UNDERGROUND STORAGE TANK CLOSURE REPORT
FOR
PARCEL 185 – FORMER DENNIS BUCK PROPERTY
1001 DICKENSON AVENUE
GREENVILLE, PITT COUNTY, NORTH CAROLINA

STATE PROJECT: U-3315
WBS ELEMENT: 35781.1.2

OCTOBER 8, 2014

PREPARED FOR:

NCDOT
GEOTECHNICAL ENGINEERING UNIT-GEOENVIRONMENTAL SECTION
1589 MAIL SERVICE CENTER
RALEIGH, NORTH CAROLINA 27699-1589

PREPARED BY:

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CATLIN PROJECT NO. 213161

CORPORATE GEOLOGY LICENSE CERTIFICATION NO. C-118
CORPORATE LICENSURE NO. FOR ENGINEERING SERVICES C-0585

TABLE OF CONTENTS

		PAGE
A.	GENERAL INFORMATION	1
B.	SITE HISTORY AND CHARACTERIZATION	3
C.	CLOSURE PROCEDURES	3
D.	SITE INVESTIGATION	5
E.	SOIL DISPOSAL	6
F.	SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	6
G.	LIMITATIONS	7
H.	SIGNATURES	7

TABLES

TABLE 1	SITE HISTORY – UST SYSTEM AND OTHER RELEASE INFORMATION
TABLE 2	SITE HISTORY – UST OWNER AND OPERATOR INFORMATION
TABLE 3	SUMMARY OF SOIL LABORATORY RESULTS – EPA METHOD 8015C

FIGURES

SHEET 1	USGS TOPOGRAPHIC GENERAL LOCATION MAP
SHEET 2	CONVENTIONAL PLAN SHEET SYMBOLS
SHEET 3	PARCEL 185 SITE MAP WITH UST CLOSURE SOIL SAMPLES

APPENDICES

APPENDIX A	CITY OF GREENVILLE FIRE/RESCUE PERMIT
APPENDIX B	UST-2 FORM
APPENDIX C	CERTIFICATES OF DISPOSAL AND WASTE MATERIAL MANIFESTS
APPENDIX D	PHOTOGRAPHS
APPENDIX E	LABORATORY ANALYTICAL REPORTS AND CHAIN-OF-CUSTODY DOCUMENTATION

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OCTOBER 8, 2014

A. GENERAL INFORMATION

1. SITE INFORMATION

1.1 Site Name

North Carolina Department Of Transportation (NCDOT)
Right-of-Way (ROW)
Parcel 185
Former Dennis Buck Property
Facility I.D. Number: 00-0-0000018382
Groundwater Incident: 38399

1.2 Site address, telephone number and county

1001 Dickinson Avenue
Greenville, Pitt County, North Carolina 27834
Telephone: None
Tank fill port (from GPS survey)
(See Sheets 1 and 3)
Longitude: -77.3804302° W
Latitude: 35.6067436° N

2. CONTACTS INFORMATION

2.1 Name, address, and telephone number of UST owner and operator

Orphan

2.2 Property Owner and Occupant

NCDOT

2.3 Name, address, telephone number and job title of primary contact person

Mr. Gordon Box, LG
NCDOT GeoEnvironmental Section
1589 MSC
Raleigh, North Carolina 27699-1589
Telephone: 919-707-6850

2.4 Name, address and telephone number of closure contractor

Mr. Tony Disher
EVO Corporation
1703 Vargrave Street
Winston-Salem, North Carolina 27107
Telephone: 336-725-5844

2.5 Name, address and telephone number of primary consultant

CATLIN Engineers and Scientists (CATLIN)
Attn: G. Richard Garrett, P.G.
P.O. Box 10279
Wilmington, North Carolina 28404-0279
Telephone: 910-452-5861

2.6 Name, address, telephone number, and State Certification number of laboratory

Pace Analytical
9800 Kincey Ave. Ste 100
Huntersville, North Carolina 28405
Telephone: 704-875-9092
North Carolina State Certification No. 12

3. INFORMATION ABOUT RELEASE

3.1 Date Discovered:

Information received by the North Carolina Department of Environment and Natural Resources (NCDENR) Washington Regional Office on March 11, 2013 indicated an underground storage tank (UST) release or discharge of petroleum at the site. A Preliminary Site Assessment (PSA) was conducted by Terracon on behalf of NCDOT. Soil and groundwater samples collected under the supervision of Terracon on September 7, 2012 and submitted for laboratory analysis subsequently revealed petroleum impacts.

B. SITE HISTORY AND CHARACTERIZATION

Currently this site has been obtained by NCDOT ROW and all structures have been razed. According to information provided by the NCDOT and collected by Terracon, there are no known releases associated with tanks at the site, however, soil and groundwater contamination were revealed during Terracon's PSA in 2012. Parcel 185 previously operated as Flemings Gasoline Station. According to the NCDENR UST database, three on-site USTs were removed in 1989 and one UST was closed in place with inert materials. Four previously active USTs are reportedly located on the site and within the adjacent railroad right of way. Two in ground hydraulic lifts were also identified and following building demolition, a UST fill port was identified within the former building. The last date in service for the UST system(s) is unknown.

The facility UST information is summarized on Table 1 (NCDENR Table B-1]. The UST owner and operator information is summarized on Table 2 (NCDENR Table B-2).

According to the NCDOT Request for Proposal (RFP), the current scope of work at the site included excavating and properly disposing of soils necessary for removing the UST inside the former building and the hydraulic lifts (including tank contents). No over-excavation of petroleum impacted soils was requested. The previously active USTs within (or partially within) the railroad right of way are to remain as well as the closed in place UST.

C. CLOSURE PROCEDURES

1. PREPARATIONS

CATLIN was contracted by NCDOT to facilitate roadway construction by removing the UST and hydraulic lifts at the site (and in the right-of-way). CATLIN performed all field work in accordance with the site *Health and Safety Plan* (available for review at the CATLIN Wilmington Office).

CATLIN and subcontractor EVO personnel mobilized to the site on July 29, 2014. A permit was obtained from the City of Greenville and a copy is provided in Appendix A.

2. CLOSURE PROCEDURES

The NCDOT Conventional Plan Sheet Symbols are provided on Sheet 2 and the site layout is illustrated on Sheet 3. As indicated on Table 1, numerous tanks were/are located at the site including a tank previously abandoned in place.

Concrete was removed from around the UST fill port and hydraulic lifts located within the former building. Residual fluid was pumped from the UST and hydraulic lift cylinders by a vacuum truck. The tank was then pressure washed with potable water and pumped dry again. Dry ice was placed in the tank to displace any potentially flammable vapors. EVO personnel measured the inside of the tank for acceptable oxygen and explosive vapor readings prior to removal. The City of Greenville Fire Marshal granted permission to remove the tank.

The top of the tank was approximately one and a half (1.5) feet below land surface (BLS). Sufficient soils were removed from the top and sides of the UST allowing it to be lifted from the excavation. The roughly 350 gallon tank was constructed of steel and found to be in poor condition with severe rusting and holes. The hydraulic lifts consisted of a single post lift (eastern most) approximately seven and a half (7.5) feet long/deep and a dual post lift (western) that was approximately seven and three-quarters (7.75) feet long/deep.

Excavated soils were loaded directly into a dump truck for off-site disposal. A *Site Investigation Report for Permanent Closure or Change-in-Service of UST (UST-2)* form is included in Appendix B.

4. RESIDUAL MATERIAL AND DISPOSAL

The residual material/fluid in the tank and hydraulic lifts were removed by the vacuum truck and properly disposed of at a permitted facility. According to the Certificates of Disposal in Appendix C, 160 gallons of non-hazardous contaminated water/pertroleum/sludge were disposed of. As indicated on the Tank Disposal Certificates in Appendix C, the UST was transported to Triad Metal Recycling in Yadkinville, NC for proper disposal; the hydraulic lifts were transported to OmniSource Southeast in Winston-Salem, NC for proper disposal.

5. SOIL EXCAVATION ACTIVITIES

The top of the UST was approximately one and a half (1.5) feet BLS. The UST was four and a half (4.5) feet long and the bottom of the UST was approximately four and a half (4.5) feet BLS. No obvious petroleum contamination was noted. The bottoms of the hydraulic lifts were approximately seven and a half (7.5) feet BLS. Excavation activity photographs are provided in Appendix D.

