PYRAMID
ENVIRONMENTAL & ENGINEERING, P.C.

September 18, 2024

Mr. Craig Haden
North Carolina Department of Transportation
1589 Mail Service Center
Raleigh, NC 27699-1589

Subject: **UST Closure Services – U-5797 Parcel 009**
Owner: Former Christopher & Karen Floyd
2303 Pine Street, Lumberton, NC

Mr. Haden,

Pyramid has completed the excavation and removal of two underground storage tanks (USTs) at the above-referenced property, in accordance with our technical and cost proposal submitted to the North Carolina Department of Transportation (NCDOT) on July 8, 2024. The tank removal was supervised by Pyramid geologist Tim Leatherman, and the excavation activities were performed by CCI Environmental Services (CCI).

Prior to the tank removal, Pyramid geophysical staff mobilized to the site and located the two USTs using a combination of an EM61 electromagnetic metal detection instrument and ground penetrating radar. This instrumentation was also used to locate and mark any buried utilities within the immediate vicinity of the tanks. The USTs were marked in the field with a combination of paint and pin flags.

Tim Leatherman and CCI mobilized to the site and began the UST excavations on August 27, 2024. It should be noted that Tim Leatherman corresponded with the Town of Lumberton Fire Marshall prior to mobilization, who indicated that records existed stating the tanks had been closed in place with slurry in 1989. The excavation of the two USTs confirmed that the tanks were abandoned in place with a slurry-sand mixture. Discussions between the NCDEQ and the NCDOT project manager Craig Haden indicated that since the tanks had been closed in place, no closure samples were needed. Pyramid sent two disposal samples to RED Labs for analysis of diesel-range organics and gasoline-range organics (DRO and GRO). The results indicated that the soils exceeded action levels for both parameters.

The tanks were successfully removed on August 28, 2024. Upon excavation, it was determined that the volumes of the two tanks were 1,000 gallons and 550 gallons. A total of 25.83 tons of soil was removed during the excavation, in accordance with the soil disposal manifest completed by CCI. Pyramid contracted Froehling and Robertson to

P.O. Box 16265 • Greensboro, NC 27416
503 Industrial Ave • Greensboro, NC 27406
Phone (336)335-3174 • Fax (336)691-0648 • Toll Free (866)545-9507
Email: Info@pyramidenvironmental.com
www.pyramidenvironmental.com

perform compaction testing to T-99 or equivalent, which was also completed on August 28, 2024.

The following Attachments are included to document the UST closure activities:

- UST Removal Notification Form (UST-3 Form)
- City of Lumberton UST Removal Permit
- UST Location Map (From Pyramid Geophysical Report, April 2019)
- Photographs of Tank Removal and Compaction
- Soil Disposal Manifest and Weight Ticket
- Soil Disposal Lab Results/Report
- UST-61 24-Hour Notice

Thank you for the opportunity to work with the NCDOT on this project, please do not hesitate to contact us with any questions or comments.

Warm regards,

DocuSigned by:
Eric Cross
3292E33596454F4...

Eric Cross, P.G.
Senior Project Manager

Attachment A

UST-3 Permanent Closure or Change-in-Service

Return completed form to:
The DWM Regional Office located in the area where the facility is located. Also send a copy to the Central Office in Raleigh.
SEE MAP ON THE BACK OF THIS FORM FOR THE CENTRAL AND REGIONAL OFFICE ADDRESSES.

STATE USE ONLY
I.D. #_____
Date Received_____

INSTRUCTIONS (READ THIS FIRST)

Complete and return a UST-3 form at least **thirty (30) days** prior to closure or change-in-service activities.

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

UST closure and change-in-service site assessments must be completed in accordance with the latest version of the *Guidelines for Site Checks, Tank Closure and Initial Response*. The guidelines can be obtained at https://deq.nc.gov/about/divisions/waste-management/ust. Note: To close tanks in place you must obtain prior approval from the DWM Regional office located in the region where the facility is located.

