"Setting the Standard for Service"

NC Registered Engineering Firm F-1078 NC Registered Geologists Firm C-406 SC Registered Engineering Firm 3239

November 14, 2017

MEMORANDUM TO: Mr. Joel Setzer

FROM: John Stewart, L.G.

ECS Chief Geologist

TIP NO: R-5863 WBS: 47140.1.1 COUNTY: Clay DIVISION 14

DESCRIPTION: US 64 Business from US Highway 64 to Main Street

ECS PROJECT NO. 49-5447

SUBJECT: GeoEnvironmental Report for Planning

ECS Southeast, LLP (ECS) has completed the GeoEnvironmental Report for Planning. This report has the following components and is transmitted as:

<u>X</u> Hazardous Materials Report (6) pages

Please contact me if you have any questions concerning this project.

Hazardous Materials Report

ECS has investigated the above referenced project to identify hazardous material sites for inclusion in the environmental document.

HAZARDOUS MATERIALS EVALUATION

Purpose

This section presents the results of a hazardous material evaluation conducted along the above referenced project. The main purpose of this investigation is to identify properties within the project study area that are or may be contaminated and therefore result in increased project costs and future liability if acquired by the Department. Hazardous material impacts may include, but are not limited to, active and abandoned underground storage tank (UST) sites, hazardous waste sites, regulated landfills and unregulated dumpsites.

Techniques/Methodologies

The Geographical Information System (GIS) was consulted to identify known sites of concern in relation to the project corridor. ECS personnel conducted a field reconnaissance along the above mentioned project on 11/6/2017. A search of appropriate environmental agencies' databases and historical aerial photographs was performed to assist in evaluating sites identified during this study.

Findings

UST Facilities

No petroleum sites were identified within the project limits. Note: US 64 Business is bordered on both sides of the road with residences. Many of these properties may contain heating oil USTs; however, they may not have had a release, or the release may not have been reported or detected. The USTs, if present, are generally located adjacent to the house and could not be seen from the road. They are not expected to impact the project unless a property is fully taken.

Hazardous Waste Sites

No apparent hazardous waste sites were identified within the project limits.

Landfills

No apparent landfills were identified within the project limits.

Other GeoEnvironmental Concerns

No geoenvironmental concerns were identified within the project limits.

Anticipated Impacts

Two potential sites were identified within the proposed project limits. We anticipate low monetary and scheduling impacts resulting from these sites. (See the following table and appendices for details)

Known and Potential Hazardous Material Sites

1) **Property Name:**

Wood Automotive 1160 US 64 Business Hayesville, NC 28904 **Property Owner:**

Dora Belcher 150 Hiawassee Street Hayesville, NC 28904



This automotive repair facility and wrecker service is located on the eastern side of US 64 Business. This parcel does not appear on the UST Section Registry nor are any incidents associated with this location. There is no evidence of USTs or UST removals. **This site is anticipated to present low geoenvironmental impacts to the project.**

2) **Property Name:**

B&T Marine 1088 US 64 Business Hayesville, NC 28904

Property Owner:

B&T Supermarket, Inc. c/o Robert Tiger, Jr. 53 Riverside Drive Hayesville, NC 28904

