal. Additionally, the Union County Fire Marshal was notified prior to removing the USTs from the ground.

The following is a chronological description of the closure activities that were performed on July 8, 2025.

July 8, 2025

- Kleinfelder personnel arrived onsite and assessed the public utilities near the UST excavation area.
- Kleinfelder personnel met with a GPRS tech onsite to locate the USTs.
- The GPRS tech located two (2) USTs approximately one (1) foot below grade.
- Kleinfelder personnel met A&D Environmental, Inc. (A&D) of Archdale, North Carolina at the site to begin UST closure activities.
- A&D mobilized a vacuum truck to the site to remove the residual liquid from the USTs. The USTs contained a combined total of approximately 500-gallons of residual liquid (Appendix B). The total liquid listed on the disposal manifest in Appendix B includes liquid removed from the UST on Parcel 134 (report under separate cover).
- A&D began excavating the soil on the top and the sides of the USTs to facilitate removal.
- Prior to UST removals, A&D checked the atmosphere of the interior of the USTs with a lower explosive level (LEL) meter to determine whether explosive vapors were present within the USTs. The atmospheres of the tanks were determined to be non-explosive before the tanks were removed from the ground.
- UST 129N was removed from the ground and the bottom and sides of the UST were observed to be intact, except for damage from the backhoe during the removal process. A visual observation of the tank did not identify any holes or areas of

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significant corrosion and pitting.

- UST 129S was removed from the ground and the bottom and sides of the UST were observed to be intact. The tank was damaged during the removal process. A visual observation of the tank did not identify any holes or areas of significant corrosion and pitting.
- Confirmation samples were collected for field screening using a photoionization detector (PID). All samples indicated PID concentrations less than 50 parts per million (ppm). The sample collected from beneath UST 129N did indicate olfactory evidence of petroleum odors, but the PID reading did not confirm a release.
- Following the removal of the USTs, Kleinfelder collected soil samples from the bottom and sidewalls from each UST basin as well as a sample from the stockpiled soil. The sample locations are shown on Figures 2A and 2B. The samples were placed in laboratory-provided containers, placed in a cooler with ice and shipped to Pace Laboratories for analysis for TPH GRO and DRO per EPA Method 8015C.
- The soil in contact with the USTs (13.34 tons) was transported offsite for disposal (Appendix B).
- A load of clean fill soil was delivered on site for backfilling.
- Copies of the tank disposal manifests are included in Appendix C.
- Photographs taken during the UST closures are included in Appendix D.

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D INITIAL RESPONSE AND ABATEMENT

Based on PID readings, petroleum impacted soil was not identified and initial response or abatement activities were not considered to be necessary.

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E SAMPLE RESULTS

The sample locations and laboratory results are presented on Figures 2A and 2B and listed in Table 3. The laboratory report and associated chain-of-custody document are included in Appendix E.

The results of the UST closure activities included the following:

- PID screening results did not indicate the presence of petroleum impacted soil.
- Kleinfelder collected confirmation soil samples from the bottom of the tank basin and sidewalls at UST 129N and UST 129S for lab testing. The soil was placed into laboratory provided containers, labeled, and maintained on ice until shipped to Pace Laboratories in Huntersville, North Carolina.
- The samples were analyzed for TPH GRO and DRO by EPA Method 8015C. The sample locations are shown on Figures 2A and 2B. Analytical results are provided in Table 3. The laboratory results did indicate a concentration that met or exceeded the TPH DRO Action Levels of 100 mg/kg at UST 129N-B which was the bottom of the tank basin at a concentration of 116 mg/kg. None of the other laboratory results indicated concentrations that exceeded the TPH DRO and GRO (50 mg/kg) Action Levels. The laboratory reports are provided in Appendix E.
- Following soil sample collection, the excavation was backfilled with clean fill soil then compacted with the backhoe bucket. No stockpiled soil remained onsite following closure.

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F CONCLUSIONS

Based on Kleinfelder's field observations, and the results of the laboratory analyses, Kleinfelder presents the following conclusions:

- Two (2) approximate 250-gallon non-commercial heating oil USTs (UST 129N and UST 129S) were closed by removal on July 8, 2025. The USTs were observed to be in good condition with no obvious evidence of holes or pitting observed.
- The USTs contained a combined total of approximately 500-gallons of residual liquid, which was removed for off-site disposal.
- All PID readings for the soil sampled screened from each excavation were less than 50 ppm.
- Confirmation laboratory analyses from UST 129N excavation indicated a concentration of TPH DRO (116 mg/kg) above the TPH Action Level of 100 mg/kg. All other laboratory analyses were below the TPH DRO and GRO Action Levels.
- Confirmation laboratory analyses of soil samples collected from the UST 129S excavation did not indicate the presence of soil contamination above the TPH Action Levels for DRO or GRO.
- The excavations were backfilled with clean fill soil then compacted.
- Groundwater was not encountered during the excavation.
- The closure activities indicated a clean closure at the UST 129S location.
- The closure activities indicated a minimal amount of residual soil impact with TPH DRO below UST 129N.

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G LIMITATIONS

Kleinfelder's work was performed in a manner consistent with that level of care and skill ordinarily exercised by other members of its profession practicing in the same locality, under similar conditions and at the date the services are provided. Kleinfelder's conclusions, opinions and recommendations will be based on a limited number of observations and data. It is possible that conditions could vary between or beyond the data evaluated. Kleinfelder makes no guarantee or warranty, express or implied, regarding the services, communication (oral or written), report, opinion, or instrument of service provided.

Kleinfelder offers various levels of investigative and engineering services to suit the varying needs of different clients. It should be recognized that definition and evaluation of geologic and environmental conditions are a difficult and inexact science. Judgments leading to conclusions and recommendations are generally made with incomplete knowledge of the subsurface conditions present due to the limitations of data from field studies. Although risk can never be eliminated, more-detailed and extensive studies yield more information, which may help understand and manage the level of risk. Since detailed study and analysis involves greater expense, Kleinfelder's clients participate in determining levels of service that provide adequate information for their purposes at acceptable levels of risk. More extensive studies, including subsurface studies or field tests, should be performed to reduce uncertainties. Acceptance of this report will indicate that NCDOT has reviewed the document and determined that it does not need or want a greater level of service than provided.

During the course of the performance of Kleinfelder's services, hazardous materials may have been discovered. Kleinfelder assumes no responsibility or liability whatsoever for any claim, loss of property value, damage, or injury that results from pre-existing hazardous materials being encountered or present on the project site, or from the discovery of such hazardous materials. Nothing contained in this report should be construed or interpreted as requiring Kleinfelder to assume the status of an owner, operator, or generator, or person who arranges for disposal, transport, storage or treatment of hazardous materials within the meaning of any governmental statute, regulation or order. NCDOT is solely responsible for directing notification of all governmental agencies, and the public at large, of the existence, release, treatment or disposal of any hazardous materials observed at the project site, either before or during performance of

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Kleinfelder's services. NCDOT is responsible for directing all arrangements to lawfully store, treat, recycle, dispose, or otherwise handle hazardous materials, including cuttings and samples resulting from Kleinfelder's services.

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TABLES

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TABLE 1: SITE HISTORY – UST SYSTEM

UST ID Number	Current/ Last Contents *	Previous Contents *	Capacity (in gallons)	Construction Details **	Tank Dimensions	Description of Associated Piping and Pumps	Date Tank Installed	Status of UST ***	Was release associated with the UST System?
Tank 1 (UST129 N)	Heating Oil	Unknown	250	Steel, single-walled	3’ x 4.8’	None	Unknown	Permanently closed by removal (07/08/25)	Yes
Tank 2 (UST-129S)	Heating Oil	Unknown	250	Steel, single-walled	3’ x 4.8’	None	Unknown	Permanently closed by removal (07/08/25)	No release

* Gasoline (unleaded or leaded), diesel, used oil, waste oil, aviation fuel, etc., or pesticides, non-halogenated or halogenated solvents, etc

** Fiberglass (single- or double-walled), steel (single- or double-walled), steel with FRP (single- or double-walled), steel with liner, other, unknown

*** Currently operational, not in use or temporarily closed (specify date), permanently closed in place (specify date), permanently closed by removal (specify date)

Table 2: Site History – UST Owner/Operator and Other Responsible Party Information

Revision Date: N/A Incident Number and Name: N/A

UST ID Number	Unknown	Facility ID Number	NA
Name of Owner		Dates of Operation (mm/dd/yy to mm/dd/yy)	
Stallings Towncenter LLC		unknown	
Street Address			
2828 and 2900 Old Monroe Road			
City	State	Zip	Telephone Number
Stallings	NC	28104	Unknown
Name of Operator		Dates of Operation (mm/dd/yy to mm/dd/yy)	
Unknown		Unknown	

TABLE 3: Soil Sample Analytical Summary

Parameter							Comparison Criteria	
Sample ID	UST 129N-B	UST 129N-N	UST 129N-S	UST 129N-E	UST 129N-W	UST 129N-Comp	TPH GRO Action Level	TPH DRO Action Level
Collection Depth (ft bgs)	4	3	3	3	3	---		
PID (ppm)	29.2	1.8	2.0	0.8	1.5	0.6		
Collection Date	7/8/25	7/8/25	7/8/25	7/8/25	7/8/25	7/8/25		
EPA Method 8015C								
TPH GRO	<6.4	<5.2	<5.7	<5.7	<6.9	<5.7	50	---
TPH DRO	**116**	<5.6	<5.7	<5.8	9.0	<5.6	---	100

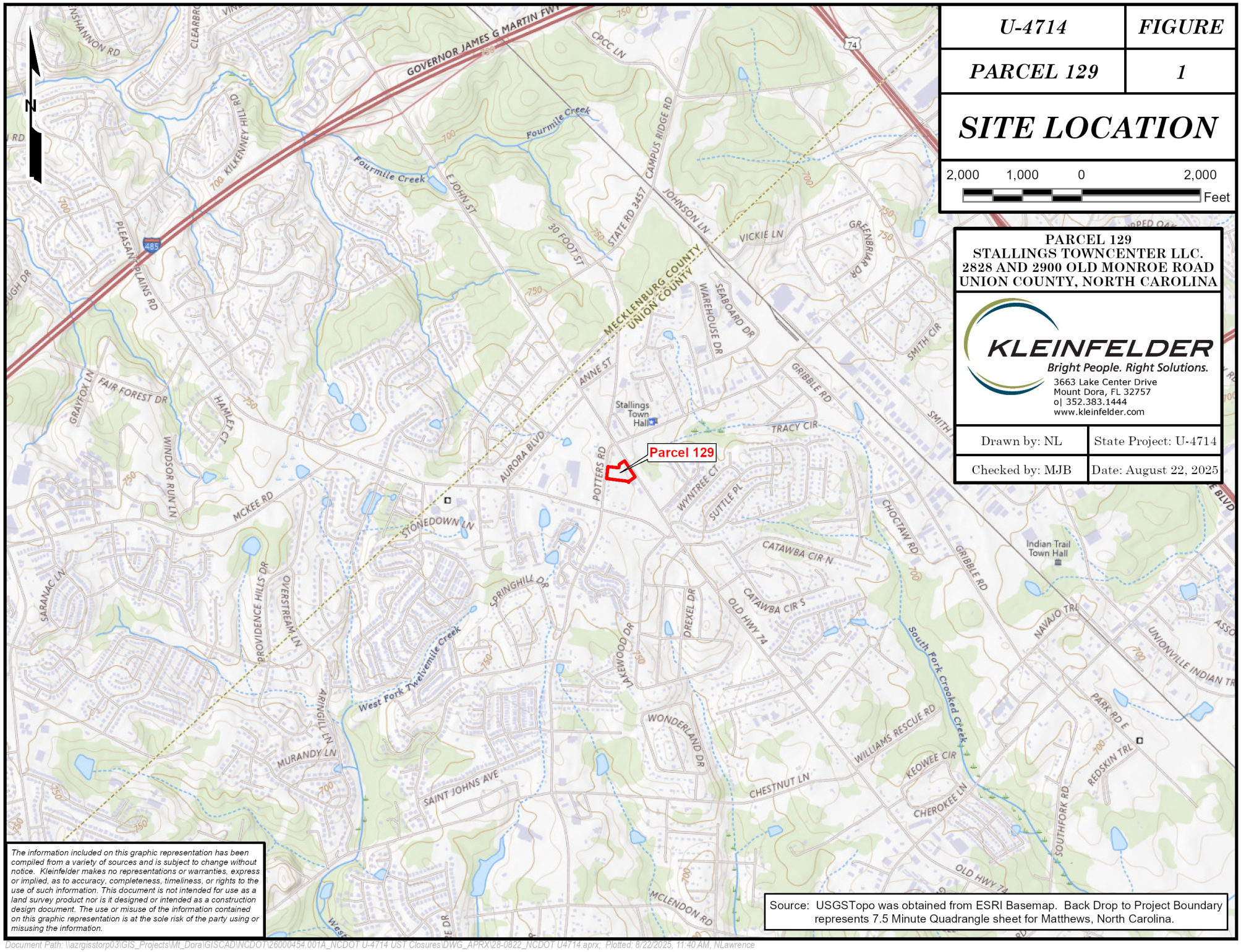
Parameter							Comparison Criteria	
Sample ID	UST 129S-B	UST 129S-N	UST 129S-S	UST 129S-E	UST 129S-W	UST 129S-Comp	TPH GRO Action Level	TPH DRO Action Level
Collection Depth (ft bgs)	5	4	4	4	4	---		
PID (ppm)	10.8	36.4	139.1	46.5	18.5	48.7		
Collection Date	7/8/25	7/8/25	7/8/25	7/8/25	7/8/25	7/8/25		
EPA Method 8015C								
TPH GRO	<5.9	9.9	<5.7	<7.9	28.9	<6.6	50	---
TPH DRO	<6.8	47.5	<5.7	<6.1	10	38.4	---	100

Notes:

Results displayed in milligram per kilogram (mg/kg)
ft bgs = Feet below ground surface
Bold = Concentration above the Action Level
ppm = Parts per million
PID = Photoionization Detector

FIGURES

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U-4714	FIGURE
PARCEL 129	1

SITE LOCATION

2,000 1,000 0 2,000 Feet

PARCEL 129
STALLINGS TOWNCENTER LLC.
2828 AND 2900 OLD MONROE ROAD
UNION COUNTY, NORTH CAROLINA

KLEINFELDER
Bright People. Right Solutions.
3663 Lake Center Drive
Mount Dora, FL 32757
o| 352.383.1444
www.kleinfelder.com

Drawn by: NL	State Project: U-4714
Checked by: MJB	Date: August 22, 2025

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PROJECT REFERENCE NO.	SHEET NO.
U-4714 - PARCEL 129N	2A

LABORATORY RESULTS

0 20 40
FEET

DRAWN BY: BCF
CHECKED BY: MJB

SAMPLE RESULTS

129N-N
TPH GRO <5.2 mg/kg
TPH DRO <5.6 mg/kg

129N-S
TPH GRO <5.7 mg/kg
TPH DRO <5.7 mg/kg

129N-B
TPH GRO <6.4 mg/kg
TPH DRO 116 mg/kg

129N-E
TPH GRO <5.7 mg/kg
TPH DRO <5.8 mg/kg

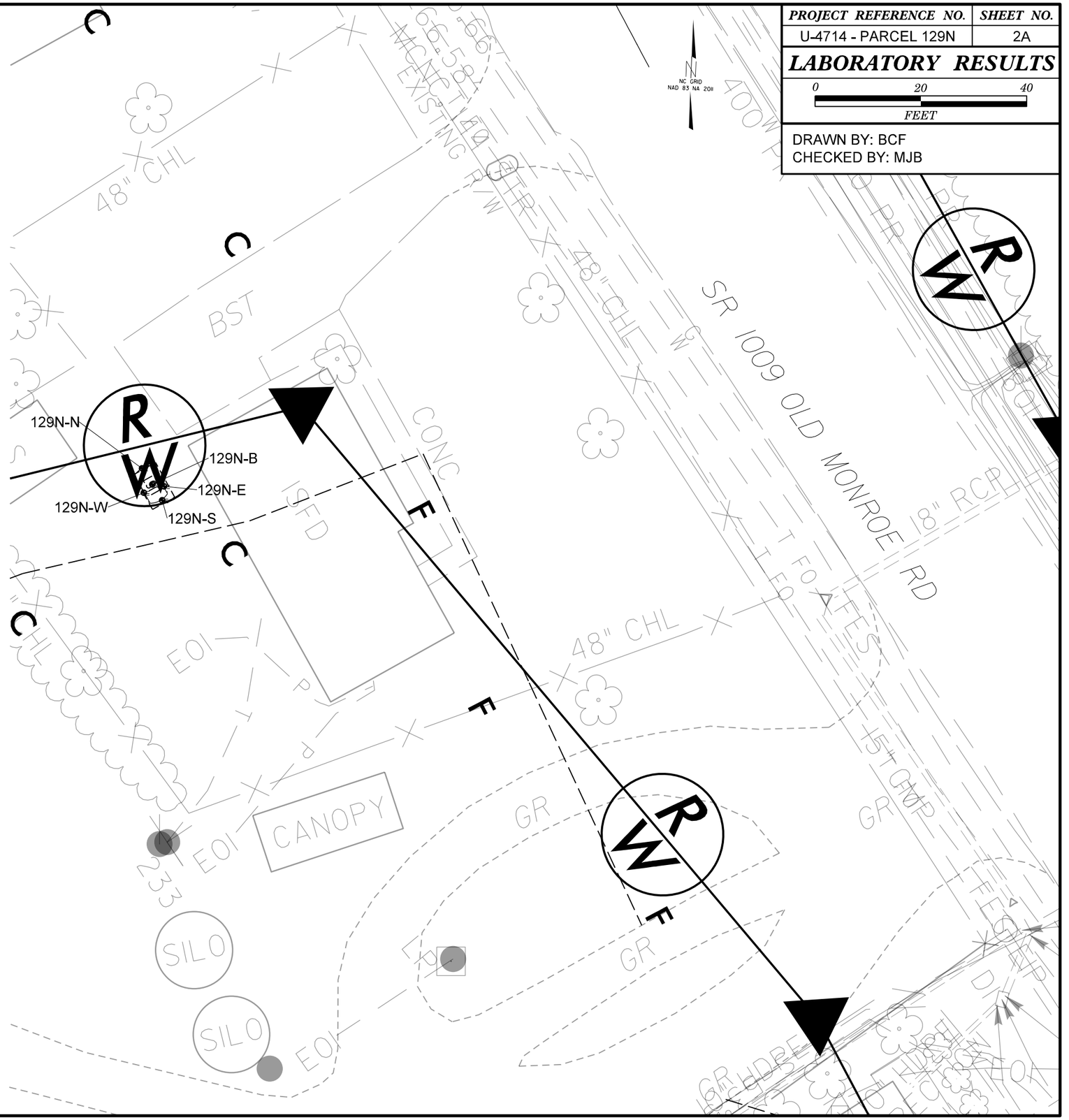
129N-W
TPH GRO <6.9 mg/kg
TPH DRO 9.0 mg/kg

NOTES

All results are expressed in milligrams per kilogram (mg/kg)
TPH = Total Petroleum Hydrocarbons
GRO = Gasoline Range Organics
DRO = Dielsel Range Organics
TPH GRO Action Level is 50 mg/kg
TPH DRO Action Level is 100 mg/kg
Underlined concentration exceeds the TPH Action Level

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LEGEND
UST — Underground Storage Tank
Excavation Limits



PROJECT REFERENCE NO.	SHEET NO.
U-4714 - PARCEL 129S	2B

LABORATORY RESULTS

0 20 40
FEET

DRAWN BY: BCF
CHECKED BY: MJB

SAMPLE RESULTS

129S-N
TPH GRO 9.9 mg/kg
TPH DRO 47.5 mg/kg

129S-S
TPH GRO <5.7 mg/kg
TPH DRO <5.7 mg/kg

129S-B
TPH GRO <5.9 mg/kg
TPH DRO <6.8 mg/kg

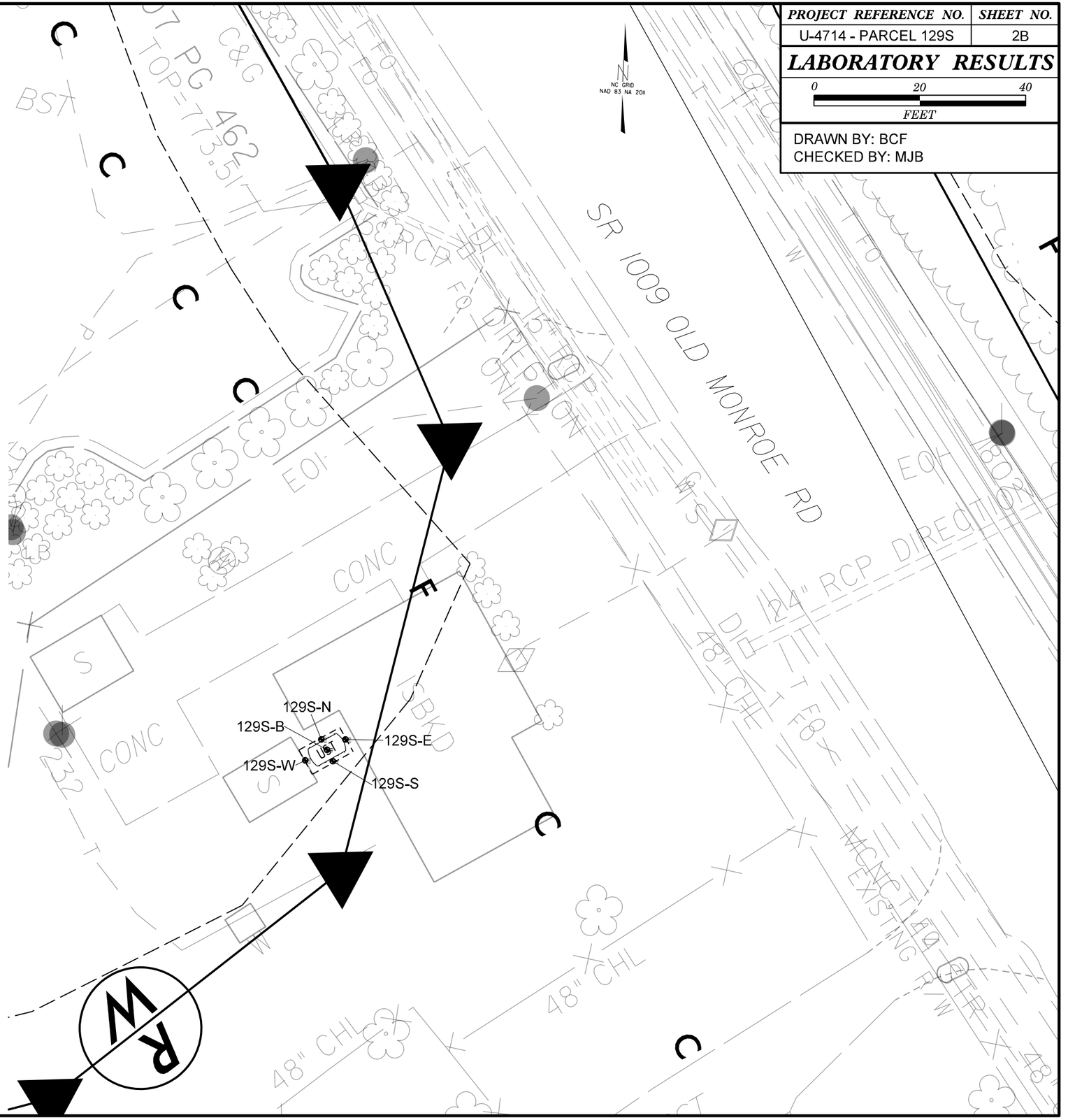
129S-E
TPH GRO <7.9 mg/kg
TPH DRO <6.1 mg/kg

129S-W
TPH GRO 28.9 mg/kg
TPH DRO 10 mg/kg

NOTES
All results are expressed in milligrams per kilogram (mg/kg)
TPH = Total Petroleum Hydrocarbons
GRO = Gasoline Range Organics
DRO = Dielsel Range Organics
TPH GRO Action Level is 50 mg/kg
TPH DRO Action Level is 100 mg/kg
Underlined concentration exceeds the TPH Action Level

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LEGEND
UST — Underground Storage Tank
Excavation Limits



APPENDIX A

UST-2B SITE INVESTIGATION REPORT FOR PERMANENT CLOSURE OR CHANGE-IN-SERVICE OF UST (UNREGISTERED)

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UST-2B

Site Investigation Report for Permanent Closure or Change-in-Service of UN-REGISTERED UST

Return completed form to:
NC DEQ / DWM / UST
SECTION 1646 MAIL SERVICE
CENTER RALEIGH, NC 27699-1646
ATTN: REGISTRATION & PERMITTING

phone (919) 707-8171 fax (919) 715-1117 http://www.wastenotnc.org/

STATE USE ONLY:
Facility ID #

Date Received

INSTRUCTIONS (READ THIS FIRST)

1. UST permanent closure or change in service must be completed in accordance with the latest version of the Guidelines for Site Checks, Tank Closure and Initial Response and Abatement. The guidelines can be obtained at http://deq.nc.gov/about/divisions/waste-management/waste-management-permit-guidance/underground-storage-tanks-section.
2. Permanent closure: Complete all sections of this form.
3. Change-in-service: Where UST systems will be converted from storing a regulated substance to a non-regulated substance, complete sections I, II, III, IV, and VI.
4. For more than 5 un-registered UST systems, attach additional forms as needed.
5. **Un-Registered USTs may be subject to unpaid fees and late penalties**.
6. REGISTERED USTs use Form UST-2A.

I. OWNERSHIP OF TANKS

Owner Name (Corporation, Individual, Public Agency, or Other Entity)
STALLINGS TOWNCENTER LLC

Street Address
2519 Maybank Dr

City: Charlotte
County: Mecklenberg
State: N C
Zip Code: 28211

Phone Number

II. LOCATION OF TANKS

Facility Name or Company
Stallings Towncenter LLC

Facility ID # (If known)

Street Address
2828 and 2900 Old Monroe Road

City: Stallings
County: Union
Zip Code: 28104

Phone Number

III. CONTACT PERSONNEL

Contact for Facility		Job Title:	Phone #:
Closure Contractor Name:	Closure Contractor Company: A&D Environmental	Address: PO Box 484, High Point	Phone # 336-289-2841
Primary Consultant Name: Michael Burns	Primary Consultant Company: Kleinfelder, Inc.	Address: 200 Regency Forest Drive, Suite 225, Cary, NC	Phone # 919-397-3734

IV. UST INFORMATION FOR UN-REGISTERED UST SYSTEMS

REGISTERED USTs use Form UST-2A.

V. EXCAVATION CONDITION

Tank ID No.	Size in Gallons	Last Contents	Last Use Date	Permanent Close Date	Method of Permanent Closure: Indicate REMOVED or enter fill material, such as foam/ concrete/ sand	Change-in- Service Date	Water in excavation		Free product		Notable odor or visible soil contamination	
							Yes	No	Yes	No	Yes	No
UST 129N	250	Heating Oil		07/08/25	REMOVED		☐	■	☐	■	☐	■
UST 129S	250	Heating Oil		07/08/25	REMOVED		☐	■	☐	■	☐	■
							☐	☐	☐	☐	☐	☐
							☐	☐	☐	☐	☐	☐
							☐	☐	☐	☐	☐	☐

VI. CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true accurate and complete.

Print name and official title of owner or owner's authorized representative
Michael Burns

Signature
Michael Burns

Date Signed
8/27/25


Environmental
Quality

APPENDIX B

SOIL AND LIQUID DISPOSAL MANIFESTS

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A&D Environmental Services — Bill of Lading / Material Manifest

A&D Job No:	Generator ID Number	Page 1 of	Emergency Response Phone	Tracking Number
2507-0038		1		47540

Generator's Name and Mailing Address

Generator's site address (if different from mailing address): 128 Stallings Road, Stallings NC

Generator's Phone

Transporter 1 ☐ 2 ☑ Company Name: **A&D Environmental Services, Inc.** — US EPA ID No: **NCD986232221**

Transporter 1 ☐ 2 ☐ Company Name — US EPA ID No:

☐ Designated Facility
A&D Environmental Services, Inc.
2718 Uwharrie Road
Archdale, NC 27263
336-434-7750
NCD986232221

☐ Designated Facility
A&D Environmental Services, Inc.
3149 Lear Drive
Burlington, NC 27215
336-229-0058
NCR000138628

☐ Designated Facility (Please insert facility information below)

HM	Hazardous Materials Shipping Name and Description (if applicable)	No.	Type	QTY	Wt/Vol	Profile Number

	Petroleum Products for Recycle		No.	Type	QTY	Wt/Vol	Profile Number
X	NA1993, Diesel fuel, 3, III	ERG# 128					
X	NA 1993, 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)		1	TT	2641	G	NC20250223

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, UN3506, Mercury contained in manufactured articles, 8 (6.1)	ERG# 172	Mercury Devices	
X					RQ, UN3432, Polychlorinated biphenyls, solid, 9, II	ERG# 171	TSCA Exempt PCB Lamp Ballasts	
X					UN2800, Batteries, wet non-spillable, 8	ERG# 154	Sealed Lead Acid Batteries	
X					UN2794, Batteries, wet, filled with acid, 8	ERG# 154	Lead Acid Batteries	
X					UN2795, Batteries, wet, filled with alkali, 8	ERG# 154	Wet NiCad Batteries	
X					UN3090, Lithium metal batteries, 9	ERG# 138	Lithium Metal Batteries	
X					UN3480, Lithium ion batteries, 9	ERG# 147	Lithium Ion Batteries	
					Batteries, dry, sealed n.o.s.		Alkaline Batteries	
					Batteries, dry, sealed n.o.s.		Dry NiCad Batteries	
					Universal Waste Lamps (Not DOT-Regulated per 49 CFR 173.164 (e)		Florescent lamps (4-Ft. and Under)	
					Universal Waste Lamps (Not DOT-Regulated per 49 CFR 173.164 (e)		Florescent lamps (Over 4-Ft.)	
					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)		Shielded Lamps	
					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/Capacitors	
					Electronic Equipment for Recycle (Not DOT-Regulated)		e-Waste	

Shipper'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 transport according to the applicable regulations of the Department of Transportation. I further certify that none of the materials described above are 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.

Shipper's/ Offeror's Printed/Typed Name	Signature	Month	Day	Year
Grant Burke	GBurke	7	9	25
Transporter 1 Printed/Typed Name	**Signature**	**Month**	**Day**	**Year**
Kevin Bellow	Kevin Bellow	7	8	25
Transporter 2 Printed/Typed Name	**Signature**	**Month**	**Day**	**Year**

Discrepancy Indication / Additional Information: Tank

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

Printed/Typed Name	Signature	Month	Day	Year
Travis Clapp	TClapp	7	8	25

DESIGNATED FACILITY TO GENERATOR

A&D Environmental Services — Bill of Lading / Material Manifest

A&D Job No:	Generator ID Number	Page 1 of	Emergency Response Phone	Tracking Number
2507-0035		1	336 434 7750	47538

Generator's Name and Mailing Address
Kleinfelder
9009 Perimeter Woods Dr
Charlotte NC

Generator's Phone

Generator's site address (if different from mailing address)
2828 Old Monroe Rd
Stallings, NC 28104

Transporter 1 ☐ 2 ☐ Company Name: **A&D Environmental Services, Inc.** — US EPA ID No: **NCD986232221**

Transporter 1 ☐ 2 ☒ Company Name: DOGBOTT — US EPA ID No:

☒ Designated Facility
A&D Environmental Services, Inc.
2718 Uwharrie Road
Archdale, NC 27263
336-434-7750
NCD986232221

☐ Designated Facility
A&D Environmental Services, Inc.
3149 Lear Drive
Burlington, NC 27215
336-229-0058
NCR000138628

☐ Designated Facility (Please insert facility information below)

HM	Hazardous Materials Shipping Name and Description (if applicable)	No.	Type	QTY	Wt/Vol	Profile Number
	NON Regulated Contaminated Soil	1	DT	13.34	T	NC20250224

	Petroleum Products for Recycle		No.	Type	QTY	Wt/Vol	Profile Number
X	NA1993, Diesel fuel, 3, III	ERG# 128					
X	NA 1993, 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, UN3506, Mercury contained in manufactured articles, 8 (6.1)	ERG# 172	Mercury Devices	
X					RQ, UN3432, Polychlorinated biphenyls, solid, 9, II	ERG# 171	TSCA Exempt PCB Lamp Ballasts	
X					UN2800, Batteries, wet non-spillable, 8	ERG# 154	Sealed Lead Acid Batteries	
X					UN2794, Batteries, wet, filled with acid, 8	ERG# 154	Lead Acid Batteries	
X					UN2795, Batteries, wet, filled with alkali, 8	ERG# 154	Wet NiCad Batteries	
X					UN3090, Lithium metal batteries, 9	ERG# 138	Lithium Metal Batteries	
X					UN3480, Lithium ion batteries, 9	ERG# 147	Lithium Ion Batteries	
					Batteries, dry, sealed n.o.s.		Alkaline Batteries	
					Batteries, dry, sealed n.o.s.		Dry NiCad Batteries	
					Universal Waste Lamps (Not DOT-Regulated per 49 CFR 173.164 (e)		Florescent lamps (4-Ft. and Under)	
					Universal Waste Lamps (Not DOT-Regulated per 49 CFR 173.164 (e)		Florescent lamps (Over 4-Ft.)	
					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)		Shielded Lamps	
					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/Capacitors	
					Electronic Equipment for Recycle (Not DOT-Regulated)		e-Waste	

Shipper'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 transport according to the applicable regulations of the Department of Transportation. I further certify that none of the materials described above are 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.

Shipper's/ Offeror's Printed/Typed Name	Signature	Month	Day	Year
Grant Burke	GBurke	7	8	25

Transporter 1 Printed/Typed Name	Signature	Month	Day	Year
Kenny Wagoner	DCC 16	7	8	25

Transporter 2 Printed/Typed Name	Signature	Month	Day	Year

Discrepancy Indication / Additional Information:
PU

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

Printed/Typed Name	Signature	Month	Day	Year
Travis Clapp	TClapp	7	8	25

DESIGNATED FACILITY TO GENERATOR

APPENDIX C

UST DISPOSAL CERTIFICATES

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A&D 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
Kleinfelder
9009 Perimeter Woods Dr.
Charlotte, NC 28216

2) Tank Owner/Authorized Representative: Contact Grant Burke
Phone#: 678 551 4184

3) Description Of Tanks:

Tank No.	Capacity	Previous Contents	Comments
1	250	Heating Oil	Empty
2	250	Heating oil	Empty

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.

HAMZA EL KHAMSI — 07/11/25
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.

Andy Trebil — 7-11-25
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: Griffin

Jeri Tank — 7-14-25
Printed/Typed Name — *Signature* — *Month/Day/Year*

APPENDIX D

PHOTOGRAPHS

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A&D 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
Kleinfelder
9009 Perimeter Woods Dr.
Charlotte, NC 28216

2) Tank Owner/Authorized Representative: Contact Grant Burke
Phone#: 678 551 4184

3) Description Of Tanks:

Tank No.	Capacity	Previous Contents	Comments
1	250	Heating Oil	Empty
2	250	Heating oil	Empty

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.