Sandy clay and clayey sand soils were encountered surrounding the tanks. Soils were removed as necessary to facilitate UST and hydraulic lift tank removal. All excavated soils were loaded directly into a truck for transportation and proper disposal off site.

Clean sand with some clay from an offsite borrow source was used to backfill the excavation to the original ground surface. All backfill was emplaced and tamped with the excavator bucket.

D. SITE INVESTIGATION

1. FIELD-SCREENING

Soil screening with a photo-ionization detector was not conducted during this UST closure.

2. SOIL SAMPLING

UST closure soil samples were collected in general accordance with NCDENR guidance documents. Grab samples were taken from the excavation floor beneath the tank and hydraulic lifts. The UST closure soil sample was collected beneath the middle of the removed tank at approximately six (6) feet BLS. Soil samples were collected beneath the eastern hydraulic lift cylinder at approximately eight (8) feet BLS. Soil samples were collected beneath each cylinder of the dual cylinder western hydraulic lift at approximately eight and a half (8.5) feet BLS.

The UST sample was identified by the parcel number, “UST” and depth [sample ID = 185 UST (6’)]. The hydraulic lift soil samples were identified by parcel number, “Lift” and with general orientation, (east and west) and depth [sample identification example = 185 Lift-E (8’)]. Soil sample locations are illustrated on Sheet 3. Sample material was obtained by the excavator bucket from beneath the former tank and hydraulic lift locations. Soil samples were packed into the appropriate laboratory provided glassware immediately following collection.

Four (4) soil samples were submitted to the laboratory for Total Petroleum Hydrocarbon (TPH) Diesel Range Organics (DRO) and Gasoline Range Organics (GRO) analysis per Environmental Protection Agency (EPA) Method 8015C. Sample identifications, depths, and times are provided on the Chain-of-Custody in Appendix E.

3. GROUNDWATER SAMPLING

No groundwater samples were collected during this investigation.

4. QUALITY CONTROL MEASURES

Clean disposable nitrile gloves were used for each sampling event. Soil samples were collected by hand from undisturbed material obtained by the excavator bucket and packed directly into new

laboratory provided glassware.

All samples were placed into appropriate sample jars with Teflon® lid liners, labeled with the site location, date, time, initials of person collecting sample, sample identification number, depth of sample, and tests required. Samples were then placed on ice in a cooler and maintained at approximately 4° Celsius during storage and transport to the laboratory. A temperature blank and trip blank were preserved in the cooler along with the site samples. A Chain-of-Custody form was maintained from the point of sampling until delivery to the laboratory.

No duplicate samples were submitted for laboratory analysis. According to the attached laboratory report (see Appendix E), the sample results are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards and analytical quality control data is available upon request.

6. RESULTS

Photographs of tank and lift removal and backfilling activities are provided in Appendix D. Summarized soil sample results are provided on Table 3 and illustrated on Sheet 3. The UST closure soil sample revealed TPH DRO and GRO at 678 milligrams per kilogram (mg/kg) and 22 mg/kg, respectively, which are above the NCDENR Action Level of 10 mg/kg.

Soil samples collected below the western dual hydraulic lift [185 Lift-W-W (8.5') and 185 Lift-W-E (8.5')] did not reveal detectable TPH GRO concentrations and TPH DRO concentrations were 1,150 mg/kg and 797 mg/kg, respectively. The soil sample “185 Lift-E (8')” did not reveal TPH DRO or GRO concentrations above 10 mg/kg or the laboratory reporting limits.

The complete laboratory analytical report is provided in Appendix E. No groundwater samples were collected during this investigation. Photographs of the final site conditions are provided in Appendix D.

E. SOIL DISPOSAL

According to the Certificate of Disposal provided in Appendix C, 24.08 tons of soil has been disposed of by Evo Corporation in a manner approved by the North Carolina Department of Environment and Natural Resources.

F. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The UST closure and hydraulic lift(s) removal were completed in general accordance with applicable State and Federal Guidelines to facilitate NCDOT

related construction activities. Based on the results of this investigation, residual petroleum impacted soils remain beneath the former UST and western hydraulic lift cylinders. No groundwater sampling was conducted during this investigation. Groundwater impacts have been reported by others at the site.

CATLIN recommends forwarding a copy of this report to the NCDENR Washington Regional Office UST Section with a cover letter indicating the presence of TPH impacted soils above the NCDENR Action Level. Additionally, it is recommended that any utility or roadway construction contractor should be notified of these findings and be advised to be prepared to handle petroleum impacted soils near the former UST. In the event a cut is required for roadway construction or utility installation, any soil samples revealing detectable TPH concentrations will be considered petroleum impacted for handling and disposal purposes.

G. LIMITATIONS

This report is based on the agreed work scope and a review of available data from limited sampling. It is possible that this investigation may have failed to reveal the presence of contamination on the subject site where such contamination may exist. Although CATLIN has used accepted methods appropriate for UST closure and contaminated soil removal sampling, CATLIN cannot guarantee that additional soil and/or groundwater contamination does not exist.

H. SIGNATURES

Benjamin J. Ashba, P.G.
Project Manager

G. Richard Garrett, P.G.
Senior Project Manager

TABLES

TABLE 1
SITE HISTORY – UST SYSTEM AND OTHER RELEASE INFORMATION

Incident Number & Name: 38399 – Former Dennis Buck Property
(Previously operated as Flemings Gasoline Station) Facility ID: 00-0-0000018382

UST ID Number (assum-ed)	Current/ Last Contents	Previous Contents	Capacity (gallons)	Construction Details	Tank Dimensions	Description of Associated Piping and Pumps	Date Tank Installed	Status of UST	Was release associated with the UST System?
1	Unknown	Unknown	Unknown	Steel (assumed)	Unknown	Unknown	Unknown	Removed 1989	Unknown
2	Unknown	Unknown	Unknown	Steel (assumed)	Unknown	Unknown	Unknown	Removed 1989	Unknown
3	Unknown	Unknown	Unknown	Steel (assumed)	Unknown	Unknown	Unknown	Removed 1989	Unknown
4	Unknown	Unknown	Unknown	Steel (assumed)	Unknown	Unknown	Unknown	Closed In Place-1989	Unknown
5	Unknown	Unknown	Unknown	Steel (assumed)	Unknown	Unknown	Unknown	Orphan	Unknown
6	Unknown	Unknown	Unknown	Steel (assumed)	Unknown	Unknown	Unknown	**Orphan**	Unknown
7	Unknown	Unknown	Unknown	Steel (assumed)	Unknown	Unknown	Unknown	**Orphan**	Unknown
8	Unknown	Unknown	Unknown	Steel (assumed)	Unknown	Unknown	Unknown	**Orphan**	Unknown
9	Waste Oil (assumed)	Unknown	350	Steel	3’ x 4.5’	None	Unknown	Removed	Yes (assumed)

TABLE 2
SITE HISTORY - UST OWNER AND OPERATOR INFORMATION

Incident Number & Name: 38399 – Former Dennis Buck Property (Previously operated as Flemings Gasoline Station)

UST ID Numbers	1, 2, 3, 4, 5, 6, 7, 8, 9	Facility ID Number	00-0-0000018382
Name of Owner		Dates of Operation	
Orphan		Unknown	
Street Address			
1001 Dickinson Avenue			
City	State	Zip	Telephone Number
Greenville	NC	27834	None
Name of Operator		Dates of Operation	
Flemings Gasoline Station		Unknown	
Street Address (Site Address)			
1001 Dickinson Avenue			
City	State	Zip	Telephone Number
Greenville	NC	27834	None
Incident Number	38399		
Name of Other Responsible Party		Dates of Release(s)	
None		Unknown	
Street Address			
City	State	Zip	Telephone Number