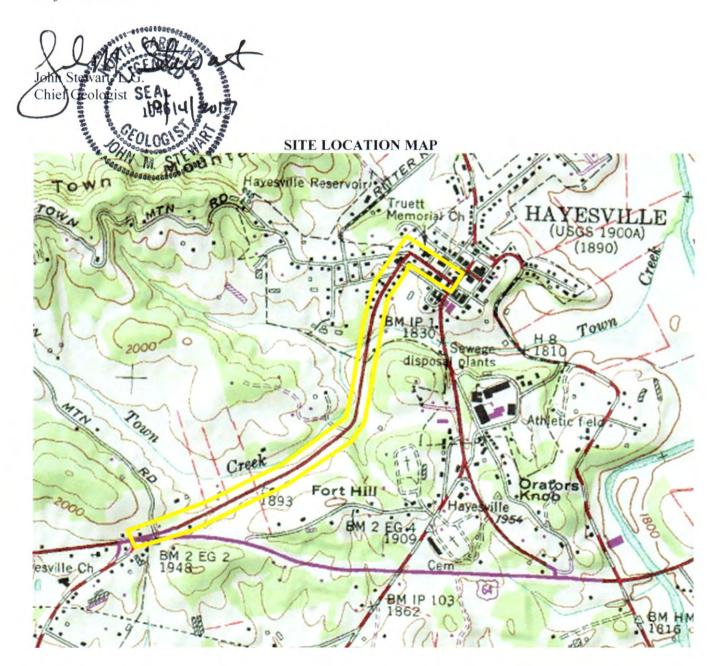


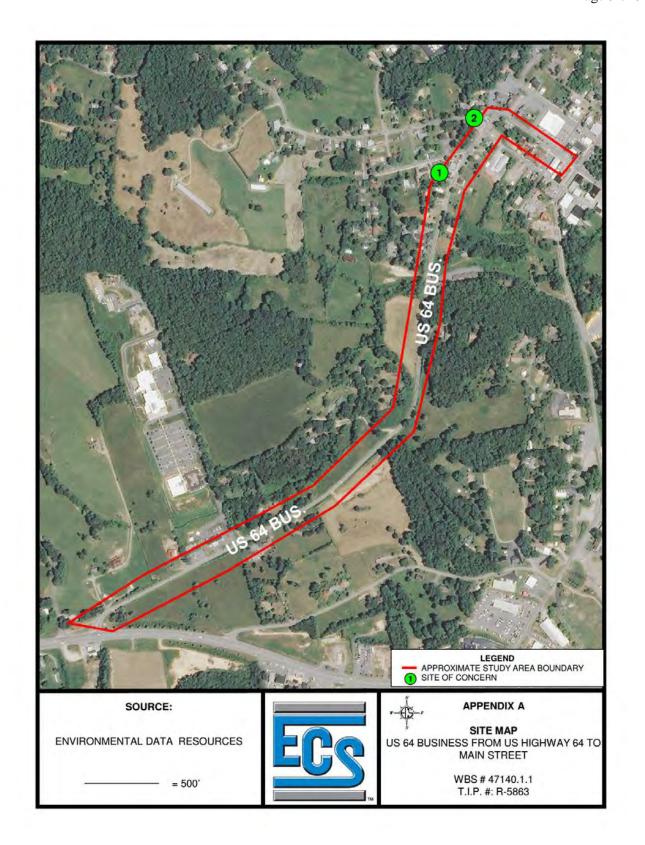
This marine repair and sales facility is located on the eastern side of US 64 Business. This parcel does not appear on the UST Section Registry nor are any incidents associated with this location. There is no evidence of USTs or UST removals. This site is anticipated to present low geoenvironmental impacts to the project.

Please note that discovery of additional sites not recorded by regulatory agencies and not reasonably discernible during the project reconnaissance may occur. The GeoEnvironmental Section should be notified immediately after discovery of such sites so their potential impact(s) may be assessed.

If there are questions regarding the geoenvironmental issues, please contact John Stewart at 336-856-7150.

Ashley Barham Project Scientist





NCDOT R-5863

Highway 64 Business Hayesville, NC 28904

Inquiry Number: 5086450.2s

October 24, 2017

The EDR Radius Map™ Report



6 Armstrong Road, 4th floor Shelton, CT 06484 Toll Free: 800.352.0050 www.edrnet.com

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GEOCHECK ADDENDUM	

GeoCheck - Not Requested

Thank you for your business. Please contact EDR at 1-800-352-0050 with any questions or comments.

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A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

HIGHWAY 64 BUSINESS HAYESVILLE, NC 28904

COORDINATES

Latitude (North): 35.0399700 - 35° 2' 23.89" Longitude (West): 83.8235920 - 83° 49' 24.93"

Universal Tranverse Mercator: Zone 17 UTM X (Meters): 242426.1 UTM Y (Meters): 3880923.8

Elevation: 1866 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 5946649 HAYESVILLE, NC

Version Date: 2013

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 20141019 Source: USDA

MAPPED SITES SUMMARY

Target Property Address: HIGHWAY 64 BUSINESS HAYESVILLE, NC 28904

Click on Map ID to see full detail.

MAP				RELATIVE	DIST (ft. & mi.)
ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	ELEVATION	DIRECTION
1	THE VILLAGE STATION	ON THE SQUARE	LUST, UST, IMD	Higher	204, 0.039, NE
2	NC DOT 1441 (DIV FOU	225 TUSQUITTEE STREE	LUST, UST	Lower	955, 0.181, NNE
3	JOHN MCCUNE'S GARAGE	285 - HIGHWAY 64 WES	UST	Higher	1048, 0.198, SSW
A4	CLAY CO SCH BUS GARA	9 SCHOOL DRIVE	UST	Lower	1115, 0.211, ENE
A5	CLAY COUNTY SCHOOL B	SCHOOL DRIVE	LUST, LUST TRUST, IMD	Lower	1125, 0.213, ENE
6	CLAY CO. NCDOT	TUSQUITTEE STREET	LUST TRUST, IMD	Lower	1154, 0.219, NNE
7	BY-PASS TEXACO	RR 2 BOX 54 C	LUST, IMD	Higher	1382, 0.262, South

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL s	ite li	st
---------------	--------	----