HAMZA EL KHAMSI — 07/11/25
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.

Andy Trebil — 7-11-25
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: Griffin

Jeri Tank — 7-14-25
Printed/Typed Name — *Signature* — *Month/Day/Year*

APPENDIX E

LABORATORY REPORTS AND CHAIN-OF-CUSTODY FORMS

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Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

July 17, 2025

Grant Burke
Kleinfelder

5775 Glenridge Dr,
Bldg. B, Suite 390
Atlanta, GA 30328

RE: Project: NCDOT - U-4717
Pace Project No.: 92806848

Dear Grant Burke:

Enclosed are the analytical results for sample(s) received by the laboratory on July 10, 2025. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Charlotte

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

Sincerely,

Bonnie Vang
bonnie.vang@pacelabs.com
704-977-0968
Project Manager

Enclosures

cc: Jen Matusick, Kleinfelder
Brett Miller, Kleinfelder, Inc.

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Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

CERTIFICATIONS

Project: NCDOT - U-4717
Pace Project No.: 92806848

Pace Analytical Services Charlotte

South Carolina Laboratory ID: 99006
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 Laboratory ID: 99006
South Carolina Certification #: 99006001
South Carolina Drinking Water Cert. #: 99006003
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Louisiana DoH Drinking Water #: LA029
Virginia/VELAP Certification #: 460221

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Huntersville, NC 28078
(704)875-9092

SAMPLE ANALYTE COUNT

Project: NCDOT - U-4717
Pace Project No.: 92806848

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92806848001	**UST-129S-S**	EPA 8015C	PKS	2	PASI-C
		EPA 8015C	TEG	2	PASI-C
		SW-846	MCR1	1	PASI-C
92806848002	**UST-129S-COMP**	EPA 8015C	PKS	2	PASI-C
		EPA 8015C	TEG	2	PASI-C
		SW-846	MCR1	1	PASI-C
92806848003	**UST-134-N**	EPA 8015C	PKS	2	PASI-C
		EPA 8015C	TEG	2	PASI-C
		SW-846	MCR1	1	PASI-C
92806848004	**UST-134-S**	EPA 8015C	PKS	2	PASI-C
		EPA 8015C	TEG	2	PASI-C
		SW-846	MCR1	1	PASI-C
92806848005	**UST-134-E**	EPA 8015C	PKS	2	PASI-C
		EPA 8015C	TEG	2	PASI-C
		SW-846	MCR1	1	PASI-C
92806848006	**UST-134-W**	EPA 8015C	PKS	2	PASI-C
		EPA 8015C	TEG	2	PASI-C
		SW-846	MCR1	1	PASI-C
92806848007	**UST-134-B**	EPA 8015C	PKS	2	PASI-C
		EPA 8015C	TEG	2	PASI-C
		SW-846	MCR1	1	PASI-C
92806848008	**UST-134-COMP**	EPA 8015C	PKS	2	PASI-C
		EPA 8015C	TEG	2	PASI-C
		SW-846	MCR1	1	PASI-C
92806848009	**UST-129N-B**	EPA 8015C	PKS	2	PASI-C
		EPA 8015C	TEG	2	PASI-C
		SW-846	MCR1	1	PASI-C
92806848010	**UST-129N-N**	EPA 8015C	PKS	2	PASI-C
		EPA 8015C	TEG	2	PASI-C
		SW-846	MCR1	1	PASI-C
92806848011	**UST-129N-S**	EPA 8015C	PKS	2	PASI-C
		EPA 8015C	TEG	2	PASI-C
		SW-846	MCR1	1	PASI-C
92806848012	**UST-129N-E**	EPA 8015C	PKS	2	PASI-C
		EPA 8015C	TEG	2	PASI-C
		SW-846	MCR1	1	PASI-C
92806848013	**UST-129N-W**	EPA 8015C	PKS	2	PASI-C

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Huntersville, NC 28078
(704)875-9092

SAMPLE ANALYTE COUNT

Project: NCDOT - U-4717
Pace Project No.: 92806848

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 8015C	TEG	2	PASI-C
		SW-846	MCR1	1	PASI-C
92806848014	**UST-129N-COMP**	EPA 8015C	PKS	2	PASI-C
		EPA 8015C	TEG	2	PASI-C
		SW-846	MCR1	1	PASI-C
92806848015	**UST-129S-N**	EPA 8015C	PKS	2	PASI-C
		EPA 8015C	TEG	2	PASI-C
		SW-846	MCR1	1	PASI-C
92806848016	**UST-129S-W**	EPA 8015C	PKS	2	PASI-C
		EPA 8015C	TEG	2	PASI-C
		SW-846	MCR1	1	PASI-C
92806848017	**UST-129S-B**	EPA 8015C	PKS	2	PASI-C
		EPA 8015C	TEG	2	PASI-C
		SW-846	MCR1	1	PASI-C
92806848018	**UST-129S-E**	EPA 8015C	PKS	2	PASI-C
		EPA 8015C	TEG	2	PASI-C
		SW-846	MCR1	1	PASI-C

PASI-C = Pace Analytical Services - Charlotte

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9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: NCDOT - U-4717
Pace Project No.: 92806848

Sample: UST-129S-S **Lab ID: 92806848001** Collected: 07/08/25 12:16 Received: 07/10/25 15:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015C Preparation Method: EPA 3546 Pace Analytical Services - Charlotte							
Diesel Range Organics(C10-C28)	**92.2**	mg/kg	5.5	1	07/11/25 00:52	07/11/25 15:29		
Surrogates								
n-Pentacosane (S)	65	%	10-152	1	07/11/25 00:52	07/11/25 15:29	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015C Preparation Method: EPA 5030B Pace Analytical Services - Charlotte							
Gas Range Organics (C6-C10)	ND	mg/kg	6.4	1	07/14/25 10:30	07/14/25 17:17		
Surrogates								
4-Bromofluorobenzene (S)	106	%	66-130	1	07/14/25 10:30	07/14/25 17:17	460-00-4	
Percent Moisture	Analytical Method: SW-846 Pace Analytical Services - Charlotte							
Percent Moisture	**9.6**	%	0.10	1		07/11/25 13:05		N2

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: NCDOT - U-4717
Pace Project No.: 92806848

Sample: UST-129S-COMP **Lab ID: 92806848002** Collected: 07/08/25 12:40 Received: 07/10/25 15:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015C Preparation Method: EPA 3546 Pace Analytical Services - Charlotte							
Diesel Range Organics(C10-C28)	**38.4**	mg/kg	5.6	1	07/11/25 00:52	07/11/25 15:29		
Surrogates								
n-Pentacosane (S)	80	%	10-152	1	07/11/25 00:52	07/11/25 15:29	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015C Preparation Method: EPA 5030B Pace Analytical Services - Charlotte							
Gas Range Organics (C6-C10)	ND	mg/kg	6.6	1	07/14/25 10:30	07/14/25 18:09		
Surrogates								
4-Bromofluorobenzene (S)	104	%	66-130	1	07/14/25 10:30	07/14/25 18:09	460-00-4	
Percent Moisture	Analytical Method: SW-846 Pace Analytical Services - Charlotte							
Percent Moisture	**11.6**	%	0.10	1		07/11/25 13:05		N2

REPORT OF LABORATORY ANALYSIS

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9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: NCDOT - U-4717
Pace Project No.: 92806848

Sample: UST-134-N **Lab ID: 92806848003** Collected: 07/10/25 12:15 Received: 07/10/25 15:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015C Preparation Method: EPA 3546 Pace Analytical Services - Charlotte							
Diesel Range Organics(C10-C28)	**38.8**	mg/kg	5.8	1	07/11/25 00:52	07/11/25 15:46		
Surrogates								
n-Pentacosane (S)	70	%	10-152	1	07/11/25 00:52	07/11/25 15:46	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015C Preparation Method: EPA 5030B Pace Analytical Services - Charlotte							
Gas Range Organics (C6-C10)	**6.6**	mg/kg	6.3	1	07/14/25 10:30	07/14/25 18:35		
Surrogates								
4-Bromofluorobenzene (S)	109	%	66-130	1	07/14/25 10:30	07/14/25 18:35	460-00-4	
Percent Moisture	Analytical Method: SW-846 Pace Analytical Services - Charlotte							
Percent Moisture	**12.5**	%	0.10	1		07/11/25 13:05		N2

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: NCDOT - U-4717
Pace Project No.: 92806848

Sample: UST-134-S **Lab ID: 92806848004** Collected: 07/10/25 12:15 Received: 07/10/25 15:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015C Preparation Method: EPA 3546 Pace Analytical Services - Charlotte							
Diesel Range Organics(C10-C28)	**125**	mg/kg	6.1	1	07/11/25 00:52	07/11/25 15:46		
Surrogates								
n-Pentacosane (S)	94	%	10-152	1	07/11/25 00:52	07/11/25 15:46	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015C Preparation Method: EPA 5030B Pace Analytical Services - Charlotte							
Gas Range Organics (C6-C10)	ND	mg/kg	6.9	1	07/11/25 10:41	07/12/25 05:26		
Surrogates								
4-Bromofluorobenzene (S)	99	%	66-130	1	07/11/25 10:41	07/12/25 05:26	460-00-4	
Percent Moisture	Analytical Method: SW-846 Pace Analytical Services - Charlotte							
Percent Moisture	**18.6**	%	0.10	1		07/11/25 13:05		N2

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: NCDOT - U-4717
Pace Project No.: 92806848

Sample: UST-134-E **Lab ID: 92806848005** Collected: 07/10/25 12:15 Received: 07/10/25 15:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015C Preparation Method: EPA 3546 Pace Analytical Services - Charlotte							
Diesel Range Organics(C10-C28)	**2000**	mg/kg	60.8	10	07/11/25 00:52	07/14/25 12:25		
Surrogates								
n-Pentacosane (S)	0	%	10-152	10	07/11/25 00:52	07/14/25 12:25	629-99-2	S4
Gasoline Range Organics	Analytical Method: EPA 8015C Preparation Method: EPA 5030B Pace Analytical Services - Charlotte							
Gas Range Organics (C6-C10)	**82.7**	mg/kg	6.8	1	07/11/25 10:41	07/12/25 05:52		
Surrogates								
4-Bromofluorobenzene (S)	148	%	66-130	1	07/11/25 10:41	07/12/25 05:52	460-00-4	S5
Percent Moisture	Analytical Method: SW-846 Pace Analytical Services - Charlotte							
Percent Moisture	**16.7**	%	0.10	1		07/11/25 13:06		N2

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ANALYTICAL RESULTS

Project: NCDOT - U-4717
Pace Project No.: 92806848

Sample: UST-134-W **Lab ID: 92806848006** Collected: 07/10/25 12:15 Received: 07/10/25 15:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015C Preparation Method: EPA 3546 Pace Analytical Services - Charlotte							
Diesel Range Organics(C10-C28)	**1100**	mg/kg	25.0	4	07/11/25 00:52	07/15/25 13:32		
Surrogates								
n-Pentacosane (S)	85	%	10-152	4	07/11/25 00:52	07/15/25 13:32	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015C Preparation Method: EPA 5030B Pace Analytical Services - Charlotte							
Gas Range Organics (C6-C10)	**164**	mg/kg	7.3	1	07/11/25 10:41	07/12/25 06:18		
Surrogates								
4-Bromofluorobenzene (S)	475	%	66-130	1	07/11/25 10:41	07/12/25 06:18	460-00-4	S5
Percent Moisture	Analytical Method: SW-846 Pace Analytical Services - Charlotte							
Percent Moisture	**19.7**	%	0.10	1		07/11/25 13:06		N2

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ANALYTICAL RESULTS

Project: NCDOT - U-4717
Pace Project No.: 92806848

Sample: UST-134-B **Lab ID: 92806848007** Collected: 07/10/25 12:15 Received: 07/10/25 15:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015C Preparation Method: EPA 3546 Pace Analytical Services - Charlotte							
Diesel Range Organics(C10-C28)	**6.6**	mg/kg	5.8	1	07/11/25 00:52	07/11/25 16:18		
Surrogates								
n-Pentacosane (S)	81	%	10-152	1	07/11/25 00:52	07/11/25 16:18	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015C Preparation Method: EPA 5030B Pace Analytical Services - Charlotte							
Gas Range Organics (C6-C10)	**15.4**	mg/kg	6.8	1	07/14/25 10:30	07/14/25 19:01		
Surrogates								
4-Bromofluorobenzene (S)	111	%	66-130	1	07/14/25 10:30	07/14/25 19:01	460-00-4	
Percent Moisture	Analytical Method: SW-846 Pace Analytical Services - Charlotte							
Percent Moisture	**13.3**	%	0.10	1		07/11/25 13:06		N2

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ANALYTICAL RESULTS

Project: NCDOT - U-4717
Pace Project No.: 92806848

Sample: UST-134-COMP **Lab ID: 92806848008** Collected: 07/10/25 12:45 Received: 07/10/25 15:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015C Preparation Method: EPA 3546 Pace Analytical Services - Charlotte							
Diesel Range Organics(C10-C28)	**89.0**	mg/kg	5.8	1	07/11/25 02:26	07/11/25 16:41		
Surrogates								
n-Pentacosane (S)	80	%	10-152	1	07/11/25 02:26	07/11/25 16:41	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015C Preparation Method: EPA 5030B Pace Analytical Services - Charlotte							
Gas Range Organics (C6-C10)	**32.6**	mg/kg	6.4	1	07/11/25 10:41	07/12/25 07:09		
Surrogates								
4-Bromofluorobenzene (S)	145	%	66-130	1	07/11/25 10:41	07/12/25 07:09	460-00-4	S5
Percent Moisture	Analytical Method: SW-846 Pace Analytical Services - Charlotte							
Percent Moisture	**14.4**	%	0.10	1		07/11/25 13:06		N2

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ANALYTICAL RESULTS

Project: NCDOT - U-4717
Pace Project No.: 92806848

Sample: UST-129N-B **Lab ID: 92806848009** Collected: 07/08/25 10:15 Received: 07/10/25 15:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015C Preparation Method: EPA 3546 Pace Analytical Services - Charlotte							
Diesel Range Organics(C10-C28)	**116**	mg/kg	6.1	1	07/11/25 00:52	07/11/25 16:18		
Surrogates								
n-Pentacosane (S)	64	%	10-152	1	07/11/25 00:52	07/11/25 16:18	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015C Preparation Method: EPA 5030B Pace Analytical Services - Charlotte							
Gas Range Organics (C6-C10)	ND	mg/kg	6.4	1	07/14/25 10:30	07/14/25 19:27		
Surrogates								
4-Bromofluorobenzene (S)	97	%	66-130	1	07/14/25 10:30	07/14/25 19:27	460-00-4	
Percent Moisture	Analytical Method: SW-846 Pace Analytical Services - Charlotte							
Percent Moisture	**15.6**	%	0.10	1		07/11/25 13:06		N2

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ANALYTICAL RESULTS

Project: NCDOT - U-4717
Pace Project No.: 92806848

Sample: UST-129N-N **Lab ID: 92806848010** Collected: 07/08/25 10:15 Received: 07/10/25 15:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015C Preparation Method: EPA 3546 Pace Analytical Services - Charlotte							
Diesel Range Organics(C10-C28)	ND	mg/kg	5.6	1	07/11/25 02:26	07/11/25 16:41		
Surrogates								
n-Pentacosane (S)	75	%	10-152	1	07/11/25 02:26	07/11/25 16:41	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015C Preparation Method: EPA 5030B Pace Analytical Services - Charlotte							
Gas Range Organics (C6-C10)	ND	mg/kg	5.2	1	07/11/25 10:55	07/11/25 16:04		
Surrogates								
4-Bromofluorobenzene (S)	102	%	66-130	1	07/11/25 10:55	07/11/25 16:04	460-00-4	
Percent Moisture	Analytical Method: SW-846 Pace Analytical Services - Charlotte							
Percent Moisture	**12.6**	%	0.10	1		07/11/25 13:07		N2

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ANALYTICAL RESULTS

Project: NCDOT - U-4717
Pace Project No.: 92806848

Sample: UST-129N-S **Lab ID: 92806848011** Collected: 07/08/25 10:15 Received: 07/10/25 15:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015C Preparation Method: EPA 3546 Pace Analytical Services - Charlotte							
Diesel Range Organics(C10-C28)	ND	mg/kg	5.7	1	07/15/25 02:59	07/15/25 16:00		
Surrogates								
n-Pentacosane (S)	40	%	10-152	1	07/15/25 02:59	07/15/25 16:00	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015C Preparation Method: EPA 5030B Pace Analytical Services - Charlotte							
Gas Range Organics (C6-C10)	ND	mg/kg	5.7	1	07/11/25 10:55	07/11/25 16:56		
Surrogates								
4-Bromofluorobenzene (S)	102	%	66-130	1	07/11/25 10:55	07/11/25 16:56	460-00-4	
Percent Moisture	Analytical Method: SW-846 Pace Analytical Services - Charlotte							
Percent Moisture	**12.2**	%	0.10	1		07/11/25 13:07		N2

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ANALYTICAL RESULTS

Project: NCDOT - U-4717
Pace Project No.: 92806848

Sample: UST-129N-E **Lab ID: 92806848012** Collected: 07/08/25 10:15 Received: 07/10/25 15:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015C Preparation Method: EPA 3546 Pace Analytical Services - Charlotte							
Diesel Range Organics(C10-C28)	ND	mg/kg	5.8	1	07/11/25 02:26	07/11/25 17:12		
Surrogates								
n-Pentacosane (S)	85	%	10-152	1	07/11/25 02:26	07/11/25 17:12	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015C Preparation Method: EPA 5030B Pace Analytical Services - Charlotte							
Gas Range Organics (C6-C10)	ND	mg/kg	5.7	1	07/11/25 10:55	07/11/25 17:22		
Surrogates								
4-Bromofluorobenzene (S)	100	%	66-130	1	07/11/25 10:55	07/11/25 17:22	460-00-4	
Percent Moisture	Analytical Method: SW-846 Pace Analytical Services - Charlotte							
Percent Moisture	**13.1**	%	0.10	1		07/11/25 13:07		N2

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ANALYTICAL RESULTS

Project: NCDOT - U-4717
Pace Project No.: 92806848

Sample: UST-129N-W **Lab ID: 92806848013** Collected: 07/08/25 10:15 Received: 07/10/25 15:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015C Preparation Method: EPA 3546 Pace Analytical Services - Charlotte							
Diesel Range Organics(C10-C28)	**9.0**	mg/kg	5.7	1	07/11/25 02:26	07/11/25 17:12		
Surrogates								
n-Pentacosane (S)	71	%	10-152	1	07/11/25 02:26	07/11/25 17:12	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015C Preparation Method: EPA 5030B Pace Analytical Services - Charlotte							
Gas Range Organics (C6-C10)	ND	mg/kg	6.9	1	07/11/25 10:55	07/11/25 17:48		
Surrogates								
4-Bromofluorobenzene (S)	100	%	66-130	1	07/11/25 10:55	07/11/25 17:48	460-00-4	
Percent Moisture	Analytical Method: SW-846 Pace Analytical Services - Charlotte							
Percent Moisture	**13.5**	%	0.10	1		07/11/25 13:07		N2

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ANALYTICAL RESULTS

Project: NCDOT - U-4717
Pace Project No.: 92806848

Sample: UST-129N-COMP **Lab ID: 92806848014** Collected: 07/08/25 10:15 Received: 07/10/25 15:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015C Preparation Method: EPA 3546 Pace Analytical Services - Charlotte							
Diesel Range Organics(C10-C28)	ND	mg/kg	5.6	1	07/11/25 02:26	07/11/25 17:28		
Surrogates								
n-Pentacosane (S)	70	%	10-152	1	07/11/25 02:26	07/11/25 17:28	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015C Preparation Method: EPA 5030B Pace Analytical Services - Charlotte							
Gas Range Organics (C6-C10)	ND	mg/kg	5.7	1	07/11/25 10:55	07/11/25 18:14		
Surrogates								
4-Bromofluorobenzene (S)	99	%	66-130	1	07/11/25 10:55	07/11/25 18:14	460-00-4	
Percent Moisture	Analytical Method: SW-846 Pace Analytical Services - Charlotte							
Percent Moisture	**12.3**	%	0.10	1		07/11/25 13:07		N2

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ANALYTICAL RESULTS

Project: NCDOT - U-4717
Pace Project No.: 92806848

Sample: UST-129S-N **Lab ID: 92806848015** Collected: 07/08/25 11:55 Received: 07/10/25 15:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015C Preparation Method: EPA 3546 Pace Analytical Services - Charlotte							
Diesel Range Organics(C10-C28)	**47.5**	mg/kg	5.7	1	07/11/25 02:26	07/11/25 17:44		
Surrogates								
n-Pentacosane (S)	80	%	10-152	1	07/11/25 02:26	07/11/25 17:44	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015C Preparation Method: EPA 5030B Pace Analytical Services - Charlotte							
Gas Range Organics (C6-C10)	**9.9**	mg/kg	6.2	1	07/11/25 10:55	07/11/25 18:40		
Surrogates								
4-Bromofluorobenzene (S)	114	%	66-130	1	07/11/25 10:55	07/11/25 18:40	460-00-4	
Percent Moisture	Analytical Method: SW-846 Pace Analytical Services - Charlotte							
Percent Moisture	**14.0**	%	0.10	1		07/11/25 13:07		N2

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ANALYTICAL RESULTS

Project: NCDOT - U-4717
Pace Project No.: 92806848

Sample: UST-129S-W **Lab ID: 92806848016** Collected: 07/08/25 11:55 Received: 07/10/25 15:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015C Preparation Method: EPA 3546 Pace Analytical Services - Charlotte							
Diesel Range Organics(C10-C28)	**10**	mg/kg	5.7	1	07/11/25 02:26	07/11/25 17:44		
Surrogates								
n-Pentacosane (S)	88	%	10-152	1	07/11/25 02:26	07/11/25 17:44	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015C Preparation Method: EPA 5030B Pace Analytical Services - Charlotte							
Gas Range Organics (C6-C10)	**28.9**	mg/kg	6.0	1	07/11/25 10:55	07/11/25 19:06		
Surrogates								
4-Bromofluorobenzene (S)	143	%	66-130	1	07/11/25 10:55	07/11/25 19:06	460-00-4	S5
Percent Moisture	Analytical Method: SW-846 Pace Analytical Services - Charlotte							
Percent Moisture	**14.1**	%	0.10	1		07/11/25 13:08		N2

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ANALYTICAL RESULTS

Project: NCDOT - U-4717
Pace Project No.: 92806848

Sample: UST-129S-B **Lab ID: 92806848017** Collected: 07/08/25 12:16 Received: 07/10/25 15:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015C Preparation Method: EPA 3546 Pace Analytical Services - Charlotte							
Diesel Range Organics(C10-C28)	ND	mg/kg	5.9	1	07/11/25 02:26	07/11/25 17:59		
Surrogates								
n-Pentacosane (S)	73	%	10-152	1	07/11/25 02:26	07/11/25 17:59	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015C Preparation Method: EPA 5030B Pace Analytical Services - Charlotte							
Gas Range Organics (C6-C10)	ND	mg/kg	6.8	1	07/15/25 10:44	07/15/25 14:34		
Surrogates								
4-Bromofluorobenzene (S)	101	%	66-130	1	07/15/25 10:44	07/15/25 14:34	460-00-4	
Percent Moisture	Analytical Method: SW-846 Pace Analytical Services - Charlotte							
Percent Moisture	**16.2**	%	0.10	1		07/11/25 13:08		N2

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ANALYTICAL RESULTS

Project: NCDOT - U-4717
Pace Project No.: 92806848

Sample: UST-129S-E **Lab ID: 92806848018** Collected: 07/08/25 12:16 Received: 07/10/25 15:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015C Preparation Method: EPA 3546 Pace Analytical Services - Charlotte							
Diesel Range Organics(C10-C28)	ND	mg/kg	6.1	1	07/11/25 02:26	07/11/25 17:59		
Surrogates								
n-Pentacosane (S)	71	%	10-152	1	07/11/25 02:26	07/11/25 17:59	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015C Preparation Method: EPA 5030B Pace Analytical Services - Charlotte							
Gas Range Organics (C6-C10)	ND	mg/kg	7.9	1	07/14/25 10:30	07/14/25 20:19		
Surrogates								
4-Bromofluorobenzene (S)	100	%	66-130	1	07/14/25 10:30	07/14/25 20:19	460-00-4	
Percent Moisture	Analytical Method: SW-846 Pace Analytical Services - Charlotte							
Percent Moisture	**18.4**	%	0.10	1		07/11/25 13:08		N2

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QUALITY CONTROL DATA

Project: NCDOT - U-4717
Pace Project No.: 92806848

QC Batch: 947234 | Analysis Method: EPA 8015C
QC Batch Method: EPA 5030B | Analysis Description: Gasoline Range Organics
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92806848004, 92806848005, 92806848006, 92806848008

METHOD BLANK: 4867508 Matrix: Solid
Associated Lab Samples: 92806848004, 92806848005, 92806848006, 92806848008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Gas Range Organics (C6-C10)	mg/kg	ND	6.0	07/11/25 15:38	
4-Bromofluorobenzene (S)	%	101	66-130	07/11/25 15:38	

LABORATORY CONTROL SAMPLE: 4867509

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Gas Range Organics (C6-C10)	mg/kg	50	46.0	92	70-130	
4-Bromofluorobenzene (S)	%			103	66-130	

MATRIX SPIKE SAMPLE: 4867511

Parameter	Units	92806657002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Gas Range Organics (C6-C10)	mg/kg	ND	65	73.6	113	37-163	
4-Bromofluorobenzene (S)	%				101	66-130	

SAMPLE DUPLICATE: 4867510

Parameter	Units	92806657001 Result	Dup Result	RPD	Qualifiers
Gas Range Organics (C6-C10)	mg/kg	ND	ND		
4-Bromofluorobenzene (S)	%	96	96		

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.

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QUALITY CONTROL DATA

Project: NCDOT - U-4717
Pace Project No.: 92806848

QC Batch: 947235
QC Batch Method: EPA 5030B
Analysis Method: EPA 8015C
Analysis Description: Gasoline Range Organics
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92806848010, 92806848011, 92806848012, 92806848013, 92806848014, 92806848015, 92806848016

METHOD BLANK: 4867515 Matrix: Solid
Associated Lab Samples: 92806848010, 92806848011, 92806848012, 92806848013, 92806848014, 92806848015, 92806848016

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Gas Range Organics (C6-C10)	mg/kg	ND	6.0	07/11/25 15:12	
4-Bromofluorobenzene (S)	%	101	66-130	07/11/25 15:12	

LABORATORY CONTROL SAMPLE: 4867516

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Gas Range Organics (C6-C10)	mg/kg	50	45.6	91	70-130	
4-Bromofluorobenzene (S)	%			101	66-130	

MATRIX SPIKE SAMPLE: 4867518

Parameter	Units	92806848011 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Gas Range Organics (C6-C10)	mg/kg	ND	47.3	61.9	130	37-163	
4-Bromofluorobenzene (S)	%				101	66-130	

SAMPLE DUPLICATE: 4867517

Parameter	Units	92806848010 Result	Dup Result	RPD	Qualifiers
Gas Range Organics (C6-C10)	mg/kg	ND	ND		
4-Bromofluorobenzene (S)	%	102	102		

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REPORT OF LABORATORY ANALYSIS

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Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: NCDOT - U-4717
Pace Project No.: 92806848

QC Batch: 947562 | Analysis Method: EPA 8015C
QC Batch Method: EPA 5030B | Analysis Description: Gasoline Range Organics
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92806848001, 92806848002, 92806848003, 92806848007, 92806848009, 92806848018

METHOD BLANK: 4869189 Matrix: Solid
Associated Lab Samples: 92806848001, 92806848002, 92806848003, 92806848007, 92806848009, 92806848018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Gas Range Organics (C6-C10)	mg/kg	ND	6.0	07/14/25 16:51	
4-Bromofluorobenzene (S)	%	99	66-130	07/14/25 16:51	

LABORATORY CONTROL SAMPLE: 4869190

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Gas Range Organics (C6-C10)	mg/kg	50	47.0	94	70-130	
4-Bromofluorobenzene (S)	%			103	66-130	

MATRIX SPIKE SAMPLE: 4869192

Parameter	Units	92806848002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Gas Range Organics (C6-C10)	mg/kg	ND	55.2	72.8	121	37-163	
4-Bromofluorobenzene (S)	%				101	66-130	

SAMPLE DUPLICATE: 4869191

Parameter	Units	92806848001 Result	Dup Result	RPD	Qualifiers
Gas Range Organics (C6-C10)	mg/kg	ND	5.3J		
4-Bromofluorobenzene (S)	%	106	104		

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QUALITY CONTROL DATA

Project: NCDOT - U-4717
Pace Project No.: 92806848

QC Batch: 947810
QC Batch Method: EPA 5030B
Analysis Method: EPA 8015C
Analysis Description: Gasoline Range Organics
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92806848017

METHOD BLANK: 4870394 Matrix: Solid
Associated Lab Samples: 92806848017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Gas Range Organics (C6-C10)	mg/kg	ND	6.0	07/15/25 14:08	
4-Bromofluorobenzene (S)	%	101	66-130	07/15/25 14:08	

LABORATORY CONTROL SAMPLE: 4870395

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Gas Range Organics (C6-C10)	mg/kg	50	50.2	100	70-130	
4-Bromofluorobenzene (S)	%			103	66-130	

MATRIX SPIKE SAMPLE: 4870397

Parameter	Units	92807006001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Gas Range Organics (C6-C10)	mg/kg	94.8	64.1	151	88	37-163	
4-Bromofluorobenzene (S)	%				109	66-130	

SAMPLE DUPLICATE: 4870396

Parameter	Units	92806848017 Result	Dup Result	RPD	Qualifiers
Gas Range Organics (C6-C10)	mg/kg	ND	ND		
4-Bromofluorobenzene (S)	%	101	101		

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QUALITY CONTROL DATA

Project: NCDOT - U-4717
Pace Project No.: 92806848

QC Batch: 947149
QC Batch Method: EPA 3546
Analysis Method: EPA 8015C
Analysis Description: 8015 Solid GCSV
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92806848001, 92806848002, 92806848003, 92806848004, 92806848005, 92806848006, 92806848007, 92806848009

METHOD BLANK: 4867278 Matrix: Solid
Associated Lab Samples: 92806848001, 92806848002, 92806848003, 92806848004, 92806848005, 92806848006, 92806848007, 92806848009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diesel Range Organics(C10-C28)	mg/kg	ND	5.0	07/11/25 13:20	
n-Pentacosane (S)	%	82	10-152	07/11/25 13:20	

LABORATORY CONTROL SAMPLE: 4867279

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Diesel Range Organics(C10-C28)	mg/kg	66	44.4	67	44-130	
n-Pentacosane (S)	%			83	10-152	

MATRIX SPIKE SAMPLE: 4867280

Parameter	Units	92806657001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Diesel Range Organics(C10-C28)	mg/kg	ND	81.4	58.1	71	10-150	
n-Pentacosane (S)	%				102	10-152	

SAMPLE DUPLICATE: 4867281

Parameter	Units	92806657005 Result	Dup Result	RPD	Qualifiers
Diesel Range Organics(C10-C28)	mg/kg	ND	ND		
n-Pentacosane (S)	%	82	86		

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QUALITY CONTROL DATA

Project: NCDOT - U-4717
Pace Project No.: 92806848

QC Batch: 947150
QC Batch Method: EPA 3546
Analysis Method: EPA 8015C
Analysis Description: 8015 Solid GCSV
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92806848008, 92806848010, 92806848012, 92806848013, 92806848014, 92806848015, 92806848016, 92806848017, 92806848018

METHOD BLANK: 4867282 Matrix: Solid
Associated Lab Samples: 92806848008, 92806848010, 92806848012, 92806848013, 92806848014, 92806848015, 92806848016, 92806848017, 92806848018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diesel Range Organics(C10-C28)	mg/kg	ND	5.0	07/11/25 16:25	
n-Pentacosane (S)	%	83	10-152	07/11/25 16:25	

LABORATORY CONTROL SAMPLE: 4867283

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Diesel Range Organics(C10-C28)	mg/kg	65.6	54.3	83	44-130	
n-Pentacosane (S)	%			90	10-152	

MATRIX SPIKE SAMPLE: 4867284

Parameter	Units	92806848010 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Diesel Range Organics(C10-C28)	mg/kg	ND	75.3	57.3	75	10-150	
n-Pentacosane (S)	%				76	10-152	

SAMPLE DUPLICATE: 4867285

Parameter	Units	92806848014 Result	Dup Result	RPD	Qualifiers
Diesel Range Organics(C10-C28)	mg/kg	ND	ND		
n-Pentacosane (S)	%	70	75		

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QUALITY CONTROL DATA

Project: NCDOT - U-4717
Pace Project No.: 92806848

QC Batch: 947717
QC Batch Method: EPA 3546
Analysis Method: EPA 8015C
Analysis Description: 8015 Solid GCSV
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92806848011

METHOD BLANK: 4870118 Matrix: Solid
Associated Lab Samples: 92806848011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diesel Range Organics(C10-C28)	mg/kg	ND	5.1	07/15/25 15:45	
n-Pentacosane (S)	%	50	10-152	07/15/25 15:45	

LABORATORY CONTROL SAMPLE: 4870119

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Diesel Range Organics(C10-C28)	mg/kg	66.9	47.3	71	44-130	
n-Pentacosane (S)	%			54	10-152	

MATRIX SPIKE SAMPLE: 4870121

Parameter	Units	92806848011 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Diesel Range Organics(C10-C28)	mg/kg	ND	76.2	37.5	46	10-150	
n-Pentacosane (S)	%				49	10-152	

SAMPLE DUPLICATE: 4870120

Parameter	Units	92807131001 Result	Dup Result	RPD	Qualifiers
Diesel Range Organics(C10-C28)	mg/kg	2700	2950	9	
n-Pentacosane (S)	%	109	103		

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QUALITY CONTROL DATA

Project: NCDOT - U-4717
Pace Project No.: 92806848

QC Batch: 947299
QC Batch Method: SW-846
Analysis Method: SW-846
Analysis Description: Dry Weight/Percent Moisture
Laboratory: Pace Analytical Services - Charlotte

Associated Lab Samples: 92806848001, 92806848002, 92806848003, 92806848004, 92806848005, 92806848006, 92806848007, 92806848008, 92806848009, 92806848010, 92806848011, 92806848012, 92806848013, 92806848014, 92806848015, 92806848016, 92806848017, 92806848018

SAMPLE DUPLICATE: 4867944

Parameter	Units	92806768001 Result	Dup Result	RPD	Qualifiers
Percent Moisture	%	13.0	13.6	4	N2

SAMPLE DUPLICATE: 4867945

Parameter	Units	92806848017 Result	Dup Result	RPD	Qualifiers
Percent Moisture	%	16.2	16.9	4	N2

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QUALIFIERS

Project: NCDOT - U-4717
Pace Project No.: 92806848

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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 - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

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.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

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

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

N2	The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.
S4	Surrogate recovery not evaluated against control limits due to sample dilution.
S5	Surrogate recovery outside control limits due to matrix interferences (not confirmed by re-analysis).