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

I. OWNERSHIP OF TANKS

Owner Name (Corporation, Individual, Public Agency, or Other Entity) Former Christopher & Karen Floyd		
Street Address 108 King Arthur Drive		
City Wilmington	County New Hanover	
State NC	Zip Code 28403	
Phone Number	Email	

II. LOCATION

Facility Name or Company Orphaned UST System - Tanks		
Facility ID # (If known) Orphaned UST System - Tanks		
Street Address 2303 Pine Street		
City Lumberton	County Robeson	Zip Code 28358
Phone Number		

III. CONTACT PERSONNEL

Name:	Company Name:	Job Title:	Phone Number:
Craig Haden	NCDOT	Project Manager	919.707.6871

IV. TANK REMOVAL, CLOSURE IN PLACE, CHANGE-IN SERVICE

1. Contact local fire marshal.
2. Plan entire closure event.
3. Conduct Site Soil Assessment.
4. If removing tanks or closing in place, refer to API Publication 2015 *Cleaning Petroleum Storage Tanks* and 1604 *Removal and Disposal of Used Underground Petroleum Storage Tanks.*
5. Provide a sketch locating piping, tanks and soil sampling locations.
6. Submit a closure report in the format of UST-12 (including the form UST-2) within thirty (30) days following the site investigation.
7. If a release from the tanks 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. If a release has not occurred, the supervision, signature or seal of a P.E. or L.G. is not required.
8. Keep closure records for three (3) years.

V. WORK TO BE PERFORMED BY

Contractor Name: Jason Jomp	Contractor Company Name: CCI			
Address: 708 Martin Luther King, Jr. Drive	City: Thomasville	State: NC	Zip Code: 27360	Phone No: 910.759.1842
Primary Consultant Name: Michael G. Jones, P.G.	Primary Consultant Company Name: Pyramid Environmental & Engineering		Consultant Phone No: 336.335.3174	

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

Tank ID No.	Size in Gallons	Last Contents	Proposed Activity: Closure – Removal	Proposed Activity: Closure – Abandonment in Place *	Proposed Activity: Change-In-Service – New Contents Stored
1	1000	Gasoline, Gas Mix	☒	☐	
2	2000	Gasoline, Gas Mix	☒	☐	
			☐	☐	
			☐	☐	
			☐	☐	

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

VII. OWNER OR OWNER'S AUTHORIZED REPRESENTATIVE

Has a release from a UST system occurred at this location? ☐ Yes ☐ No ☒ Unknown

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

Print name and official title: Timothy D. Leatherman, P.G.

Signature	Date Signed	SCHEDULED REMOVAL DATE	**Notify your DWM Regional Office 48 hours before this date if scheduled removal date changes**
Timothy D. Leatherman	07/19/2024	08/27 & 28/2024	

Attachment B

CITY OF LUMBERTON

500 N CEDAR ST
LUMBERTON NC 28358
910-671-3838

FIRE PERMIT

F-24-241059

Permission is hereby granted for work as listed below. All work shall conform to the current version of the IBC and all other applicable state and local laws.

Date Issued: 7/31/2024
Issued To: CONTAMINANT CONTR

Location: 2303 N PINE ST
Zoned As:

Subdivision:
Legal:

Parcel ID:

Lessee:

Owner Name: NC DOT ROW
PH:

Address:

City ST Zip

Contractor: CONTAMINANT CONTROL INC
PH:

Address: 708 MARTIN LUTHER KING JR DR

City ST Zip: THOMASVILLE, NC 27360

Description of Work: REMOVE TWO UNDERGROUND TANKS 2000 GALLON,1000 GALLON

Remarks:

Value of Improvement: 0

Paid By:	Cash	Check	Credit Card	Fee Paid
				.00

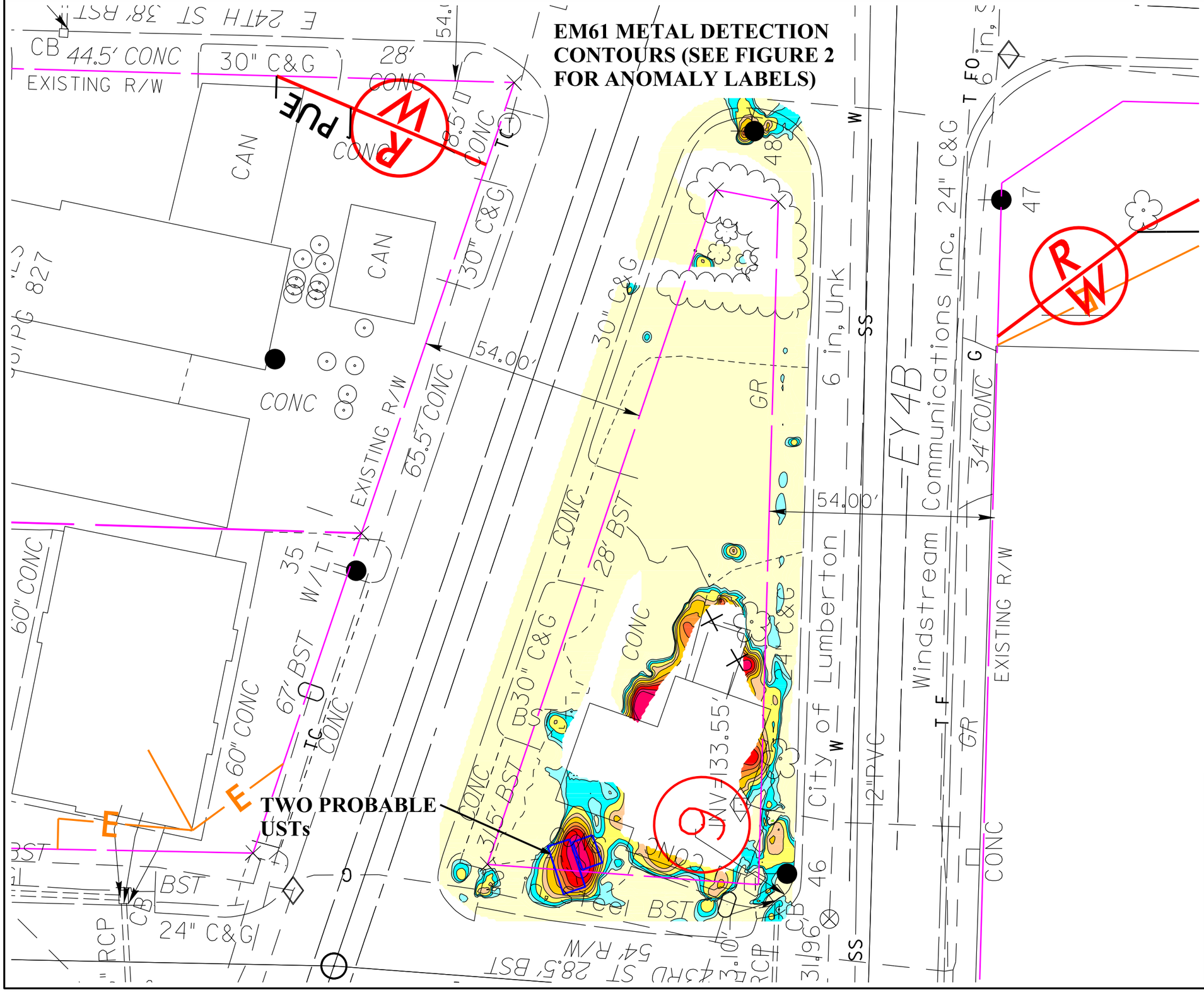
Applicant: _____ **Issued By:** _____

BUILDING OFFICIAL

All holders of permit, or their agents shall notify the Inspection Department at the appropriate stage of construction so that approval may be given before work is continued.

Attachment C

EM61 METAL DETECTION CONTOURS (SEE FIGURE 2 FOR ANOMALY LABELS)



LEGEND

- EXISTING ROW
- EXISTING PROPERTY BOUNDARY
- PROPOSED ROW LINE
- E — TEMPORARY CONSTRUCTION EASEMENT
- PUE — PROPOSED PERMANENT UTILITY EASEMENT
- PROPOSED SS CUT LINE
- PROPOSED SS FILL LINE
- PROBABLE UST

MILLIVOLTS (mV)

1000 750 500 400 300 200 150 100 75 60 50 40 30 -90 -100 -200 -400 -5000

0 15 30
FEET

N

TITLE: OVERLAY OF METAL DETECTION RESULTS AND TWO PROBABLE USTs ON NCDOT ENGINEERING PLANS

PROJECT: PARCEL 009
LUMBERTON, NORTH CAROLINA
NCDOT PROJECT U-5797

PYRAMID GEOPHYSICS
503 INDUSTRIAL AVENUE
GREENSBORO, NC 27406
336.335.3174 (p) 336.691.0648 (f)
License # C1251 Eng. / #C257 Geology