NPL	National Priority List
Proposed NPL	Proposed National Priority List Sites
NPL LIENS	Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL...... National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY	Federal Facility Site Information listing
SEMS	Superfund Enterprise Management System

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE..... Superfund Enterprise Management System Archive

Federal RCRA CORRACTS facilities list

CORRACTS..... Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG	RCRA - Large Quantity Generators
RCRA-SQG	RCRA - Small Quantity Generators
RCRA-CESQG	RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

LUCIS	Land Use Control Information System
US ENG CONTROLS	Engineering Controls Sites List

US INST CONTROL...... Sites with Institutional Controls

Federal ERNS list

ERNS..... Emergency Response Notification System

State- and tribal - equivalent NPL

NC HSDS..... Hazardous Substance Disposal Site

State- and tribal - equivalent CERCLIS

SHWS..... Inactive Hazardous Sites Inventory

State and tribal landfill and/or solid waste disposal site lists

SWF/LF..... List of Solid Waste Facilities OLI...... Old Landfill Inventory

State and tribal leaking storage tank lists

LAST..... Leaking Aboveground Storage Tanks

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

FEMA UST..... Underground Storage Tank Listing

AST_____ AST Database

INDIAN UST..... Underground Storage Tanks on Indian Land

State and tribal institutional control / engineering control registries

INST CONTROL...... No Further Action Sites With Land Use Restrictions Monitoring

State and tribal voluntary cleanup sites

INDIAN VCP..... Voluntary Cleanup Priority Listing

VCP......Responsible Party Voluntary Action Sites

State and tribal Brownfields sites

BROWNFIELDS..... Brownfields Projects Inventory

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

HIST LF..... Solid Waste Facility Listing SWRCY...... Recycling Center Listing

INDIAN ODI...... Report on the Status of Open Dumps on Indian Lands

DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL..... Delisted National Clandestine Laboratory Register US CDL...... National Clandestine Laboratory Register

Local Land Records

LIENS 2..... CERCLA Lien Information

Records of Emergency Release Reports

HMIRS..... Hazardous Materials Information Reporting System

SPILLS...... Spills Incident Listing

SPILLS 90. SPILLS 90 data from FirstSearch SPILLS 80. SPILLS 80 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR...... RCRA - Non Generators / No Longer Regulated

FUDS Formerly Used Defense Sites DOD Department of Defense Sites

SCRD DRYCLEANERS...... State Coalition for Remediation of Drycleaners Listing

US FIN ASSUR_____ Financial Assurance Information

EPA WATCH LIST..... EPA WATCH LIST

TSCA...... Toxic Substances Control Act

TRIS...... Toxic Chemical Release Inventory System

RAATS...... RCRA Administrative Action Tracking System

ICIS...... Integrated Compliance Information System

FTTS......FIFŘA/ TSCA Tracking System - FIFŘA (Federal Insecticide, Fungicide, & Rodenticide

Act)/TSCA (Toxic Substances Control Act)

COAL ASH EPA..... Coal Combustion Residues Surface Impoundments List

PCB TRANSFORMER...... PCB Transformer Registration Database

RADINFO...... Radiation Information Database

HIST FTTS..... FIFRA/TSCA Tracking System Administrative Case Listing

DOT OPS..... Incident and Accident Data

CONSENT...... Superfund (CERCLA) Consent Decrees

INDIAN RESERV.....Indian Reservations

FUSRAP..... Formerly Utilized Sites Remedial Action Program

UMTRA..... Uranium Mill Tailings Sites

LEAD SMELTERS..... Lead Smelter Sites

US AIRS..... Aerometric Information Retrieval System Facility Subsystem

US MINES...... Mines Master Index File

ABANDONED MINES..... Abandoned Mines

FINDS..... Facility Index System/Facility Registry System

UXO..... Unexploded Ordnance Sites

DOCKET HWC..... Hazardous Waste Compliance Docket Listing ECHO..... Enforcement & Compliance History Information

FUELS PROGRAM..... EPA Fuels Program Registered Listing

COAL ASH..... Coal Ash Disposal Sites

DRYCLEANERS..... Drycleaning Sites

Financial Assurance Financial Assurance Information Listing NPDES NPDES Facility Location Listing UIC Underground Injection Wells Listing

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP...... EDR Proprietary Manufactured Gas Plants
EDR Hist Auto..... EDR Exclusive Historic Auto Stations
EDR Hist Cleaner.... EDR Exclusive Historic Dry Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in **bold italics** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

State and tribal leaking storage tank lists

LUST: The Leaking Underground Storage Tank Incidents Management Database contains an inventory of reported leaking underground storage tank incidents. The data come from the Department of Environment, & Natural Resources' Incidents by Address.