TABLE 3
SUMMARY OF SOIL LABORATORY RESULTS - EPA METHOD 8015C

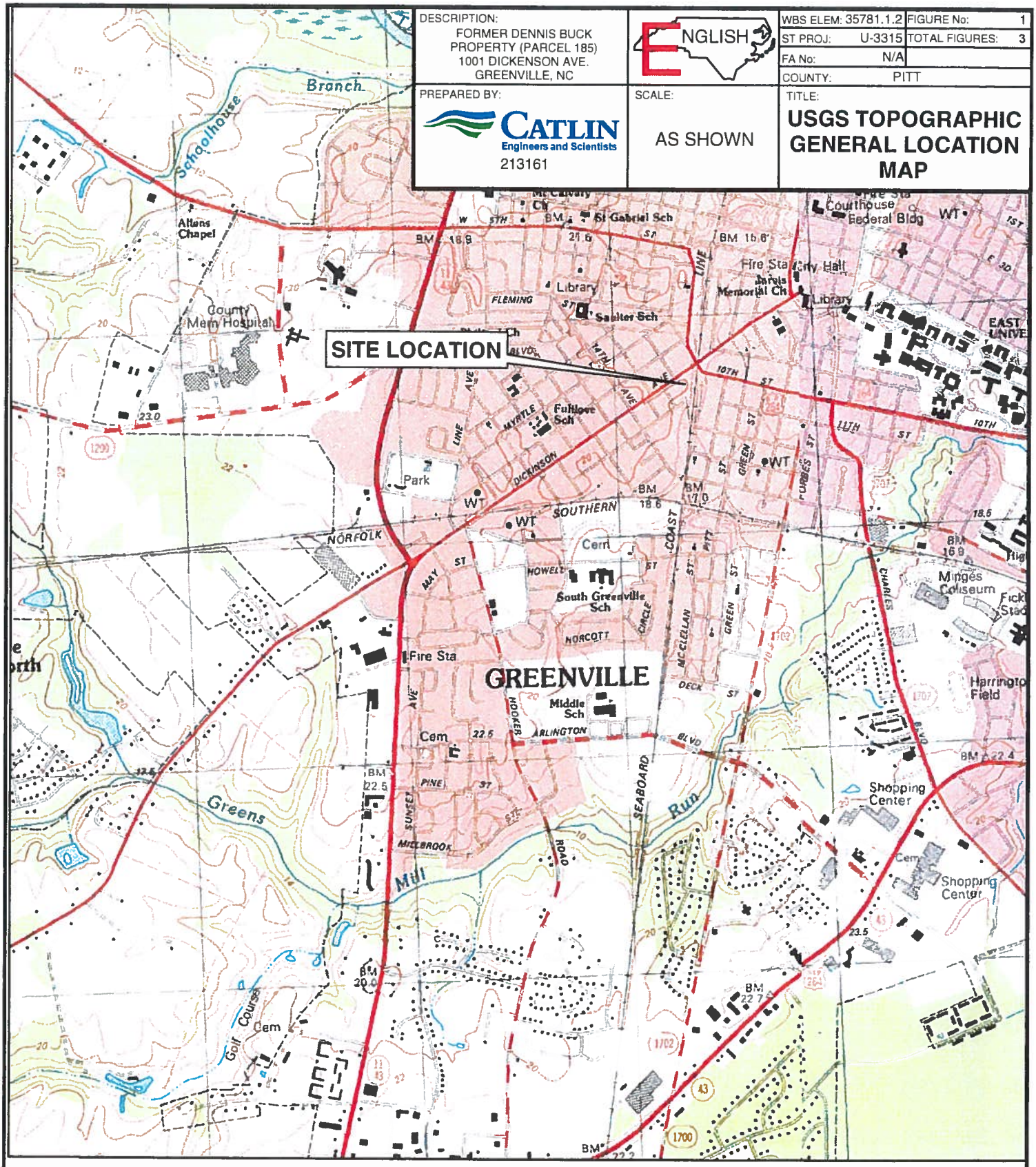
Incident Number: 38399
Incident Name: Former Denis Buck Property (Previously operated as Flemings Gasoline Station)
Facility ID: 00-0-0000018382

Sample ID	Contaminant of Concern →		TPH Diesel Range Organics (DRO)	TPH Gasoline Range Organics (GRO)
	Date Collected	Location		
185 Lift-E (8')	7/29/14	Beneath removed hydraulic lift cylinder on east side of former garage	<5.8	<5.2
185 Lift-W-W (8.5')	7/29/14	Beneath western hydraulic lift cylinder portion of dual hydraulic lift on west side of former garage	**1,150**	<5.6
185 Lift-W-E (8.5')	7/29/14	Beneath eastern hydraulic lift cylinder portion of dual hydraulic lift on west side of former garage	**797**	<6.5
185 UST (6')	7/29/14	Beneath removed tank within the former garage	**678**	**22.0**
		State Action Level (mg/kg)	**10**	**10**

TPH = Total Petroleum Hydrocarbon
All results in milligrams per kilogram (mg/kg).
Sample depth below land surface provided in parenthesis as part of the sample identification.
< = Below Method Detection Limit
Bold results exceed the State Action Level of 10 mg/kg.

FIGURES

DESCRIPTION: FORMER DENNIS BUCK PROPERTY (PARCEL 185) 1001 DICKENSON AVE. GREENVILLE, NC	ENGLISH	WBS ELEM: 35781.1.2	FIGURE No: 1
		ST PROJ: U-3315	TOTAL FIGURES: 3
		FA No: N/A	
		COUNTY: PITT	
PREPARED BY: CATLIN Engineers and Scientists 213161	SCALE: AS SHOWN	TITLE: **USGS TOPOGRAPHIC GENERAL LOCATION MAP**	



Source: Terrain Navigator Pro USGS Topographic Quadrangle, (Greenville SW and Greenville SE1981)

2,000 1,000 0 2,000 4,000 Feet

SCALE

N W E S

PROJECT REFERENCE NO.	SHEET NO.
3578.12 (U-3315)	2

Note: Not to Scale

**S.U.E. = Subsurface Utility Engineering*

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

CONVENTIONAL PLAN SHEET SYMBOLS

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

BOUNDARIES AND PROPERTY:

- State Line
- County Line
- Township Line
- City Line
- Reservation Line
- Property Line
- Existing Iron Pin
- Property Corner
- Property Monument
- Parcel/Sequence Number
- Existing Fence Line
- Proposed Woven Wire Fence
- Proposed Chain Link Fence
- Proposed Barbed Wire Fence
- Existing Wetland Boundary
- Proposed Wetland Boundary
- Existing Endangered Animal Boundary
- Existing Endangered Plant Boundary
- Known Soil Contamination: Area or Site
- Potential Soil Contamination: Area or Site

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
- Buffer Zone 1
- Buffer Zone 2
- Flow Arrow
- Disappearing Stream
- Spring
- Wetland
- Proposed Lateral, Tail, Head Ditch
- False Sump

RAILROADS:

- Standard Gauge
- RR Signal Milepost
- Switch
- RR Abandoned
- RR Dismantled

RIGHT OF WAY:

- Baseline Control Point
- Existing Right of Way Marker
- Existing Right of Way Line
- Proposed Right of Way Line
- Proposed Right of Way Line with Iron Pin and Cap Marker
- Proposed Right of Way Line with Concrete or Granite Marker
- Existing Control of Access
- Proposed Control of Access
- Existing Easement Line
- Proposed Temporary Construction Easement
- Proposed Temporary Drainage Easement
- Proposed Permanent Drainage Easement
- Proposed Permanent Drainage / Utility Easement
- Proposed Permanent Utility Easement
- Proposed Temporary Utility Easement
- Proposed Aerial Utility Easement
- Proposed Permanent Easement with Iron Pin and Cap Marker

ROADS AND RELATED FEATURES:

- Existing Edge of Pavement
- Existing Curb
- Proposed Slope Stakes Cut
- Proposed Slope Stakes Fill
- Proposed Curb Ramp
- Curb Cut Future Ramp
- 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

EXISTING STRUCTURES:

MAJOR:

- Bridge, Tunnel or Box Culvert
- Bridge Wing Wall, Head Wall and End Wall

MINOR:

- Head and End Wall
- Pipe Culvert
- Footbridge
- Drainage Box: Catch Basin, DI or JB
- Paved Ditch Gutter
- Storm Sewer Manhole
- Storm Sewer

UTILITIES:

POWER:

- Existing Power Pole
- Proposed Power Pole
- Existing Joint Use Pole
- Proposed Joint Use Pole
- Power Manhole
- Power Line Tower
- Power Transformer
- U/G Power Cable Hand Hole
- H-Frame Pole
- Recorded U/G Power Line
- Designated U/G Power Line (S.U.E.*)

TELEPHONE:

- Existing Telephone Pole
- Proposed Telephone Pole
- Telephone Manhole
- Telephone Booth
- Telephone Pedestal
- Telephone Cell Tower
- U/G Telephone Cable Hand Hole
- Recorded U/G Telephone Cable
- Designated U/G Telephone Cable (S.U.E.*)
- Recorded U/G Telephone Conduit
- Designated U/G Telephone Conduit (S.U.E.*)
- Recorded U/G Fiber Optics Cable
- Designated U/G Fiber Optics Cable (S.U.E.*)

WATER:

- Water Manhole
- Water Meter
- Water Valve
- Water Hydrant
- Recorded U/G Water Line
- Designated U/G Water Line (S.U.E.*)
- Above Ground Water Line

TV:

- TV Satellite Dish
- TV Pedestal
- TV Tower
- U/G TV Cable Hand Hole
- Recorded U/G TV Cable
- Designated U/G TV Cable (S.U.E.*)
- Recorded U/G Fiber Optic Cable
- Designated U/G Fiber Optic Cable (S.U.E.*)

GAS:

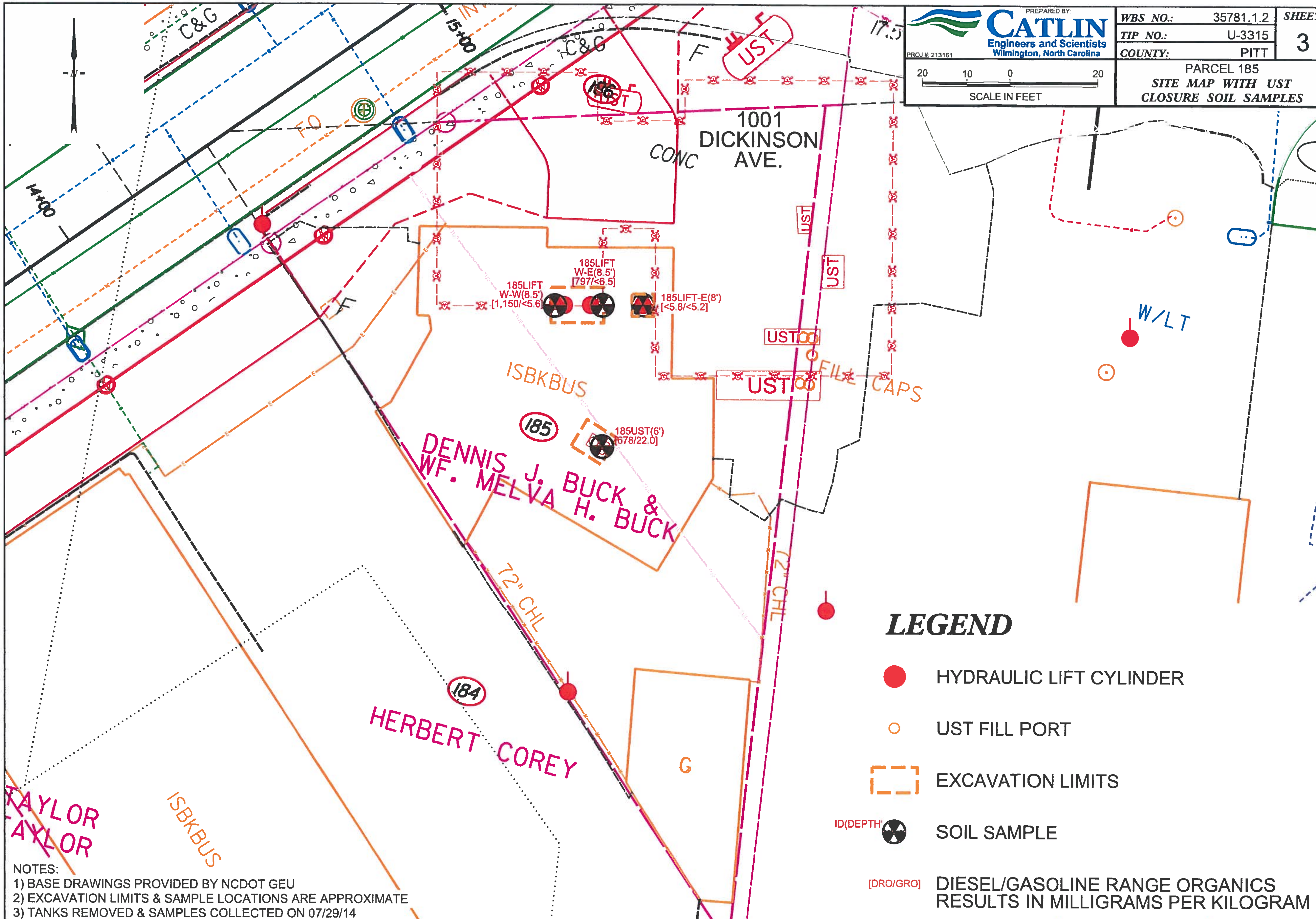
- Gas Valve
- Gas Meter
- Recorded U/G Gas Line
- Designated U/G Gas Line (S.U.E.*)
- Above Ground Gas Line

SANITARY SEWER:

- Sanitary Sewer Manhole
- Sanitary Sewer Cleanout
- U/G Sanitary Sewer Line
- Above Ground Sanitary Sewer
- Recorded SS Forced Main Line
- Designated SS Forced Main Line (S.U.E.*)

MISCELLANEOUS:

- Utility Pole
- Utility Pole with Base
- Utility Located Object
- Utility Traffic Signal Box
- Utility Unknown U/G Line
- U/G Tank; Water, Gas, Oil
- Underground Storage Tank, Approx. Loc.
- A/G Tank; Water, Gas, Oil
- Geoenvironmental Boring
- U/G Test Hole (S.U.E.*)
- Abandoned According to Utility Records — AATUR
- End of Information — E.O.I.



PREPARED BY:
CATLIN
Engineers and Scientists
Wilmington, North Carolina
PROJ #: 213161

WBS NO.:	35781.1.2
TIP NO.:	U-3315
COUNTY:	PITT
SHEET	3

PARCEL 185
SITE MAP WITH UST CLOSURE SOIL SAMPLES

LEGEND

- HYDRAULIC LIFT CYLINDER
- UST FILL PORT
- EXCAVATION LIMITS
- ID(DEPTH) SOIL SAMPLE
- [DRO/GRO] DIESEL/GASOLINE RANGE ORGANICS RESULTS IN MILLIGRAMS PER KILOGRAM

NOTES:
1) BASE DRAWINGS PROVIDED BY NCDOT GEU
2) EXCAVATION LIMITS & SAMPLE LOCATIONS ARE APPROXIMATE
3) TANKS REMOVED & SAMPLES COLLECTED ON 07/29/14

APPENDICES

APPENDIX A

CITY OF GREENVILLE FIRE/RESCUE PERMIT

CITY OF GREENVILLE, NC
FIRE/RESCUE

Application for Underground Storage Tank Permit

	Select Type			Class of Work			Structure	
☐	Installation	*$150.00 per tank*	☐	New Facility		☒	Service Station	
☒	Extraction	*$125.00 per tank*	☒	Closed Facility		☐	Commercial	
☐	Abandonment	*$ 50.00 per tank*	☐	Repair		☐	Multi-family Residential	
☐	Re-piping	*$ 50.00 per tank*	☐	Addition		☐	Other _____	
☐	Follow-Up	*$ 50.00 per tank*						

Tank #1	Tank Fee:	$ 125.00	Tank size:	550 gallons	Product Stored:	Waste Oil
Tank #2	Tank Fee:	$	Tank size:		Product Stored:	
Tank #3	Tank Fee:	$	Tank size:		Product Stored:	

Total Amount **$ 125.00**

Company Name:	EJO Corporation		
Company Address:	1703 Vargrave Street, Winston-Salem, NC 27107		
Site Address:	1001 Dickinson Ave., Greenville, NC		
Contact Name:	Tony Dishen	Telephone:	336-725-5844
Event Start Date:	07-28-2014	Event End Date:	07-29-2014
Comments:	NC DOT is now the property owner		

At time of payment, the applicant must submit any required copies of certifications, site plans and/or other documentation as stated by the North Carolina Fire Code and the City of Greenville Fire Marshal.