DATE: 04-11-2019	REVISION NO. 0
PYRAMID PROJECT NO. 2019-091	FIGURE NO. 5

Attachment D

Attachment E

Load #1
08/27/24
Job# 29417
TK# 6006

Carolina Composting of NC
Post Office Box 99
China Grove, NC 28023
Phone #: 704-218-9653
Email: office@carolinacomposting.org

Tim F Holder

NON-HAZARDOUS WASTE MANIFEST

Project Number: 2024-214 NCDOT U-5797	Load Number: #1
Consultant: Pyramid Environmental & Engineering, P.C.	Contact: Tim Leatherman, Agent for NCDOT
Generator: NCDOT	Contact: Craig Haden, NCDOT Phone (919) 707-6867
Transporter: CCI - Environmental - Thomasville NC	Contact: Phone :
Destination: Carolina Composting of NC 6483-/6425 NC-109 Wadesboro, NC 28170	Contact: Frankie Holder/Joseph Solomon Phone: 919-777-4405 or 704-218-9623
Waste: Petroleum Contaminated Soil	*Waste Origination:* 2303 N. Pine Street Lumberton NC
Truck #: 6006	*Gross Weight:* 12:42Pm 08/27/2024 13 ID. NO. 83320 lb GR
	Tare Weight: 31660 lb TR RECAL
	Net Weight: 51660 lb NT
	Tons: 25.83 Ton

Generator's Certification: I certify that the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of HAZARDOUS WASTE.

NCDOT / Timothy C. Leatherman — Project Manager — 08/27/24
Generator / Agent Signature — Title — Date

Acknowledgment of Receipt of Material: — 08/27/24
Drivers Signature — Date

Noted Discrepancies: _____

Inspected & Accepted (except as noted above by: Carolina Composting of NC)

Accepted By: Frankie Holder Date: 8-27-24

Attachment F

QED REDLAB RAPID ENVIRONMENTAL DIAGNOSTICS QROS

Hydrocarbon Analysis Results

Client: Pyramid Environmental
Address: 503 Industrial Ave Greensboro, NC

Samples taken Tuesday, August 27, 2024
Samples extracted Tuesday, August 27, 2024
Samples analysed Wednesday, August 28, 2024

Contact: Tim Leatherman

Operator Coby Clayton

Project: NCDOT U-5797

T03308

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
										% light	% mid	% heavy	
s	DS1	16.9	5.6	196.2	720.8	917	44.5	1.7	<0.017	98.4	1.5	0.1	Deg.Kerosene 83.1%,(FCM)
s	DS2	20.0	<0.5	51	<0.5	51	6.7	0.26	<0.02	99.6	0.4	0	Deg.Gas 90.8%,(FCM)

Initial Calibrator QC check OK Final FCM QC Check OK 92 %

Results generated by a QED HC-1 analyser. Concentration values in mg/kg for soil samples and mg/L for water samples. Soil values are not corrected for moisture or stone content

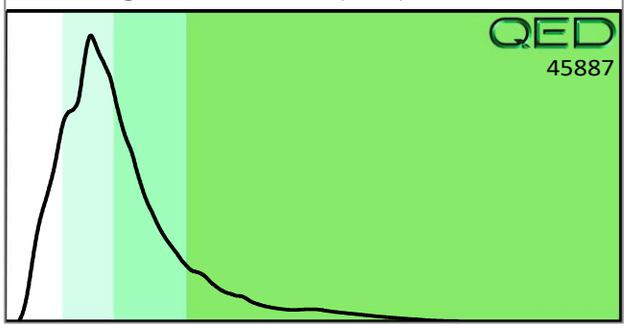
Fingerprints provide a tentative hydrocarbon identification. The abbreviations are:- FCM = Results calculated using Fundamental Calibration Mode : % = confidence for sample fingerprint match to library

(SBS) or (LBS) = Site Specific or Library Background Subtraction applied to result : (PFM) = Poor Fingerprint Match : (T) = Turbid : (P) = Particulate present

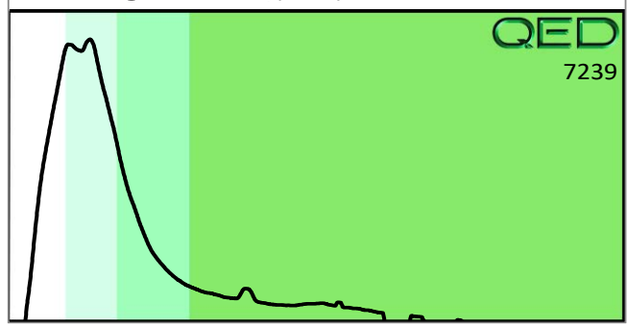
QED Hydrocarbon Fingerprints

Project: ##################

DS1 : Deg.Kerosene 83.1%,(FCM)