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: NCDOT - U-4717
Pace Project No.: 92806848

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92806848001	**UST-129S-S**	EPA 3546	947149	EPA 8015C	947268
92806848002	**UST-129S-COMP**	EPA 3546	947149	EPA 8015C	947268
92806848003	**UST-134-N**	EPA 3546	947149	EPA 8015C	947268
92806848004	**UST-134-S**	EPA 3546	947149	EPA 8015C	947268
92806848005	**UST-134-E**	EPA 3546	947149	EPA 8015C	947268
92806848006	**UST-134-W**	EPA 3546	947149	EPA 8015C	947268
92806848007	**UST-134-B**	EPA 3546	947149	EPA 8015C	947268
92806848008	**UST-134-COMP**	EPA 3546	947150	EPA 8015C	947560
92806848009	**UST-129N-B**	EPA 3546	947149	EPA 8015C	947268
92806848010	**UST-129N-N**	EPA 3546	947150	EPA 8015C	947560
92806848011	**UST-129N-S**	EPA 3546	947717	EPA 8015C	947886
92806848012	**UST-129N-E**	EPA 3546	947150	EPA 8015C	947560
92806848013	**UST-129N-W**	EPA 3546	947150	EPA 8015C	947560
92806848014	**UST-129N-COMP**	EPA 3546	947150	EPA 8015C	947560
92806848015	**UST-129S-N**	EPA 3546	947150	EPA 8015C	947560
92806848016	**UST-129S-W**	EPA 3546	947150	EPA 8015C	947560
92806848017	**UST-129S-B**	EPA 3546	947150	EPA 8015C	947560
92806848018	**UST-129S-E**	EPA 3546	947150	EPA 8015C	947560
92806848001	**UST-129S-S**	EPA 5030B	947562	EPA 8015C	947613
92806848002	**UST-129S-COMP**	EPA 5030B	947562	EPA 8015C	947613
92806848003	**UST-134-N**	EPA 5030B	947562	EPA 8015C	947613
92806848004	**UST-134-S**	EPA 5030B	947234	EPA 8015C	947512
92806848005	**UST-134-E**	EPA 5030B	947234	EPA 8015C	947512
92806848006	**UST-134-W**	EPA 5030B	947234	EPA 8015C	947512
92806848007	**UST-134-B**	EPA 5030B	947562	EPA 8015C	947613
92806848008	**UST-134-COMP**	EPA 5030B	947234	EPA 8015C	947512
92806848009	**UST-129N-B**	EPA 5030B	947562	EPA 8015C	947613
92806848010	**UST-129N-N**	EPA 5030B	947235	EPA 8015C	947517
92806848011	**UST-129N-S**	EPA 5030B	947235	EPA 8015C	947517
92806848012	**UST-129N-E**	EPA 5030B	947235	EPA 8015C	947517
92806848013	**UST-129N-W**	EPA 5030B	947235	EPA 8015C	947517
92806848014	**UST-129N-COMP**	EPA 5030B	947235	EPA 8015C	947517
92806848015	**UST-129S-N**	EPA 5030B	947235	EPA 8015C	947517
92806848016	**UST-129S-W**	EPA 5030B	947235	EPA 8015C	947517
92806848017	**UST-129S-B**	EPA 5030B	947810	EPA 8015C	947841
92806848018	**UST-129S-E**	EPA 5030B	947562	EPA 8015C	947613
92806848001	**UST-129S-S**	SW-846	947299		
92806848002	**UST-129S-COMP**	SW-846	947299		
92806848003	**UST-134-N**	SW-846	947299		
92806848004	**UST-134-S**	SW-846	947299		
92806848005	**UST-134-E**	SW-846	947299		
92806848006	**UST-134-W**	SW-846	947299		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: NCDOT - U-4717
Pace Project No.: 92806848

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92806848007	**UST-134-B**	SW-846	947299		
92806848008	**UST-134-COMP**	SW-846	947299		
92806848009	**UST-129N-B**	SW-846	947299		
92806848010	**UST-129N-N**	SW-846	947299		
92806848011	**UST-129N-S**	SW-846	947299		
92806848012	**UST-129N-E**	SW-846	947299		
92806848013	**UST-129N-W**	SW-846	947299		
92806848014	**UST-129N-COMP**	SW-846	947299		
92806848015	**UST-129S-N**	SW-846	947299		
92806848016	**UST-129S-W**	SW-846	947299		
92806848017	**UST-129S-B**	SW-846	947299		
92806848018	**UST-129S-E**	SW-846	947299		

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Pace

Effective Date: 05/24/2024

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☑ Raleigh ☐ Mechanicsville ☐ Atlanta ☐ Kernersville ☐

Sample Condition Upon Receipt

Client Name: Kleinfelder_NC

Project #: **WO# : 92806848**

92806848

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☑ Client ☐ Commercial ☐ Pace ☐ Other:____

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☐ No ☑ N/A

Date/Initials Person Examining Contents: TC 7-10-25

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☐ IR Gun ID: 92T053

Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: 4.6 Correction Factor: Add/Subtract (°C) 0

Temp should be above freezing to 6°C

☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): TC 4.6

USDA Regulated Soil (☑ N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☑ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☑ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☐ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☑ No	☐ N/A	8.
Sample Labels Match COC? -Includes Date/Time/ID/Analysis Matrix: SV	☑ Yes	☐ No	☐ N/A	9.
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

WO# : 92806848

PM: BV Due Date: 07/18/25
CLIENT: 92-Klein CLT

Project #

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.
Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg
**Bottom half of box is to list number of bottles
***Check all unpreserved Nitrates for chlorine

Laboratory Receiving location: Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☑ Raleigh ☐ Mechanicsville ☐ Atlanta ☐ Kernersville ☐

Client Kleinfelder_NC Profile/Template (Circle one) 32751 67 Notes

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)		BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic Zn Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG9A-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gasket (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)		BP3R-250 mL Plastic (NH4)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
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12																													

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

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

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.
Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg
**Bottom half of box is to list number of bottles
***Check all unpreserved Nitrates for chlorine

Project #

Laboratory Receiving location: Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☑ Raleigh ☐ Mechanicsville ☐ Atlanta ☐ Kernersville ☐

Client Kleinfelder_NC Profile #3 (Circle one) 3275167 Notes

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)		BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG9A-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)		BP3R-250 mL Plastic (NH4)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
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pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

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

Pace® Location Requested (City/State):
Pace Analytical Charlotte
9800 Kincey Ave. Suite 100, Huntersville, NC 28078

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here

Scan QR Code for instructions

Company Name:	Kleinfelder_NC	Contact/Report To:	Grant Burke
Street Address:	5775 Glenridge Dr, Bldg. B, Suite 390 Atlanta, GA 30328	Phone #:	(678)551-4184
		E-Mail:	gburke@kleinfelder.com
		Cc E-Mail:	
Customer Project #:			
Project Name:	NCDOT - U-4717	Invoice To:	Accounts Payable
		Invoice E-Mail:	accountspayableus@kleinfelder.com
Site Collection Info/Facility ID (as applicable):		Purchase Order # (if applicable):	
		Quote #:	

Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [X] ET

County / State origin of sample(s): North Carolina

Data Deliverables:
[ ] Level II [ ] Level III [ ] Level IV
[ ] EQUIS
[ ] Other

Regulatory Program (DW, RCRA, etc.) as applicable: Reportable [ ] Yes [ ] No

Rush (Pre-approval required):
[ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day [ ] Other

DW PWSID # or WW Permit # as applicable:

Date Results Requested: STD TAT

Field Filtered (if applicable): [ ] Yes [ ] No

Analysis:

Specify Container Size **

Identify Container Preservative Type***

Analysis Requested

**Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) EnCore, (8) TerraCore, (9) 90mL, (10) Other

*** Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

Lab Use Only
Proj. Mgr: **Bonnie Vang**
AcctNum / Client ID:
Table #:
Profile / Template: **19586**
Prelog / Bottle Ord. ID: **EZ 3275167**

Preservation non-conformance identified for sample.

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Waste Water (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW),Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Composite Start Time	Collected or Composite End Date	Collected or Composite End Time	# Cont.	Res. Chlorine Results	Res. Chlorine Units	8260/GRO	NC EPH	NC VPH	SVOC 625 (BNA)	SVOC 8270	TPH-DRO	VOC 624	TPH-GRO			Sample Comment
UST-1295-S	SS	G			7-8-25	12:16	2								X		X			
UST-1295-comp	SS	G			7-8-25	12:40	2								X		X			
UST-134-N	SS	G			7-10-25	12:15	2								X		X			
UST-134-S	SS	G			7-10-25	12:15	2								X		X			
UST-134-E	SS	G			7-10-25	12:15	2								X		X			
UST-134-W	SS	G			7-10-25	12:15	2								X		X			
UST-134-B	SS	G			7-10-25	12:15	2								X		X			
UST-134-comp	SS	G			7-10-25	12:45	2								X		X			

Additional Instructions from Pace®:

Collected By:
(Printed Name) Grant Burke
Signature: GBurke

Customer Remarks / Special Conditions / Possible Hazards:

# Coolers:	Thermometer ID:	Correction Factor (°C):	Obs. Temp. (°C)	Corrected Temp. (°C)	On Ice:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
~~Grant~~ GBurke	7-10-25 15:30	3Cx Pace Hen	7-10-25 1530

Tracking Number:

Delivered by: [ ] In- Person [ ] Courier
[ ] FedEx [ ] UPS [ ] Other

Page: 2 of 2

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace® Terms and Conditions found at https://www.pacelabs.com/resource-library/resource/pace-terms-and-conditions/

ENV-FRM-CORQ-0019_v02_110123 ©

Pace® Location Requested (City/State):
Pace Analytical Charlotte
9800 Kincey Ave. Suite 100, Huntersville, NC 28078

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here

Scan QR Code for instructions

Company Name:	Kleinfelder_NC	Contact/Report To:	Grant Burke
Street Address:	5775 Glenridge Dr, Bldg. B, Suite 390 Atlanta, GA 30328	Phone #:	(678)551-4184
		E-Mail:	gburke@kleinfelder.com
		Cc E-Mail:	
Customer Project #:			
Project Name:	NCDOT - U-4717	Invoice To:	Accounts Payable
		Invoice E-Mail:	accountspayableus@kleinfelder.com
Site Collection Info/Facility ID (as applicable):		Purchase Order # (if applicable):	
		Quote #:	

Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [X] ET

County / State origin of sample(s): North Carolina

Data Deliverables:
[ ] Level II [ ] Level III [ ] Level IV
[ ] EQUIS
[ ] Other

Regulatory Program (DW, RCRA, etc.) as applicable: Reportable [ ] Yes [ ] No

Rush (Pre-approval required):
[ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day [ ] Other

DW PWSID # or WW Permit # as applicable:

Date Results Requested: STD TAT

Field Filtered (if applicable): [ ] Yes [ ] No

Analysis:

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Waste Water (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW),Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

Specify Container Size **

Identify Container Preservative Type***

Analysis Requested

Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Composite Start Time	Collected or Composite End Date	Collected or Composite End Time	# Cont.	Res. Chlorine Results	Res. Chlorine Units	8260/GRO	NC EPH	NC VPH	SVOC 625 (BNA)	SVOC 8270	TPH-DRO	VOC 624	TPH-GRO	Sample Comment
UST-129N-B	SS	G			7-8-25	10:15	2								X		X	
UST-129N-N	SS	G			7-8-25	10:15	2								X		X	
UST-129N-S	SS	G			7-8-25	10:15	2								X		X	
UST-129N-E	SS	G			7-8-25	10:15	2								X		X	
UST-129N-W	SS	G			7-8-25	10:15	2								X		X	
UST-129N-Comp	SS	G			7-8-25	10:15	2								X		X	
UST-129S-N	SS	G			7-8-25	11:55	2								X		X	
UST-129S-W	SS	G			7-8-25	11:55	2								X		X	
UST-129S-B	SS	G			7-8-25	12:16	2								X		X	
UST-129S-E	SS	G			7-8-25	12:16	2								X		X	

**Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) EnCore, (8) TerraCore, (9) 90mL, (10) Other

*** Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

Lab Use Only

Proj. Mgr: **Bonnie Vang**
AcctNum / Client ID:
Table #:
Profile / Template: **19586**
Prelog / Bottle Ord. ID: **EZ 3275167**

Preservation non-conformance identified for sample.

Additional Instructions from Pace®:

Collected By: (Printed Name) Grant Burke
Signature: GBurke

Customer Remarks / Special Conditions / Possible Hazards:

# Coolers:	Thermometer ID:	Correction Factor (°C):	Obs. Temp. (°C)	Corrected Temp. (°C)	On Ice:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Tracking Number:
GBurke	7-10-25 15:30	Ice Pace Hu	7-10-25 1730	
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Delivered by: [ ] In- Person [ ] Courier
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	[ ] FedEX [ ] UPS [ ] Other
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Page: 1 of 2

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace® Terms and Conditions found at https://www.pacelabs.com/resource-library/resource/pace-terms-and-conditions/

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August 27, 2025
Kleinfelder File No. RAL25R186013

Ms. Cheryl A. Youngblood, LG, CPG
North Carolina Department of Transportation
Assistant State Geotechnical Engineer
1589 Mail Service Center
Raleigh, North Carolina 27699-1589

SUBJECT: UST CLOSURE REPORT
WBS ELEMENT NO. 39078.1.2, TIP NO. U-4717AC aka U-4714A
SR 1009 (JOHN STREET/OLD MONROE ROAD), SR 3448/SR3474 (TRADE STREET) TO SR 1377 (WESLEY CHAPEL - STOUTS ROAD)
PARCEL 134, TIMOTHY AND RANDALL DUCKWORTH
KLEINFELDER PROJECT NO. 26000454.001A

Dear Ms. Youngblood:

Please find enclosed Kleinfelder, Inc.'s (Kleinfelder) report summarizing the underground storage tank (UST) removal activities performed at the subject site. This report summarizes Kleinfelder's field activities, observations, and includes the laboratory reports.

Should questions arise or additional information be required, please contact the undersigned.

Sincerely,
KLEINFELDER, INC.

Michael J. Burns, LG
Environmental Program Manager

Michael Mastbaum, LG
Senior Professional

MJB:jrm
Enclosure

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KLEINFELDER 200 Regency Forest Drive, Suite 225, Cary, NC 27518 **p |** 919.755.5011

UST CLOSURE REPORT
WBS ELEMENT NO. 39078.1.2, TIP NO. U-4717AC aka U-4714A
SR 1009 (JOHN STREET/OLD MONROE ROAD), SR 3448/SR3474 (TRADE STREET) TO SR 1377 (WESLEY CHAPEL -STOUTS ROAD)
PARCEL 134, TIMOTHY AND RANDALL DUCKWORTH
KLEINFELDER PROJECT NO. 26000454.001A

AUGUST 27, 2025

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ONLY THE CLIENT OR ITS DESIGNATED REPRESENTATIVES MAY USE THIS DOCUMENT AND ONLY FOR THE SPECIFIC PROJECT FOR WHICH THIS REPORT WAS PREPARED.

A Report Prepared for:

North Carolina Department of Transportation
Geotechnical Unit
GeoEnvironmental Section
1020 Birch Ridge Drive
Raleigh, North Carolina 27610

UST CLOSURE REPORT
WBS ELEMENT NO. 39078.1.2, TIP NO. U-4717AC aka U-4714A
SR 1009 (JOHN STREET/OLD MONROE ROAD), SR 3448/SR3474 (TRADE STREET) TO SR 1377 (WESLEY CHAPEL -STOUTS ROAD)
PARCEL 134, TIMOTHY AND RANDALL DUCKWORTH
KLEINFELDER PROJECT NO. 26000454.001A



Michael J. Burns, LG
Program Manager



Michael Mastbaum, LG
Senior Professional

KLEINFELDER, INC.
200 Regency Forest Drive. | Suite 225
Cary, North Carolina 27518

August 27, 2025
Kleinfelder Project No. 26000454.001A

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UST CLOSURE AND INITIAL ABATEMENT ACTION REPORT

1. SITE IDENTIFICATION

Facility I.D.:	Not Assigned
UST Incident Number (if known):	Not Assigned
Site Risk:	Not Determined
Site Name:	Not Assigned
Site Street Address:	2801 Old Monroe Road
City/Town:	Stallings
Zip Code:	28104
County:	Union
Description of Geographical Data Point (e.g., diesel fill port):	Center of UST Basin
Location Method (GPS, topographical map, other):	Google Earth
Latitude (decimal degrees):	UST 134 35.0860
Longitude (decimal degrees):	UST 134 -80.6955
Date of Report:	August 27, 2025

2. Information about Contacts Associated with the UST System

UST Owner:	Timothy and Randall Duckworth
Address:	2801 Old Monroe Road Stallings, North Carolina 28104
Phone:	Unknown
UST Operator:	See UST Owner
Property Owner:	Timothy and Randall Duckworth
Address:	2801 Old Monroe Road Stallings, North Carolina 28104
Property Occupant:	No current occupant
Consultant:	Kleinfelder, Inc.
Address:	200 Regency Forest Drive. | Suite 225 Cary, North Carolina 27518
Phone:	919.755.5011

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Contact:	Michael J. Burns, LG
Analytical Laboratory:	Pace Analytical Services, LLC
Address:	9800 Kincey Avenue, Suite 100 Huntersville, NC 28078
Phone:	704.875.9092
State Certification No.	12

3. Information about Release

Date Discovered:	July 9 and 10, 2025
Estimated Quantity of Release:	Unknown
Cause of Release:	Unknown
Source of Release (Dispenser/Piping/UST):	UST
Sizes and Contents of Tanks or Other Containment from which the Release Occurred:	6,000-gallon steel UST with unknown previous contents.

Release Information: Release detected along the east, west, and south sidewalls of UST 134 based on laboratory results.

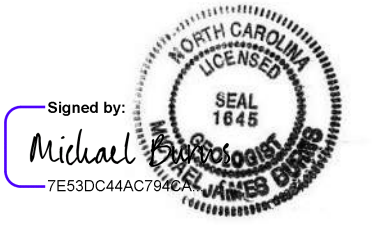
4. CERTIFICATION

SEAL AND SIGNATURE OF CERTIFYING LICENSED GEOLOGIST

I, Michael J. Burns, a Licensed Geologist for Kleinfelder, Inc., do certify that the information contained in this report is correct and accurate to the best of my knowledge.



Michael J Burns, LG
NC License No. 1645



Kleinfelder, Inc. is permitted to practice geology | engineering in North Carolina. The certification number of the corporation is C521 | F-1312.

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F CONCLUSIONS **8**

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2 Site History – UST Owner/Operator and Other Responsible Party Information
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2 Laboratory Results

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A UST-2B Site Investigation Report for Permanent Closure or Change-in-Service of Unregistered UST
B Soil and Water Disposal Manifests
C UST Disposal Certificate
D Photographs
E Laboratory Reports and Chain-of-Custody Forms
F Compaction Testing Field Reports

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EXECUTIVE SUMMARY

The site is located at 2801 Old Monroe Road in Stallings, Union County, North Carolina. The site is currently part of the NCDOT right-of-way. At the time of the closure activities, the site consisted of a vacant parcel with no structures. The underground storage tank (UST) had been associated with a former retail gasoline station.

On July 9 and 10, 2025, Kleinfelder, Inc. (Kleinfelder) provided oversight of the removal of an approximately 6,000-gallon commercial UST. The UST is assumed to have contained petroleum products. The UST contained about 6,000-gallons of liquid which was vacuumed out and transported off-site on July 9, 2025. Upon the removal of the UST, the tank appeared to be in good condition with no significant pitting. Obvious olfactory and photoionization detector (PID) evidence of petroleum-impacted soil was identified on the east, west, and south sidewalls of the excavation. Soil in contact with the UST was loaded onto a dump truck and transported offsite for disposal. Petroleum concentrations were detected in the samples collected from the east, west, and south sidewalls of the excavation that exceeded the total petroleum hydrocarbon (TPH) diesel range organics (DRO) and/or gasoline range organics (GRO) Action Levels. The excavation was backfilled with rip rap, stone and geogrid to stabilize the bottom of the excavation, then clean fill compacted to the ground surface in accordance with NCDOT T-99 standard. Groundwater was not encountered in the UST excavation, but soil at the base of the excavation was saturated due to heavy rain. The UST was hauled of site for disposal on July 10, 2025.

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A SITE HISTORY AND CHARACTERIZATION

The site is located at 2801 Old Monroe Road in Stallings, Union County, North Carolina (Figure 1). The site is located within the NCDOT right-of-way. At the time of the closure activities, the site consisted of a vacant parcel with no structures. The UST had been associated with a former retail gasoline station that had been demolished prior to the date of the closure activities. The UST-2B form is provided in Appendix A.

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B SITE CHECK

There was no indication that a release had occurred from the UST prior to closure; therefore, site check assessment procedures were not performed.

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C UST CLOSURE PROCEDURES

Kleinfelder was contracted to remove a 6,000-gallon commercial UST on a vacant parcel with no structures located at 2801 Old Monroe Road in Stallings, Union County, North Carolina. The UST information is included in Tables 1 and 2. The UST was previously associated with a former retail gasoline station that was demolished prior to the closure activities. Prior to the removal of the UST, Kleinfelder obtained a permit from the Union County Fire Marshal. The Union County Fire Marshal was notified prior to removing the UST from the ground.

The following is a chronological description of the closure activities that were performed on July 9 and 10, 2025.

July 9 and 10, 2025

- Kleinfelder personnel arrives onsite and assessed the public utilities near the UST excavation area.
- Kleinfelder personnel met with a GPRS tech onsite to locate the USTs.
- The GPRS tech located the UST approximately three (3) feet below grade.
- Kleinfelder personnel met A&D Environmental, Inc. (A&D) of Archdale, North Carolina at the site to begin UST closure activities.
- A&D mobilized a vacuum truck to the site to remove the residual liquid from the USTs. The UST was full and approximately 6,000-gallons of liquid was removed and transported offsite for disposal (Appendix B). The liquid disposal manifests provided in Appendix B include material removed from the Parcel 129 USTs as well.
- A&D began excavating the soil on the top and the sides of the USTs to facilitate removal.
- Prior to UST removals, A&D checked the atmosphere of the interior of the USTs with a lower explosive level (LEL) meter to determine whether explosive vapors were present within the USTs. The atmospheres of the tanks were determined to be non-explosive before the tanks were removed from the ground.
- The UST was removed from the ground and the bottom and sides of the UST were observed to be intact. A visual observation of the tank did not identify any holes or areas of significant corrosion and pitting.
- Confirmation samples were collected for field screening using a photoionization

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detector (PID). During the sampling activities, petroleum odors were noted in the samples collected from the east, west and south sidewalls. PID readings greater than 50 parts per million (ppm) were measured in the samples collected from the east, west and south sidewalls. The other soil samples collected for screening indicated PID concentrations less than 50 ppm.

- Following the removal of the USTs, Kleinfelder collected soil samples from the bottom and sidewalls from the UST excavation as well as a sample from the stockpiled soil. The sample locations are shown on Figure 2. The samples were placed in laboratory-provided containers, placed in a cooler with ice and shipped to Pace Laboratories for analysis for TPH GRO and DRO per EPA Method 8015C.
- The soil in contact with the USTs (21.16 tons) was transported offsite for disposal (Appendix B).
- The UST excavation was backfilled and compacted in accordance with NCDOT T-99 standards.
- A Copy of the tank disposal manifest is included in Appendix C. The tank disposal manifest lists the former contents as “diesel” but the former contents are unknown.
- Photographs taken during the UST closures are included in Appendix D.

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D INITIAL RESPONSE AND ABATEMENT

Based on the proximity of the excavation to the Old Monroe Road travel lanes, initial response or abatement activities were not performed.

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E SAMPLE RESULTS

The sample locations and laboratory results are presented on Figure 2 and Table 3. The laboratory report and associated chain-of-custody document are included in Appendix E.

The results of the UST closure activities included the following:

- PID screening results indicated the presence of petroleum impacted soil.
- Kleinfelder collected confirmation soil samples from the bottom of the tank basin and sidewalls for lab testing. The soil was placed into laboratory provided containers, labeled, and maintained on ice until shipped to Pace Laboratories in Huntersville, North Carolina.
- The samples were analyzed for TPH GRO and DRO by EPA Method 8015C. The sample locations are shown on Figure 2. Analytical results are provided in Table 3. The laboratory results indicated concentrations that met or exceeded the TPH GRO and DRO Action Levels of 100 mg/kg and 50 mg/kg, respectively on the east (UST-134-E) and west (UST-134-W) sidewalls. The laboratory results indicated a TPH DRO concentration on the south sidewall that exceeded the Action Level of 100 mg/kg on the south (UST-134-S) sidewall. None of the other laboratory results indicated concentrations that exceeded the TPH DRO and GRO (50 mg/kg) Action Levels. The laboratory reports are provided in Appendix E.
- Due to the proximity of the UST excavation to the travel lanes of Old Monroe Road, over-excavation was not performed.
- Following soil sample collection, the excavation was backfilled and compacted in accordance with NCDOT T-99 standards. Based on the condition of the soil at the bottom of the excavation which was saturated due to heavy rain, Kleinfelder's professional engineer recommended that rip rap and stone be place at the bottom of the excavation and covered with geogrid prior to placing soil backfill in lifts and compacting the soil. Kleinfelder's compaction field report with compaction results are provided in Appendix F.

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F CONCLUSIONS

Based on Kleinfelder's field observations, and the results of the laboratory analyses, Kleinfelder presents the following conclusions:

- An approximate 6,000-gallon commercial petroleum UST (UST-134) was closed by removal on July 9 and 10, 2025. The UST was observed to be in good condition with no obvious evidence of holes or pitting observed.
- The UST was completed full of residual liquid which was removed and transported off-site for disposal.
- All PID readings for the soil sampled screened from the east, west and south sidewalls indicated concentrations higher than 50 ppm.
- Confirmation laboratory analyses indicated concentrations of TPH GRO and/or DRO above the TPH GRO and DRO Action Levels of 50 mg/kg and 100 mg/kg, respectively on the east (UST-134-E), west (UST-134-W), and south (UST-134-S) sidewalls. All other laboratory analyses were below the TPH DRO and GRO Action Levels.
- Based on the proximity of the UST excavation to the Old Monroe Road travel lanes, over-excavation was not performed.
- Following soil sample collection, the excavation was backfilled and compacted in accordance with NCDOT T-99 standards. Based on the condition of the soil at the bottom of the excavation which was saturated due to heavy rain, Kleinfelder's professional engineer recommended that rip rap and stone be place at the bottom of the excavation and covered with geogrid prior to placing soil backfill. The backfill was placed in lifts and compacted.
- Groundwater was not encountered in the excavation, but the soil at the base of the excavation was saturated.
- The closure activities indicated soil impact on the east, west, and south sidewalls above the TPH Action Levels.

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G LIMITATIONS

Kleinfelder's work was performed in a manner consistent with that level of care and skill ordinarily exercised by other members of its profession practicing in the same locality, under similar conditions and at the date the services are provided. Kleinfelder's conclusions, opinions and recommendations will be based on a limited number of observations and data. It is possible that conditions could vary between or beyond the data evaluated. Kleinfelder makes no guarantee or warranty, express or implied, regarding the services, communication (oral or written), report, opinion, or instrument of service provided.

Kleinfelder offers various levels of investigative and engineering services to suit the varying needs of different clients. It should be recognized that definition and evaluation of geologic and environmental conditions are a difficult and inexact science. Judgments leading to conclusions and recommendations are generally made with incomplete knowledge of the subsurface conditions present due to the limitations of data from field studies. Although risk can never be eliminated, more-detailed and extensive studies yield more information, which may help understand and manage the level of risk. Since detailed study and analysis involves greater expense, Kleinfelder's clients participate in determining levels of service that provide adequate information for their purposes at acceptable levels of risk. More extensive studies, including subsurface studies or field tests, should be performed to reduce uncertainties. Acceptance of this report will indicate that NCDOT has reviewed the document and determined that it does not need or want a greater level of service than provided.

During the course of the performance of Kleinfelder's services, hazardous materials may have been discovered. Kleinfelder assumes no responsibility or liability whatsoever for any claim, loss of property value, damage, or injury that results from pre-existing hazardous materials being encountered or present on the project site, or from the discovery of such hazardous materials. Nothing contained in this report should be construed or interpreted as requiring Kleinfelder to assume the status of an owner, operator, or generator, or person who arranges for disposal, transport, storage or treatment of hazardous materials within the meaning of any governmental statute, regulation or order. NCDOT is solely responsible for directing notification of all governmental agencies, and the public at large, of the existence, release, treatment or disposal of any hazardous materials observed at the project site, either before or during performance of

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Kleinfelder's services. NCDOT is responsible for directing all arrangements to lawfully store, treat, recycle, dispose, or otherwise handle hazardous materials, including cuttings and samples resulting from Kleinfelder's services.

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TABLES

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TABLE 1: SITE HISTORY – UST SYSTEM

UST ID Number	Current/ Last Contents *	Previous Contents *	Capacity (in gallons)	Construction Details **	Tank Dimensions	Description of Associated Piping and Pumps	Date Tank Installed	Status of UST ***	Was release associated with the UST System?
Tank 1	Unknown	Unknown	6,000	Steel, single-walled	8’ x 16’	None	Unknown	Permanently closed by removal (07/10/2025)	Yes

* Gasoline (unleaded or leaded), diesel, used oil, waste oil, aviation fuel, etc., or pesticides, non-halogenated or halogenated solvents, etc

** Fiberglass (single- or double-walled), steel (single- or double-walled), steel with FRP (single- or double-walled), steel with liner, other, unknown

*** Currently operational, not in use or temporarily closed (specify date), permanently closed in place (specify date), permanently closed by removal (specify date)

Table 2: Site History – UST Owner/Operator and Other Responsible Party Information

Revision Date: N/A Incident Number and Name: N/A

UST ID Number	Unknown	Facility ID Number	NA
Name of Owner		Dates of Operation (mm/dd/yy to mm/dd/yy)	
Timothy & Randall Duckworth		unknown	
Street Address			
2801 Old Monroe Road			
City	State	Zip	Telephone Number
Stallings	NC	28104	Unknown
Name of Operator		Dates of Operation (mm/dd/yy to mm/dd/yy)	
Unknown		Unknown	

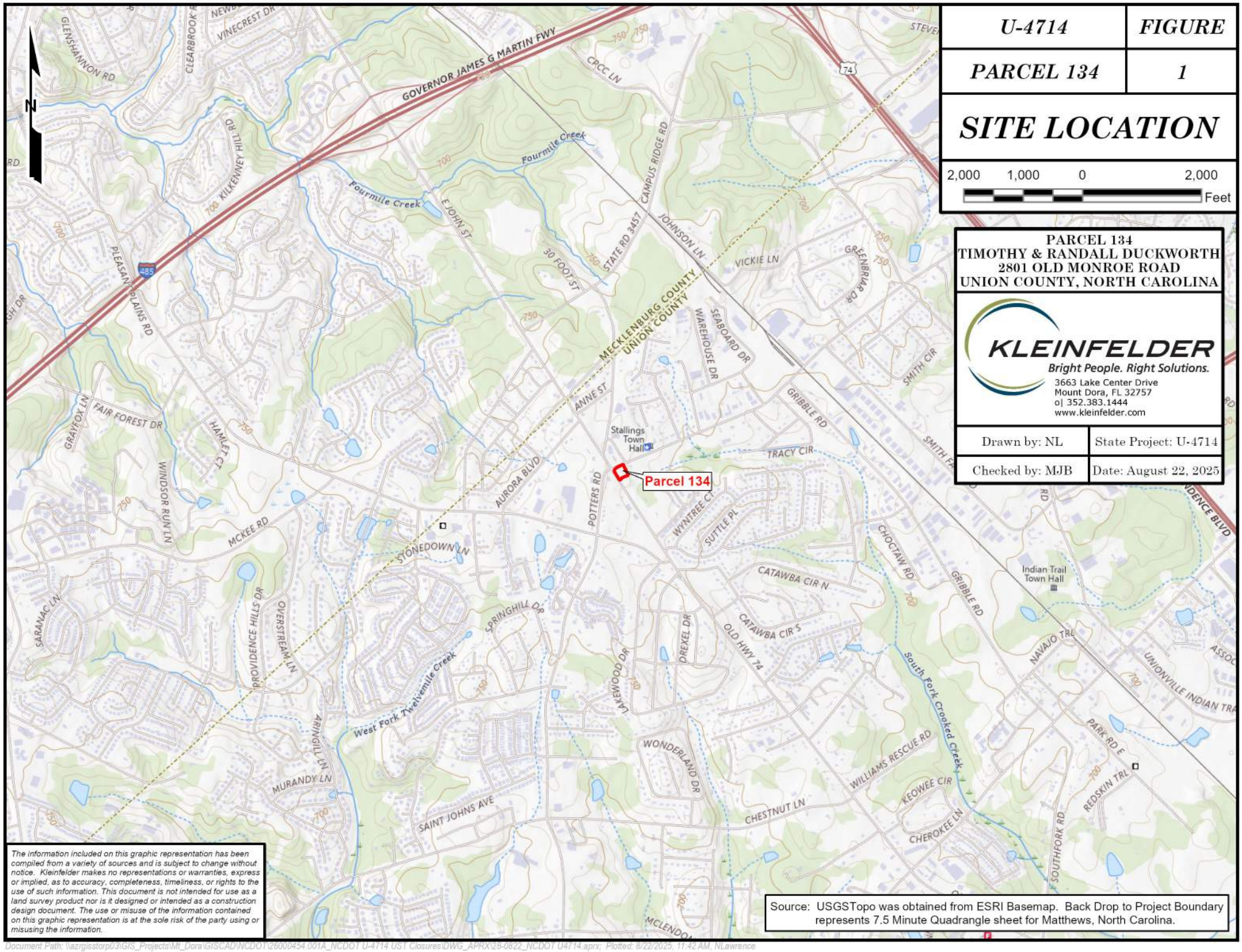
TABLE 3: Soil Sample Analytical Summary

Parameter							Comparison Criteria	
Sample ID	UST-134-N	UST-134-S	UST-134-E	UST-134-W	UST-134-B	UST-134-Comp	TPH GRO Action Level	TPH DRO Action Level
Collection Depth (ft bgs)	8	8	8	8	11	---		
Collection Date	4/3/25	4/3/25	4/3/25	4/3/25	4/3/25	7/10/25		
EPA Method 8015C								
TPH GRO	6.6	<6.9	**82.7**	**164**	15.4	32.6	50	---
TPH DRO	38.8	**125**	**2000**	**1100**	6.6	89	---	100

Notes:
Results displayed in milligram per kilogram (mg/kg)
ft bgs = Feet below ground surface
Bold = Concentration above the Action Level
ppm = Parts per million

FIGURES

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U-4714	FIGURE
PARCEL 134	1

SITE LOCATION

2,000 1,000 0 2,000 Feet

PARCEL 134
TIMOTHY & RANDALL DUCKWORTH
2801 OLD MONROE ROAD
UNION COUNTY, NORTH CAROLINA

KLEINFELDER
Bright People. Right Solutions.
3663 Lake Center Drive
Mount Dora, FL 32757
o| 352.383.1444
www.kleinfelder.com