Mail Application, documentation and payment to: *Greenville Fire/Rescue, PO Box 7207, Greenville, NC 27835* **OR** Submit in person to: *Greenville Fire/Rescue, 500 S. Greene St, Greenville, NC 27834.*

Make checks payable to: *City of Greenville*

Signature: _____ **Date:** _____

Fire/Rescue Use Only			
Date Received:	7/28/14	Receipt #:	220577
Date Reviewed:	07/29/14	Reviewed by:	[signature]
☒ Approved	☐ Denied		

APPENDIX B

UST-2 FORM

UST-2 Site Investigation Report for Permanent Closure or Change-in-Service of UST

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

STATE USE ONLY:
I.D. #_____
Date Received_____

INSTRUCTIONS (READ THIS FIRST)

For more than five UST systems you may attach additional forms as needed.

Permanent closure – For permanent closure, complete all sections of this form.

Change-in-service – For change-in-service where UST systems will be converted from containing a regulated substance to storing a non-regulated substance, complete sections I, II, III, IV, and VIII

Effective February 1, 1995, all UST closure/change-in-service reports must be submitted in the format provided in the UST-12 form. UST closure and change-in-services must be completed in accordance with the latest version of the *Guidelines for Tank Closure*. A copy of the UST-12 form and the *Guidelines for Tank Closure* can be obtained at www.wastenotnc.org.

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

NOTE: If a release from the tank(s) has occurred, the site assessment portion of the tank closure must be conducted under the supervision of a P.E. or L.G., with all closure site assessment reports bearing the signature and seal of the P.E. or L.G.

I. OWNERSHIP OF TANKS

Owner Name (Corporation, Individual, Public Agency, or Other Entity) Orphan	
Street Address	
City	County
State	Zip Code
Phone Number	

II. LOCATION OF TANKS

Facility Name or Company Former Dennis Buck Property - NCDOT ROW		
Facility ID # (If known) 00-0-0000018382		
Street Address 1001 Dickenson Avenue		
City Greenville	County Pitt	Zip Code 27834
Phone Number None		

III. CONTACT PERSONNEL

Contact for Facility: Gordon Box, LG		Job Title: NCDOT GeoEnvironmental Proj. Mgr.	Phone. No: 919-707-6850
Closure Contractor Name: Tony Disher	Closure Contractor Company: EVO	Address: 1703 Vargrave St. Winston-Salem, NC	Phone. No: 336-725-5844
Primary Consultant Name: Rick Garrett, P.G.	Primary Consultant Company: CATLIN Engineers & Scientists	Address: 220 Old Dairy Rd. Wilmington, NC	Phone. No: 910-452-5861

IV. UST INFORMATION FOR REGISTERED UST SYSTEMS

V. EXCAVATION CONDITION

Tank ID No.	Size in Gallons	Tank Dimensions	Last Contents	Last Use Date	Permanent Close Date	Change-in-Service Date	Water in excavation		Free product		Notable odor or visible soil contamination	
							Yes	No	Yes	No	Yes	No
							☐	☐	☐	☐	☐	☐
							☐	☐	☐	☐	☐	☐
							☐	☐	☐	☐	☐	☐
							☐	☐	☐	☐	☐	☐
							☐	☐	☐	☐	☐	☐

VI. UST INFORMATION FOR UNREGISTERED UST SYSTEMS

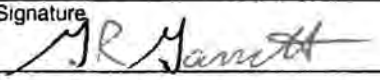
VII. EXCAVATION CONDITION

Tank ID No.	Size in Gallons	Tank Dimensions	Last Contents	Last Use Date	Permanent Close Date	Tank Owner Name *	Water in excavation		Free product		Notable odor or visible soil contamination	
							Yes	No	Yes	No	Yes	No
9	350	3' x 4.5'	Unknown	Unknown	7/29/14	Orphan	☐	☒	☐	☒	☐	☒
							☐	☐	☐	☐	☐	☐
							☐	☐	☐	☐	☐	☐
							☐	☐	☐	☐	☐	☐
							☐	☐	☐	☐	☐	☐

* If the tank owner address is different from the one listed in Section I., then enter the street address, city, state, zip code and telephone no. below:

VIII. 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	Signature	Date Signed
G. Richard Garrett, P.G.; CATLIN agent for NCDOT		9/22/2014

APPENDIX C

CERTIFICATES OF DISPOSAL AND WASTE MATERIAL MANIFESTS

1703 Vargrave Street
Winston-Salem, NC 27107
ph 336-725-5844
fax 336-725-6244

CERTIFICATE OF DISPOSAL

Evo Corporation. does hereby certify that 160 gallons of non-hazardous contaminated sludge received on 07/29/2014 from:

Generator: NCDOT

Originating at: 1001 Dickenson Ave.
Greenville, NC

EC Waste ID #: 071453

has been disposed of by Evo Corporation. in a manner approved by the North Carolina Department of Environment and Natural Resources.

Signature

Thomas W. Hammett
CEO
Evo Corporation

1703 Vargrave Street
Winston-Salem, NC 27107
ph 336-725-5844
fax 336-725-6244

TANK DISPOSAL CERTIFICATE

Tank Owner: NCDOT

Site Address: 1001 Dickenson Ave.
Greenville, NC

Tank Description:

Tank Number	Size of Tank	Contents
1	350 Gallons	Waste Oil

Transporter: Evo Corporation

EC Project #: 071453

Disposal Certification:

Evo Corporation does hereby certify that the above named storage tank was transported to Triad Metal Recycling in Yadkinville, NC for proper disposal and recycling.

Thomas W. Hammett

Signature

Thomas W. Hammett
CEO
Evo Corporation

1703 Vargrave Street
Winston-Salem, NC 27107
ph 336-725-5844
fax 336-725-6244

EQUIPMENT DISPOSAL CERTIFICATE

Lift Owner: NCDOT

Site Address: 1001 Dickenson Ave.
Greenville, NC

Description of Equipment:

Item Number	Description	Contents
1	Hydraulic Lift	Hydraulic Oil
2	Hydraulic Lift	Hydraulic Oil

Transporter: Evo Corporation

EC Project #: 071453

Disposal Certification:

Evo Corporation does hereby certify that the above named equipment was transported to OmniSource Southeast in Winston-Salem, NC for proper disposal and recycling.

Signature

Thomas W. Hammett
CEO
Evo Corporation

1703 Vargrave Street
Winston-Salem, NC 27107
ph 336-725-5844
fax 336-725-6244

CERTIFICATE OF DISPOSAL

Evo Corporation does hereby certify that 24.08 tons of non-hazardous contaminated material received on 07/30/2014 from:

Generator: NCDOT

Originating at: 1001 Dickenson Ave.
Greenville, NC

EC Waste ID #: 071453

has been disposed of by Evo Corporation in a manner approved by the North Carolina Department of Environment and Natural Resources.

Thomas W. Hammett

Signature

Thomas W. Hammett
CEO
Evo Corporation

EVO CORPORATION

1703 Vargrave Street, Winston-Salem, NC 27107
www.evocorp.net
NON-HAZARDOUS MATERIALS MANIFEST

Load # Manifest No. 71742

GENERATOR INFORMATION

Generator: _____ Phone: _____

Site Address: NCDOT Phone: 919-707-6859

City/State: 1001 Dickenson Ave. Greenville, NC Contact: Gordon Box

MATERIAL DESCRIPTION / QUANTITY / WEIGHT

Gross Weight (lbs): _____ Material: _____

Empty Weight (lbs): _____ Contaminant: ~~Product~~ Sludge ~~Waste Oil~~

Net Weight (lbs): _____

Quantity 160 Tons Drums Pails Sacs Yards Other: 99

TRANSPORTER INFORMATION

Transporter: Evo Corporation Phone: 336-725-5844

Truck #: _____ Contact: Tony Disher

As the transporter, I certify that the materials described above being shipped under this non-hazardous materials manifest are properly classified, packaged, labeled, secured and are in proper condition for transport in commerce under the applicable regulations governing transportation, and I hereby receive this material for delivery to the facility designate.