A review of the LUST list, as provided by EDR, and dated 08/04/2017 has revealed that there are 4 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
THE VILLAGE STATION Incident Phase: Closed Out Incident Number: 9767 Current Status: File Located in Archives	ON THE SQUARE	NE 0 - 1/8 (0.039 mi.)	1	8
BY-PASS TEXACO Incident Phase: Closed Out Incident Number: 18285 Current Status: File Located in Archives	RR 2 BOX 54 C	S 1/4 - 1/2 (0.262 mi.)	7	26
Lower Elevation	Address	Direction / Distance	Map ID	Page
NC DOT 1441 (DIV FOU Incident Phase: Closed Out Incident Number: 5056 Current Status: File Located in Archives	225 TUSQUITTEE STREE	NNE 1/8 - 1/4 (0.181 mi.)	2	12
CLAY COUNTY SCHOOL B Incident Phase: Response Incident Number: 20470	SCHOOL DRIVE	ENE 1/8 - 1/4 (0.213 mi.)	A5	22

LUST TRUST: This database contains information about claims against the State Trust Funds for reimbursements for expenses incurred while remediating Leaking USTs.

A review of the LUST TRUST list, as provided by EDR, and dated 10/09/2017 has revealed that there are 2 LUST TRUST sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
CLAY COUNTY SCHOOL B Facility Id: 0-012263 Site ID: 20470	SCHOOL DRIVE	ENE 1/8 - 1/4 (0.213 mi.)	A5	22
CLAY CO. NCDOT Facility Id: 0-031492 Site ID: 5056	TUSQUITTEE STREET	NNE 1/8 - 1/4 (0.219 mi.)	6	25

State and tribal registered storage tank lists

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of Environment & Natural Resources' Petroleum Underground Storage Tank Database.

A review of the UST list, as provided by EDR, and dated 10/06/2017 has revealed that there are 4 UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
THE VILLAGE STATION Tank Status: Removed Facility Id: 00-0-000012474	ON THE SQUARE	NE 0 - 1/8 (0.039 mi.)	1	8
JOHN MCCUNE'S GARAGE	285 - HIGHWAY 64 WES	SSW 1/8 - 1/4 (0.198 mi.)	3	17

Tank Status: Removed Facility Id: 00-0-000028046

Lower Elevation	Address	Direction / Distance	Map ID	Page
NC DOT 1441 (DIV FOU Tank Status: Current Tank Status: Removed Facility Id: 00-0-0000031492	225 TUSQUITTEE STREE	NNE 1/8 - 1/4 (0.181 mi.)	2	12
CLAY CO SCH BUS GARA Tank Status: Current Tank Status: Temporarily Closed Facility Id: 00-0-0000012263	9 SCHOOL DRIVE	ENE 1/8 - 1/4 (0.211 mi.)	A4	19

ADDITIONAL ENVIRONMENTAL RECORDS

Records of Emergency Release Reports

IMD: Incident Management Database.

A review of the IMD list, as provided by EDR, and dated 07/21/2006 has revealed that there are 4 IMD sites within approximately 0.5 miles of the target property.

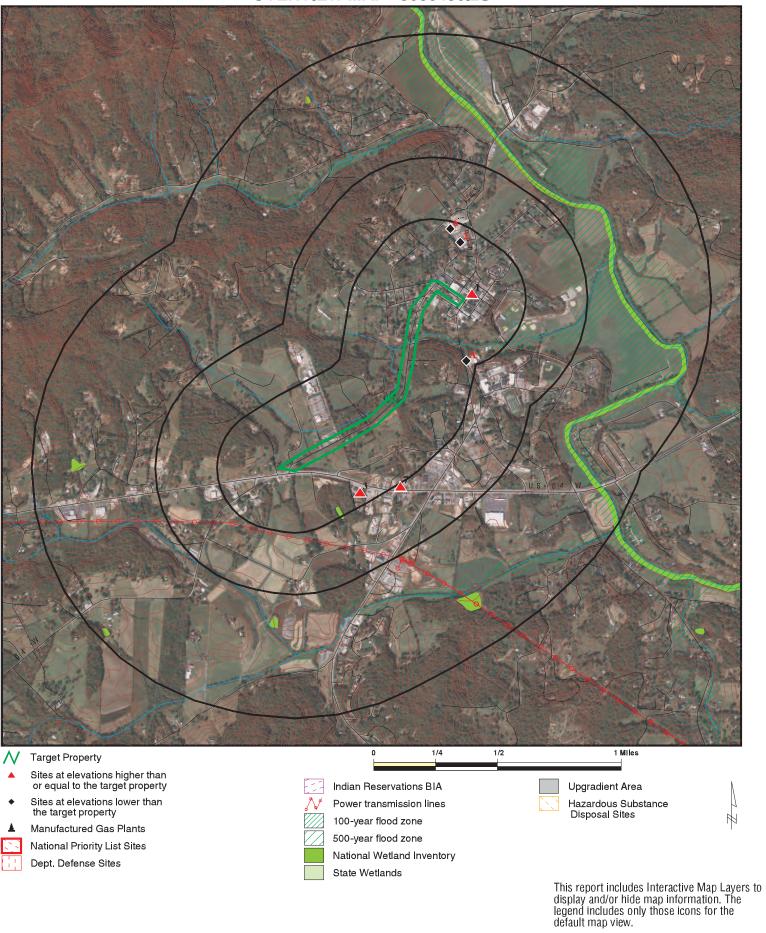
Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
THE VILLAGE STATION Facility Id: 9767	ON THE SQUARE	NE 0 - 1/8 (0.039 mi.)	1	8
BY-PASS TEXACO Facility Id: 18285	RR 2 BOX 54 C	S 1/4 - 1/2 (0.262 mi.)	7	26
Lower Elevation	Address	Direction / Distance	Map ID	Page
CLAY COUNTY SCHOOL B Facility Id: 20470	SCHOOL DRIVE	ENE 1/8 - 1/4 (0.213 mi.)	A5	22
CLAY CO. NCDOT Facility Id: 5056	TUSQUITTEE STREET	NNE 1/8 - 1/4 (0.219 mi.)	6	25