Drawn by: NL	State Project: U-4714
Checked by: MJB	Date: August 22, 2025

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Document Path: \\azrgisstorp03\GIS_Projects\Mt_Dora\GIS\CAD\NCDOT\26000454.001A_NCDOT U-4714 UST Closures\DWG_APRX\28-0822_NCDOT U4714.aprx; Plotted: 8/22/2025, 11:42 AM, NLawrence

PROJECT REFERENCE NO.	SHEET NO.
U-4714 - PARCEL 134	2

LABORATORY RESULTS

0 20 40
FEET

DRAWN BY: BCF
CHECKED BY: MJB

SAMPLE RESULTS

134-B
TPH GRO 15.4 mg/kg
TPH DRO 6.6 mg/kg

134-N
TPH GRO 6.6 mg/kg
TPH DRO 38.8 mg/kg

134-S
TPH GRO <6.9 mg/kg
TPH DRO 125 mg/kg

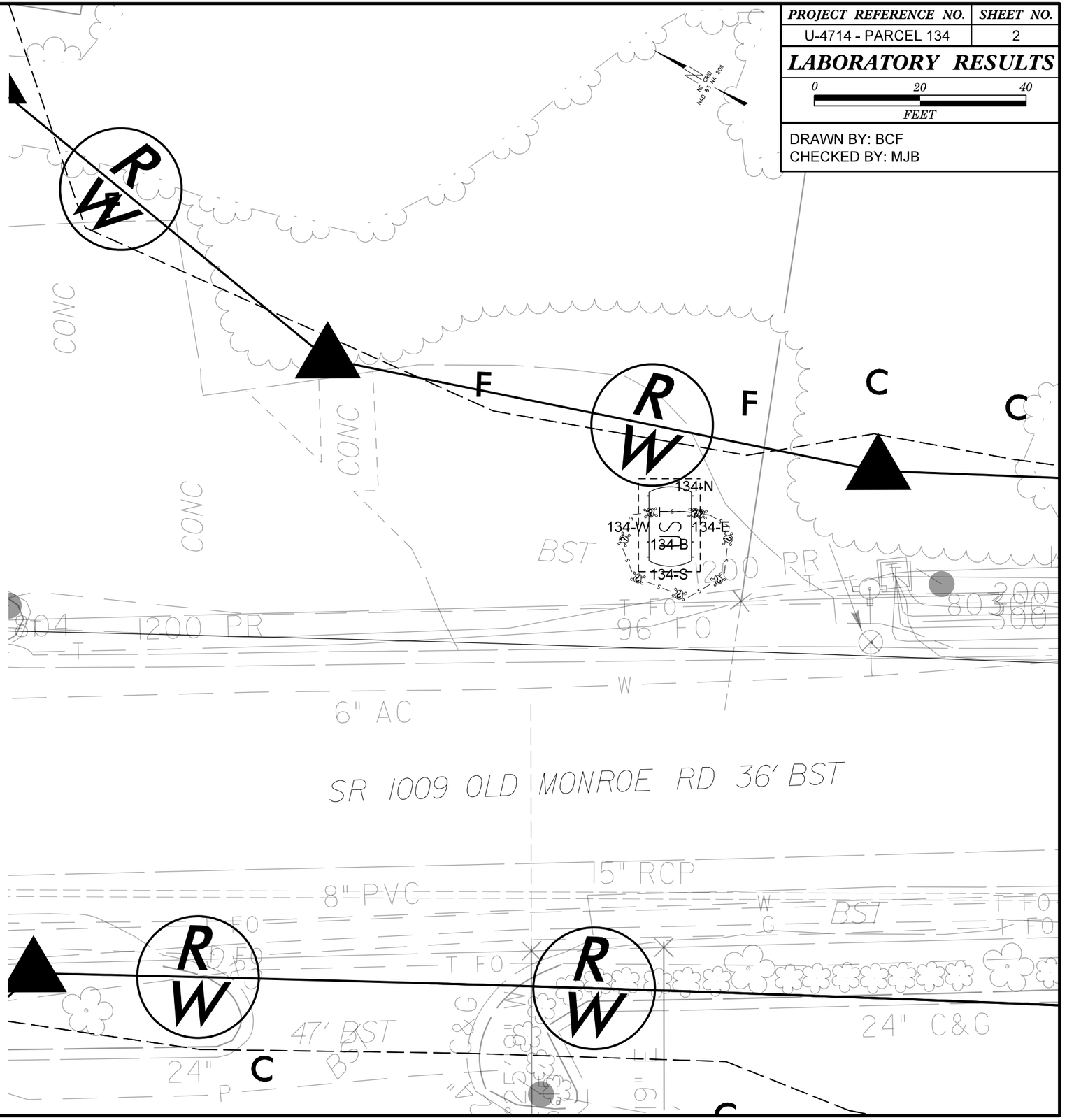
134-E
TPH GRO 82.7 mg/kg
TPH DRO 2000 mg/kg

134-W
TPH GRO 164 mg/kg
TPH DRO 1100 mg/kg

NOTES
All results are expressed in milligrams per kilogram (mg/kg)
TPH = Total Petroleum Hydrocarbons
GRO = Gasoline Range Organics
DRO = Dielsel Range Organics
TPH GRO Action Level is 50 mg/kg
TPH DRO Action Level is 100 mg/kg
Underlined concentration exceeds the TPH Action Level

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LEGEND
- UST — Underground Storage Tank
- Excavation Limits
- Excavation Limits



APPENDIX A

UST-2B SITE INVESTIGATION REPORT FOR PERMANENT CLOSURE OR CHANGE-IN-SERVICE OF UST (UNREGISTERED)

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UST-2B

Site Investigation Report for Permanent Closure or Change-in-Service of UN-REGISTERED UST

Return completed form to:

NC DEQ / DWM / UST
SECTION 1646 MAIL SERVICE
CENTER RALEIGH, NC 27699-1646
ATTN: REGISTRATION & PERMITTING

phone (919) 707-8171 fax (919) 715-1117 http://www.wastenotnc.org/

STATE USE ONLY:
Facility ID #

Date Received

INSTRUCTIONS (READ THIS FIRST)

1. UST permanent closure or change in service must be completed in accordance with the latest version of the Guidelines for Site Checks, Tank Closure and Initial Response and Abatement. The guidelines can be obtained at http://deq.nc.gov/about/divisions/waste-management/waste-management-permit-guidance/underground-storage-tanks-section.
2. Permanent closure: Complete all sections of this form.
3. Change-in-service: Where UST systems will be converted from storing a regulated substance to a non-regulated substance, complete sections I, II, III, IV, and VI.
4. For more than 5 un-registered UST systems, attach additional forms as needed.
5. **Un-Registered USTs may be subject to unpaid fees and late penalties**.
6. REGISTERED USTs use Form UST-2A.

I. OWNERSHIP OF TANKS

Owner Name (Corporation, Individual, Public Agency, or Other Entity)
TIMOTHY AND RANDALL DUCKWORTH

Street Address
2801 Old Monroe Road

City: Stallings
County: Union

State: N C
Zip Code: 28104

Phone Number

II. LOCATION OF TANKS

Facility Name or Company
TIMOTHY AND RANDALL DUCKWORTH

Facility ID # (If known)

Street Address
2801 Old Monroe Road

City: Stallings
County: Union
Zip Code: 28104

Phone Number

III. CONTACT PERSONNEL

Contact for Facility		Job Title:	Phone #:
Closure Contractor Name:	Closure Contractor Company: A&D Environmental	Address: PO Box 484, High Point	Phone # 336-289-2841
Primary Consultant Name: Michael Burns	Primary Consultant Company: Kleinfelder, Inc.	Address: 200 Regency Forest Drive, Suite 225, Cary, NC	Phone # 919-397-3734

IV. UST INFORMATION FOR UN-REGISTERED UST SYSTEMS

REGISTERED USTs use Form UST-2A.

V. EXCAVATION CONDITION

Tank ID No.	Size in Gallons	Last Contents	Last Use Date	Permanent Close Date	Method of Permanent Closure: Indicate REMOVED or enter fill material, such as foam/ concrete/ sand	Change-in- Service Date	Water in excavation		Free product		Notable odor or visible soil contamination	
							Yes	No	Yes	No	Yes	No
Tank 1	6,000	unknown		07/09/25	REMOVED		☐	■	☐	■	■	☐
							☐	☐	☐	☐	☐	☐
							☐	☐	☐	☐	☐	☐
							☐	☐	☐	☐	☐	☐
							☐	☐	☐	☐	☐	☐

VI. CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true accurate and complete.

Print name and official title of owner or owner's authorized representative
Michael Burns

Signature
Michael Burns

Date Signed
8/28/25

APPENDIX B

SOIL AND LIQUID DISPOSAL MANIFESTS

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A&D Environmental Services — Bill of Lading / Material Manifest

A&D Job No:	Generator ID Number	Page 1 of	Emergency Response Phone	Tracking Number
2507-0038		1	336 4347750	47541

Generator's Name and Mailing Address: Kleinfelder, 9004 Perimeter Woods Dr, Charlotte NC

Generator's site address (if different from mailing address): 128 Stallings Rd

Generator's Phone

Transporter 1 ☐ 2 ☐ Company Name: **A&D Environmental Services, Inc.** — US EPA ID No: **NCD986232221**

Transporter 1 ☑ 2 ☐ Company Name: Doggett — US EPA ID No:

☑ Designated Facility
A&D Environmental Services, Inc.
2718 Uwharrie Road
Archdale, NC 27263
336-434-7750
NCD986232221

☐ Designated Facility
A&D Environmental Services, Inc.
3149 Lear Drive
Burlington, NC 27215
336-229-0058
NCR000138628

☐ Designated Facility (Please insert facility information below)

HM	Hazardous Materials Shipping Name and Description (if applicable)	No.	Type	QTY	Wt/Vol	Profile Number
	NON Regulated Impacted Soil	1	DT	21.20	T	NC2025022S

	Petroleum Products for Recycle		No.	Type	QTY	Wt/Vol	Profile Number
X	NA1993, Diesel fuel, 3, III	ERG# 128					
X	NA 1993, 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, UN3506, Mercury contained in manufactured articles, 8 (6.1)	ERG# 172	Mercury Devices	
X					RQ, UN3432, Polychlorinated biphenyls, solid, 9, II	ERG# 171	TSCA Exempt PCB Lamp Ballasts	
X					UN2800, Batteries, wet non-spillable, 8	ERG# 154	Sealed Lead Acid Batteries	
X					UN2794, Batteries, wet, filled with acid, 8	ERG# 154	Lead Acid Batteries	
X					UN2795, Batteries, wet, filled with alkali, 8	ERG# 154	Wet NiCad Batteries	
X					UN3090, Lithium metal batteries, 9	ERG# 138	Lithium Metal Batteries	
X					UN3480, Lithium ion batteries, 9	ERG# 147	Lithium Ion Batteries	
					Batteries, dry, sealed n.o.s.		Alkaline Batteries	
					Batteries, dry, sealed n.o.s.		Dry NiCad Batteries	
					Universal Waste Lamps (Not DOT-Regulated per 49 CFR 173.164 (e)		Florescent lamps (4-Ft. and Under)	
					Universal Waste Lamps (Not DOT-Regulated per 49 CFR 173.164 (e)		Florescent lamps (Over 4-Ft.)	
					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)		Shielded Lamps	
					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/Capacitors	
					Electronic Equipment for Recycle (Not DOT-Regulated)		e-Waste	

Shipper'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 transport according to the applicable regulations of the Department of Transportation. I further certify that none of the materials described above are 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.

	Printed/Typed Name	Signature	Month	Day	Year
Shipper's/ Offeror's	HAMZA EL KHAMSI		07	11	25
Transporter 1	KENNY WAGONER	DCC16	7	11	25
Transporter 2					

Discrepancy Indication / Additional Information: AH

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

Printed/Typed Name	Signature	Month	Day	Year
Travis Chapp		7	11	25

DESIGNATED FACILITY TO GENERATOR

A&D Environmental Services — Bill of Lading / Material Manifest

A&D Job No:	Generator ID Number	Page 1 of	Emergency Response Phone	Tracking Number
2507-0038		1		47540

Generator's Name and Mailing Address

Generator's site address (if different from mailing address): 128 Stallings Road, Stallings NC

Generator's Phone

Transporter 1 ☐ 2 ☑ Company Name: **A&D Environmental Services, Inc.** — US EPA ID No: NCD986232221

Transporter 1 ☐ 2 ☐ Company Name: — US EPA ID No:

☐ Designated Facility
A&D Environmental Services, Inc.
2718 Uwharrie Road
Archdale, NC 27263
336-434-7750
NCD986232221

☐ Designated Facility
A&D Environmental Services, Inc.
3149 Lear Drive
Burlington, NC 27215
336-229-0058
NCR000138628

☐ Designated Facility (Please insert facility information below)

HM	Hazardous Materials Shipping Name and Description (if applicable)	No.	Type	QTY	Wt/Vol	Profile Number

	Petroleum Products for Recycle		No.	Type	QTY	Wt/Vol	Profile Number
X	NA1993, Diesel fuel, 3, III	ERG# 128					
X	NA 1993, 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)		1	TT	2641	G	NC20250223

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, UN3506, Mercury contained in manufactured articles, 8 (6.1)	ERG# 172	Mercury Devices	
X					RQ, UN3432, Polychlorinated biphenyls, solid, 9, II	ERG# 171	TSCA Exempt PCB Lamp Ballasts	
X					UN2800, Batteries, wet non-spillable, 8	ERG# 154	Sealed Lead Acid Batteries	
X					UN2794, Batteries, wet, filled with acid, 8	ERG# 154	Lead Acid Batteries	
X					UN2795, Batteries, wet, filled with alkali, 8	ERG# 154	Wet NiCad Batteries	
X					UN3090, Lithium metal batteries, 9	ERG# 138	Lithium Metal Batteries	
X					UN3480, Lithium ion batteries, 9	ERG# 147	Lithium Ion Batteries	
					Batteries, dry, sealed n.o.s.		Alkaline Batteries	
					Batteries, dry, sealed n.o.s.		Dry NiCad Batteries	
					Universal Waste Lamps (Not DOT-Regulated per 49 CFR 173.164 (e)		Florescent lamps (4-Ft. and Under)	
					Universal Waste Lamps (Not DOT-Regulated per 49 CFR 173.164 (e)		Florescent lamps (Over 4-Ft.)	
					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)		Shielded Lamps	
					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/Capacitors	
					Electronic Equipment for Recycle (Not DOT-Regulated)		e-Waste	

Shipper'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 transport according to the applicable regulations of the Department of Transportation. I further certify that none of the materials described above are 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.

Shipper's/ Offeror's Printed/Typed Name	Signature	Month	Day	Year
Grant Burke	GBurke	7	9	25

Transporter 1 Printed/Typed Name	Signature	Month	Day	Year
Kevin Bellow	Kev Bellow	7	8	25

Transporter 2 Printed/Typed Name	Signature	Month	Day	Year

Discrepancy Indication / Additional Information: Tank

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

Printed/Typed Name	Signature	Month	Day	Year
Travis Clapp	TClapp	7	8	25

DESIGNATED FACILITY TO GENERATOR

VT-1020

A&D Environmental Services — Bill of Lading / Material Manifest

A&D Job No:	Generator ID Number	Page 1 of	Emergency Response Phone	Tracking Number
2507-0038		1	336 434 7750	47539

Generator's Name and Mailing Address
Kleinfelder
9009 Perimeter Woods Dr
Charlotte, NC

Generator's site address (if different from mailing address)
124 Stallings Rd
Stallings, NC 28104

Generator's Phone

Transporter 1 ☑ 2 ☐ Company Name: **A&D Environmental Services, Inc.** — US EPA ID No: **NCD986232221**

Transporter 1 ☐ 2 ☐ Company Name — US EPA ID No:

☑ Designated Facility
A&D Environmental Services, Inc.
2718 Uwharrie Road
Archdale, NC 27263
336-434-7750
NCD986232221

☐ Designated Facility
A&D Environmental Services, Inc.
3149 Lear Drive
Burlington, NC 27215
336-229-0058
NCR000138628

☐ Designated Facility (Please insert facility information below)

HM	Hazardous Materials Shipping Name and Description (if applicable)	No.	Type	QTY	Wt/Vol	Profile Number

	Petroleum Products for Recycle		No.	Type	QTY	Wt/Vol	Profile Number
X	NA1993, Diesel fuel, 3, III	ERG# 128					
X	NA 1993, 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)		1	TT	3891	G	NC2025 0223

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, UN3506, Mercury contained in manufactured articles, 8 (6.1)	ERG# 172	Mercury Devices	
X					RQ, UN3432, Polychlorinated biphenyls, solid, 9, II	ERG# 171	TSCA Exempt PCB Lamp Ballasts	
X					UN2800, Batteries, wet non-spillable, 8	ERG# 154	Sealed Lead Acid Batteries	
X					UN2794, Batteries, wet, filled with acid, 8	ERG# 154	Lead Acid Batteries	
X					UN2795, Batteries, wet, filled with alkali, 8	ERG# 154	Wet NiCad Batteries	
X					UN3090, Lithium metal batteries, 9	ERG# 138	Lithium Metal Batteries	
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					Batteries, dry, sealed n.o.s.		Alkaline Batteries	
					Batteries, dry, sealed n.o.s.		Dry NiCad Batteries	
					Universal Waste Lamps (Not DOT-Regulated per 49 CFR 173.164 (e)		Florescent lamps (4-Ft. and Under)	
					Universal Waste Lamps (Not DOT-Regulated per 49 CFR 173.164 (e)		Florescent lamps (Over 4-Ft.)	
					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)		Shielded Lamps	
					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/Capacitors	
					Electronic Equipment for Recycle (Not DOT-Regulated)		e-Waste	

Shipper'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 transport according to the applicable regulations of the Department of Transportation. I further certify that none of the materials described above are 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.

	Printed/Typed Name	Signature	Month	Day	Year
Shipper's/ Offeror's	Grant Burke	G Burke	07	09	25
Transporter 1	Corey McMahon	Corey McMahon	07	09	25
Transporter 2					

Discrepancy Indication / Additional Information: Trip charge

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

Printed/Typed Name	Signature	Month	Day	Year
Travis Clapp	T Clapp	7	9	25

DESIGNATED FACILITY TO GENERATOR

APPENDIX C

UST DISPOSAL CERTIFICATE

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A&D 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
Kleinfelder
9009 Perimiter Woods Dr
Charlotte, NC

2) Tank Owner/Authorized Representative: Contact Grant Burke
Phone#: 678 551 4184

3) Description Of Tanks:

Tank No.	Capacity	Previous Contents	Comments
1	6K	~~Diesel~~ Diesel	Empty

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.

Grant Burke — GBurke — 7-16-25
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. DCC 16/12

Kenny Wagoner — [signature] — 7-10-25
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: DH Griffin

Jeri Tank — Jeri Tank — 7-11-25
Printed/Typed Name — *Signature* — *Month/Day/Year*

APPENDIX D
PHOTOGRAPHS

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SITE PHOTOGRAPHS

Project Name: NCDOT U-4714 Parcel 134 UST Closure
Project Number: 26000454.001A
Project Location: 2801 Old Monroe Road, Stallings, North Carolina
Date: July 9 and 10, 2025



PHOTO 1: View of uncovered UST.



PHOTO 2: View of the UST.



PHOTO 3: View of segregated soil piles.



PHOTO 4: View of UST being pumped out.

SITE PHOTOGRAPHS

Project Name: NCDOT U-4714 Parcel 134 UST Closure
Project Number: 26000454.001A
Project Location: 2801 Old Monroe Road, Stallings, North Carolina
Date: July 9 and 10, 2025



PHOTO 5: View of UST prior to removal from the excavation.



PHOTO 6: View of the excavation area with rain water in the excavation.

APPENDIX E

LABORATORY REPORTS AND CHAIN-OF-CUSTODY FORMS

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Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

July 17, 2025

Grant Burke
Kleinfelder

5775 Glenridge Dr,
Bldg. B, Suite 390
Atlanta, GA 30328

RE: Project: NCDOT - U-4717
Pace Project No.: 92806848

Dear Grant Burke:

Enclosed are the analytical results for sample(s) received by the laboratory on July 10, 2025. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Charlotte

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

Sincerely,

Bonnie Vang
bonnie.vang@pacelabs.com
704-977-0968
Project Manager

Enclosures

cc: Jen Matusick, Kleinfelder
Brett Miller, Kleinfelder, Inc.

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CERTIFICATIONS

Project: NCDOT - U-4717
Pace Project No.: 92806848

Pace Analytical Services Charlotte

South Carolina Laboratory ID: 99006
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 Laboratory ID: 99006
South Carolina Certification #: 99006001
South Carolina Drinking Water Cert. #: 99006003
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Louisiana DoH Drinking Water #: LA029
Virginia/VELAP Certification #: 460221

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SAMPLE ANALYTE COUNT

Project: NCDOT - U-4717
Pace Project No.: 92806848

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92806848001	**UST-129S-S**	EPA 8015C	PKS	2	PASI-C
		EPA 8015C	TEG	2	PASI-C
		SW-846	MCR1	1	PASI-C
92806848002	**UST-129S-COMP**	EPA 8015C	PKS	2	PASI-C
		EPA 8015C	TEG	2	PASI-C
		SW-846	MCR1	1	PASI-C
92806848003	**UST-134-N**	EPA 8015C	PKS	2	PASI-C
		EPA 8015C	TEG	2	PASI-C
		SW-846	MCR1	1	PASI-C
92806848004	**UST-134-S**	EPA 8015C	PKS	2	PASI-C
		EPA 8015C	TEG	2	PASI-C
		SW-846	MCR1	1	PASI-C
92806848005	**UST-134-E**	EPA 8015C	PKS	2	PASI-C
		EPA 8015C	TEG	2	PASI-C
		SW-846	MCR1	1	PASI-C
92806848006	**UST-134-W**	EPA 8015C	PKS	2	PASI-C
		EPA 8015C	TEG	2	PASI-C
		SW-846	MCR1	1	PASI-C
92806848007	**UST-134-B**	EPA 8015C	PKS	2	PASI-C
		EPA 8015C	TEG	2	PASI-C
		SW-846	MCR1	1	PASI-C
92806848008	**UST-134-COMP**	EPA 8015C	PKS	2	PASI-C
		EPA 8015C	TEG	2	PASI-C
		SW-846	MCR1	1	PASI-C
92806848009	**UST-129N-B**	EPA 8015C	PKS	2	PASI-C
		EPA 8015C	TEG	2	PASI-C
		SW-846	MCR1	1	PASI-C
92806848010	**UST-129N-N**	EPA 8015C	PKS	2	PASI-C
		EPA 8015C	TEG	2	PASI-C
		SW-846	MCR1	1	PASI-C
92806848011	**UST-129N-S**	EPA 8015C	PKS	2	PASI-C
		EPA 8015C	TEG	2	PASI-C
		SW-846	MCR1	1	PASI-C
92806848012	**UST-129N-E**	EPA 8015C	PKS	2	PASI-C
		EPA 8015C	TEG	2	PASI-C
		SW-846	MCR1	1	PASI-C
92806848013	**UST-129N-W**	EPA 8015C	PKS	2	PASI-C

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SAMPLE ANALYTE COUNT

Project: NCDOT - U-4717
Pace Project No.: 92806848

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 8015C	TEG	2	PASI-C
		SW-846	MCR1	1	PASI-C
92806848014	**UST-129N-COMP**	EPA 8015C	PKS	2	PASI-C
		EPA 8015C	TEG	2	PASI-C
		SW-846	MCR1	1	PASI-C
92806848015	**UST-129S-N**	EPA 8015C	PKS	2	PASI-C
		EPA 8015C	TEG	2	PASI-C
		SW-846	MCR1	1	PASI-C
92806848016	**UST-129S-W**	EPA 8015C	PKS	2	PASI-C
		EPA 8015C	TEG	2	PASI-C
		SW-846	MCR1	1	PASI-C
92806848017	**UST-129S-B**	EPA 8015C	PKS	2	PASI-C
		EPA 8015C	TEG	2	PASI-C
		SW-846	MCR1	1	PASI-C
92806848018	**UST-129S-E**	EPA 8015C	PKS	2	PASI-C
		EPA 8015C	TEG	2	PASI-C
		SW-846	MCR1	1	PASI-C

PASI-C = Pace Analytical Services - Charlotte

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ANALYTICAL RESULTS

Project: NCDOT - U-4717
Pace Project No.: 92806848

Sample: UST-129S-S **Lab ID: 92806848001** Collected: 07/08/25 12:16 Received: 07/10/25 15:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015C Preparation Method: EPA 3546 Pace Analytical Services - Charlotte							
Diesel Range Organics(C10-C28)	**92.2**	mg/kg	5.5	1	07/11/25 00:52	07/11/25 15:29		
Surrogates								
n-Pentacosane (S)	65	%	10-152	1	07/11/25 00:52	07/11/25 15:29	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015C Preparation Method: EPA 5030B Pace Analytical Services - Charlotte							
Gas Range Organics (C6-C10)	ND	mg/kg	6.4	1	07/14/25 10:30	07/14/25 17:17		
Surrogates								
4-Bromofluorobenzene (S)	106	%	66-130	1	07/14/25 10:30	07/14/25 17:17	460-00-4	
Percent Moisture	Analytical Method: SW-846 Pace Analytical Services - Charlotte							
Percent Moisture	**9.6**	%	0.10	1		07/11/25 13:05		N2

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NCDOT - U-4717
Pace Project No.: 92806848

Sample: UST-129S-COMP **Lab ID: 92806848002** Collected: 07/08/25 12:40 Received: 07/10/25 15:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015C Preparation Method: EPA 3546 Pace Analytical Services - Charlotte							
Diesel Range Organics(C10-C28)	**38.4**	mg/kg	5.6	1	07/11/25 00:52	07/11/25 15:29		
Surrogates								
n-Pentacosane (S)	80	%	10-152	1	07/11/25 00:52	07/11/25 15:29	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015C Preparation Method: EPA 5030B Pace Analytical Services - Charlotte							
Gas Range Organics (C6-C10)	ND	mg/kg	6.6	1	07/14/25 10:30	07/14/25 18:09		
Surrogates								
4-Bromofluorobenzene (S)	104	%	66-130	1	07/14/25 10:30	07/14/25 18:09	460-00-4	
Percent Moisture	Analytical Method: SW-846 Pace Analytical Services - Charlotte							
Percent Moisture	**11.6**	%	0.10	1		07/11/25 13:05		N2

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ANALYTICAL RESULTS

Project: NCDOT - U-4717
Pace Project No.: 92806848

Sample: UST-134-N **Lab ID: 92806848003** Collected: 07/10/25 12:15 Received: 07/10/25 15:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015C Preparation Method: EPA 3546 Pace Analytical Services - Charlotte							
Diesel Range Organics(C10-C28)	**38.8**	mg/kg	5.8	1	07/11/25 00:52	07/11/25 15:46		
Surrogates								
n-Pentacosane (S)	70	%	10-152	1	07/11/25 00:52	07/11/25 15:46	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015C Preparation Method: EPA 5030B Pace Analytical Services - Charlotte							
Gas Range Organics (C6-C10)	**6.6**	mg/kg	6.3	1	07/14/25 10:30	07/14/25 18:35		
Surrogates								
4-Bromofluorobenzene (S)	109	%	66-130	1	07/14/25 10:30	07/14/25 18:35	460-00-4	
Percent Moisture	Analytical Method: SW-846 Pace Analytical Services - Charlotte							
Percent Moisture	**12.5**	%	0.10	1		07/11/25 13:05		N2

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ANALYTICAL RESULTS

Project: NCDOT - U-4717
Pace Project No.: 92806848

Sample: UST-134-S **Lab ID: 92806848004** Collected: 07/10/25 12:15 Received: 07/10/25 15:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015C Preparation Method: EPA 3546 Pace Analytical Services - Charlotte							
Diesel Range Organics(C10-C28)	**125**	mg/kg	6.1	1	07/11/25 00:52	07/11/25 15:46		
Surrogates								
n-Pentacosane (S)	94	%	10-152	1	07/11/25 00:52	07/11/25 15:46	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015C Preparation Method: EPA 5030B Pace Analytical Services - Charlotte							
Gas Range Organics (C6-C10)	ND	mg/kg	6.9	1	07/11/25 10:41	07/12/25 05:26		
Surrogates								
4-Bromofluorobenzene (S)	99	%	66-130	1	07/11/25 10:41	07/12/25 05:26	460-00-4	
Percent Moisture	Analytical Method: SW-846 Pace Analytical Services - Charlotte							
Percent Moisture	**18.6**	%	0.10	1		07/11/25 13:05		N2

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ANALYTICAL RESULTS

Project: NCDOT - U-4717
Pace Project No.: 92806848

Sample: UST-134-E **Lab ID: 92806848005** Collected: 07/10/25 12:15 Received: 07/10/25 15:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015C Preparation Method: EPA 3546 Pace Analytical Services - Charlotte							
Diesel Range Organics(C10-C28)	**2000**	mg/kg	60.8	10	07/11/25 00:52	07/14/25 12:25		
Surrogates								
n-Pentacosane (S)	0	%	10-152	10	07/11/25 00:52	07/14/25 12:25	629-99-2	S4
Gasoline Range Organics	Analytical Method: EPA 8015C Preparation Method: EPA 5030B Pace Analytical Services - Charlotte							
Gas Range Organics (C6-C10)	**82.7**	mg/kg	6.8	1	07/11/25 10:41	07/12/25 05:52		
Surrogates								
4-Bromofluorobenzene (S)	148	%	66-130	1	07/11/25 10:41	07/12/25 05:52	460-00-4	S5
Percent Moisture	Analytical Method: SW-846 Pace Analytical Services - Charlotte							
Percent Moisture	**16.7**	%	0.10	1		07/11/25 13:06		N2

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ANALYTICAL RESULTS

Project: NCDOT - U-4717
Pace Project No.: 92806848

Sample: UST-134-W **Lab ID: 92806848006** Collected: 07/10/25 12:15 Received: 07/10/25 15:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015C Preparation Method: EPA 3546 Pace Analytical Services - Charlotte							
Diesel Range Organics(C10-C28)	**1100**	mg/kg	25.0	4	07/11/25 00:52	07/15/25 13:32		
Surrogates								
n-Pentacosane (S)	85	%	10-152	4	07/11/25 00:52	07/15/25 13:32	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015C Preparation Method: EPA 5030B Pace Analytical Services - Charlotte							
Gas Range Organics (C6-C10)	**164**	mg/kg	7.3	1	07/11/25 10:41	07/12/25 06:18		
Surrogates								
4-Bromofluorobenzene (S)	475	%	66-130	1	07/11/25 10:41	07/12/25 06:18	460-00-4	S5
Percent Moisture	Analytical Method: SW-846 Pace Analytical Services - Charlotte							
Percent Moisture	**19.7**	%	0.10	1		07/11/25 13:06		N2

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ANALYTICAL RESULTS

Project: NCDOT - U-4717
Pace Project No.: 92806848

Sample: UST-134-B **Lab ID: 92806848007** Collected: 07/10/25 12:15 Received: 07/10/25 15:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015C Preparation Method: EPA 3546 Pace Analytical Services - Charlotte							
Diesel Range Organics(C10-C28)	**6.6**	mg/kg	5.8	1	07/11/25 00:52	07/11/25 16:18		
Surrogates								
n-Pentacosane (S)	81	%	10-152	1	07/11/25 00:52	07/11/25 16:18	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015C Preparation Method: EPA 5030B Pace Analytical Services - Charlotte							
Gas Range Organics (C6-C10)	**15.4**	mg/kg	6.8	1	07/14/25 10:30	07/14/25 19:01		
Surrogates								
4-Bromofluorobenzene (S)	111	%	66-130	1	07/14/25 10:30	07/14/25 19:01	460-00-4	
Percent Moisture	Analytical Method: SW-846 Pace Analytical Services - Charlotte							
Percent Moisture	**13.3**	%	0.10	1		07/11/25 13:06		N2

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ANALYTICAL RESULTS

Project: NCDOT - U-4717
Pace Project No.: 92806848

Sample: UST-134-COMP **Lab ID: 92806848008** Collected: 07/10/25 12:45 Received: 07/10/25 15:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015C Preparation Method: EPA 3546 Pace Analytical Services - Charlotte							
Diesel Range Organics(C10-C28)	**89.0**	mg/kg	5.8	1	07/11/25 02:26	07/11/25 16:41		
Surrogates								
n-Pentacosane (S)	80	%	10-152	1	07/11/25 02:26	07/11/25 16:41	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015C Preparation Method: EPA 5030B Pace Analytical Services - Charlotte							
Gas Range Organics (C6-C10)	**32.6**	mg/kg	6.4	1	07/11/25 10:41	07/12/25 07:09		
Surrogates								
4-Bromofluorobenzene (S)	145	%	66-130	1	07/11/25 10:41	07/12/25 07:09	460-00-4	S5
Percent Moisture	Analytical Method: SW-846 Pace Analytical Services - Charlotte							
Percent Moisture	**14.4**	%	0.10	1		07/11/25 13:06		N2

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NCDOT - U-4717
Pace Project No.: 92806848

Sample: UST-129N-B **Lab ID: 92806848009** Collected: 07/08/25 10:15 Received: 07/10/25 15:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015C Preparation Method: EPA 3546 Pace Analytical Services - Charlotte							
Diesel Range Organics(C10-C28)	**116**	mg/kg	6.1	1	07/11/25 00:52	07/11/25 16:18		
Surrogates								
n-Pentacosane (S)	64	%	10-152	1	07/11/25 00:52	07/11/25 16:18	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015C Preparation Method: EPA 5030B Pace Analytical Services - Charlotte							
Gas Range Organics (C6-C10)	ND	mg/kg	6.4	1	07/14/25 10:30	07/14/25 19:27		
Surrogates								
4-Bromofluorobenzene (S)	97	%	66-130	1	07/14/25 10:30	07/14/25 19:27	460-00-4	
Percent Moisture	Analytical Method: SW-846 Pace Analytical Services - Charlotte							
Percent Moisture	**15.6**	%	0.10	1		07/11/25 13:06		N2

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NCDOT - U-4717
Pace Project No.: 92806848

Sample: UST-129N-N **Lab ID: 92806848010** Collected: 07/08/25 10:15 Received: 07/10/25 15:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015C Preparation Method: EPA 3546 Pace Analytical Services - Charlotte							
Diesel Range Organics(C10-C28)	ND	mg/kg	5.6	1	07/11/25 02:26	07/11/25 16:41		
Surrogates								
n-Pentacosane (S)	75	%	10-152	1	07/11/25 02:26	07/11/25 16:41	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015C Preparation Method: EPA 5030B Pace Analytical Services - Charlotte							
Gas Range Organics (C6-C10)	ND	mg/kg	5.2	1	07/11/25 10:55	07/11/25 16:04		
Surrogates								
4-Bromofluorobenzene (S)	102	%	66-130	1	07/11/25 10:55	07/11/25 16:04	460-00-4	
Percent Moisture	Analytical Method: SW-846 Pace Analytical Services - Charlotte							
Percent Moisture	**12.6**	%	0.10	1		07/11/25 13:07		N2