Driver Signature: _____ Date: 7-29-14

FACILITY INFORMATION

Evo Project #: 071453

EVO CORPORATION
1703 Vargrave Street
Winston-Salem, NC 27107

Phone: (336) 725-5844

Contact: Tony Disher

I certify that the carrier has delivered the materials described above to this facility, and I hereby accept this material for treatment and/or disposal in a manner that has been authorized by the State of North Carolina.

Facility Signature: Amanda Tynon Date: 7/29/14

White/Facility Canary/Invoice Goldenrod/Generator Pink/Carrier

EVO CORPORATION

1703 Vargrave Street, Winston-Salem, NC 27107
www.evocorp.net
NON-HAZARDOUS MATERIALS MANIFEST

Load # Manifest No. 71744

GENERATOR INFORMATION

Generator: NCDOT Phone: 919-707-6859
Site Address: 1001 Dickenson Ave.
City/State: Greenville, NC Contact: Gordon Box

MATERIAL DESCRIPTION / QUANTITY / WEIGHT

Gross Weight (lbs): 81,020 Material: Soil
Empty Weight (lbs): 52,860 Contaminant: Waste Oil
Net Weight (lbs): 46,160

Quantity 24.08 (Tons) Drums Pails Sacs Yards Other: _____

TRANSPORTER INFORMATION

Transporter: Evo Corporation Phone: 336-725-5844
Truck #: 208/30 Contact: Tony Disher

As the transporter, I certify that the materials described above being shipped under this non-hazardous materials manifest are properly classified, packaged, labeled, secured and are in proper condition for transport in commerce under the applicable regulations governing transportation, and I hereby receive this material for delivery to the facility designate.

Driver Signature: Date: 7-30-14

FACILITY INFORMATION

Evo Project #: 071453

EVO CORPORATION
1703 Vargrave Street
Winston-Salem, NC 27107

Phone: (336) 725-5844
Contact: Tony Disher

I certify that the carrier has delivered the materials described above to this facility, and I hereby accept this material for treatment and/or disposal in a manner that has been authorized by the State of North Carolina.

Facility Signature: Gregory Cox Date: 7/30/14

White/Facility Canary/Invoice Goldenrod/Generator Pink/Carrier

40289022
TICKET NUMBER

CAT SCALE

CERTIFIED AUTOMATED TRUCK SCALE

CAT SCALE COMPANY
P.O. BOX 630
WALCOTT, IA 52773
(563) 284-6283
www.catscale.com

THE CAT SCALE GUARANTEE

The CAT scale Company guarantees that our scale will give an accurate weight. If you notice any difference from other scale companies in how we back up our guarantee with cash.

WEIGH WHAT WE SAY OR WE PAY®

If you get an overweight fine from the state AFTER one of our CAT Scales showed a legal weight, we will immediately check our scale and we will:

(1) Reimburse you for the cost of the overweight fine if our scale is wrong, OR
(2) A representative of CAT Scale Company will appear in court WITH the driver as an expert witness if we believe our scale was correct.

IF YOU SHOULD GET AN OVERWEIGHT FINE, YOU SHOULD DO THE FOLLOWING TO GET THE PROBLEM RESOLVED:

1) Post bond and request a court date.
2) Call CAT Scale Company direct 24 hours a day at 1-877-GET-SCALE, opt 7 (Toll Free) or visit www.catscaleguarantee.com for instructions.
3) IMMEDIATELY send a copy of the citation, CAT Scale Ticket, your name, company, address, and phone number to CAT Scale Company Attn: Guarantee Department.

CAT SCALE COLLECTOR CARD INSIDE!

*The four weights shown below are separate weights. The GROSS WEIGHT is the CERTIFIED WEIGHT and was weighed on a full length platform scale. All weights are guaranteed by CAT Scale.

DATE: 7-30-2014

STEER AXLE	9500	lb
DRIVE AXLE	30380	lb
TRAILER AXLE	41140	lb
*GROSS WEIGHT	81020	lb

1007 SCALE
402A902 LOCATION:
PUBLIC WEIGHMASTER'S CERTIFICATE OF WEIGHT & MEASURE

686
COUNTRY MART
4787 HWY 11 NORTH
BETHEL NC

This is to certify that the following described merchandise was weighed, counted, or measured by a public or deputy weighmaster, and when properly signed and sealed shall be prima facie evidence of the accuracy of the weight shown as prescribed by law.

NORTH CAROLINA
PUBLIC WEIGHMASTER
LICENSE EXPIRES JUNE 30, 2014
KRISTIAN PARRISH RE 37022
(IF APPLICABLE)
* INVALID UNLESS SIGNED

LIVESTOCK, PRODUCE, PROPERTY, COMMODITY, OR ARTICLE WEIGHED: FREIGHT ALL KINDS

COMPANY: EVO TRACTOR #: 208 TRAILER #: 301

WEIGH NUMBER: 9022

FEE: $10.00

WEIGHMASTER OR WEIGHER SIGNATURE: KRISTIAN PARRISH

FULL WEIGH TICKET # (IF REWEIGH):

CUSTOMER COPY

DRIVER IN TRUCK AT ALL TIMES DURING WEIGHING

37063348

TICKET NUMBER

CERTIFIED AUTOMATED TRUCK SCALE

CAT SCALE COMPANY
P.O. BOX 630
WALCOTT, IA 52773
(563) 284-6283
www.catscale.com

THE CAT SCALE GUARANTEE

The CAT Scale Company guarantees that our scales will give an accurate weight. What makes us different from other scale companies is that we back up our guarantee with cash.©

CAT SCALE COLLECTOR CARD INSIDE!

WEIGH WHAT WE SAY OR WE PAY®

If you get an overweight fine from the state **AFTER** one of our CAT Scales showed a legal weight, we will immediately check our scale and we will:

(1) Reimburse you for the cost of the overweight fine if our scale is wrong, **OR**
(2) A representative of CAT Scale Company will appear in court **WITH** the driver as an expert witness if we believe our scale was correct.

IF YOU SHOULD GET AN OVERWEIGHT FINE, YOU SHOULD DO THE FOLLOWING TO GET THE PROBLEM RESOLVED:

1) Post bond and request a court date.
2) Call CAT Scale Company direct 24 hours a day at 1-877-CAT-SCALE, ext. 7 (Toll Free) or visit www.catscaleguarantee.com for instructions.
3) IMMEDIATELY send a copy of the citation, CAT Scale Ticket, your name, company, address, and phone number to CAT Scale Company Attn: Guarantee Department.

* The four weights shown below are separate weights. The GROSS WEIGHT is the CERTIFIED WEIGHT and was weighed on a full length platform scale. All weights are guaranteed by CAT Scale.

DATE: 7-09-2014

SCALE 1357

LOCATION: 37063347

PUBLIC WEIGHMASTER'S CERTIFICATE OF WEIGHT & MEASURE

1278
EAGLE XPRESS
US 220 N OF GREENSBORO
STOKESDALE NC

STEER AXLE	9020 lb
DRIVE AXLE	13520 lb
TRAILER AXLE	10320 lb
GROSS WEIGHT	32860 lb

This is to certify that the following described merchandise was weighed, counted, or measured by a public or deputy weighmaster, and when properly signed and sealed shall be prima facia evidence of the accuracy of the weight shown as prescribed by law.

Mew Empty

IMPRINT SEAL HERE (IF APPLICABLE)

LIVESTOCK, PRODUCE, PROPERTY, COMMODITY, OR ARTICLE WEIGHED: FREIGHT ALL KINDS

COMPANY: EVD

TRACTOR #: 208 TRAILER #: 301

WEIGH NUMBER: 3347

FEE: $10.00

WEIGHMASTER OR WEIGHER SIGNATURE: Linda Simmons

LINDA SIMMONS

FULL WEIGH TICKET # (IF REWEIGH):

DRIVER: IN TRUCK UNLESS CHECKED HERE:

CUSTOMER COPY

APPENDIX D

PHOTOGRAPHS

PARCEL 185 – FORMER DENNIS BUCK PROPERTY
1001 DICKENSON AVENUE

Looking north from southern portion of former building.
UST fill port in foreground and hydraulic lift cylinders in background.