Due to I	poor or inaded	quate address info	ormation, the	following sites	were not mappe	ed. Count: 1	records.

 Site Name
 Database(s)

 HUBERT & CAROL'S STORE
 LUST TRUST

OVERVIEW MAP - 5086450.2S



NCDOT R-5863 Highway 64 Business

Hayesville NC 28904

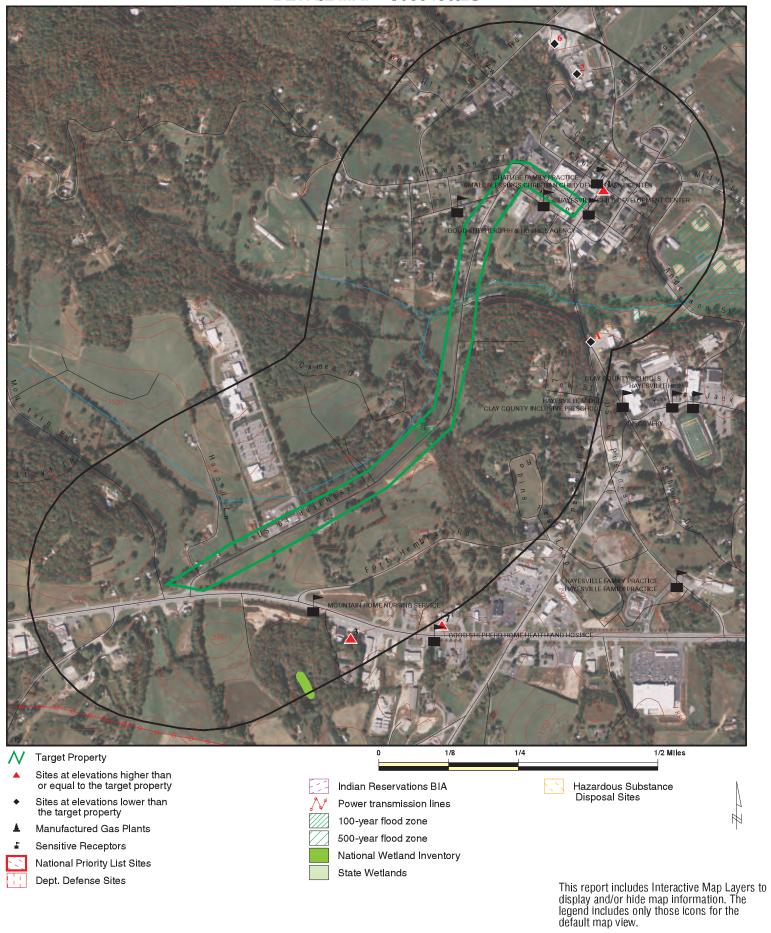
35.03997 / 83.823592

SITE NAME: ADDRESS:

LAT/LONG:

CLIENT: ECS Carolinas, LLP
CONTACT: Ashley Barham
INQUIRY #: 5086450.2s
DATE: October 24, 2017 6:25 pm

DETAIL MAP - 5086450.2S



SITE NAME: NCDOT R-5863
ADDRESS: Highway 64 Business
Hayesville NC 28904
LAT/LONG: 35.03997 / 83.823592