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ANALYTICAL RESULTS

Project: NCDOT - U-4717
Pace Project No.: 92806848

Sample: UST-129N-S **Lab ID: 92806848011** Collected: 07/08/25 10:15 Received: 07/10/25 15:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015C Preparation Method: EPA 3546 Pace Analytical Services - Charlotte							
Diesel Range Organics(C10-C28)	ND	mg/kg	5.7	1	07/15/25 02:59	07/15/25 16:00		
Surrogates								
n-Pentacosane (S)	40	%	10-152	1	07/15/25 02:59	07/15/25 16:00	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015C Preparation Method: EPA 5030B Pace Analytical Services - Charlotte							
Gas Range Organics (C6-C10)	ND	mg/kg	5.7	1	07/11/25 10:55	07/11/25 16:56		
Surrogates								
4-Bromofluorobenzene (S)	102	%	66-130	1	07/11/25 10:55	07/11/25 16:56	460-00-4	
Percent Moisture	Analytical Method: SW-846 Pace Analytical Services - Charlotte							
Percent Moisture	**12.2**	%	0.10	1		07/11/25 13:07		N2

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ANALYTICAL RESULTS

Project: NCDOT - U-4717
Pace Project No.: 92806848

Sample: UST-129N-E **Lab ID: 92806848012** Collected: 07/08/25 10:15 Received: 07/10/25 15:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015C Preparation Method: EPA 3546 Pace Analytical Services - Charlotte							
Diesel Range Organics(C10-C28)	ND	mg/kg	5.8	1	07/11/25 02:26	07/11/25 17:12		
Surrogates								
n-Pentacosane (S)	85	%	10-152	1	07/11/25 02:26	07/11/25 17:12	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015C Preparation Method: EPA 5030B Pace Analytical Services - Charlotte							
Gas Range Organics (C6-C10)	ND	mg/kg	5.7	1	07/11/25 10:55	07/11/25 17:22		
Surrogates								
4-Bromofluorobenzene (S)	100	%	66-130	1	07/11/25 10:55	07/11/25 17:22	460-00-4	
Percent Moisture	Analytical Method: SW-846 Pace Analytical Services - Charlotte							
Percent Moisture	**13.1**	%	0.10	1		07/11/25 13:07		N2

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ANALYTICAL RESULTS

Project: NCDOT - U-4717
Pace Project No.: 92806848

Sample: UST-129N-W **Lab ID: 92806848013** Collected: 07/08/25 10:15 Received: 07/10/25 15:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015C Preparation Method: EPA 3546 Pace Analytical Services - Charlotte							
Diesel Range Organics(C10-C28)	**9.0**	mg/kg	5.7	1	07/11/25 02:26	07/11/25 17:12		
Surrogates								
n-Pentacosane (S)	71	%	10-152	1	07/11/25 02:26	07/11/25 17:12	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015C Preparation Method: EPA 5030B Pace Analytical Services - Charlotte							
Gas Range Organics (C6-C10)	ND	mg/kg	6.9	1	07/11/25 10:55	07/11/25 17:48		
Surrogates								
4-Bromofluorobenzene (S)	100	%	66-130	1	07/11/25 10:55	07/11/25 17:48	460-00-4	
Percent Moisture	Analytical Method: SW-846 Pace Analytical Services - Charlotte							
Percent Moisture	**13.5**	%	0.10	1		07/11/25 13:07		N2

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ANALYTICAL RESULTS

Project: NCDOT - U-4717
Pace Project No.: 92806848

Sample: UST-129N-COMP **Lab ID: 92806848014** Collected: 07/08/25 10:15 Received: 07/10/25 15:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015C Preparation Method: EPA 3546 Pace Analytical Services - Charlotte							
Diesel Range Organics(C10-C28)	ND	mg/kg	5.6	1	07/11/25 02:26	07/11/25 17:28		
Surrogates								
n-Pentacosane (S)	70	%	10-152	1	07/11/25 02:26	07/11/25 17:28	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015C Preparation Method: EPA 5030B Pace Analytical Services - Charlotte							
Gas Range Organics (C6-C10)	ND	mg/kg	5.7	1	07/11/25 10:55	07/11/25 18:14		
Surrogates								
4-Bromofluorobenzene (S)	99	%	66-130	1	07/11/25 10:55	07/11/25 18:14	460-00-4	
Percent Moisture	Analytical Method: SW-846 Pace Analytical Services - Charlotte							
Percent Moisture	**12.3**	%	0.10	1		07/11/25 13:07		N2

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ANALYTICAL RESULTS

Project: NCDOT - U-4717
Pace Project No.: 92806848

Sample: UST-129S-N **Lab ID: 92806848015** Collected: 07/08/25 11:55 Received: 07/10/25 15:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015C Preparation Method: EPA 3546 Pace Analytical Services - Charlotte							
Diesel Range Organics(C10-C28)	**47.5**	mg/kg	5.7	1	07/11/25 02:26	07/11/25 17:44		
Surrogates								
n-Pentacosane (S)	80	%	10-152	1	07/11/25 02:26	07/11/25 17:44	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015C Preparation Method: EPA 5030B Pace Analytical Services - Charlotte							
Gas Range Organics (C6-C10)	**9.9**	mg/kg	6.2	1	07/11/25 10:55	07/11/25 18:40		
Surrogates								
4-Bromofluorobenzene (S)	114	%	66-130	1	07/11/25 10:55	07/11/25 18:40	460-00-4	
Percent Moisture	Analytical Method: SW-846 Pace Analytical Services - Charlotte							
Percent Moisture	**14.0**	%	0.10	1		07/11/25 13:07		N2

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ANALYTICAL RESULTS

Project: NCDOT - U-4717
Pace Project No.: 92806848

Sample: UST-129S-W **Lab ID: 92806848016** Collected: 07/08/25 11:55 Received: 07/10/25 15:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015C Preparation Method: EPA 3546 Pace Analytical Services - Charlotte							
Diesel Range Organics(C10-C28)	**10**	mg/kg	5.7	1	07/11/25 02:26	07/11/25 17:44		
Surrogates								
n-Pentacosane (S)	88	%	10-152	1	07/11/25 02:26	07/11/25 17:44	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015C Preparation Method: EPA 5030B Pace Analytical Services - Charlotte							
Gas Range Organics (C6-C10)	**28.9**	mg/kg	6.0	1	07/11/25 10:55	07/11/25 19:06		
Surrogates								
4-Bromofluorobenzene (S)	143	%	66-130	1	07/11/25 10:55	07/11/25 19:06	460-00-4	S5
Percent Moisture	Analytical Method: SW-846 Pace Analytical Services - Charlotte							
Percent Moisture	**14.1**	%	0.10	1		07/11/25 13:08		N2

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ANALYTICAL RESULTS

Project: NCDOT - U-4717
Pace Project No.: 92806848

Sample: UST-129S-B **Lab ID: 92806848017** Collected: 07/08/25 12:16 Received: 07/10/25 15:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015C Preparation Method: EPA 3546 Pace Analytical Services - Charlotte							
Diesel Range Organics(C10-C28)	ND	mg/kg	5.9	1	07/11/25 02:26	07/11/25 17:59		
Surrogates								
n-Pentacosane (S)	73	%	10-152	1	07/11/25 02:26	07/11/25 17:59	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015C Preparation Method: EPA 5030B Pace Analytical Services - Charlotte							
Gas Range Organics (C6-C10)	ND	mg/kg	6.8	1	07/15/25 10:44	07/15/25 14:34		
Surrogates								
4-Bromofluorobenzene (S)	101	%	66-130	1	07/15/25 10:44	07/15/25 14:34	460-00-4	
Percent Moisture	Analytical Method: SW-846 Pace Analytical Services - Charlotte							
Percent Moisture	**16.2**	%	0.10	1		07/11/25 13:08		N2

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ANALYTICAL RESULTS

Project: NCDOT - U-4717
Pace Project No.: 92806848

Sample: UST-129S-E **Lab ID: 92806848018** Collected: 07/08/25 12:16 Received: 07/10/25 15:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015C Preparation Method: EPA 3546 Pace Analytical Services - Charlotte							
Diesel Range Organics(C10-C28)	ND	mg/kg	6.1	1	07/11/25 02:26	07/11/25 17:59		
Surrogates								
n-Pentacosane (S)	71	%	10-152	1	07/11/25 02:26	07/11/25 17:59	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015C Preparation Method: EPA 5030B Pace Analytical Services - Charlotte							
Gas Range Organics (C6-C10)	ND	mg/kg	7.9	1	07/14/25 10:30	07/14/25 20:19		
Surrogates								
4-Bromofluorobenzene (S)	100	%	66-130	1	07/14/25 10:30	07/14/25 20:19	460-00-4	
Percent Moisture	Analytical Method: SW-846 Pace Analytical Services - Charlotte							
Percent Moisture	**18.4**	%	0.10	1		07/11/25 13:08		N2

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QUALITY CONTROL DATA

Project: NCDOT - U-4717
Pace Project No.: 92806848

QC Batch: 947234 | Analysis Method: EPA 8015C
QC Batch Method: EPA 5030B | Analysis Description: Gasoline Range Organics
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92806848004, 92806848005, 92806848006, 92806848008

METHOD BLANK: 4867508 Matrix: Solid
Associated Lab Samples: 92806848004, 92806848005, 92806848006, 92806848008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Gas Range Organics (C6-C10)	mg/kg	ND	6.0	07/11/25 15:38	
4-Bromofluorobenzene (S)	%	101	66-130	07/11/25 15:38	

LABORATORY CONTROL SAMPLE: 4867509

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Gas Range Organics (C6-C10)	mg/kg	50	46.0	92	70-130	
4-Bromofluorobenzene (S)	%			103	66-130	

MATRIX SPIKE SAMPLE: 4867511

Parameter	Units	92806657002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Gas Range Organics (C6-C10)	mg/kg	ND	65	73.6	113	37-163	
4-Bromofluorobenzene (S)	%				101	66-130	

SAMPLE DUPLICATE: 4867510

Parameter	Units	92806657001 Result	Dup Result	RPD	Qualifiers
Gas Range Organics (C6-C10)	mg/kg	ND	ND		
4-Bromofluorobenzene (S)	%	96	96		

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QUALITY CONTROL DATA

Project: NCDOT - U-4717
Pace Project No.: 92806848

QC Batch: 947235 | Analysis Method: EPA 8015C
QC Batch Method: EPA 5030B | Analysis Description: Gasoline Range Organics
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92806848010, 92806848011, 92806848012, 92806848013, 92806848014, 92806848015, 92806848016

METHOD BLANK: 4867515 Matrix: Solid
Associated Lab Samples: 92806848010, 92806848011, 92806848012, 92806848013, 92806848014, 92806848015, 92806848016

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Gas Range Organics (C6-C10)	mg/kg	ND	6.0	07/11/25 15:12	
4-Bromofluorobenzene (S)	%	101	66-130	07/11/25 15:12	

LABORATORY CONTROL SAMPLE: 4867516

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Gas Range Organics (C6-C10)	mg/kg	50	45.6	91	70-130	
4-Bromofluorobenzene (S)	%			101	66-130	

MATRIX SPIKE SAMPLE: 4867518

Parameter	Units	92806848011 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Gas Range Organics (C6-C10)	mg/kg	ND	47.3	61.9	130	37-163	
4-Bromofluorobenzene (S)	%				101	66-130	

SAMPLE DUPLICATE: 4867517

Parameter	Units	92806848010 Result	Dup Result	RPD	Qualifiers
Gas Range Organics (C6-C10)	mg/kg	ND	ND		
4-Bromofluorobenzene (S)	%	102	102		

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QUALITY CONTROL DATA

Project: NCDOT - U-4717
Pace Project No.: 92806848

QC Batch: 947562 | Analysis Method: EPA 8015C
QC Batch Method: EPA 5030B | Analysis Description: Gasoline Range Organics
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92806848001, 92806848002, 92806848003, 92806848007, 92806848009, 92806848018

METHOD BLANK: 4869189 Matrix: Solid
Associated Lab Samples: 92806848001, 92806848002, 92806848003, 92806848007, 92806848009, 92806848018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Gas Range Organics (C6-C10)	mg/kg	ND	6.0	07/14/25 16:51	
4-Bromofluorobenzene (S)	%	99	66-130	07/14/25 16:51	

LABORATORY CONTROL SAMPLE: 4869190

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Gas Range Organics (C6-C10)	mg/kg	50	47.0	94	70-130	
4-Bromofluorobenzene (S)	%			103	66-130	

MATRIX SPIKE SAMPLE: 4869192

Parameter	Units	92806848002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Gas Range Organics (C6-C10)	mg/kg	ND	55.2	72.8	121	37-163	
4-Bromofluorobenzene (S)	%				101	66-130	

SAMPLE DUPLICATE: 4869191

Parameter	Units	92806848001 Result	Dup Result	RPD	Qualifiers
Gas Range Organics (C6-C10)	mg/kg	ND	5.3J		
4-Bromofluorobenzene (S)	%	106	104		

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QUALITY CONTROL DATA

Project: NCDOT - U-4717
Pace Project No.: 92806848

QC Batch: 947810
QC Batch Method: EPA 5030B
Analysis Method: EPA 8015C
Analysis Description: Gasoline Range Organics
Laboratory: Pace Analytical Services - Charlotte

Associated Lab Samples: 92806848017

METHOD BLANK: 4870394 Matrix: Solid
Associated Lab Samples: 92806848017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Gas Range Organics (C6-C10)	mg/kg	ND	6.0	07/15/25 14:08	
4-Bromofluorobenzene (S)	%	101	66-130	07/15/25 14:08	

LABORATORY CONTROL SAMPLE: 4870395

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Gas Range Organics (C6-C10)	mg/kg	50	50.2	100	70-130	
4-Bromofluorobenzene (S)	%			103	66-130	

MATRIX SPIKE SAMPLE: 4870397

Parameter	Units	92807006001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Gas Range Organics (C6-C10)	mg/kg	94.8	64.1	151	88	37-163	
4-Bromofluorobenzene (S)	%				109	66-130	

SAMPLE DUPLICATE: 4870396

Parameter	Units	92806848017 Result	Dup Result	RPD	Qualifiers
Gas Range Organics (C6-C10)	mg/kg	ND	ND		
4-Bromofluorobenzene (S)	%	101	101		

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QUALITY CONTROL DATA

Project: NCDOT - U-4717
Pace Project No.: 92806848

QC Batch: 947149
QC Batch Method: EPA 3546
Analysis Method: EPA 8015C
Analysis Description: 8015 Solid GCSV
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92806848001, 92806848002, 92806848003, 92806848004, 92806848005, 92806848006, 92806848007, 92806848009

METHOD BLANK: 4867278 Matrix: Solid
Associated Lab Samples: 92806848001, 92806848002, 92806848003, 92806848004, 92806848005, 92806848006, 92806848007, 92806848009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diesel Range Organics(C10-C28)	mg/kg	ND	5.0	07/11/25 13:20	
n-Pentacosane (S)	%	82	10-152	07/11/25 13:20	

LABORATORY CONTROL SAMPLE: 4867279

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Diesel Range Organics(C10-C28)	mg/kg	66	44.4	67	44-130	
n-Pentacosane (S)	%			83	10-152	

MATRIX SPIKE SAMPLE: 4867280

Parameter	Units	92806657001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Diesel Range Organics(C10-C28)	mg/kg	ND	81.4	58.1	71	10-150	
n-Pentacosane (S)	%				102	10-152	

SAMPLE DUPLICATE: 4867281

Parameter	Units	92806657005 Result	Dup Result	RPD	Qualifiers
Diesel Range Organics(C10-C28)	mg/kg	ND	ND		
n-Pentacosane (S)	%	82	86		

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QUALITY CONTROL DATA

Project: NCDOT - U-4717
Pace Project No.: 92806848

QC Batch: 947150
QC Batch Method: EPA 3546
Analysis Method: EPA 8015C
Analysis Description: 8015 Solid GCSV
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92806848008, 92806848010, 92806848012, 92806848013, 92806848014, 92806848015, 92806848016, 92806848017, 92806848018

METHOD BLANK: 4867282 Matrix: Solid
Associated Lab Samples: 92806848008, 92806848010, 92806848012, 92806848013, 92806848014, 92806848015, 92806848016, 92806848017, 92806848018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diesel Range Organics(C10-C28)	mg/kg	ND	5.0	07/11/25 16:25	
n-Pentacosane (S)	%	83	10-152	07/11/25 16:25	

LABORATORY CONTROL SAMPLE: 4867283

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Diesel Range Organics(C10-C28)	mg/kg	65.6	54.3	83	44-130	
n-Pentacosane (S)	%			90	10-152	

MATRIX SPIKE SAMPLE: 4867284

Parameter	Units	92806848010 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Diesel Range Organics(C10-C28)	mg/kg	ND	75.3	57.3	75	10-150	
n-Pentacosane (S)	%				76	10-152	

SAMPLE DUPLICATE: 4867285

Parameter	Units	92806848014 Result	Dup Result	RPD	Qualifiers
Diesel Range Organics(C10-C28)	mg/kg	ND	ND		
n-Pentacosane (S)	%	70	75		

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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Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: NCDOT - U-4717
Pace Project No.: 92806848

QC Batch: 947717
QC Batch Method: EPA 3546
Analysis Method: EPA 8015C
Analysis Description: 8015 Solid GCSV
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92806848011

METHOD BLANK: 4870118 Matrix: Solid
Associated Lab Samples: 92806848011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diesel Range Organics(C10-C28)	mg/kg	ND	5.1	07/15/25 15:45	
n-Pentacosane (S)	%	50	10-152	07/15/25 15:45	

LABORATORY CONTROL SAMPLE: 4870119

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Diesel Range Organics(C10-C28)	mg/kg	66.9	47.3	71	44-130	
n-Pentacosane (S)	%			54	10-152	

MATRIX SPIKE SAMPLE: 4870121

Parameter	Units	92806848011 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Diesel Range Organics(C10-C28)	mg/kg	ND	76.2	37.5	46	10-150	
n-Pentacosane (S)	%				49	10-152	

SAMPLE DUPLICATE: 4870120

Parameter	Units	92807131001 Result	Dup Result	RPD	Qualifiers
Diesel Range Organics(C10-C28)	mg/kg	2700	2950	9	
n-Pentacosane (S)	%	109	103		

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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Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: NCDOT - U-4717
Pace Project No.: 92806848

QC Batch: 947299
QC Batch Method: SW-846
Analysis Method: SW-846
Analysis Description: Dry Weight/Percent Moisture
Laboratory: Pace Analytical Services - Charlotte

Associated Lab Samples: 92806848001, 92806848002, 92806848003, 92806848004, 92806848005, 92806848006, 92806848007, 92806848008, 92806848009, 92806848010, 92806848011, 92806848012, 92806848013, 92806848014, 92806848015, 92806848016, 92806848017, 92806848018

SAMPLE DUPLICATE: 4867944

Parameter	Units	92806768001 Result	Dup Result	RPD	Qualifiers
Percent Moisture	%	13.0	13.6	4	N2

SAMPLE DUPLICATE: 4867945

Parameter	Units	92806848017 Result	Dup Result	RPD	Qualifiers
Percent Moisture	%	16.2	16.9	4	N2

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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9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALIFIERS

Project: NCDOT - U-4717
Pace Project No.: 92806848

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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 - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

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.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

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

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

N2	The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.
S4	Surrogate recovery not evaluated against control limits due to sample dilution.
S5	Surrogate recovery outside control limits due to matrix interferences (not confirmed by re-analysis).

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9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: NCDOT - U-4717
Pace Project No.: 92806848

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92806848001	**UST-129S-S**	EPA 3546	947149	EPA 8015C	947268
92806848002	**UST-129S-COMP**	EPA 3546	947149	EPA 8015C	947268
92806848003	**UST-134-N**	EPA 3546	947149	EPA 8015C	947268
92806848004	**UST-134-S**	EPA 3546	947149	EPA 8015C	947268
92806848005	**UST-134-E**	EPA 3546	947149	EPA 8015C	947268
92806848006	**UST-134-W**	EPA 3546	947149	EPA 8015C	947268
92806848007	**UST-134-B**	EPA 3546	947149	EPA 8015C	947268
92806848008	**UST-134-COMP**	EPA 3546	947150	EPA 8015C	947560
92806848009	**UST-129N-B**	EPA 3546	947149	EPA 8015C	947268
92806848010	**UST-129N-N**	EPA 3546	947150	EPA 8015C	947560
92806848011	**UST-129N-S**	EPA 3546	947717	EPA 8015C	947886
92806848012	**UST-129N-E**	EPA 3546	947150	EPA 8015C	947560
92806848013	**UST-129N-W**	EPA 3546	947150	EPA 8015C	947560
92806848014	**UST-129N-COMP**	EPA 3546	947150	EPA 8015C	947560
92806848015	**UST-129S-N**	EPA 3546	947150	EPA 8015C	947560
92806848016	**UST-129S-W**	EPA 3546	947150	EPA 8015C	947560
92806848017	**UST-129S-B**	EPA 3546	947150	EPA 8015C	947560
92806848018	**UST-129S-E**	EPA 3546	947150	EPA 8015C	947560
92806848001	**UST-129S-S**	EPA 5030B	947562	EPA 8015C	947613
92806848002	**UST-129S-COMP**	EPA 5030B	947562	EPA 8015C	947613
92806848003	**UST-134-N**	EPA 5030B	947562	EPA 8015C	947613
92806848004	**UST-134-S**	EPA 5030B	947234	EPA 8015C	947512
92806848005	**UST-134-E**	EPA 5030B	947234	EPA 8015C	947512
92806848006	**UST-134-W**	EPA 5030B	947234	EPA 8015C	947512
92806848007	**UST-134-B**	EPA 5030B	947562	EPA 8015C	947613
92806848008	**UST-134-COMP**	EPA 5030B	947234	EPA 8015C	947512
92806848009	**UST-129N-B**	EPA 5030B	947562	EPA 8015C	947613
92806848010	**UST-129N-N**	EPA 5030B	947235	EPA 8015C	947517
92806848011	**UST-129N-S**	EPA 5030B	947235	EPA 8015C	947517
92806848012	**UST-129N-E**	EPA 5030B	947235	EPA 8015C	947517
92806848013	**UST-129N-W**	EPA 5030B	947235	EPA 8015C	947517
92806848014	**UST-129N-COMP**	EPA 5030B	947235	EPA 8015C	947517
92806848015	**UST-129S-N**	EPA 5030B	947235	EPA 8015C	947517
92806848016	**UST-129S-W**	EPA 5030B	947235	EPA 8015C	947517
92806848017	**UST-129S-B**	EPA 5030B	947810	EPA 8015C	947841
92806848018	**UST-129S-E**	EPA 5030B	947562	EPA 8015C	947613
92806848001	**UST-129S-S**	SW-846	947299		
92806848002	**UST-129S-COMP**	SW-846	947299		
92806848003	**UST-134-N**	SW-846	947299		
92806848004	**UST-134-S**	SW-846	947299		
92806848005	**UST-134-E**	SW-846	947299		
92806848006	**UST-134-W**	SW-846	947299		

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: NCDOT - U-4717
Pace Project No.: 92806848

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92806848007	**UST-134-B**	SW-846	947299		
92806848008	**UST-134-COMP**	SW-846	947299		
92806848009	**UST-129N-B**	SW-846	947299		
92806848010	**UST-129N-N**	SW-846	947299		
92806848011	**UST-129N-S**	SW-846	947299		
92806848012	**UST-129N-E**	SW-846	947299		
92806848013	**UST-129N-W**	SW-846	947299		
92806848014	**UST-129N-COMP**	SW-846	947299		
92806848015	**UST-129S-N**	SW-846	947299		
92806848016	**UST-129S-W**	SW-846	947299		
92806848017	**UST-129S-B**	SW-846	947299		
92806848018	**UST-129S-E**	SW-846	947299		

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Pace

Effective Date: 05/24/2024

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☑ Raleigh ☐ Mechanicsville ☐ Atlanta ☐ Kernersville ☐

Sample Condition Upon Receipt

Client Name: Kleinfelder_NC

Project #: WO# : 92806848

92806848

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☑ Client ☐ Commercial ☐ Pace ☐ Other:____

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☐ No ☑ N/A

Date/Initials Person Examining Contents: IC 7-10-25

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer:
☐ IR Gun ID: 92705 3

Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: 4.6 Correction Factor: Add/Subtract (°C) 0

Temp should be above freezing to 6°C
☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): TC 4.6

USDA Regulated Soil (☑ N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☑ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☑ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☐ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☑ No	☐ N/A	8.
Sample Labels Match COC? -Includes Date/Time/ID/Analysis Matrix: SV	☑ Yes	☐ No	☐ N/A	9.
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

Pace

DC#_Title: ENV-FRM-HUNT-0003 v03_Sample Condition Upon Receipt

Effective Date: 05/24/2024

WO#: 92806848

PM: BV Due Date: 07/18/25

CLIENT: 92-Klein CLT

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottles

***Check all unpreserved Nitrates for chlorine

Project #

Laboratory Receiving location: Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☑ Raleigh ☐ Mechanicsville ☐ Atlanta ☐ Kernersville ☐

Client Kleinfelder_NC Profile/# (Circle one) 3275167 Notes

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)		BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic Zn Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG9A-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gasket (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)		BP3R-250 mL Plastic (NH4)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
CC										CH													CH						
1																													
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pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

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

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.
Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg
**Bottom half of box is to list number of bottles
***Check all unpreserved Nitrates for chlorine

Project #

Laboratory Receiving location: Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☑ Raleigh ☐ Mechanicsville ☐ Atlanta ☐ Kernersville ☐

Client Kleinfelder_NC Profile/Eq (Circle one) 3275167 Notes

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)		BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG1U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG9A-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SPST-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)		BP3R-250 mL Plastic (NH4)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
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pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

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

Pace® Location Requested (City/State):
Pace Analytical Charlotte
9800 Kincey Ave. Suite 100, Huntersville, NC 28078

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here

Scan QR Code for instructions

Company Name:	Kleinfelder_NC	Contact/Report To:	Grant Burke
Street Address:	5775 Glenridge Dr, Bldg. B, Suite 390 Atlanta, GA 30328	Phone #:	(678)551-4184
		E-Mail:	gburke@kleinfelder.com
		Cc E-Mail:	
Customer Project #:			
Project Name:	NCDOT - U-4717	Invoice To:	Accounts Payable
		Invoice E-Mail:	accountspayableus@kleinfelder.com
Site Collection Info/Facility ID (as applicable):		Purchase Order # (if applicable):	
		Quote #:	

Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [X] ET

County / State origin of sample(s): North Carolina

Data Deliverables: [ ] Level II [ ] Level III [ ] Level IV [ ] EQUIS [ ] Other

Regulatory Program (DW, RCRA, etc.) as applicable: Reportable [ ] Yes [ ] No

Rush (Pre-approval required): [ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day [ ] Other

DW PWSID # or WW Permit # as applicable:

Date Results Requested: STD TAT

Field Filtered (if applicable): [ ] Yes [ ] No

Analysis:

Specify Container Size **

Identify Container Preservative Type***

Analysis Requested

**Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) EnCore, (8) TerraCore, (9) 90mL, (10) Other

*** Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

Lab Use Only

Proj. Mgr: **Bonnie Vang**

AcctNum / Client ID:

Table #:

Profile / Template: **19586**

Prelog / Bottle Ord. ID: **EZ 3275167**

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Waste Water (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW),Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Composite Start Time	Collected or Composite End Date	Collected or Composite End Time	# Cont.	Res. Chlorine Results	Res. Chlorine Units	8260/GRO	NC EPH	NC VPH	SVOC 625 (BNA)	SVOC 8270	TPH-DRO	VOC 624	TPH-GRO			Sample Comment	Preservation non-conformance identified for sample.
UST-1295-S	SS	G			7-8-25	12:16	2								X		X				
UST-1295-comp	SS	G			7-8-25	12:40	2								X		X				
UST-134-N	SS	G			7-10-25	12:15	2								X		X				
UST-134-S	SS	G			7-10-25	12:15	2								X		X				
UST-134-E	SS	G			7-10-25	12:15	2								X		X				
UST-134-W	SS	G			7-10-25	12:15	2								X		X				
UST-134-B	SS	G			7-10-25	12:15	2								X		X				
UST-134-comp	SS	G			7-10-25	12:45	2								X		X				

Additional Instructions from Pace®:

Collected By: (Printed Name) Grant Burke

Signature: GBurke

Customer Remarks / Special Conditions / Possible Hazards:

# Coolers:	Thermometer ID:	Correction Factor (°C):	Obs. Temp. (°C)	Corrected Temp. (°C)	On Ice:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Tracking Number:
~~Grant~~ GBurke	7-10-25 15:30	3Cx Pace Hen	7-10-25 1530	
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Delivered by: [ ] In- Person [ ] Courier [ ] FedEx [ ] UPS [ ] Other
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Page: 2 of 2

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace® Terms and Conditions found at https://www.pacelabs.com/resource-library/resource/pace-terms-and-conditions/

ENV-FRM-CORQ-0019_v02_110123 ©

Pace® Location Requested (City/State):
Pace Analytical Charlotte
9800 Kincey Ave. Suite 100, Huntersville, NC 28078

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

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Scan QR Code for instructions

Company Name:	Kleinfelder_NC	Contact/Report To:	Grant Burke
Street Address:	5775 Glenridge Dr, Bldg. B, Suite 390 Atlanta, GA 30328	Phone #:	(678)551-4184
		E-Mail:	gburke@kleinfelder.com
		Cc E-Mail:	
Customer Project #:			
Project Name:	NCDOT - U-4717	Invoice To:	Accounts Payable
		Invoice E-Mail:	accountspayableus@kleinfelder.com
Site Collection Info/Facility ID (as applicable):		Purchase Order # (if applicable):	
		Quote #:	

Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [X] ET

County / State origin of sample(s): North Carolina

Data Deliverables: [ ] Level II [ ] Level III [ ] Level IV [ ] EQUIS [ ] Other

Regulatory Program (DW, RCRA, etc.) as applicable: Reportable [ ] Yes [ ] No

Rush (Pre-approval required): [ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day [ ] Other

DW PWSID # or WW Permit # as applicable:

Date Results Requested: STD TAT

Field Filtered (if applicable): [ ] Yes [ ] No

Analysis:

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Waste Water (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW),Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

Specify Container Size **

Identify Container Preservative Type***

Analysis Requested

Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Composite Start Time	Collected or Composite End Date	Collected or Composite End Time	# Cont.	Res. Chlorine Results	Res. Chlorine Units	8260/GRO	NC EPH	NC VPH	SVOC 625 (BNA)	SVOC 8270	TPH-DRO	VOC 624	TPH-GRO	Sample Comment
UST-129N-B	SS	G			7-8-25	10:15	2								X		X	
UST-129N-N	SS	G			7-8-25	10:15	2								X		X	
UST-129N-S	SS	G			7-8-25	10:15	2								X		X	
UST-129N-E	SS	G			7-8-25	10:15	2								X		X	
UST-129N-W	SS	G			7-8-25	10:15	2								X		X	
UST-129N-Comp	SS	G			7-8-25	10:15	2								X		X	
UST-129S-N	SS	G			7-8-25	11:55	2								X		X	
UST-129S-W	SS	G			7-8-25	11:55	2								X		X	
UST-129S-B	SS	G			7-8-25	12:16	2								X		X	
UST-129S-E	SS	G			7-8-25	12:16	2								X		X	

**Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) EnCore, (8) TerraCore, (9) 90mL, (10) Other

*** Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

Lab Use Only

Proj. Mgr: **Bonnie Vang**

AcctNum / Client ID:

Table #:

Profile / Template: **19586**

Prelog / Bottle Ord. ID: **EZ 3275167**

Preservation non-conformance identified for sample.

Additional Instructions from Pace®:

Collected By: (Printed Name) Grant Burke

Signature: GBurke

Customer Remarks / Special Conditions / Possible Hazards:

# Coolers:	Thermometer ID:	Correction Factor (°C):	Obs. Temp. (°C)	Corrected Temp. (°C)	On Ice:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Tracking Number:
GBurke	7-10-25 15:30	Ace Pace Hu	7-10-25 1730	
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Delivered by: [ ] In-Person [ ] Courier [ ] FedEX [ ] UPS [ ] Other
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Page: 1 of 2

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace® Terms and Conditions found at https://www.pacelabs.com/resource-library/resource/pace-terms-and-conditions/

APPENDIX F

COMPACTION TESTING FIELD REPORTS

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Daily Field Report

July 09, 2025

by **Hamza El Khamsi** for **NCDOT U-4717 UST Closures**

DFR #: 20250709_1200_HE
Project #: 26000454.001A
:

Client: North Carolina Department of Transportation
Contractor: A&D environmental

Weather Conditions: 83°F, Clear
Time Start: 12:00 pm Time Stop: 02:00 pm
Traveled: 1.5 hrs, 65 mi.

Types of Tests/Observations Performed:

Report items Comply

Soil / Density Testing

Documents Referenced:

Observations/Remarks

As requested, I arrived on site to provide construction services related to NCDOT conventional density.

Once on site, I was informed by Grant Burke with Kleinfelder that the construction services requested have been canceled due to work not being ready for the inspection.

Kleinfelder Representative *Signature*

Hamza El Khamsi

Kleinfelder Representative *Print Name*

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Daily Field Report

July 10, 2025

by **Hamza El Khamsi** for **NCDOT U-4717 UST Closures**

DFR #: 20250710_1200_HE
Project #: 26000454.001A
:

Client: North Carolina Department of Transportation
Contractor: A&D Environmental

Weather Conditions: 83°F, Clear
Time Start: 12:00 pm Time Stop: 05:30 pm
Traveled: 1.5 hrs, 65 mi.

Types of Tests/Observations Performed:

Report items Comply

Soil / Density Testing

Documents Referenced:

Observations/Remarks

As requested, I arrived on site to provide construction services related to soil density.

Upon arrival, I observed the existing condition and shared my findings for the tank hole with Michelle Stadel,PE Kleinfelder and requested recommendations. Michelle Stadel, PE with Kleinfelder recommended that we need a solid base to start back filling, we placed rip rap rocks at the bottom of the hole and 57 stone on top after we covered all of that with fiber.

Before departing the site, I informed Grant Burke with Kleinfelder of the information included in this report.

Kleinfelder Representative *Signature*

Hamza El Khamsi

Kleinfelder Representative *Print Name*

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Plans and Markups

Fig. 1: Area of work



Kleinfelder Representative *Signature*

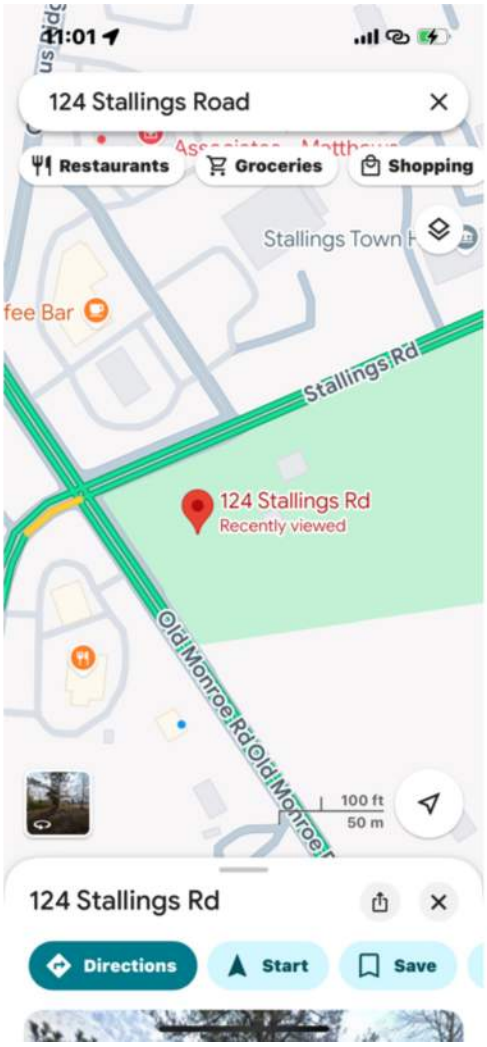
Hamza El Khamsi

Kleinfelder Representative *Print Name*

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Plans and Markups

Fig. 2: Work location



Kleinfelder Representative *Signature*

Hamza El Khamsi

Kleinfelder Representative *Print Name*

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Daily Field Report

July 11, 2025

by **Hamza El Khamsi** for **NCDOT U-4717 UST Closures**

DFR #: 20250711_0800_HE
Project #: 26000454.001A
:

Client: North Carolina Department of Transportation
Contractor: A&D Envirenmental

Weather Conditions: 80°F, Clear
Time Start: 08:00 am Time Stop: 02:00 pm
Traveled: 1.5 hrs, 65 mi.