DS2 : Deg.Gas 90.8%,(FCM)



Client Name:	Pyramid Environmental
Address:	503 Industrial Ave Greensboro NC 27406
Contact:	Tim Leatherman
Project Ref.:	NCDOT U-5797
Email:	tim@pyramidenvironmental.com
Phone #	(336) 335-3174
Collected by:	

REDLAB™
RAPID ENVIRONMENTAL DIAGNOSTICS

CHAIN OF CUSTODY AND ANALYTICAL REQUEST FORM

RED Lab, LLC
105 Portwatch Way
Suite F
Wilmington, NC 28412

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					
8/27/24/9:30		X	X		TDL	DS1	40.2	32.5	7.7
8/27/24/10:00		X	X		TDL	DS1T	39.0	32.5	6.5

COMMENTS/REQUESTS:

TARGET GC/UVF ANALYTES:

Relinquished by	Accepted by	Date/Time
Timothy D. Leatherman	MM 8/27/24	1745
Relinquished by	Accepted by	Date/Time

RED Lab USE ONLY

Ref. No 2

Attachment G

UST-61 — 24-Hour Release and UST Leak Reporting Form.

For Releases in NC

This form should be completed and submitted to the UST Section's regional office following a known or suspected release from an underground storage tank (UST) system. This form is required to be submitted within 24 hours of discovery of a known or suspected release

(DWM USE ONLY)
Incident # _____ Risk (H,I,L,U)_____
Received On _____ Received By _____
Reported by (*circle one*): Phone, Fax or Report
Region _____

Suspected Contamination? (Y/N) No
Confirmed GW Contamination? (Y/N) No
Confirmed Soil Contamination ?(Y/N) Y
Samples Taken?(Y/N) Y
Free Product? (Y/N) N/A If Yes, State Greatest Thickness N/A

Facility ID Number Orphaned Tanks
Date Leak Discovered 8/28/2024
Comm/Non-Commercial? Non
Reg/Non-regulated? Non

INCIDENT DESCRIPTION

Incident Name: (1896 - 1970)

Address: 2303 N. Pine Street | County: Robeson

City/Town: Lumberton, NC | Zip Code: 28358 | Regional Office (*circle one*): Asheville, Mooresville, (Fayetteville), Raleigh, Washington, Wilmington, Winston-Salem

Latitude (decimal degrees): 34.633458 N Longitude (decimal degrees) : - 79.003340 W

Obtained by:
- [x] GPS
- [ ] Topographic map
- [ ] GIS Address matching
- [ ] Other
- [ ] Unknown

Describe location: Google Maps

Briefly describe suspected or confirmed release: *(including but not limited to: nature of release, date of release, amount of release, amount of free product present and recovery efforts, initial responses conducted, impacts to receptors)*

According to the Fire Marshall the 1,000-gallon & 550-gallon UST were abandoned in-place with slurry in 1989. During the UST removals, the tanks were full of slurry - sand mixture. Petroleum odor was observed in the soil around and below the tanks. The excavated soil and sand material in the tanks were transported off-site for proper disposal (25.83 tons). Laboratory results of the excavated material detected concentrations above NCAC Action Levels for GRO and DRO.

HOW RELEASE WAS DISCOVERED (Release Code)

(Check one)

- [ ] Release Detection Equipment or Methods
- [x] During UST Closure/Removal
- [ ] Property Transfer
- [x] Visual/Odor
- [ ] Water in Tank
- [ ] Water Supply Well Contamination
- [ ] Groundwater Contamination
- [ ] Surface Water Contamination
- [ ] Other (specify) _____

SOURCE OF CONTAMINATION

Source of Release *(Check one to indicate primary source)*
- [x] Tank
- [ ] Piping
- [ ] Dispenser
- [ ] Submersible Turbine Pump
- [ ] Delivery Problem
- [ ] Other
- [ ] Unknown