CLIENT: ECS Carolinas, LLP
CONTACT: Ashley Barham
INQUIRY #: 5086450.2s
DATE: October 24, 2017 6:28 pm

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENT	AL RECORDS							
Federal NPL site list								
NPL Proposed NPL NPL LIENS	1.000 1.000 TP		0 0 NR	0 0 NR	0 0 NR	0 0 NR	NR NR NR	0 0 0
Federal Delisted NPL site	e list							
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY SEMS	0.500 0.500		0 0	0 0	0 0	NR NR	NR NR	0 0
Federal CERCLIS NFRAI	P site list							
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Federal RCRA CORRAC	TS facilities li	st						
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generator	s list							
RCRA-LQG RCRA-SQG RCRA-CESQG	0.250 0.250 0.250		0 0 0	0 0 0	NR NR NR	NR NR NR	NR NR NR	0 0 0
Federal institutional con engineering controls reg								
LUCIS US ENG CONTROLS US INST CONTROL	0.500 0.500 0.500		0 0 0	0 0 0	0 0 0	NR NR NR	NR NR NR	0 0 0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equiva	lent NPL							
NC HSDS	1.000		0	0	0	0	NR	0
State- and tribal - equiva	lent CERCLIS	3						
SHWS	1.000		0	0	0	0	NR	0
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF OLI	0.500 0.500		0 0	0 0	0 0	NR NR	NR NR	0 0
State and tribal leaking s	storage tank l	ists						
LAST	0.500		0	0	0	NR	NR	0

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	<u>1/2 - 1</u>	<u>> 1</u>	Total Plotted	
LUST INDIAN LUST LUST TRUST	0.500 0.500 0.500		1 0 0	2 0 2	1 0 0	NR NR NR	NR NR NR	4 0 2	
State and tribal registere	ed storage tal	nk lists							
FEMA UST UST AST INDIAN UST	0.250 0.250 0.250 0.250		0 1 0 0	0 3 0 0	NR NR NR NR	NR NR NR NR	NR NR NR NR	0 4 0 0	
State and tribal institution control / engineering control		25							
INST CONTROL	0.500	.5	0	0	0	NR	NR	0	
State and tribal voluntar	y cleanup sit	es							
INDIAN VCP VCP	0.500 0.500		0 0	0 0	0 0	NR NR	NR NR	0 0	
State and tribal Brownfie	elds sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0	
ADDITIONAL ENVIRONMENTAL RECORDS									
Local Brownfield lists									
US BROWNFIELDS	0.500		0	0	0	NR	NR	0	
Local Lists of Landfill / S Waste Disposal Sites	Solid								
HIST LF SWRCY INDIAN ODI DEBRIS REGION 9 ODI IHS OPEN DUMPS	0.500 0.500 0.500 0.500 0.500 0.500		0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	NR NR NR NR NR	NR NR NR NR NR	0 0 0 0 0	
Local Lists of Hazardous Contaminated Sites	s waste /								
US HIST CDL US CDL	TP TP		NR NR	NR NR	NR NR	NR NR	NR NR	0 0	
Local Land Records									
LIENS 2	TP		NR	NR	NR	NR	NR	0	
Records of Emergency I	=	orts							
HMIRS SPILLS IMD SPILLS 90 SPILLS 80	TP TP 0.500 TP TP		NR NR 1 NR NR	NR NR 2 NR NR	NR NR 1 NR NR	NR NR NR NR NR	NR NR NR NR NR	0 0 4 0	
Other Ascertainable Rec	ords								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0	

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted	
FUDS DOD SCRD DRYCLEANERS US FIN ASSUR EPA WATCH LIST 2020 COR ACTION TSCA TRIS SSTS ROD RMP RAATS PRP PADS ICIS FTTS MLTS COAL ASH DOE COAL ASH EPA PCB TRANSFORMER RADINFO HIST FTTS DOT OPS CONSENT INDIAN RESERV FUSRAP UMTRA LEAD SMELTERS US AIRS US MINES ABANDONED MINES FINDS UXO DOCKET HWC ECHO FUELS PROGRAM COAL ASH DRYCLEANERS Financial Assurance	1.000 1.000 0.500 TP TP 0.250 TP TP 1.000 TP	Toperty	OOORRORRRARRRARRARRORRAROOOORRORROORORROOR	0 0 0 RR O RR R O RR RR RR RR O RR RR O O O O O RR O O O O O RR O	000 RR RR R OR RR RR RR OR RR RR OOOORR RR	OORRRRRRORRRRRRRRRRRRRRRRRRRRRRRRRRRRR		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
NPDES UIC	TP TP		NR NR	NR NR	NR NR	NR NR	NR NR	0 0	
EDR HIGH RISK HISTORICAL RECORDS									
EDR Exclusive Records									
EDR MGP EDR Hist Auto EDR Hist Cleaner	1.000 0.125 0.125		0 0 0	0 NR NR	0 NR NR	0 NR NR	NR NR NR	0 0 0	
EDR RECOVERED GOVERNMENT ARCHIVES									
Exclusive Recovered Go								•	
RGA HWS	TP		NR	NR	NR	NR	NR	0	