Types of Tests/Observations Performed:

Report items Comply

Soil / Density Testing

Documents Referenced:

Observations/Remarks

As requested, I arrived on site to provide construction services related to Conventional density for the backfilled area.

I performed two density tests using the conventional density method, with compaction results of 98% nd 100%. See attached sketch for approximate test locations. Test results meet or exceed the required compaction of 95% and 100%.

Refer to my Soil Density Report for further details.

If subgrade stability or moisture conditions change, due to weather or for other reasons, prior to the next stage of construction, the area should be reevaluated by Kleinfelder.

Before departing the site, I informed Grant Burke with Kleinfelder of the information included in this report.



Kleinfelder Representative *Signature*

Hamza El Khamsi

Kleinfelder Representative *Print Name*

Limitations: Pursuant to applicable building codes, the information presented in this report is for the exclusive use of Kleinfelder's client and the registered design professional in responsible charge. Observations, and/or inspections reported are those existing at the time of our services and may not be the same or comparable at other times. Results apply only to items inspected or tested. If changes to the plans and/or specifications were made and not communicated to Kleinfelder, Kleinfelder assumes no responsibility for pass/fail statements (conforms/does not conform), if provided. This report may not be reproduced, except in full, without written approval of Kleinfelder.

Plans and Markups

Fig. 1:



Kleinfelder Representative *Signature*

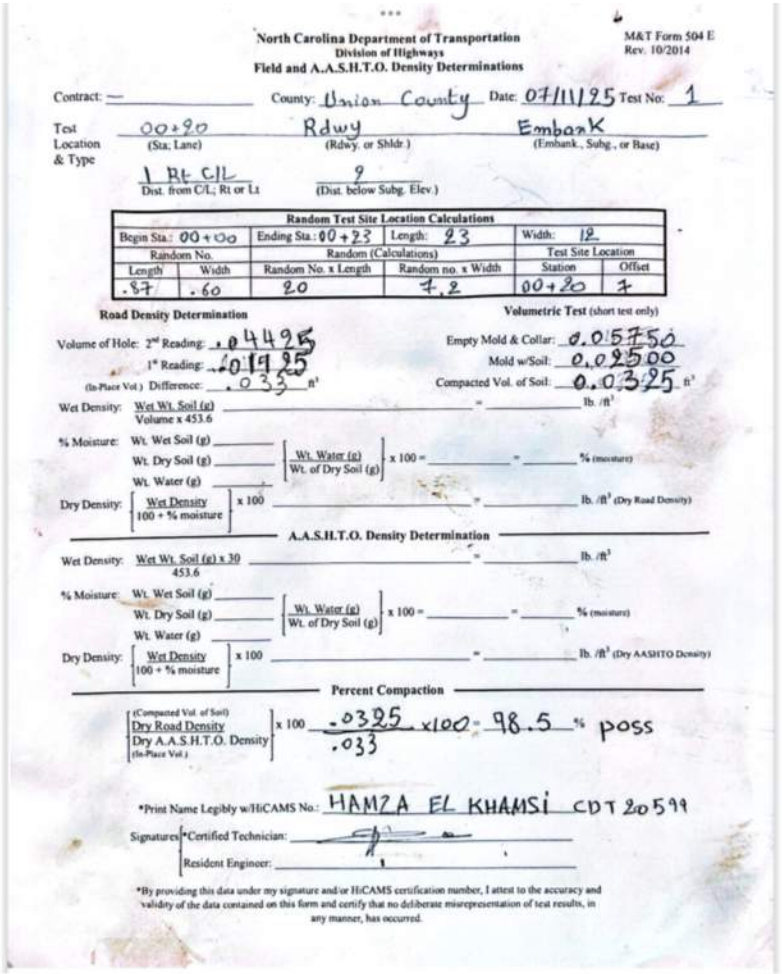
Hamza El Khamsi

Kleinfelder Representative *Print Name*

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Plans and Markups

Fig. 2:



North Carolina Department of Transportation
Division of Highways
Field and A.A.S.H.T.O. Density Determinations

M&T Form 504 E
Rev. 10/2014

Contract: — County: Union County Date: 07/11/25 Test No: 1

Test Location & Type: 00+90 (Sta; Lane) | Rdwy (Rdwy. or Shldr.) | EmbanK (Embank., Subg., or Base)

1 Rt C/L (Dist. from C/L; Rt or Lt) | 9 (Dist. below Subg. Elev.)

Random Test Site Location Calculations

Begin Sta.: 00+00	Ending Sta.: 00+23	Length: 23	Width: 12	
Random No.		Random (Calculations)	Test Site Location	
Length	Width	Random No. x Length	Random no. x Width	Station	Offset
.87	.60	20	7.2	00+20	7

Road Density Determination

Volume of Hole: 2nd Reading: .04495
1st Reading: .01925
(In-Place Vol.) Difference: .033 ft³

Wet Density: Wet Wt. Soil (g) / Volume x 453.6 = _____ lb. /ft³

% Moisture: Wt. Wet Soil (g) _____ / Wt. Dry Soil (g) _____ [Wt. Water (g) / Wt. of Dry Soil (g)] x 100 = _____ = _____ % (moisture)
Wt. Water (g) _____

Dry Density: [Wet Density / 100 + % moisture] x 100 _____ = _____ lb. /ft³ (Dry Road Density)

Volumetric Test (short test only)

Empty Mold & Collar: 0.05750
Mold w/Soil: 0.09250
Compacted Vol. of Soil: 0.03325 ft³

A.A.S.H.T.O. Density Determination

Wet Density: Wet Wt. Soil (g) x 30 / 453.6 _____ = _____ lb. /ft³

% Moisture: Wt. Wet Soil (g) _____ / Wt. Dry Soil (g) _____ [Wt. Water (g) / Wt. of Dry Soil (g)] x 100 = _____ = _____ % (moisture)
Wt. Water (g) _____

Dry Density: [Wet Density / 100 + % moisture] x 100 _____ = _____ lb. /ft³ (Dry AASHTO Density)

Percent Compaction

[(Compacted Vol. of Soil) Dry Road Density / Dry A.A.S.H.T.O. Density (In-Place Vol.)] x 100 = .0325 / .033 x100 = 98.5 % poss

*Print Name Legibly w/HiCAMS No.: HAMZA EL KHAMSI CDT 20599

Signatures: *Certified Technician: _____
Resident Engineer: _____

*By providing this data under my signature and/or HiCAMS certification number, I attest to the accuracy and validity of the data contained on this form and certify that no deliberate misrepresentation of test results, in any manner, has occurred.

Kleinfelder Representative *Signature*

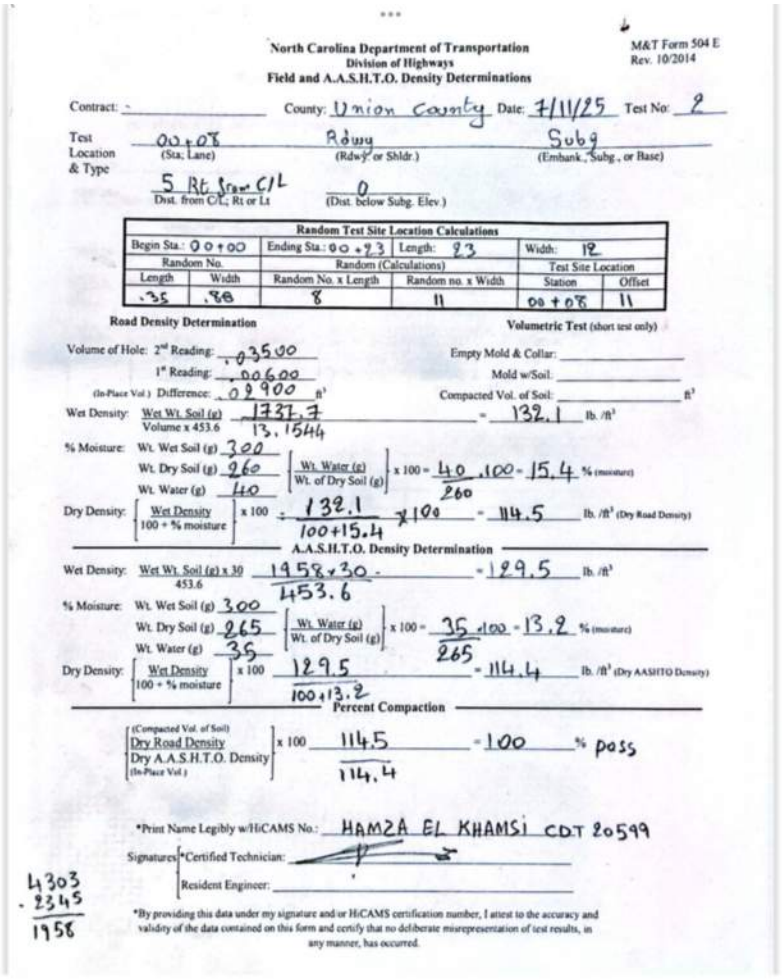
Hamza El Khamsi

Kleinfelder Representative *Print Name*

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Plans and Markups

Fig. 3:



North Carolina Department of Transportation
Division of Highways
Field and A.A.S.H.T.O. Density Determinations

M&T Form 504 E
Rev. 10/2014

Contract: - County: Union County Date: 7/11/25 Test No: 2

Test Location & Type: 00+08 (Sta; Lane) Rdwy (Rdwy or Shldr.) Subg (Embank., Subg., or Base)

5 Rt from C/L (Dist. from C/L; Rt or Lt) 0 (Dist. below Subg. Elev.)

Random Test Site Location Calculations					
Begin Sta.: 00+00		Ending Sta.: 00+93	Length: 93	Width: 18	
Random No.		Random (Calculations)		Test Site Location	
Length	Width	Random No. x Length	Random no. x Width	Station	Offset
.35	.88	8	11	00+08	11

Road Density Determination

Volume of Hole: 2nd Reading: .03500
1st Reading: .00600
(In-Place Vol.) Difference: .02900 ft³

Wet Density: Wet Wt. Soil (g) / Volume x 453.6 = 1737.7 / 13.1544 = 132.1 lb./ft³

% Moisture: Wt. Wet Soil (g) 300; Wt. Dry Soil (g) 260; Wt. Water (g) 40
[Wt. Water (g) / Wt. of Dry Soil (g)] x 100 = 40.100 / 260 = 15.4 % (moisture)

Dry Density: [Wet Density / 100 + % moisture] x 100 = 132.1 / 100+15.4 x 100 = 114.5 lb./ft³ (Dry Road Density)

Volumetric Test (short test only)

Empty Mold & Collar: _____
Mold w/Soil: _____
Compacted Vol. of Soil: _____ ft³

A.A.S.H.T.O. Density Determination

Wet Density: Wet Wt. Soil (g) x 30 / 453.6 = 1958 x 30 / 453.6 = 129.5 lb./ft³

% Moisture: Wt. Wet Soil (g) 300; Wt. Dry Soil (g) 265; Wt. Water (g) 35
[Wt. Water (g) / Wt. of Dry Soil (g)] x 100 = 35.100 / 265 = 13.2 % (moisture)

Dry Density: [Wet Density / 100 + % moisture] x 100 = 129.5 / 100+13.2 = 114.4 lb./ft³ (Dry AASHTO Density)

Percent Compaction

[(Compacted Vol. of Soil) Dry Road Density / Dry A.A.S.H.T.O. Density (In-Place Vol.)] x 100 = 114.5 / 114.4 = 100 % pass

*Print Name Legibly w/HiCAMS No.: HAMZA EL KHAMSI CDT 20599

Signatures: *Certified Technician: _____
Resident Engineer: _____

*By providing this data under my signature and/or HiCAMS certification number, I attest to the accuracy and validity of the data contained on this form and certify that no deliberate misrepresentation of test results, in any manner, has occurred.

4303
-2345
1958

Kleinfelder Representative *Signature*

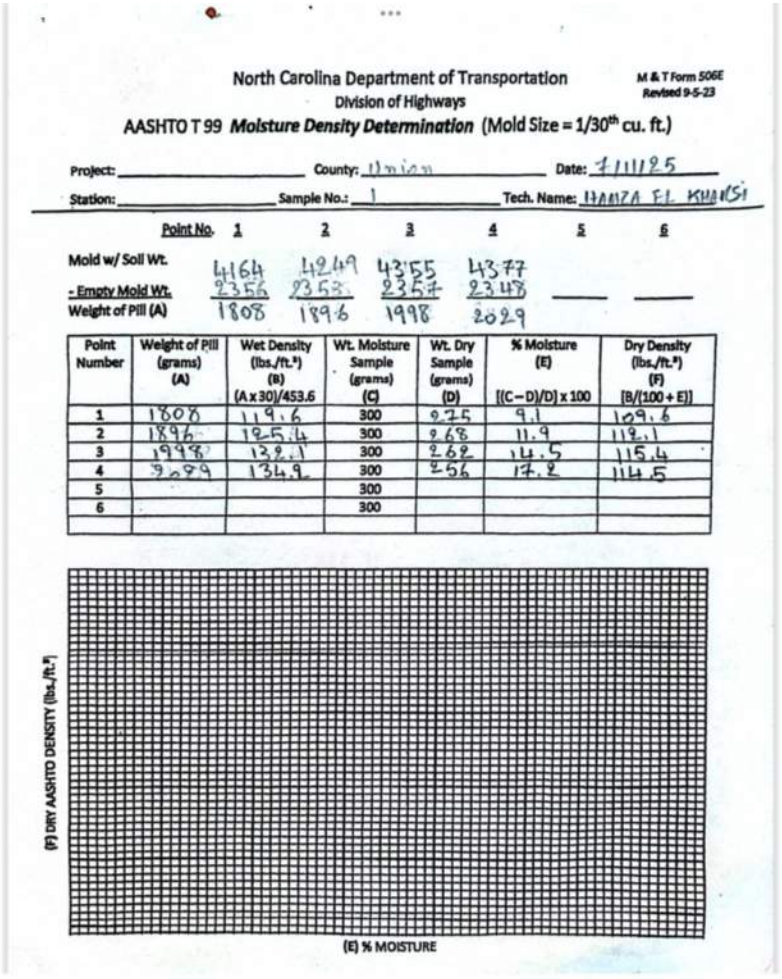
Hamza El Khamsi

Kleinfelder Representative *Print Name*

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Plans and Markups

Fig. 4:



North Carolina Department of Transportation
Division of Highways
M & T Form 506E
Revised 9-5-23

AASHTO T 99 ***Moisture Density Determination*** (Mold Size = 1/30th cu. ft.)

Project: _____ County: Union Date: 7/11/25

Station: _____ Sample No.: 1 Tech. Name: HAMZA EL KHAMSI

Point No.	1	2	3	4	5	6
Mold w/ Soil Wt.	4164	4249	4355	4377		
- Empty Mold Wt.	2356	2353	2357	2348		
Weight of Pill (A)	1808	1896	1998	2029		

Point Number	Weight of Pill (grams) (A)	Wet Density (lbs./ft.³) (B) (A x 30)/453.6	Wt. Moisture Sample (grams) (C)	Wt. Dry Sample (grams) (D)	% Moisture (E) [(C−D)/D] x 100	Dry Density (lbs./ft.³) (F) [B/(100 + E)]
1	1808	119.6	300	275	9.1	109.6
2	1896	125.4	300	268	11.9	112.1
3	1998	132.1	300	262	14.5	115.4
4	2029	134.9	300	256	17.8	114.5
5			300			
6			300			

(F) DRY AASHTO DENSITY (lbs./ft.³)

(E) % MOISTURE

Kleinfelder Representative *Signature*

Hamza El Khamsi

Kleinfelder Representative *Print Name*

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February 11, 2020

Mr. Gordon Box, LG
Geotechnical Engineering Unit
North Carolina Department of Transportation
1020 Birch Ridge Drive
Raleigh, NC 27610

RE: PHASE II INVESTIGATION OF PARCEL 125
Sam's Mart, Rainbow Trout Properties, LLC
2700 Old Monroe Rd., Stallings, NC
ESP Project No. GR22.321

TIP Number:	U-4714AC
WBS Number:	39078.1.8
County:	MECKLENBURG
Description:	SR 1009 (John Street/Old Monroe Road), SR 3448/SR3474 (Trade Street) to SR 1377 (Wesley Chapel-Stouts Road)

Dear Mr. Box:

ESP Associates, Inc. (ESP) is pleased to submit this report on our GeoEnvironmental Phase II Investigation of the subject parcel. This work was performed in accordance with your Request for Proposal dated September 23, 2019 and our Cost Proposal dated October 31, 2019.

We appreciate the opportunity to assist you during this phase of the project. If you should have any questions concerning this report, or if we may be of further assistance, please contact us.

Sincerely,

ESP Associates, Inc.

Edward D. Billington, PG
Senior Geologist/Geophysicist
EDB/NAZ

NORTH CAROLINA LICENSED SEAL 1631 GEOLOGIST EDWARD DAVIS BILLINGTON

DocuSigned by: Ed Billington 7402544DC92F4E9...

not considered Final unless all signatures are completed

ESP Associates, Inc.
7011 Albert Pick Road, Suite E, Greensboro, NC 27409
1.800.960.7317 · NC: 328.334.7724
www.espassociates.com

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1.0 INTRODUCTION

The North Carolina Department of Transportation (NCDOT) is planning to widen East John Street-Old Monroe Road from Trade Street (S.R. 3448/S.R. 3474) to Wesley Chapel-Stouts Road (S.R. 1377) in the Towns of Matthews, Stallings, and Indian Trail. The project is about 6.5 miles long. The NCDOT requested that ESP Associates, Inc. (ESP) perform a Phase II geoenvironmental investigation of the proposed right-of-way (ROW) and proposed permanent drainage/utility easement (DUE) of Parcel 125 to locate possible underground storage tanks (USTs), sample soil, and delineate potential contaminated soil. Parcel 125 is located at 2700 Old Monroe Rd., Stallings, on the west side of E. John St. at the intersection with Potter Rd. (Figure 1).

2.0 HISTORY

According to the 2014 Hazardous Materials Report (Phase I) prepared by the NCDOT, Parcel 125 is an active gas station with the business name of Sam's Mart. Four USTs are registered to be on site (Facility ID 8472). Nine monitoring wells (MWs) were observed on site. Groundwater contamination may be an ongoing concern. This site is anticipated to present low geoenvironmental impacts to the project.

We checked the following online sources at the NCDEQ with the results summarized below:

- Division of Waste Management Site Locator Tool
    - Indicated UST Incident No. 27639, link to files include:
        - September 9, 2004 Phase II Limited Assessment Report shows the USTs were in the present location and states that 8 MWs were completed to check for soil and groundwater contamination. The soil samples sent for testing were found to be below the Soil-to-Water Maximum Soil Contaminant Concentration Levels (MSCCs) for the constituents tested. The groundwater samples from 5 MWs were above the NCDEQ 2L standards for benzene.
        - A notice of No Further Action (NFA) was issued by the NCDEQ on January 26, 2005, subject to the following.
        - A notice of Residual Petroleum was filed by the consultant on February 1, 2005.
    - Indicated UST Active Facility No. 08472
- NC UST Facility Operating Permits
    - Facility No. 08472
    - 4 active USTs, three 10,000 gallon (gas, gas mix) and one 8,000 gallon (diesel)
- Incident Management Database (Regional Underground Storage Tanks)
    - UST No. MO-6920
    - Release occurred 12/19/2003
    - Reported 1/23/2004
    - Closed out 2/9/2005

- Registered USTs Database
    - Three 10,000-gallon tanks for gas, gas mix
    - One 8,000-gallon tank for diesel

3.0 SITE OBSERVATIONS

During our November/December 2019 and January 2020 field work, the site was occupied by an active Exxon gas station and market (7-Eleven, Sam's Mart) (Figure 2). The ground in the study area was covered by grass, concrete pavement, and asphalt pavement. The tank bed is located in the approximate center of the study area on the edge of the proposed ROW and partially within the proposed DUE. The inventory report provided by Sam's Mart lists three 10,000-gallon tanks (regular, plus, and premium blends) and one 8,000-gallon tank (diesel).

4.0 METHODS

ESP performed a geophysical study of the area designated by the NCDOT on November 19, 2019. The geophysical investigation area was approximately 0.53 acres and encompassed the proposed ROW and the proposed DUE. We performed direct-push drilling and sampling of subsurface soils on December 20, 2019. A photoionization detector (PID) was used to screen subsurface soils in the field and select soil samples to send for laboratory analysis. Groundwater was not encountered during the drilling investigation. Some perched water was encountered in the shallow subsurface, especially in the gravel layer below the asphalt.

4.1 Geophysics

ESP performed a metal detector study over the accessible areas of the site using a Geonics EM61 MK2 with a line spacing of approximately three feet (Figures 3 and 4). Location control was provided in real-time using a differential global positioning system (DGPS). Two EM61 anomalies were observed that required additional investigation using ground-penetrating radar (GPR). The GPR data was collected using a Sensors and Software Noggin GPR system with a 250 MHz antenna.

4.2 Borings

ESP performed direct-push drilling activities within the proposed ROW and proposed DUE of Parcel 125 using a subcontractor, SAEDACCO of Fort Mill, South Carolina. Seven borings were drilled, designated B125-1 through B125-7 (Figure 8). The soil borings were advanced using a GeoProbe 54DT drill rig. Soil samples were obtained to a depth of approximately 10 feet using three 4-foot long Macro-Core® tubes. Soil cores varied in recovery from 2.3 to 4.0 feet (58 to 100 percent recovery). The sampling equipment was decontaminated prior to drilling and between borings by the driller using a Liquinox® detergent solution.

4.3 Soil Sample Protocol

Representative soil samples were taken from the Macro-Core tubes at approximate one-foot intervals by the ESP field geologist while wearing nitrile disposable gloves. A petroleum odor was observed in the samples from the 0.0 to 4.0 feet Macro-Core in Borings B125-2, B125-3, and B125-4. Each sample was placed in a sealed plastic bag and then kept in a warm area for approximately 10 to 15 minutes prior to measuring volatile organic compound (VOC) levels in the head space with the PID. The PID readings ranged from 0.1 to 329.9 parts per million (ppm) (Table 1).

Twelve soil samples were selected for laboratory analysis, as listed in Table 2. For each selected sample, an approximate 10-gram soil sample was collected from the sample bag using a Terra Core™ sampler and placed into a laboratory-supplied 40-milliliter volatile organic analysis (VOA) vial containing methanol. Once sealed, the vial was labeled with the sample identification number and then shaken vigorously for about one minute. The samples were packed on ice and sent via overnight delivery to RED Lab, LLC (RED Lab), located in Wilmington, North Carolina, following proper chain-of-custody procedures (Appendix C). One sample vial (B125-6, S5) was broken on arrival at the laboratory so was replaced with a second sample taken from the sample bag and shipped to RED Lab.

RED Lab used a QED Hydrocarbon Analyzer to quantitatively analyze the soil samples using the ultraviolet fluorescence (UVF) method for benzene, toluene, ethylbenzene, and xylene (BTEX); gasoline range organics (GRO); diesel range organics (DRO); total petroleum hydrocarbons (TPH); total aromatics; polycyclic aromatic hydrocarbons (PAHs); and benzo(a)pyrene (BaP).

4.4 Groundwater

Groundwater was not encountered in the 7 borings. Some perched water was encountered in the gravel layer below the asphalt pavement in Boring B125-3.

5.0 RESULTS

5.1 Geophysics

The EM61 early time gate data show the response from both shallow and deeper metallic objects (Figure 3). The differential response reduces the effect of shallow anomalies and emphasizes anomalies from larger and more deeply buried metallic objects, such as USTs (Figure 4). Our evaluation of the differential response indicated two anomalies that required GPR imaging.

GPR data collected over the anomaly near the northern end of the parcel indicated that it was caused by reinforced concrete. The other anomaly in the approximate center of the study area was caused by reinforced concrete and the 4 known USTs. GPR data from the known USTs are shown on Figure 5 and indicate that the tanks are buried approximately 4.5 feet below the ground surface. We were unable to determine the length of the tanks from the GPR data due to interference from

metal covers on the surface but the extent of the reinforced concrete slab covering the tank bed suggested that the tanks are a maximum of approximately 30 feet long.

The EM61 early time gate response and differential response are shown on the plan sheet on Figures 6 and 7, respectively.

5.2 Sample Data

The soil sample UVF hydrocarbon analysis results for BTEX, GRO, DRO, and PAHs are presented in Table 2. The RED Lab laboratory report, which also includes results for TPH, total aromatics, and BaP, is provided in Appendix B. Values are provided in milligrams per kilogram (mg/kg or ppm).

5.3 Sample Observations

The results of the laboratory testing indicate that BTEX was below the laboratory detection limits for the 12 samples tested (Table 2). GRO was detected in 5 of the samples with values ranging from 1.3 to 24.5 ppm, below the NCDEQ action level of 50 ppm for GRO. DRO was detected in 7 samples with values ranging from 0.38 to 40.2 ppm, below the NCDEQ action level of 100 ppm for DRO, and in one sample with a value of 163.4 ppm, above the NCDEQ action level for DRO. PAHs were detected in 5 samples with readings ranging from 0.55 to 2.5 ppm.

6.0 CONCLUSIONS

6.1 Interpretation of Results

The results of the Phase II investigation for Parcel 125 of NCDOT Project U-4714AC indicates that there is no evidence for abandoned USTs in the proposed ROW and proposed DUE. The 4 known USTs are partially within the proposed DUE and are on the edge of the proposed ROW. Laboratory testing detected petroleum compounds in 8 of the 12 soil samples with one sample above the action level of 100 ppm for DRO (B125-4, S-6). Based on the PID readings and laboratory results, the contamination in Boring B125-4 appears to extend from approximately 4.0 to 7.5 feet depth below ground surface.

6.2 Geophysics

The geophysical data did not indicate the presence of abandoned USTs in the proposed ROW or proposed DUE. The GPR data were able to image the USTs from north to south over the short axes but not sufficiently from east to west over the long axes, due to interference from the metal plates on the ground surface.

6.3 Soil

Petroleum hydrocarbon compounds were detected in 8 of the 12 samples tested. One sample had a DRO value of 163.4 ppm, above the action level of 100 ppm for DRO.

6.4 Estimated Quantities

Based on the laboratory results and PID readings for Boring B125-4, the petroleum contamination appears to extend from approximately 4.0 to 7.5 feet below ground surface. Using a contaminated soil thickness of 3.5 feet and an area of 1700 square feet, the volume of contaminated soil within the proposed DUE in the vicinity of Boring B125-4 is estimated as follows:

1700 square feet * 3.5 feet = 5950 cubic feet = 220 cubic yards.

Assuming 100 pounds per cubic foot, the estimated amount of contaminated soil is approximately 298 tons.

7.0 RECOMMENDATIONS

ESP recommends that soil removed from the site as part of NCDOT construction activities in the vicinity of the known USTs and Boring B-125-4 be screened for petroleum hydrocarbon contamination, properly handled, segregated, and disposed of in accordance with NCDEQ regulations.

If the final plans indicate that the 4 known USTs that are partially within the DUE will be encountered during construction, the USTs should be properly closed by removal prior to construction. Since this is an active gasoline service station, arrangements may need to be made for relocating the USTs to another location on the parcel.

Groundwater was not encountered in the upper 10 feet in the study area. However, some perched water was encountered that was associated with a petroleum odor and should be properly handled, tested, and disposed of in accordance with NCDEQ regulations.

8.0 LIMITATIONS

ESP's professional services have been performed, findings obtained, and recommendations prepared in accordance with customary principles and practices in the fields of environmental science and engineering. ESP is not responsible for the independent conclusions, opinions, or recommendations made by others based on the data presented in this report.

The passage of time may result in a change in the environmental characteristics at this site and surrounding properties. ESP does not warrant against future operations or conditions, or against operations or conditions present of a type or at a location not investigated. ESP does not assume responsibility for other environmental issues that may be associated with the subject site.

TABLES

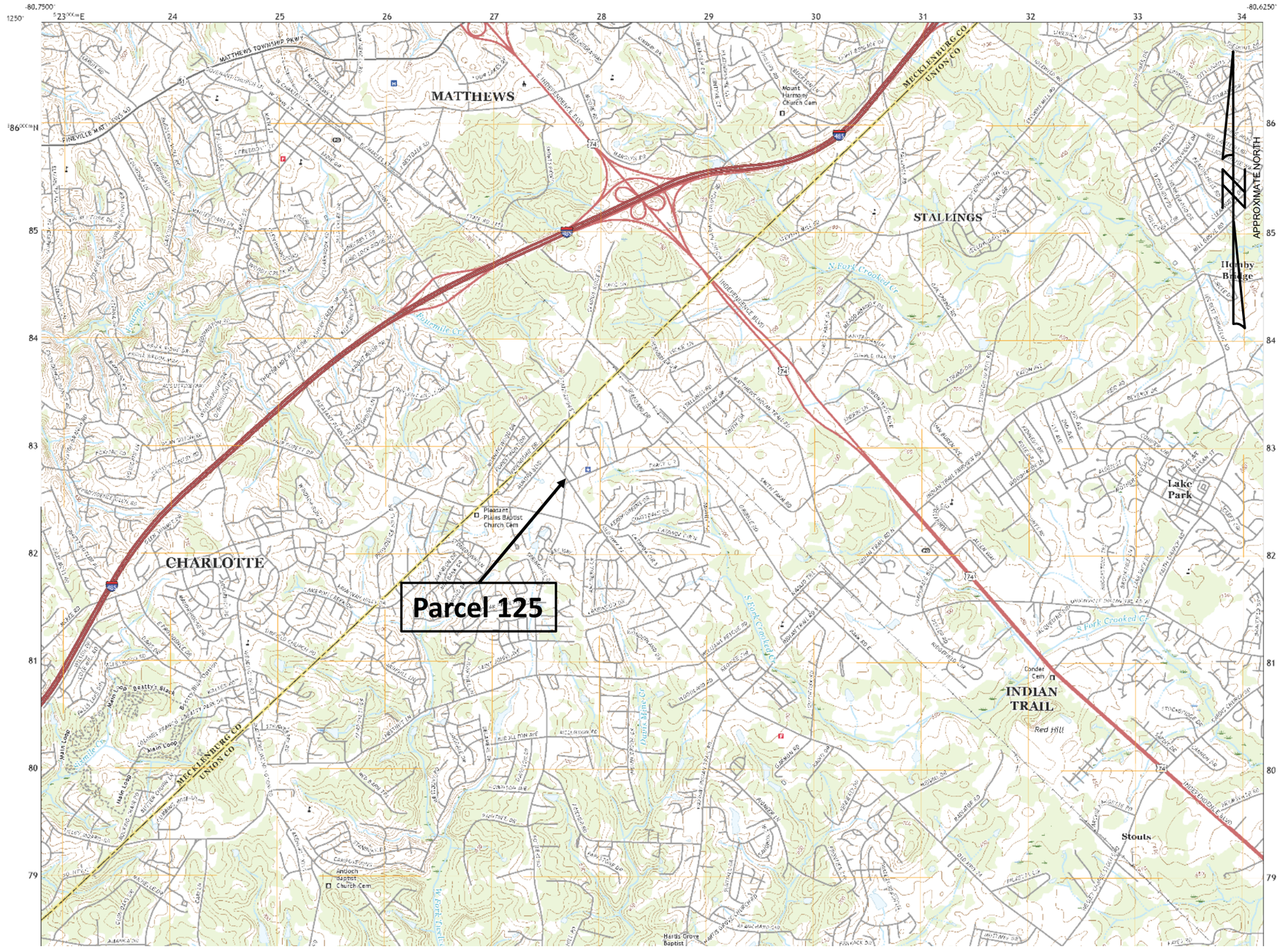
TABLE 1
SOIL SAMPLE PID READINGS

Boring	Sample Depth Range with PID > 10 ppm (feet bgs)	Maximum PID Reading (ppm) and Sample Depth (feet bgs)
B125-1	none	0.4 (8.0-8.5)
B125-2	2.0-2.5, 5.0-5.5	24.2 (2.0-2.5)
B125-3	7.0-10.0	40.6 (8.0-8.5)
B125-4	0.0-10.0	329.9 (6.0-6.5)
B125-5	none	0.6 (4.0-4.5)
B125-6	none	0.7 (2.0-2.5)
B125-7	none	0.5 (9.0-9.5)

TABLE 2
SOIL SAMPLE UVF RESULTS SUMMARY

Boring	Sample ID (depth in feet bgs)	Date Collected	BTEX (C6-C9) (mg/kg)	GRO (C5-C10) (mg/kg)	DRO (C10-C35) (mg/kg)	PAHs (mg/kg)
B125-1	S4 (4.0-4.5)	12/20/19	<0.4	<0.4	<0.4	<0.13
B125-2	S2 (2.0-2.5)	12/20/19	<0.7	7.4	39	2.1
B125-2	S5 (5.0-5.5)	12/20/19	<0.7	2	27.9	0.91
B125-2	S8 (8.0-8.5)	12/20/19	<0.67	<0.67	1	<0.22
B125-3	S5 (5.0-5.5)	12/20/19	<0.38	<0.38	0.38	<0.12
B125-3	S8 (8.0-8.5)	12/20/19	<0.74	1.3	6.7	<0.24
B125-4	S1 (1.0-1.5)	12/20/19	<0.81	2.1	40.2	2.1
B125-4	S6 (6.0-6.5)	12/20/19	<0.73	24.5	163.4	2.5
B125-4	S9 (9.0-9.5)	12/20/19	<0.67	<0.67	19.4	0.55
B125-5	S9 (9.0-9.5)	12/20/19	<0.36	<0.36	<0.36	<0.12
B125-6	S5 (5.0-5.5)	12/20/19	<0.67	<0.67	<0.67	<0.21
B125-7	S9 (9.0-9.5)	12/20/19	<0.69	<0.69	<0.69	<0.22

FIGURES



From: USGS US Topo 7.5 - minute map for MATTHEWS QUADRANGLE, NC, Date: 2019, Original Scale: 1:24,000

PROJECT NO. GR22.321	***FIGURE 1 – PARCEL 125, RAINBOW TROUT PROP, LLC SITE VICINITY MAP***
SCALE AS SHOWN	***NCDOT PROJECT U-4714AC***
DATE 2/10/2020	***SR 1009, SR 3448/SR 3474 TO SR 1377***
BY CRP/EDB	***MECKLENBURG COUNTY, NORTH CAROLINA***

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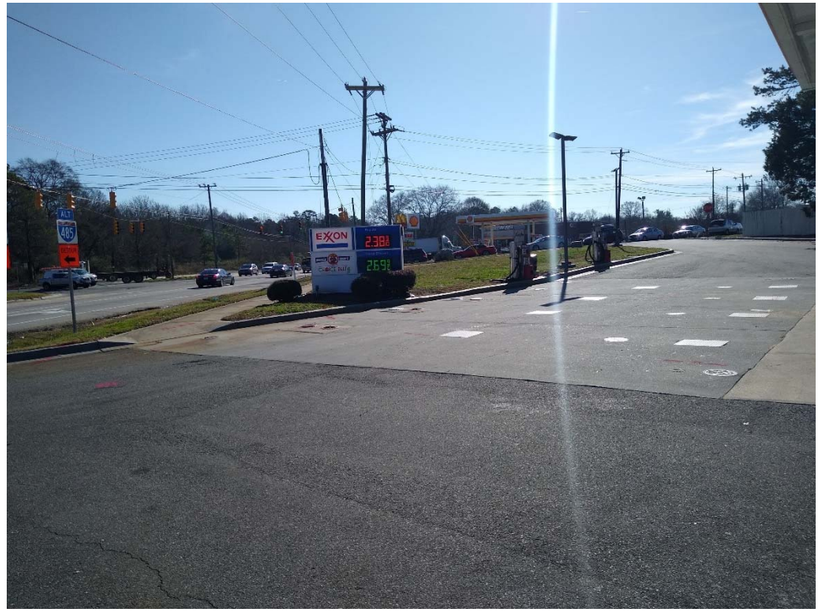
A. Photograph from north end of parcel, looking southeast.