Looking west from eastern portion of former building. Single post (eastern most) hydraulic lift cylinder in foreground and dual post (western most) hydraulic lift cylinders in background.

PARCEL 185 – FORMER DENNIS BUCK PROPERTY
1001 DICKENSON AVENUE

UST Excavation

Removed single post hydraulic lift.

PARCEL 185 – FORMER DENNIS BUCK PROPERTY
1001 DICKENSON AVENUE

Dual post hydraulic lift excavation.

Removed hydraulic lift cylinders.

PARCEL 185 – FORMER DENNIS BUCK PROPERTY
1001 DICKENSON AVENUE

Removed UST.

Looking north from southern portion of former building.
Backfilled UST excavation in foreground and backfilled hydraulic lift cylinder excavations in background.

APPENDIX E

LABORATORY ANALYTICAL REPORTS AND CHAIN-OF-CUSTODY DOCUMENTATION

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

August 08, 2014

Ben Ashba
CATLIN Engineers & Scientists, Inc.
220 Old Dairy Road
Wilmington, NC 28405

RE: Project: Parcel 185 WBS35781.1.2
Pace Project No.: 92211575

Dear Ben Ashba:
Enclosed are the analytical results for sample(s) received by the laboratory on August 01, 2014. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

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

Sincerely,

Angela M. Baioni

Angela Baioni
angela.baioni@pacelabs.com
Project Manager

Enclosures

cc: Chemical Testing Engineer, NCDOT
Rick Garrett, CATLIN Engineers and Scientists

REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: Parcel 185 WBS35781.1.2
Pace Project No.: 92211575

Charlotte Certification IDs
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Certification #: 99006001
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
West Virginia Certification #: 357
Virginia/VELAP Certification #: 460221

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: Parcel 185 WBS35781.1.2
Pace Project No.: 92211575

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92211575001	**185 Lift-E (8')**					
ASTM D2974-87	Percent Moisture	14.3	%	0.10	08/05/14 16:47	
92211575002	**185 Lift-W-W (8.5')**					
EPA 8015 Modified	Diesel Components	1150	mg/kg	28.9	08/07/14 23:11	
ASTM D2974-87	Percent Moisture	13.5	%	0.10	08/05/14 16:47	
92211575003	**185 Lift-W-E (8.5')**					
EPA 8015 Modified	Diesel Components	797	mg/kg	21.9	08/07/14 23:34	
ASTM D2974-87	Percent Moisture	8.7	%	0.10	08/05/14 16:47	
92211575004	**185 UST (6')**					
EPA 8015 Modified	Diesel Components	678	mg/kg	12.1	08/07/14 23:58	
EPA 8015 Modified	Gasoline Range Organics	22.0	mg/kg	6.0	08/04/14 22:25	
ASTM D2974-87	Percent Moisture	17.2	%	0.10	08/05/14 16:47	

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

ANALYTICAL RESULTS

Project: Parcel 185 WBS35781.1.2
Pace Project No.: 92211575

Sample: 185 Lift-E (8') **Lab ID: 92211575001** Collected: 07/29/14 10:30 Received: 08/01/14 09:35 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3546							
Diesel Components	ND	mg/kg	5.8	1	08/04/14 16:25	08/07/14 23:11	68334-30-5	
Surrogates								
n-Pentacosane (S)	59	%	41-119	1	08/04/14 16:25	08/07/14 23:11	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B							
Gasoline Range Organics	ND	mg/kg	5.2	1	08/05/14 15:14	08/05/14 10:54	8006-61-9	
Surrogates								
4-Bromofluorobenzene (S)	90	%	70-167	1	08/05/14 15:14	08/05/14 10:54	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**14.3**	%	0.10	1		08/05/14 16:47		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Parcel 185 WBS35781.1.2
Pace Project No.: 92211575

Sample: 185 Lift-W-W (8.5') **Lab ID: 92211575002** Collected: 07/29/14 11:00 Received: 08/01/14 09:35 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3546							
Diesel Components	**1150**	mg/kg	28.9	5	08/04/14 16:25	08/07/14 23:11	68334-30-5	
Surrogates								
n-Pentacosane (S)	0	%	41-119	5	08/04/14 16:25	08/07/14 23:11	629-99-2	S4
Gasoline Range Organics	Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B							
Gasoline Range Organics	ND	mg/kg	5.6	1	08/04/14 15:03	08/04/14 21:40	8006-61-9	
Surrogates								
4-Bromofluorobenzene (S)	87	%	70-167	1	08/04/14 15:03	08/04/14 21:40	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**13.5**	%	0.10	1		08/05/14 16:47		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Parcel 185 WBS35781.1.2
Pace Project No.: 92211575

Sample: 185 Lift-W-E (8.5') **Lab ID: 92211575003** Collected: 07/29/14 11:10 Received: 08/01/14 09:35 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3546							
Diesel Components	**797**	mg/kg	21.9	4	08/04/14 16:25	08/07/14 23:34	68334-30-5	
Surrogates								
n-Pentacosane (S)	391	%	41-119	4	08/04/14 16:25	08/07/14 23:34	629-99-2	S5
Gasoline Range Organics	Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B							
Gasoline Range Organics	ND	mg/kg	6.5	1	08/04/14 15:03	08/04/14 22:03	8006-61-9	
Surrogates								
4-Bromofluorobenzene (S)	85	%	70-167	1	08/04/14 15:03	08/04/14 22:03	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**8.7**	%	0.10	1		08/05/14 16:47		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Parcel 185 WBS35781.1.2
Pace Project No.: 92211575

Sample: 185 UST (6') **Lab ID: 92211575004** Collected: 07/29/14 15:00 Received: 08/01/14 09:35 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3546							
Diesel Components	**678**	mg/kg	12.1	2	08/04/14 16:25	08/07/14 23:58	68334-30-5	
Surrogates								
n-Pentacosane (S)	83	%	41-119	2	08/04/14 16:25	08/07/14 23:58	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B							
Gasoline Range Organics	**22.0**	mg/kg	6.0	1	08/04/14 15:03	08/04/14 22:25	8006-61-9	
Surrogates								
4-Bromofluorobenzene (S)	99	%	70-167	1	08/04/14 15:03	08/04/14 22:25	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**17.2**	%	0.10	1		08/05/14 16:47		

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Parcel 185 WBS35781.1.2
Pace Project No.: 92211575

QC Batch: GCV/8406 Analysis Method: EPA 8015 Modified
QC Batch Method: EPA 5035A/5030B Analysis Description: Gasoline Range Organics
Associated Lab Samples: 92211575002, 92211575003, 92211575004

METHOD BLANK: 1256078 Matrix: Solid
Associated Lab Samples: 92211575002, 92211575003, 92211575004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Gasoline Range Organics	mg/kg	ND	5.9	08/04/14 20:31	
4-Bromofluorobenzene (S)	%	87	70-167	08/04/14 20:31	

LABORATORY CONTROL SAMPLE: 1256079

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Gasoline Range Organics	mg/kg	49.4	47.4	96	70-165	
4-Bromofluorobenzene (S)	%			89	70-167	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Parcel 185 WBS35781.1.2
Pace Project No.: 92211575

QC Batch: GCV/8408
QC Batch Method: EPA 5035A/5030B
Analysis Method: EPA 8015 Modified
Analysis Description: Gasoline Range Organics
Associated Lab Samples: 92211575001

METHOD BLANK: 1256496 Matrix: Solid
Associated Lab Samples: 92211575001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Gasoline Range Organics	mg/kg	ND	5.9	08/05/14 10:08	
4-Bromofluorobenzene (S)	%	85	70-167	08/05/14 10:08	

LABORATORY CONTROL SAMPLE: 1256497

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Gasoline Range Organics	mg/kg	48.8	45.4	93	70-165	
4-Bromofluorobenzene (S)	%			87	70-167	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1256498 1256499

Parameter	Units	92211575001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Gasoline Range Organics	mg/kg	ND	43.3	43.3	48.4	49.3	111	113	47-187	2	
4-Bromofluorobenzene (S)	%						87	89	70-167		

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Parcel 185 WBS35781.1.2
Pace Project No.: 92211575