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
RGA LF RGA LUST	TP TP		NR NR	NR NR	NR NR	NR NR	NR NR	0 0
- Totals		0	3	9	2	0	0	14

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

MAP FINDINGS Map ID

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

THE VILLAGE STATION LUST U003144285 ΝE ON THE SQUARE UST N/A IMD HAYESVILLE, NC 28904

< 1/8 0.039 mi. 204 ft.

LUST: Relative:

00-0-000 Higher Facility ID: UST Number: AS-844 Actual:

Incident Number: 9767 1891 ft. Contamination Type: SL Source Type: Leak-underground

Product Type:

10/23/1991 Date Reported: 10/09/1991 Date Occur: Cleanup: 10/09/1991 Closure Request: Not reported Close Out: 10/30/1991

Level Of Soil Cleanup Achieved: Not reported

Tank Regulated Status:

Of Supply Wells: Not reported

Commercial/NonCommercial UST Site: COMMERCIAL

Risk Classification:

Risk Class Based On Review: L

Corrective Action Plan Type: Not reported

NOV Issue Date: Not reported NORR Issue Date: Not reported Site Priority: Not reported Phase Of LSA Req: Not reported Site Risk Reason: Not reported Land Use: Not reported MTBE: Not reported

MTBE1: No Flag: No Flag1: No LUR Filed: Not reported

Release Detection:

Current Status: File Located in Archives

RBCA GW: Not reported

PETOPT: False RPL: CD Num: 49 Reel Num: 0 RPOW: False RPOP: False Error Flag: 0

Error Code: Not reported

Valid: False

Lat/Long Decimal: 35.0462 -83.8179 Testlat: Not reported

Regional Officer Project Mgr: JCA Region: ASH

KILGORE OIL COMPANY Company: Contact Person: WILLIAM E. HALL 828-837-2321 Telephone: RP Address: **REGAL STREET** RP City,St,Zip: MURPHY, NC 28906-

RP County: Not reported

Comments: CLOSED 10/30/91 Lat and Long Hayesville centroid site map not in

MAP FINDINGS Map ID

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

THE VILLAGE STATION (Continued)

U003144285

archived file June 14, 2013

5 Min Quad: Not reported

PIRF:

Facility Id: 9767

Date Occurred: 1991-10-09 00:00:00 1991-10-09 00:00:00 Date Reported:

Description Of Incident: CONTAMINATION FOUND DURING UST REMOVAL

Owner/Operator: Not reported

Ownership: Operation Type: 6 Type: 3 Location: 1

Site Priority: Not reported Priority Update: Not reported Wells Affected Y/N: Not reported

Samples Include:

7#5 Minute Quad: Not reported 5 Minute Quad: Not reported Not reported Pirf/Min Soil: Not reported Release Code: Source Code: Min_Soil Not reported Err Type: Cause: Not reported Source: Not reported Ust Number: Not reported

Last Modified: 1993-02-24 00:00:00

Incident Phase: **Closed Out** NOV Issued: Not reported Not reported NORR Issued: 45 Day Report: Not reported Public Meeting Held: Not reported Not reported Corrective Action Planned: SOC Signed: Not reported Reclassification Report: Not reported Not reported RS Designation: Closure Request Date: Not reported

1991-10-30 00:00:00 Close-out Report:

UST:

Facility Id: 00-0-0000012474

Contact: PATTERSON UNRUH CORP/DBA KILGORE

Contact Address1: PO BOX 28 Contact Address2: Not reported

Contact City/State/Zip: MURPHY, NC 28906-0028

FIPS County Desc: Clay Latitude: 0 Longitude: 0

Tank Id:

Tank Status: Removed 05/12/1966 Installed Date: Perm Close Date: 10/30/1991 Product Name: Gasoline, Gas Mix

Tank Capacity: 2000 Root Tank Id: Not reported

Direction
Distance

Elevation Site Database(s) EPA ID Number

THE VILLAGE STATION (Continued)

U003144285

EDR ID Number

Main Tank: No Compartment Tank: No

Manifold Tank: Not reported

Commercial: Yes Regulated: Yes

Other CP Tank:
Overfill Protection Name:
Spill Protection Name:
Leak Detection Name:
Decode for TCONS_KEY:
Decode for PCONS_KEY:
Decode for PSYS_KEY:
Unknown