B. Photograph from south end of parcel, looking north.

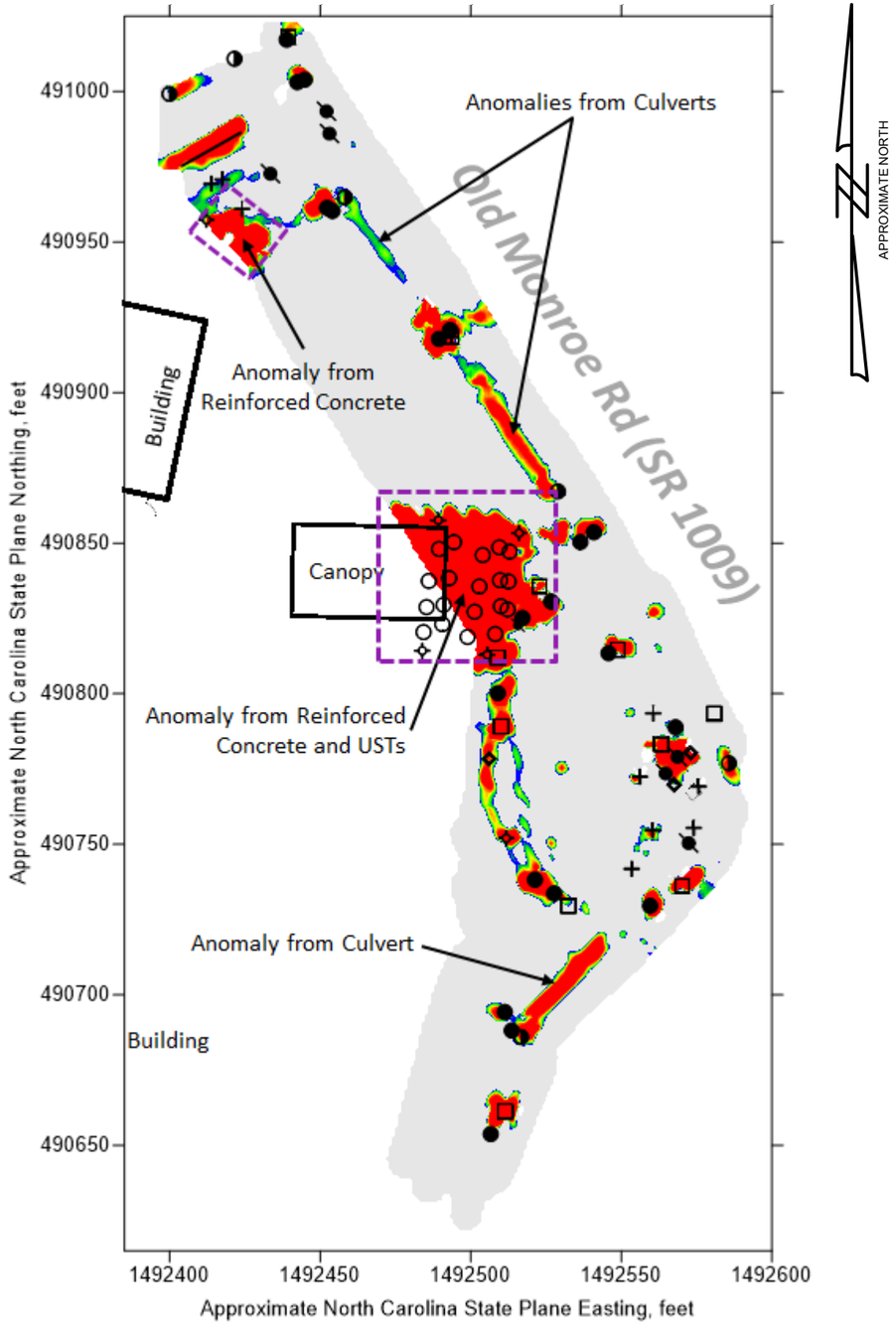


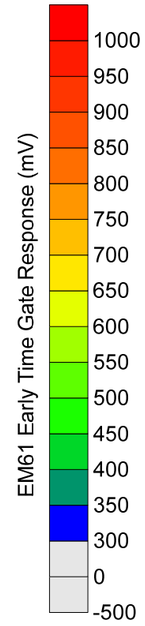
C. Photograph of tank bed area, partially within DUE, looking north.



D. Photograph of tank bed area, partially within DUE, looking south.

PROJECT NO. GR22.321	***FIGURE 2 – PARCEL 125, RAINBOW TROUT PROP, LLC SITE PHOTOGRAPHS***	ESP Associates, Inc.
SCALE N/A		7011 Albert Pick Rd., Suite E Greensboro, NC 27409
DATE 2/10/2020	***NCDOT PROJECT U-4714AC SR 1009, SR 3448/SR 3474 TO SR 1377 MECKLENBURG COUNTY, NORTH CAROLINA***	336.334.7724
BY CRP/EDB		www.espassociates.com





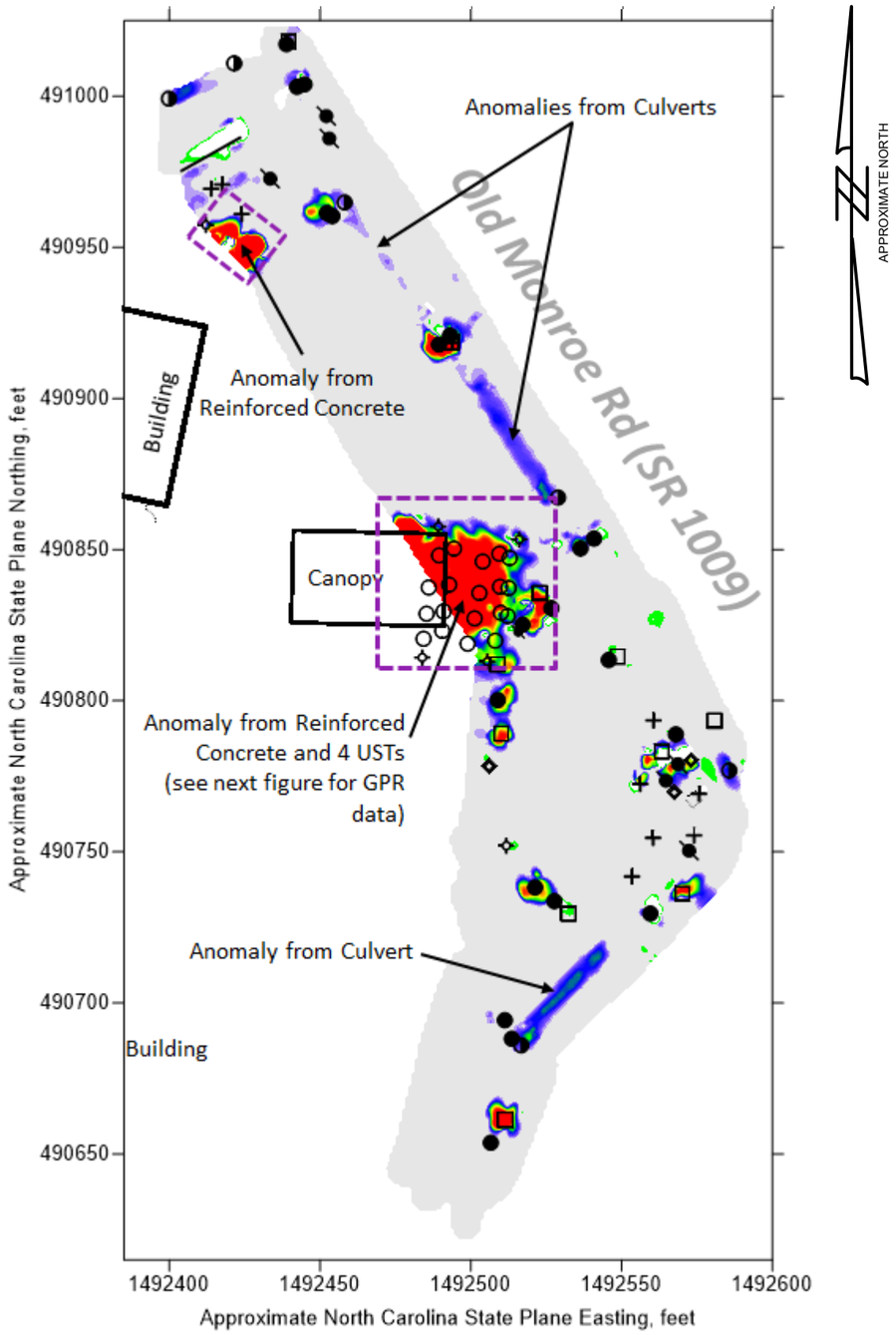
EXPLANATION

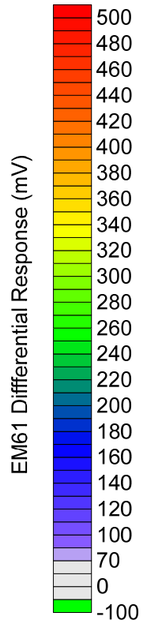
- Miscellaneous metal object (pipe, debris, etc.)
- Utility Box (water meter, electrical outlet, etc.)
- Drop Inlet, Catch Basin, Manhole
- Culvert, storm drain pipe
- Utility pole
- Guy wire anchor
- Sign pole, other pole
- UST Fill Port or Valve Cover
- Monitoring Well
- Buried utility line (marked by others)
- EM61 Data Collection Areas
- GPR Data Collection Areas
- Underground Storage Tank

Note: Locations of data and features are approximate and were collected using a DGPS instrument. ESP makes no guarantees as to the accuracy of these locations. Coordinates on the axes of the maps are approximate and provided for general reference only.

PROJECT NO. GR22.321	***FIGURE 3 – PARCEL 125, RAINBOW TROUT PROP, LLC EM61 EARLY TIME GATE DATA***
SCALE AS SHOWN	***NCDOT PROJECT U-4714AC***
DATE 2/10/2020	***SR 1009, SR 3448/SR 3474 TO SR 1377***
BY CRP/EDB	***MECKLENBURG COUNTY, NORTH CAROLINA***

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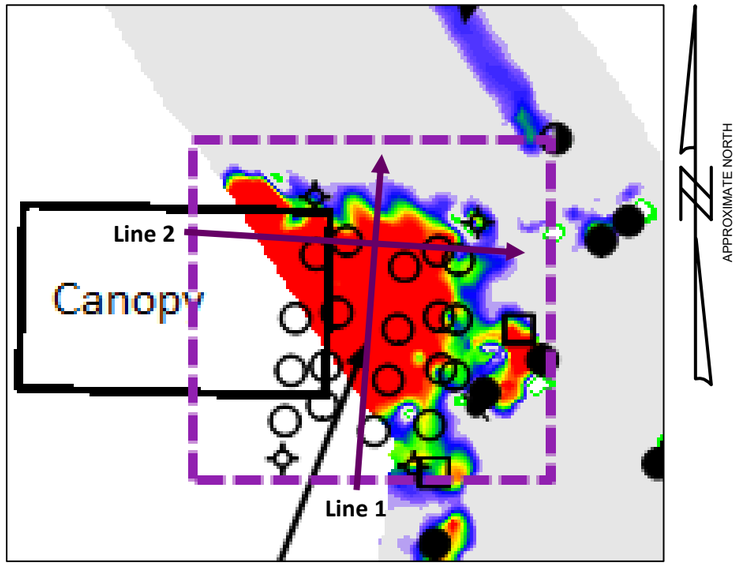
EXPLANATION

- Miscellaneous metal object (pipe, debris, etc.)
- Utility Box (water meter, electrical outlet, etc.)
- Drop Inlet, Catch Basin, Manhole
- Culvert, storm drain pipe
- Utility pole
- Guy wire anchor
- Sign pole, other pole
- UST Fill Port or Valve Cover
- Monitoring Well
- Buried utility line (marked by others)
- EM61 Data Collection Areas
- GPR Data Collection Areas
- Underground Storage Tank

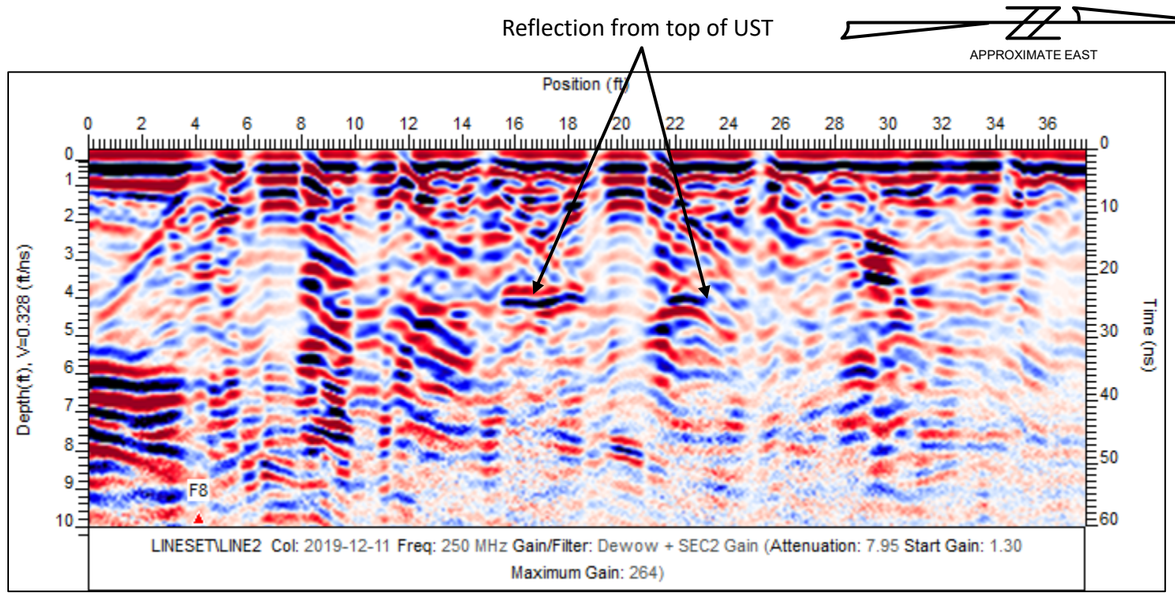
Note: Locations of data and features are approximate and were collected using a DGPS instrument. ESP makes no guarantees as to the accuracy of these locations. Coordinates on the axes of the maps are approximate and provided for general reference only.

PROJECT NO. GR22.321	***FIGURE 4 – PARCEL 125, RAINBOW TROUT PROP, LLC EM61 DIFFERENTIAL DATA***
SCALE AS SHOWN	
DATE 2/10/2020	***NCDOT PROJECT U-4714AC SR 1009, SR 3448/SR 3474 TO SR 1377 MECKLENBURG COUNTY, NORTH CAROLINA***
BY CRP/EDB	

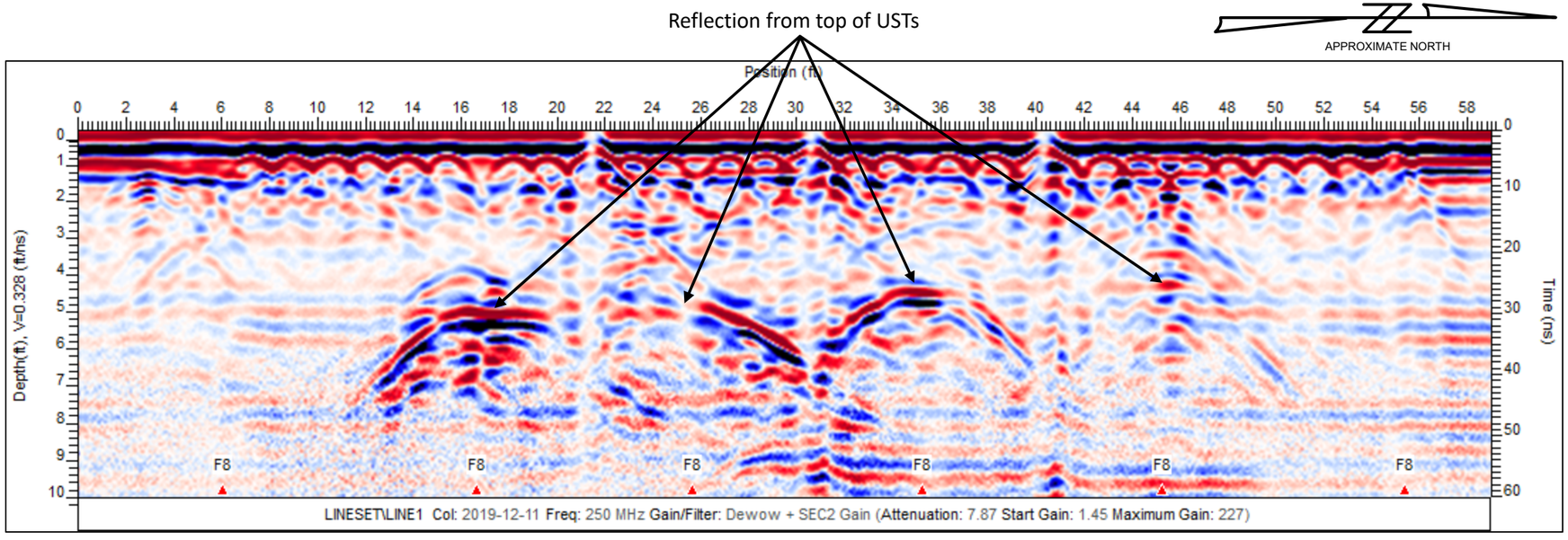
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A. Approximate location of example GPR lines.



C. Example GPR Line 2 over long axis of northern UST. Reflection from UST is distorted by reinforced concrete and partially blocked by steel plates on surface.

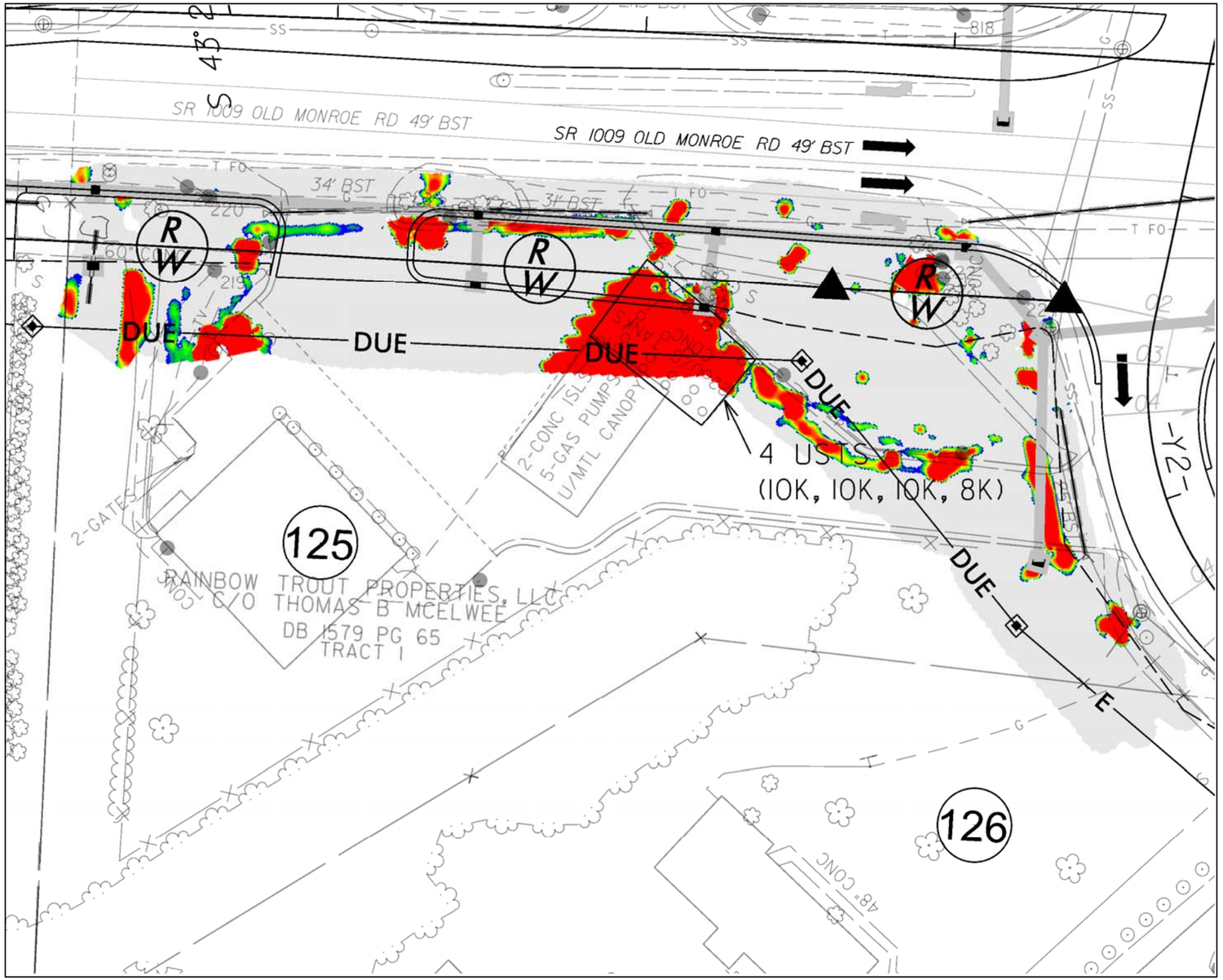


B. Example GPR Line 1 over short axes of 4 USTs. Reflections from USTs are distorted by reinforced concrete and partially blocked by steel plates on surface.

Note: Locations of data and features are approximate and were collected using a DGPS instrument. ESP makes no guarantees as to the accuracy of these locations. Coordinates on the axes of the maps are approximate and provided for general reference only.

PROJECT NO. GR22.321	***FIGURE 5 – PARCEL 125, RAINBOW TROUT PROP, LLC GPR IMAGES OF KNOWN USTS***
SCALE AS SHOWN	
DATE 2/10/2020	***NCDOT PROJECT U-4714AC SR 1009, SR 3448/SR 3474 TO SR 1377 MECKLENBURG COUNTY, NORTH CAROLINA***
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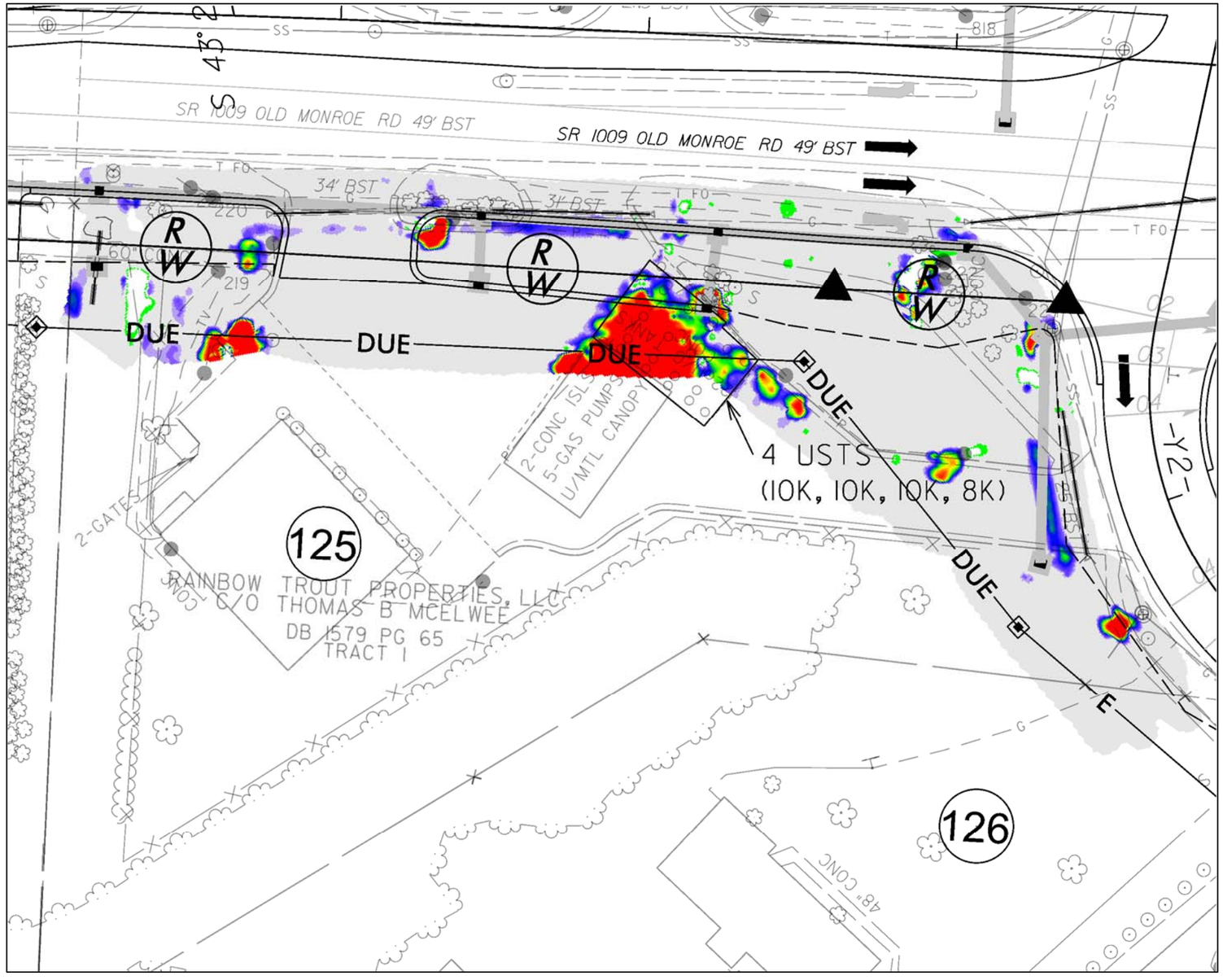
- U4714AC_Geo_env.dgn
  - U4714A_ncdot_fs.dgn
  - U4714_NAT_WEX.dgn
  - U-4714A_Hyd_DRN.dgn
  - U-4714AC_Rdy_aln.dgn, Default
  - U-4714AC_Rdy_dsn.dgn, Default
  - U-4714AC_Rdy_row.dgn
  - U-4714AC_Rdy_ss.dgn

0 40 80
FEET

See Figure 10 for explanation of symbols and line types

PROJECT NO. GR22.321	***FIGURE 6 – PARCEL 125, RAINBOW TROUT PROP, LLC EM61 EARLY TIME GATE DATA ON PLAN SHEET***
SCALE 1" = 40'	
DATE 2/10/2020	***NCDOT PROJECT U-4714AC SR 1009, SR 3448/SR 3474 TO SR 1377 MECKLENBURG COUNTY, NORTH CAROLINA***
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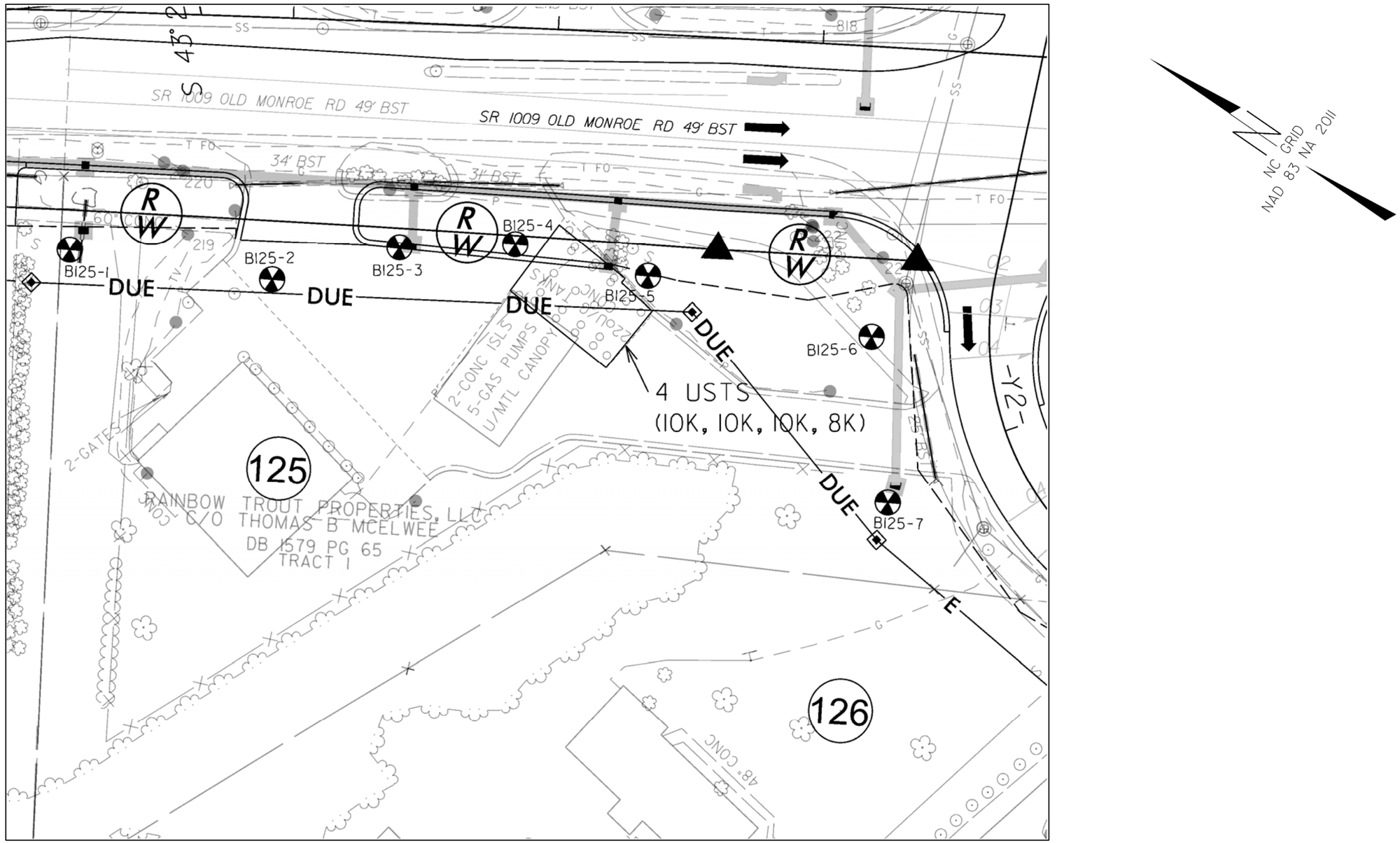
- U4714AC_Geo_env.dgn
  - U4714A_ncdot_fs.dgn
  - U4714_NAT_WEX.dgn
  - U-4714A_Hyd_DRN.dgn
  - U-4714AC_Rdy_aln.dgn, Default
  - U-4714AC_Rdy_dsn.dgn, Default
  - U-4714AC_Rdy_row.dgn
  - U-4714AC_Rdy_ss.dgn

0 40 80
FEET

See Figure 10 for explanation of symbols and line types

PROJECT NO. GR22.321	***FIGURE 7 – PARCEL 125, RAINBOW TROUT PROP, LLC EM61 DIFFERENTIAL DATA ON PLAN SHEET***
SCALE 1" = 40'	***NCDOT PROJECT U-4714AC SR 1009, SR 3448/SR 3474 TO SR 1377 MECKLENBURG COUNTY, NORTH CAROLINA***
DATE 2/10/2020	
BY CRP/EDB	

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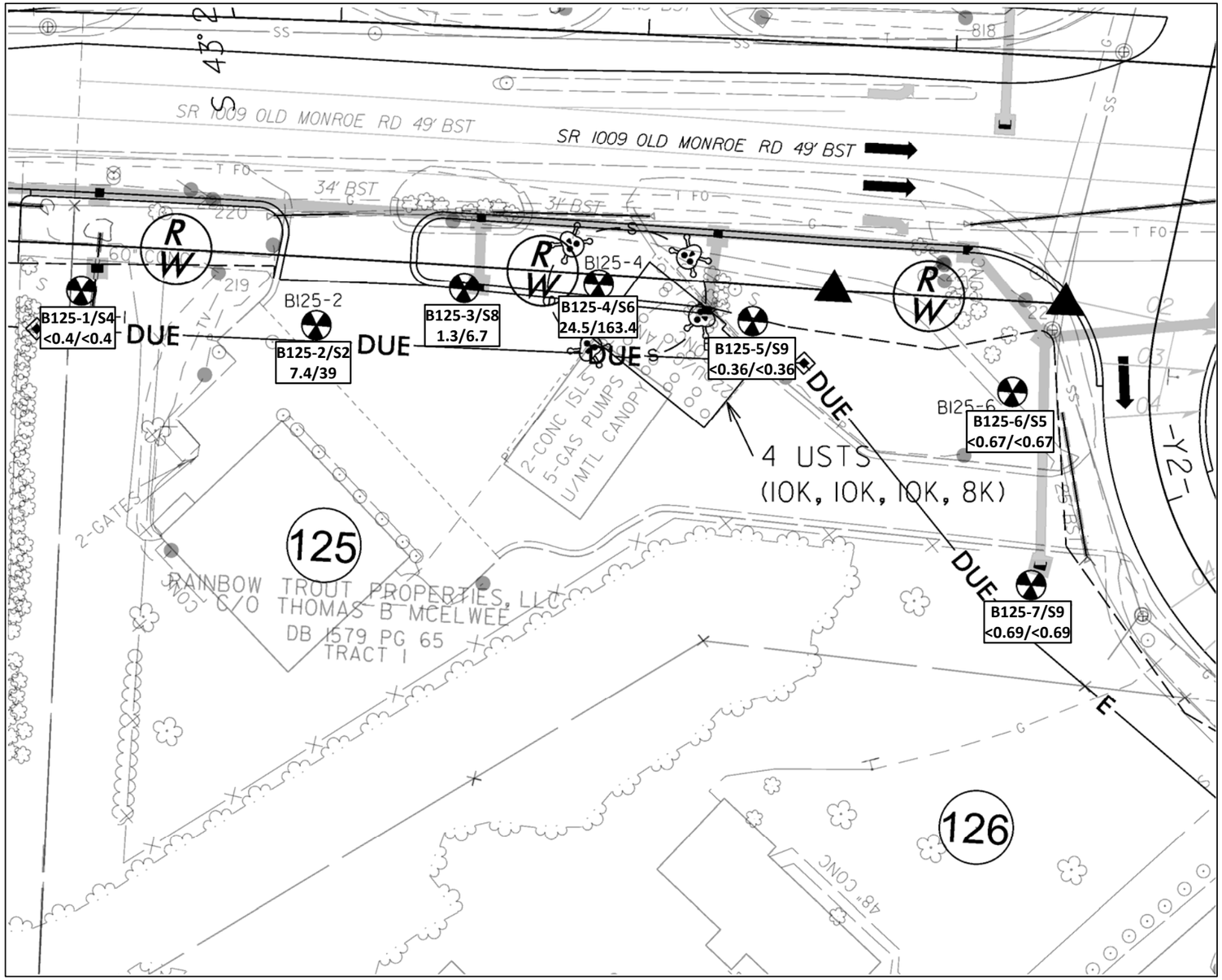
- U4714AC_Geo_env.dgn
  - U4714A_ncdot_fs.dgn
  - U4714_NAT_WEX.dgn
  - U-4714A_Hyd_DRN.dgn
  - U-4714AC_Rdy_aln.dgn, Default
  - U-4714AC_Rdy_dsn.dgn, Default
  - U-4714AC_Rdy_row.dgn
  - U-4714AC_Rdy_ss.dgn

0 40 80
FEET

See Figure 10 for explanation of symbols and line types

PROJECT NO. GR22.321	***FIGURE 8 – PARCEL 125, RAINBOW TROUT PROP, LLC BORING LOCATIONS ON PLAN SHEET***
SCALE 1" = 40'	
DATE 2/10/2020	***NCDOT PROJECT U-4714AC SR 1009, SR 3448/SR 3474 TO SR 1377 MECKLENBURG COUNTY, NORTH CAROLINA***
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Explanation

Maximum Analytical Results per Boring

B125-1/S4
<0.4/<0.4

Boring No./Sample No.
GRO/DRO (mg/kg, ppm)

- U4714AC_Geo_env.dgn
  - U4714A_ncdot_fs.dgn
  - U4714_NAT_WEX.dgn
  - U-4714A_Hyd_DRN.dgn
  - U-4714AC_Rdy_aln.dgn, Default
  - U-4714AC_Rdy_dsn.dgn, Default
  - U-4714AC_Rdy_row.dgn
  - U-4714AC_Rdy_ss.dgn

0 40 80
FEET

See Figure 10 for explanation of symbols and line types

PROJECT NO. GR22.321	***FIGURE 9 – PARCEL 125, RAINBOW TROUT PROP, LLC SOIL ANALYTICAL RESULTS ON PLAN SHEET***
SCALE 1" = 40'	***NCDOT PROJECT U-4714AC SR 1009, SR 3448/SR 3474 TO SR 1377 MECKLENBURG COUNTY, NORTH CAROLINA***
DATE 2/10/2020	
BY CRP/EDB	

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12/2/2016

PROJECT REFERENCE NO.	SHEET NO.