QC Batch: OEXT/29201 Analysis Method: EPA 8015 Modified
QC Batch Method: EPA 3546 Analysis Description: 8015 Solid GCSV
Associated Lab Samples: 92211575001, 92211575002, 92211575003, 92211575004

METHOD BLANK: 1256163 Matrix: Solid
Associated Lab Samples: 92211575001, 92211575002, 92211575003, 92211575004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diesel Components	mg/kg	ND	5.0	08/06/14 22:46	
n-Pentacosane (S)	%	71	41-119	08/06/14 22:46	

LABORATORY CONTROL SAMPLE: 1256164

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Diesel Components	mg/kg	66.7	49.7	74	49-113	
n-Pentacosane (S)	%			69	41-119	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1256165 1256166

Parameter	Units	92211575002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Diesel Components	mg/kg	1150	77.1	77.1	1130	1120	-18	-37	10-146	1	M3
n-Pentacosane (S)	%						296	365	41-119		S5

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

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

QUALITY CONTROL DATA

Project: Parcel 185 WBS35781.1.2
Pace Project No.: 92211575

QC Batch: PMST/6883 Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 92211575001, 92211575002, 92211575003, 92211575004

SAMPLE DUPLICATE: 1256450

Parameter	Units	92211549012 Result	Dup Result	RPD	Qualifiers
Percent Moisture	%	12.8	17.1	29	R1

SAMPLE DUPLICATE: 1256451

Parameter	Units	92211575004 Result	Dup Result	RPD	Qualifiers
Percent Moisture	%	17.2	16.5	4	

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

Pace Analytical Services, Inc.
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Huntersville, NC 28078
(704)875-9092

QUALIFIERS

Project: Parcel 185 WBS35781.1.2
Pace Project No.: 92211575

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

M3	Matrix spike recovery was outside laboratory control limits due to matrix interferences.
R1	RPD value was outside control limits.
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).

Pace Analytical Services, Inc.
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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Parcel 185 WBS35781.1.2
Pace Project No.: 92211575

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92211575001	**185 Lift-E (8')**	EPA 3546	OEXT/29201	EPA 8015 Modified	GCSV/18448
92211575002	**185 Lift-W-W (8.5')**	EPA 3546	OEXT/29201	EPA 8015 Modified	GCSV/18448
92211575003	**185 Lift-W-E (8.5')**	EPA 3546	OEXT/29201	EPA 8015 Modified	GCSV/18448
92211575004	**185 UST (6')**	EPA 3546	OEXT/29201	EPA 8015 Modified	GCSV/18448
92211575001	**185 Lift-E (8')**	EPA 5035A/5030B	GCV/8408	EPA 8015 Modified	GCV/8414
92211575002	**185 Lift-W-W (8.5')**	EPA 5035A/5030B	GCV/8406	EPA 8015 Modified	GCV/8409
92211575003	**185 Lift-W-E (8.5')**	EPA 5035A/5030B	GCV/8406	EPA 8015 Modified	GCV/8409
92211575004	**185 UST (6')**	EPA 5035A/5030B	GCV/8406	EPA 8015 Modified	GCV/8409
92211575001	**185 Lift-E (8')**	ASTM D2974-87	PMST/6883		
92211575002	**185 Lift-W-W (8.5')**	ASTM D2974-87	PMST/6883		
92211575003	**185 Lift-W-E (8.5')**	ASTM D2974-87	PMST/6883		
92211575004	**185 UST (6')**	ASTM D2974-87	PMST/6883		

Pace Analytical	Document Name: **Sample Condition Upon Receipt (SCUR)**	Document Revised: April 07. 2014 Page 1 of 2
	Document Number: **F-CHR-CS-003-rev.14**	Issuing Authority: Pace Huntersville Quality Office

Client Name: Catlin / NCDOT

Courier: [X] Fed Ex [ ] UPS [ ] USPS [ ] Client [ ] Commercial [ ] Pace Other_____

Custody Seal on Cooler/Box Present: [ ] yes [X] no Seals intact: [ ] yes [ ] no

Optional
Proj. Due Date:
Proj. Name:

Packing Material: [X] Bubble Wrap [X] Bubble Bags [ ] None [ ] Other_____

Thermometer Used: IR Gun T1102 (T1401) Type of Ice: (Wet) Blue None [X] Samples on ice, cooling process has begun

Temp Correction Factor T1102: No Correction T1301: No Correction

Corrected Cooler Temp.: 5.6 °C Biological Tissue is Frozen: Yes No N/A

Temp should be above freezing to 6°C

Comments:

Date and Initials of person examining contents: ans 8/1/14

Chain of Custody Present:	[X]Yes [ ]No [ ]N/A	1.
Chain of Custody Filled Out:	[X]Yes [ ]No [ ]N/A	2.
Chain of Custody Relinquished:	[X]Yes [ ]No [ ]N/A	3.
Sampler Name & Signature on COC:	[X]Yes [ ]No [ ]N/A	4.
Samples Arrived within Hold Time:	[X]Yes [ ]No [ ]N/A	5.
Short Hold Time Analysis (<72hr):	[ ]Yes [X]No [ ]N/A	6.
Rush Turn Around Time Requested:	[ ]Yes [X]No [ ]N/A	7.
Sufficient Volume:	[X]Yes [ ]No [ ]N/A	8.
Correct Containers Used:	[X]Yes [ ]No [ ]N/A	9.
-Pace Containers Used:	[X]Yes [ ]No [ ]N/A	
Containers Intact:	[X]Yes [ ]No [ ]N/A	10.
Filtered volume received for Dissolved tests	[ ]Yes [ ]No [X]N/A	11.
Sample Labels match COC:	[X]Yes [ ]No [ ]N/A	12.
-Includes date/time/ID/Analysis Matrix:_____		
All containers needing preservation have been checked.	[ ]Yes [ ]No [X]N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	[ ]Yes [ ]No [X]N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	[ ]Yes [X]No	
Samples checked for dechlorination:	[ ]Yes [ ]No [X]N/A	14.
Headspace in VOA Vials (>6mm):	[ ]Yes [ ]No [X]N/A	15.
Trip Blank Present:	[ ]Yes [ ]No [X]N/A	16.
Trip Blank Custody Seals Present	[ ]Yes [ ]No [X]N/A	
Pace Trip Blank Lot # (if purchased):_____		

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted:_____ Date/Time:_____

Comments/ Resolution:_____

SCURF Review:	AMB	Date:	8-1-14
SRF Review:	JDB	Date:	8/2/14

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

Place label here

WO# : 92211575

92211575

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 1

1657245

Section A Required Client Information:

Company: CATLIN/NCDOT
Address: 220 Old Dairy Rd. Wilmington, NC 28405
Email To: benashba@catlinusa.com
Phone: 910-452-5861 Fax: 910-452-7563
Requested Due Date/TAT: STANDARD

Section B Required Project Information:

Report To: Ben Ashba @ CATLIN
Copy To: Gordon Box @ NCDOT
WBS: 35781.1.2 Pitt County
Purchase Order No.: State U-3315
Project Name: NCDOT Greenville Parcel 185
Project Number: 23161.4

Section C Invoice Information:

Attention: Geo Enviro
Company Name: NCDOT
Address:
Pace Quote Reference: NCDOT
Pace Project Manager: Angela
Pace Profile #: 5838-2

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☒ UST ☐ RCRA ☐ OTHER

Site Location STATE: NC

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Matrix Codes — MATRIX / CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Tissue TS; Other OT

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	TPH GRO	TPH DRO	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	185 Lift-E (8')	SL	G			7-29-14	1030		4	2						2			Y	Y		9271575 001
2	185 Lift-W-W (8.5')						1100															002
3	185 Lift-W-E (8.5')						1110															003
4	185 UST (6')						1500															004
5																						
6																						
7																						
8																						
9																						
10																						
11																						
12																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Ben Ashba/CATLIN agent for NCDOT	7.31.14	1520	J. Dixon / Pace	7-31-14	1520				
				Wayne Armstrong Pace	8/1/14	0935	5.6	Y	N	Y

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Ben Ashba
SIGNATURE of SAMPLER: Ben Ashba
DATE Signed (MM/DD/YY): 07/31/14

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.