Definitions presented on reverse

Cause of Release *(Check one to indicate primary cause)*
- [ ] Spill
- [ ] Overfill
- [ ] Corrosion
- [ ] Physical or Mechanical Damage
- [ ] Install Problem
- [ ] Other
- [x] Unknown

Definitions presented on reverse

Type of Release *(Check one)*
- [x] Petroleum
- [ ] Non-Petroleum
- [ ] Both

Location *(Check one)*
- [x] Facility
- [ ] Residence
- [ ] Other

Product Type Released *(Check one to indicate primary product type released)*
- [x] Gasoline/ Diesel/ Kerosene
- [ ] Heating Oil
- [ ] Other Petroleum Products
- [ ] Metals
- [ ] Other Inorganics
- [ ] Other Organics
- [ ] Diesel/Veg. Oil Blend
- [ ] Vegetable Oil 100%
- [ ] E10 – E20
- [ ] E21 – E84
- [ ] E85 – E99
- [ ] Ethanol 100%
- [ ] E01 – E09

Ownership
1. Municipal 2. Military (3. Unknown) 4. Private 5. Federal 6. County 7. State

Operation Type
1. Public Service 2. Agricultural 3. Residential 4. Education/Relig. 5. Industrial (6. Commercial) 7. Mining

IMPACT ON DRINKING WATER SUPPLIES

Water Supply Wells Affected? 1. Yes (2. No) 3. Unknown

Number of Water Supply Wells Affected _____

Water Supply Wells Contaminated: (*Include Users Names, Addresses and Phone Numbers. Attach additional sheet if necessary*)

1.
2.
3.

UST SYSTEM OWNER

UST Owner/Company			
Orphaned UST System - Tanks / Former Property Owner - Christopher & Karen Floyd			
Point of Contact		Address	
Tanks abandoned In-Place with Slurry in 1989		108 King Arthur Drive	
City	State	Zip Code	Telephone Number
Wilmington	NC	28403	

UST SYSTEM OPERATOR

UST Operator/Company		Address	
Orphaned UST System - Tanks			
City	State	Zip Code	Telephone Number

LANDOWNER AT LOCATION OF UST INCIDENT

Landowner		Address	
Former Christopher & Karen Floyd - Current NCDOT		108 King Srthur Dr.	
City	State	Zip Code	Telephone Number
Wilmington	NC	28403	

Draw Sketch of Area (showing two major road intersections) or Attach Map

Person Reporting Incident	Tim Leatherman	Company	Pyramid Environmental & Engineering, P.C.	Telephone Number	336-335-3174
Title	Project Manager	Address	503 Industrial Avenue, Greensboro, NC	Date	08/30/2024

Definitions of Sources

Tank: means the tank that stores the product and is part of the underground storage tank system

Piping: means the piping and connectors running from the tank or submersible turbine pump to the dispenser or other end-use equipment (Vent, vapor recovery, or fill lines are excluded.)

Dispenser: includes the dispenser and the equipment used to connect the dispenser to the piping (e.g., a release from a suction pump or from components located above the shear valve)

Submersible Turbine Pump (STP) Area includes the submersible turbine pump head (typically located in the tank sump), the line leak detector, and the piping that connects the submersible turbine pump to the tank

Delivery Problem: identifies releases that occurred during product delivery to the tank. (Typical causes associated with this source are spills and overfills.)

Other: serves as the option to use when the release source is known but does not fit into one of the preceding categories (e.g., for releases from vent lines, vapor recovery lines, and fill lines)

Unknown: identifies releases for which the source has not been determined

Definitions of Causes

Spill: use this cause when a spill occurs (e.g., when the delivery hose is disconnected from the tank fill pipe or when the nozzle is removed from the dispenser)

Overfill: use when an overfill occurs (e.g., overfills may occur from the fill pipe at the tank or when the nozzle fails to shut off at the dispenser)

Physical or Mechanical Damage: use for all types of physical or mechanical damage, except corrosion (e.g., puncture of tank or piping, loose fittings, broken components, and components that have changed dimension)

Corrosion: use when a metal tank, piping, or other component has a release due to corrosion (e.g., for steel, corrosion takes the form of rust)

Installation Problem: use when the problem is determined to have occurred specifically because the UST system was not installed properly

Other: use this option when the cause is known but does not fit into one of the preceding categories (e.g., putting regulated substances into monitoring wells)

Unknown: use when the cause has not been determined