STATE OF NORTH CAROLINA, DIVISION OF HIGHWAYS
CONVENTIONAL PLAN SHEET SYMBOLS

Note: Not to Scale **S.U.E. = Subsurface Utility Engineering*

BOUNDARIES AND PROPERTY:
- State Line
- County Line
- Township Line
- City Line
- Reservation Line
- Property Line
- Existing Iron Pin — EIP
- Computed Property Corner
- Property Monument — ECM
- Parcel/Sequence Number — 23
- Existing Fence Line
- Proposed Woven Wire Fence
- Proposed Chain Link Fence
- Proposed Barbed Wire Fence
- Existing Wetland Boundary — WLB
- Proposed Wetland Boundary — WLB
- Existing Endangered Animal Boundary — EAB
- Existing Endangered Plant Boundary — EPB
- Existing Historic Property Boundary — HPB
- Known Contamination Area: Soil — S
- Potential Contamination Area: Soil — S
- Known Contamination Area: Water — W
- Potential Contamination Area: Water — W
- Contaminated Site: Known or Potential

BUILDINGS AND OTHER CULTURE:
- Gas Pump Vent or U/G Tank Cap
- Sign
- Well
- Small Mine
- Foundation
- Area Outline
- Cemetery
- Building
- School
- Church
- Dam

HYDROLOGY:
- Stream or Body of Water
- Hydro, Pool or Reservoir
- Jurisdictional Stream — JS
- Buffer Zone 1 — BZ 1
- Buffer Zone 2 — BZ 2
- Flow Arrow
- Disappearing Stream
- Spring
- Wetland
- Proposed Lateral, Tail, Head Ditch — Flow
- False Sump

RAILROADS:
- Standard Gauge — CSX TRANSPORTATION
- RR Signal Milepost — MILEPOST 35
- Switch — SWITCH
- RR Abandoned
- RR Dismantled

RIGHT OF WAY & PROJECT CONTROL:
- Secondary Horiz and Vert Control Point
- Primary Horiz Control Point
- Primary Horiz and Vert Control Point
- Exist Permanent Easment Pin and Cap
- New Permanent Easement Pin and Cap
- Vertical Benchmark
- Existing Right of Way Marker
- Existing Right of Way Line
- New Right of Way Line — RW
- New Right of Way Line with Pin and Cap — RW
- New Right of Way Line with Concrete or Granite R/W Marker — RW
- New Control of Access Line with Concrete C/A Marker — CA
- Existing Control of Access — CA
- New Control of Access — CA
- Existing Easement Line — E
- New Temporary Construction Easement — E
- New Temporary Drainage Easement — TDE
- New Permanent Drainage Easement — PDE
- New Permanent Drainage / Utility Easement — DUE
- New Permanent Utility Easement — PUE
- New Temporary Utility Easement — TUE
- New Aerial Utility Easement — AUE

ROADS AND RELATED FEATURES:
- Existing Edge of Pavement
- Existing Curb
- Proposed Slope Stakes Cut — C
- Proposed Slope Stakes Fill — F
- Proposed Curb Ramp — CR
- Existing Metal Guardrail
- Proposed Guardrail
- Existing Cable Guiderail
- Proposed Cable Guiderail
- Equality Symbol
- Pavement Removal

VEGETATION:
- Single Tree
- Single Shrub
- Hedge
- Woods Line
- Orchard
- Vineyard — Vineyard

EXISTING STRUCTURES:
MAJOR:
- Bridge, Tunnel or Box Culvert — CONC
- Bridge Wing Wall, Head Wall and End Wall — CONC WW

MINOR:
- Head and End Wall — CONC HW
- Pipe Culvert
- Footbridge
- Drainage Box: Catch Basin, DI or JB — CB
- Paved Ditch Gutter
- Storm Sewer Manhole — S
- Storm Sewer — S

UTILITIES:
POWER:
- Existing Power Pole
- Proposed Power Pole
- Existing Joint Use Pole
- Proposed Joint Use Pole
- Power Manhole — P
- Power Line Tower
- Power Transformer
- U/G Power Cable Hand Hole — HH
- H-Frame Pole
- U/G Power Line LOS B (S.U.E.*) — P
- U/G Power Line LOS C (S.U.E.*) — P
- U/G Power Line LOS D (S.U.E.*) — P

TELEPHONE:
- Existing Telephone Pole
- Proposed Telephone Pole
- Telephone Manhole — T
- Telephone Pedestal — T
- Telephone Cell Tower
- U/G Telephone Cable Hand Hole — HH
- U/G Telephone Cable LOS B (S.U.E.*) — T
- U/G Telephone Cable LOS C (S.U.E.*) — T
- U/G Telephone Cable LOS D (S.U.E.*) — T
- U/G Telephone Conduit LOS B (S.U.E.*) — TC
- U/G Telephone Conduit LOS C (S.U.E.*) — TC
- U/G Telephone Conduit LOS D (S.U.E.*) — TC
- U/G Fiber Optics Cable LOS B (S.U.E.*) — T FO
- U/G Fiber Optics Cable LOS C (S.U.E.*) — T FO
- U/G Fiber Optics Cable LOS D (S.U.E.*) — T FO

WATER:
- Water Manhole — W
- Water Meter
- Water Valve
- Water Hydrant
- U/G Water Line LOS B (S.U.E.*) — W
- U/G Water Line LOS C (S.U.E.*) — W
- U/G Water Line LOS D (S.U.E.*) — W
- Above Ground Water Line — A/G Water

TV:
- TV Pedestal — TV
- TV Tower
- U/G TV Cable Hand Hole — HH
- U/G TV Cable LOS B (S.U.E.*) — TV
- U/G TV Cable LOS C (S.U.E.*) — TV
- U/G TV Cable LOS D (S.U.E.*) — TV
- U/G Fiber Optic Cable LOS B (S.U.E.*) — TV FO
- U/G Fiber Optic Cable LOS C (S.U.E.*) — TV FO
- U/G Fiber Optic Cable LOS D (S.U.E.*) — TV FO

GAS:
- Gas Valve
- Gas Meter
- U/G Gas Line LOS B (S.U.E.*) — G
- U/G Gas Line LOS C (S.U.E.*) — G
- U/G Gas Line LOS D (S.U.E.*) — G
- Above Ground Gas Line — A/G Gas

SANITARY SEWER:
- Sanitary Sewer Manhole
- Sanitary Sewer Cleanout
- U/G Sanitary Sewer Line — SS
- Above Ground Sanitary Sewer — A/G Sanitary Sewer
- SS Forced Main Line LOS B (S.U.E.*) — FSS
- SS Forced Main Line LOS C (S.U.E.*) — FSS
- SS Forced Main Line LOS D (S.U.E.*) — FSS

MISCELLANEOUS:
- Utility Pole
- Utility Pole with Base
- Utility Located Object
- Utility Traffic Signal Box — S
- Utility Unknown U/G Line LOS B (S.U.E.*) — W/S
- U/G Tank; Water, Gas, Oil
- Underground Storage Tank, Approx. Loc. — UST
- A/G Tank; Water, Gas, Oil
- Geoenvironmental Boring
- U/G Test Hole LOS A (S.U.E.*)
- Abandoned According to Utility Records — AATUR
- End of Information — E.O.I.

PROJECT NO. GR22.321	**FIGURE 10**
SCALE N/A	**LEGEND FOR PLAN SHEET FIGURES**
DATE 2/10/2020	**NCDOT PROJECT U-4714AC**
BY CRP/EDB	**SR 1009, SR 3448/SR 3474 TO SR 1377**
	MECKLENBURG COUNTY, NORTH CAROLINA

ESP Associates, Inc.
7011 Albert Pick Rd., Suite E
Greensboro, NC 27409
336.334.7724
www.espassociates.com

APPENDIX A
SOIL BORING LOGS

FIELD BORING LOG

BORING NO. B125-1

PROJECT NAME: NCDOT U-4714AC Phase II | PROJ. NO.: GR22.321
LOCATION: North End of Parcel / North Side of Fence
TYPE OF BORING: Direct Push | DATE STARTED: 12/20/19 | SHEET: 1 of 1
DRILLING FIRM: SAEDACCO | DATE FINISHED: 12/20/19 | TOTAL DEPTH: 10.0 ft
DRILLER: Brent Romec | SAMPLE METHOD: 4' Macrocore | DEPTH TO GW: N/A ft
DRILL RIG: Geoprobe 54DT | LOGGED BY: R. Pastrana | COMMENT: Approx. Elev: 782.7'

DEPTH (ft)	SAMPLE NO.	SAMPLE DEPTH (ft)	PID READING (ppm)	FIELD CLASSIFICATION AND PHYSICAL DESCRIPTION	REMARKS
				0.0' - 0.5' Topsoil	Core 1 Rec 3.2'/4.0'
				0.5' - 2.8' Sandy Clay, Brown, Moist	
1	S-1	1.0-1.5	0.1		
2	S-2	2.0-2.5	0.2		
				2.8' - 5.0' Clayey Sand, Green-Brown to Tan, V. Moist	
3	S-3	3.0-3.5	0.1		
4	S-4 Sample Tested	4.0-4.5	0.1		Core 2 Rec 4.0'/4.0'
5	S-5	5.0-5.5	0.2	5.0' - 10.0' Sandy Clay with Layers of Clayey Sand, Orange-Brown to Red and Gray, Moist to Dry	
6	S-6	6.0-6.5	0.1		
7	S-7	7.0-7.5	0.2		
8	S-8	8.0-8.5	0.4		Core 3 Rec 2.0'/2.0'
9	S-9	9.0-9.5	0.2		
10				10.0' End of Boring	
11					
12					
13					
14					
15					

FIELD BORING LOG

BORING NO. B125-2

PROJECT NAME: NCDOT U-4714AC Phase II | PROJ. NO.: GR22.321
LOCATION: Near N. Side of N. Entrance
TYPE OF BORING: Direct Push | DATE STARTED: 12/20/19 | SHEET: 1 of 1
DRILLING FIRM: SAEDACCO | DATE FINISHED: 12/20/19 | TOTAL DEPTH: 10.0 ft
DRILLER: Brent Romec | SAMPLE METHOD: 4' Macrocore | DEPTH TO GW: N/A ft
DRILL RIG: Geoprobe 54DT | LOGGED BY: R. Pastrana | COMMENT: Approx. Elev: 782.4'

DEPTH (ft)	SAMPLE NO.	SAMPLE DEPTH (ft)	PID READING (ppm)	FIELD CLASSIFICATION AND PHYSICAL DESCRIPTION	REMARKS
				0.0' - 0.6' Asphalt and Gravel	Core 1 Rec 3.1'/4.0'
					Petroleum odor in Core 1
				0.6' - 10.0' Silty Clay with Layers of Clayey Sand, Orange-Brown, Moist	
1	S-1	1.0-1.5	3.4	Wood Fragments in Top 2.5'	
2	S-2 Sample Tested	2.0-2.5	24.2		
3	S-3	3.0-3.5	8.4		
4	S-4	4.0-4.5	3.9	4.0' grading to Mottled Orange-Brown and Red	
					Core 2 Rec 4.0'/4.0'
5	S-5 Sample Tested	5.0-5.5	11.8		
6	S-6	6.0-6.5	2.9		
7	S-7	7.0-7.5	3.7		
8	S-8 Sample Tested	8.0-8.5	1.7		Core 3 Rec 2.0'/2.0'
9	S-9	9.0-9.5	1.5		
10				10.0' End of Boring	
11					
12					
13					
14					
15					

FIELD BORING LOG

BORING NO. B125-3

PROJECT NAME: NCDOT U-4714AC Phase II | PROJ. NO.: GR22.321
LOCATION: Near S. side of N. Entrance
TYPE OF BORING: Direct Push | DATE STARTED: 12/20/19 | SHEET: 1 of 1
DRILLING FIRM: SAEDACCO | DATE FINISHED: 12/20/19 | TOTAL DEPTH: 10.0 ft
DRILLER: Brent Romec | SAMPLE METHOD: 4' Macrocore | DEPTH TO GW: N/A ft
DRILL RIG: Geoprobe 54DT | LOGGED BY: R. Pastrana | COMMENT: Approx. Elev: 781.6'

DEPTH (ft)	SAMPLE NO.	SAMPLE DEPTH (ft)	PID READING (ppm)	FIELD CLASSIFICATION AND PHYSICAL DESCRIPTION	REMARKS
				0.0' - 1.6' Asphalt and Gravel, Wet (Gravel Layer)	Core 1 Rec 2.3'/4.0'
					Petroleum odor in Core 1
					Water contained in
1	no sample				gravel layer
				1.6' - 10.0' Silty Clay, Orange-Brown to Red and Gray, Moist	
2	S-2	2.0-2.5	0.5		
3	S-3	3.0-3.5	1.3		
4	S-4	4.0-4.5	4.3		
					Core 2 Rec 4.0'/4.0'
5	S-5 Sample Tested	5.0-5.5	2.9		
6	S-6	6.0-6.5	7.4	6.0' grading to Dry	
7	S-7	7.0-7.5	19.6		
8	S-8 Sample Tested	8.0-8.5	40.6		Core 3 Rec 2.0'/2.0'
9	S-9	9.0-9.5	17.8		
10				10.0' End of Boring	
11					
12					
13					
14					
15					

FIELD BORING LOG

BORING NO. B125-4

PROJECT NAME: NCDOT U-4714AC Phase II | PROJ. NO.: GR22.321
LOCATION: North edge of known USTs
TYPE OF BORING: Direct Push | DATE STARTED: 12/20/19 | SHEET: 1 of 1
DRILLING FIRM: SAEDACCO | DATE FINISHED: 12/20/19 | TOTAL DEPTH: 10.0 ft
DRILLER: Brent Romec | SAMPLE METHOD: 4' Macrocore | DEPTH TO GW: N/A ft
DRILL RIG: Geoprobe 54DT | LOGGED BY: R. Pastrana | COMMENT: Approx. Elev: 781.6'

DEPTH (ft)	SAMPLE NO.	SAMPLE DEPTH (ft)	PID READING (ppm)	FIELD CLASSIFICATION AND PHYSICAL DESCRIPTION	REMARKS
				0.0' - 0.4' Asphalt and Gravel	Core 1 Rec 4.0'/4.0'
					Petroleum odor in Core 1
				0.4' - 10.0' Silty Clay, Red and Orange-Brown to Gray, Moist to Dry	
1	S-1 Sample Tested	1.0-1.5	31.7		
2	S-2	2.0-2.5	27.6		
3	S-3	3.0-3.5	53.2		
4	S-4	4.0-4.5	119.5		
					Core 2 Rec 4.0'/4.0'
					Redrilled 1' South Due to
5	S-5	5.0-5.5	211.3		No Recovery in 4'-8' Sample
6	S-6 Sample Tested	6.0-6.5	329.9		
7	S-7	7.0-7.5	108.0		
8	S-8	8.0-8.5	52.7		
					Core 3 Rec 2.0'/2.0'
9	S-9 Sample Tested	9.0-9.5	44.6		
10				10.0' End of Boring	
11					
12					
13					
14					
15					

FIELD BORING LOG

BORING NO. B125-5

PROJECT NAME: NCDOT U-4714AC Phase II | PROJ. NO.: GR22.321
LOCATION: Southeast side of known USTs
TYPE OF BORING: Direct Push | DATE STARTED: 12/20/19 | SHEET: 1 of 1
DRILLING FIRM: SAEDACCO | DATE FINISHED: 12/20/19 | TOTAL DEPTH: 10.0 ft
DRILLER: Brent Romec | SAMPLE METHOD: 4' Macrocore | DEPTH TO GW: N/A ft
DRILL RIG: Geoprobe 54DT | LOGGED BY: R. Pastrana | COMMENT: Approx. Elev: 782.7'

DEPTH (ft)	SAMPLE NO.	SAMPLE DEPTH (ft)	PID READING (ppm)	FIELD CLASSIFICATION AND PHYSICAL DESCRIPTION	REMARKS
				0.0' - 0.3' Topsoil	Core 1 Rec 4.0'/4.0'
				0.3' - 1.9' Clayey Sand, Tan-Brown, Dry	
1	S-1	1.0-1.5	0.4		
2	S-2	2.0-2.5	0.4	1.9' - 10.0' Silty Clay, Orange-Brown to Tan-Brown and Red, Moist to Dry	
3	S-3	3.0-3.5	0.3		
4	S-4	4.0-4.5	0.6		
					Core 2 Rec 3.7'/4.0'
5	S-5	5.0-5.5	0.5		
6	S-6	6.0-6.5	0.5		
7	S-7	7.0-7.5	0.4		
8	S-8	8.0-8.5	0.2		
					Core 3 Rec 2.0'/2.0'
9	S-9 Sample Tested	9.0-9.5	0.3		
10				10.0' End of Boring	
11					
12					
13					
14					
15					

FIELD BORING LOG

BORING NO. B125-6

PROJECT NAME: NCDOT U-4714AC Phase II | PROJ. NO.: GR22.321
LOCATION: Near E. side of S. entrance
TYPE OF BORING: Direct Push | DATE STARTED: 12/20/19 | SHEET: 1 of 1
DRILLING FIRM: SAEDACCO | DATE FINISHED: 12/20/19 | TOTAL DEPTH: 10.0 ft
DRILLER: Brent Romec | SAMPLE METHOD: 4' Macrocore | DEPTH TO GW: N/A ft
DRILL RIG: Geoprobe 54DT | LOGGED BY: R. Pastrana | COMMENT: Approx. Elev: 783.7'

DEPTH (ft)	SAMPLE NO.	SAMPLE DEPTH (ft)	PID READING (ppm)	FIELD CLASSIFICATION AND PHYSICAL DESCRIPTION	REMARKS
				0.0' - 0.3' Topsoil	Core 1 Rec 3.7'/4.0'
				0.3' - 10.0' Sandy and Silty Clay, Brown to Orange and Red-Brown, Moist	
1	S-1	1.0-1.5	0.2	to Dry	
2	S-2	2.0-2.5	0.7		
3	S-3	3.0-3.5	0.5		
4	S-4	4.0-4.5	0.4		
					Core 2 Rec 4.0'/4.0'
5	S-5 Sample Tested	5.0-5.5	0.6		
6	S-6	6.0-6.5	0.2		
7	S-7	7.0-7.5	0.4		
8	S-8	8.0-8.5	0.3		
					Core 3 Rec 2.0'/2.0'
9	S-9	9.0-9.5	0.2		
10				10.0' End of Boring	
11					
12					
13					
14					
15					

FIELD BORING LOG

BORING NO. B125-7

PROJECT NAME: NCDOT U-4714AC Phase II | PROJ. NO.: GR22.321
LOCATION: Near W. side of south entrance
TYPE OF BORING: Direct Push | DATE STARTED: 12/20/19 | SHEET: 1 of 1
DRILLING FIRM: SAEDACCO | DATE FINISHED: 12/20/19 | TOTAL DEPTH: 10.0 ft
DRILLER: Brent Romec | SAMPLE METHOD: 4' Macrocore | DEPTH TO GW: N/A ft
DRILL RIG: Geoprobe 54DT | LOGGED BY: R. Pastrana | COMMENT: Approx. Elev: 784.0'

DEPTH (ft)	SAMPLE NO.	SAMPLE DEPTH (ft)	PID READING (ppm)	FIELD CLASSIFICATION AND PHYSICAL DESCRIPTION	REMARKS
				0.0' - 0.6' Topsoil	Core 1 Rec 3.7'/4.0'
				0.6' - 1.6' Sand, Gray-Brown, V. Moist	
1	S-1	1.0-1.5	0.2		
				1.6' - 10.0' Silty and Sandy Clay, Orange to Red-Brown, Moist to Dry	
2	S-2	2.0-2.5	0.2		
3	S-3	3.0-3.5	0.2		
4	S-4	4.0-4.5	0.2		
					Core 2 Rec 4.0'/4.0'
5	S-5	5.0-5.5	0.3		
6	S-6	6.0-6.5	0.4		
7	S-7	7.0-7.5	0.4		
8	S-8	8.0-8.5	0.4		
					Core 3 Rec 2.0'/2.0'
9	S-9 Sample Tested	9.0-9.5	0.5		
10				10.0' End of Boring	
11					
12					
13					
14					
15					

APPENDIX B

RED LAB LABORATORY TESTING REPORT

QED

REDLAB RAPID ENVIRONMENTAL DIAGNOSTICS

QROS

Hydrocarbon Analysis Results

Client: ESP
Address: On File

Samples taken Friday, December 20, 2019
Samples extracted Friday, December 20, 2019
Samples analysed Monday, December 30, 2019

Contact: Ned Billington

Operator Harry Wooten

Project: GR22 , 321

U00902

Matrix	Sample ID	Dilution used	BTEX (C6 - C9)	GRO (C5 - C10)	DRO (C10 - C35)	TPH (C5 - C35)	Total Aromatics (C10-C35)	16 EPA PAHs	BaP	% Ratios			HC Fingerprint Match
										C5 - C10	C10 - C18	C18	
s	B125-1 , S4	15.9	<0.4	<0.4	<0.4	<0.4	<0.08	<0.13	<0.016	0	100	0	,(FCM),(P)
s	B125-2 , 52	28.1	<0.7	7.4	39	46.4	19.5	2.1	<0.028	27.4	69.3	3.3	Road Tar 85.7%,(FCM)
s	B125-2 , S5	28.1	<0.7	2	27.9	29.9	14	0.91	<0.028	15	80.9	4.1	Deg.Fuel 72.8%,(FCM)
s	B125-2 , S8	26.9	<0.67	<0.67	1	1	0.5	<0.22	<0.027	0	96.9	3.1	Deg.PHC 79.9%,(FCM)
s	B125-3 , S5	15.0	<0.38	<0.38	0.38	0.38	0.32	<0.12	<0.015	0	88.1	11.9	Deg Fuel 59.6%,(FCM),(BO),(P)
s	B125-3 , S8	29.6	<0.74	1.3	6.7	8	3.4	<0.24	<0.03	34.3	61.3	4.4	Deg.PHC 80%,(FCM)
s	B125-4 , S1	32.3	<0.81	2.1	40.2	42.3	19.3	2.1	<0.032	10.2	83.8	6	Road Tar 90.7%,(FCM)
s	B125-4 , S6	29.1	<0.73	24.5	163.4	187.9	57.8	2.5	<0.029	53.6	45	1.4	Deg.Diesel 69.1%,(FCM)
s	B125-4 , S9	26.9	<0.67	<0.67	19.4	19.4	9.2	0.55	<0.027	0	94.7	5.3	V.Deg.Diesel 81.5%,(FCM)
s	B125-5 , S9	14.5	<0.36	<0.36	<0.36	<0.36	<0.07	<0.12	<0.015	0	100	0	,(FCM),(BO),(P)

Initial Calibrator QC check OK Final FCM QC Check OK 95.8 %

Concentration values in mg/kg for soil samples and mg/L for water samples. Soil values uncorrected for moisture or stone content. Fingerprints provide a tentative hydrocarbon identification.

Abbreviations :- FCM = Results calculated using Fundamental Calibration Mode : % = confidence of hydrocarbon identification : (PFM) = Poor Fingerprint Match : (T) = Turbid : (P) = Particulate detected

B = Blank Drift : (SBS)/(LBS) = Site Specific or Library Background Subtraction applied to result : (BO) = Background Organics detected : (OCR) = Outside cal range : (M) = Modifed Result.
% Ratios estimated aromatic carbon number proportions : HC = Hydrocarbon : PHC = Petroleum HC : FP = Fingerprint only. **Data generated by HC-1 Analyser**

QED

AQROS

Hydrocarbon Analysis Results

Client: ESP
Address:

Samples taken Friday, December 20, 2019
Samples extracted Tuesday, January 7, 2020
Samples analysed Tuesday, January 7, 2020

Contact: NED BILLINGTON

Operator JENN RYAN

Project: GR22.321

U00904

Matrix	Sample ID	Dilution used	BTEX (C6 - C9)	GRO (C5 - C10)	DRO (C10 - C35)	TPH (C5 - C35)	Total Aromatics (C10-C35)	16 EPA PAHs	BaP	% Ratios			HC Fingerprint Match
										C5 - C10	C10 - C18	C18	
s	B125 - 6 S5	26.8	<0.67	<0.67	<0.67	<0.67	<0.13	<0.21	<0.027	0	0	0	PHC not detected

Initial Calibrator QC check OK

Final FCM QC Check OK 102.5 %

Concentration values in mg/kg for soil samples and mg/L for water samples. Soil values uncorrected for moisture or stone content. Fingerprints provide a tentative hydrocarbon identification.

Abbreviations :- FCM = Results calculated using Fundamental Calibration Mode : % = confidence of hydrocarbon identification : (PFM) = Poor Fingerprint Match : (T) = Turbid : (P) = Particulate detected

B = Blank Drift : (SBS)/(LBS) = Site Specific or Library Background Subtraction applied to result : (BO) = Background Organics detected : (OCR) = Outside cal range : (M) = Modifed Result.
% Ratios estimated aromatic carbon number proportions : HC = Hydrocarbon : PHC = Petroleum HC : FP = Fingerprint only. **Data generated by HC-1 Analyser**

QED

REDLAB RAPID ENVIRONMENTAL DIAGNOSTICS

AQROS

Hydrocarbon Analysis Results

Client: ESP
Address: On File

Samples taken Friday, December 20, 2019
Samples extracted Friday, December 20, 2019
Samples analysed Monday, December 30, 2019

Contact: Ned Billington

Operator Harry Wooten

Project: GR22 , 321

U00902

Matrix	Sample ID	Dilution used	BTEX (C6 - C9)	GRO (C5 - C10)	DRO (C10 - C35)	TPH (C5 - C35)	Total Aromatics (C10-C35)	16 EPA PAHs	BaP	% Ratios			HC Fingerprint Match
										C5 - C10	C10 - C18	C18	
s	B125-7 , S9	27.6	<0.69	<0.69	<0.69	<0.69	<0.14	<0.22	<0.028	0	0	0	,(FCM),(BO)

Initial Calibrator QC check OK

Final FCM QC Check OK 103.5 %

Concentration values in mg/kg for soil samples and mg/L for water samples. Soil values uncorrected for moisture or stone content. Fingerprints provide a tentative hydrocarbon identification.

Abbreviations :- FCM = Results calculated using Fundamental Calibration Mode : % = confidence of hydrocarbon identification : (PFM) = Poor Fingerprint Match : (T) = Turbid : (P) = Particulate detected

B = Blank Drift : (SBS)/(LBS) = Site Specific or Library Background Subtraction applied to result : (BO) = Background Organics detected : (OCR) = Outside cal range : (M) = Modifed Result.
% Ratios estimated aromatic carbon number proportions : HC = Hydrocarbon : PHC = Petroleum HC : FP = Fingerprint only. **Data generated by HC-1 Analyser**

APPENDIX C
CHAIN-OF-CUSTODY FORM

Client Name:	ESP
Address:	on file
Contact:	Ned Billington
Project Ref.:	GR22.321
Email:	on file
Phone #:	3364205452
Collected by:	N. Billing

REDLAB™
RAPID ENVIRONMENTAL DIAGNOSTICS

CHAIN OF CUSTODY AND ANALYTICAL REQUEST FORM

RED Lab, LLC
5598 Marvin K Moss Lane
MARBIONC Bldg, Suite 2003
Wilmington, NC 28409

Each UVF sample will be analyzed for total BTEX, GRO, DRO, TPH, PAH total aromatics and BaP. Standard GC Analyses are for BTEX and Chlorinated Solvents: VC, 1,1 DCE, 1,2 cis DCE, 1,2 trans DCE, TCE, and PCE. Specify target analytes in the space provided below.

Sample Collection	TAT Requested		Analysis Type		Initials	Sample ID		Total Wt.	Tare Wt.	Sample Wt.
Date/Time	24 Hour	48 Hour	UVF	GC						
12/20/19		✓	✓		EBS	B125-1, 54		56.8	45.1	10.7
						B125-2, 52		56.5	45.1	11.4
						B125-2, 55		56.9	45.5	11.4
						B125-2, 58		57.0	45.1	11.9
						B125-3, 55		56.1	44.8	11.3
						B125-3, 58		56.2	45.4	10.8
						B125-4, 51	B125	55.2	45.3	9.9
						B125-4, ~~55~~ 56		56.3	45.3	11.0
						B125-4, 59		57.1	45.2	11.9
						B125-5, 59		56.8	45.1	11.7
						B125-6, 55		BROKEN ON ARRIVAL		
					SBS	B125-7, 59		56.0	45.0	11.6

COMMENTS/REQUESTS:
Pls report B125 separately

TARGET GC/UVF ANALYTES:

Relinquished by		Accepted by	Date/Time
	12/27/19		12/30
Relinquished by		Accepted by	Date/Time

RED Lab USE ONLY
12
Ref. No B149

B150

Client Name:	ESP
Address:	on file
Contact:	Ned Billington
Project Ref.:	GR22, 321
Email:	on file
Phone #:	336 420 5452
Collected by:	R. Pastrana

REDLAB™
RAPID ENVIRONMENTAL DIAGNOSTICS

CHAIN OF CUSTODY AND ANALYTICAL REQUEST FORM

RED Lab, LLC
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MARBIONC Bldg, Suite 2003
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Each UVF sample will be analyzed for total BTEX, GRO, DRO, TPH, PAH total aromatics and BaP. Standard GC Analyses are for BTEX and Chlorinated Solvents: VC, 1,1 DCE, 1,2 cis DCE, 1,2 trans DCE, TCE, and PCE. Specify target analytes in the space provided below.

Sample Collection	TAT Requested		Analysis Type		Initials	Sample ID (* these are letter "S")	Total Wt.	Tare Wt.	Sample Wt.
Date/Time	24 Hour	48 Hour	UVF	GC					
1/3/20		✓	✓		SOS	B127-1, S9	59.1	45.2	13.9
1/3/20		✓	✓		CRP	B127-2, S4	57.3	45.2	12.1
1/3/20		✓	✓		CRP	B127-3, S9	59.0	45.0	14.0
1/3/20		✓	✓		CRP	B127-4, S4	57.3	45.1	12.2
1/3/20		✓	✓		CRP	B127-5, S9	57.1	45.3	11.8
1/3/20		✓	✓		CRP	B127-6, S4	57.5	45.3	12.2
1/3/20		✓	✓		CRP	B127-7, S9	57.3	45.3	12.0
1/3/20		✓	✓		CRP	B127-8, S4	57.3	45.1	12.2
1/3/20		✓	✓		CRP	B17-9, S9	57.1	45.1	12.0
12/20/19		—	—		SOS	B125-6, S5 }	54.6	44.9	9.7
1/2/20		—	—		CRP	B134-1, S9	57.7	44.1	13.2
1/2/20		—	—		CRP	B134-2, S4	57.4	44.6	12.8
1/2/20		—	—		CRP	B134-2, S9	58.3	44.1	14.2
1/2/20		—	—		CRP	B134-3, S8	57.1	44.0	13.1
1/2/20		—	—		CRP	B134-4, S8	56.8	44.1	12.7
1/2/20		—	—		CRP	B134-5, S4	57.9	43.9	14.0
1/2/20		—	—		CRP	B134-5, S8	58.4	45.4	13.0
1/2/20		—	—		CRP	B134-6, S8	57.8	45.0	12.8

COMMENTS/REQUESTS:
Report bracketed samples separately

TARGET GC/UVF ANALYTES:

Relinquished by		Accepted by	Date/Time
Relinquished by		Accepted by	Date/Time
		CCS	12/7/20 9:00

RED Lab USE ONLY
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Ref. No