Not reported
Unknown
Unknown
Unknown
Single Wall Steel
Single Wall Steel
Unknown

Tank ld: 2

Tank Status: Removed Installed Date: 05/12/1966
Perm Close Date: 10/30/1991

Product Name: Gasoline, Gas Mix

Tank Capacity: 2000

Root Tank Id: Not reported

Main Tank: No Compartment Tank: No

Manifold Tank: Not reported

Commercial: Yes Regulated: Yes

Other CP Tank:
Overfill Protection Name:
Spill Protection Name:
Leak Detection Name:
Decode for TCONS_KEY:
Decode for PCONS_KEY:
Single Wall Steel
Single Wall Steel

Decode for PSYS_KEY: Unknown

Tank ld: 3

Tank Status: Removed
Installed Date: 05/12/1966
Perm Close Date: 10/30/1991
Product Name: Gasoline, Gas Mix

Tank Capacity: 2000
Root Tank Id: Not reported

Main Tank: No Compartment Tank: No

Manifold Tank: Not reported

Commercial: Yes Regulated: Yes

Other CP Tank:

Overfill Protection Name:

Spill Protection Name:

Leak Detection Name:

Decode for TCONS_KEY:

Not reported

Unknown

Unknown

Single Wall Steel

Decode for PCONS_KEY: Single Wall Steel
Decode for PSYS_KEY: Unknown

4

Tank Id:

Direction Distance

Elevation Site Database(s) EPA ID Number

THE VILLAGE STATION (Continued)

U003144285

EDR ID Number

Tank Status: Removed Installed Date: 05/12/1966
Perm Close Date: 10/30/1991

Product Name: Kerosene, Kero Mix

Tank Capacity: 550

Root Tank Id: Not reported

Main Tank: No Compartment Tank: No

Manifold Tank: Not reported

Commercial: Yes Regulated: Yes

Other CP Tank:
Overfill Protection Name:
Spill Protection Name:
Leak Detection Name:
Decode for TCONS_KEY:
Decode for PCONS_KEY:
Decode for PSYS KEY:
Unknown
Not reported
Unknown
Unknown
Unknown
Single Wall Steel
Unknown

IMD:

Region: ASH Facility ID: 9767 Date Occurred: 10/9/1991 Submit Date: 2/9/1993

GW Contam: No Groundwater Contamination detected

Soil Contam: Yes

Incident Desc: CONTAMINATION FOUND DURING UST REMOVAL

Operator: WILLIAM E. HALL Contact Phone: 828-837-2321

Owner Company: KILGORE OIL COMPANY

Operator Address:REGAL STREET

Operator City: MURPHY

Oper City, St, Zip: MURPHY, NC 28906-

Ownership: Private
Operation: Commercial
Material: Not reported
Qty Lost 1: Not reported
Qty Recovered 1: Not reported
Source: Leak-underground
Type: Gasoline/diesel

Location: Facility
Setting: Urban
Risk Site: L

Site Priority: Not reported Priority Code: Not reported Priority Update: Not reported Dem Contact: JCA

Wells Affected: Not reported

Num Affected: 0

Wells Contam: Not reported Sampled By: Not reported Samples Include: Not reported

7.5 Min Quad: Not reported 5 Min Quad: Not reported Latitude: Not reported Longitude: Not reported Latitude Number: Not reported

Direction Distance

Elevation Site Database(s) **EPA ID Number**

THE VILLAGE STATION (Continued)

U003144285

U003138080

N/A

UST

EDR ID Number

Longitude Number: Not reported Latitude Decimal: Not reported Longitude Decimal: Not reported GPS: NOD Agency: DWM Facility ID: 9767 2/24/1993 Last Modified: Incident Phase: Closed Out NOV Issued: Not reported NORR Issued: Not reported 45 Day Report: Not reported Public Meeting Held: Not reported Corrective Action Planned: Not reported SOC Sighned: Not reported Reclassification Report: Not reported RS Designation: Not reported Closure Request Date: Not reported Close-out Report: 10/30/1991

NC DOT 1441 (DIV FOURTEEN) LUST **NNE** 225 TUSQUITTEE STREET 1/8-1/4 HAYESVILLE, NC 28904

0.181 mi. 955 ft.

LUST: Relative:

Facility ID: 00-0-000 Lower UST Number: AS-270

Actual: Incident Number: 5056 1851 ft. Contamination Type: GW Source Type: Leak-underground

Product Type:

Date Reported: 05/20/1989 Date Occur: 05/20/1989 Cleanup: 05/20/1989 Closure Request: Not reported Close Out: 05/18/2004

Level Of Soil Cleanup Achieved: Not reported

Tank Regulated Status:

Of Supply Wells: Not reported

Commercial/NonCommercial UST Site: COMMERCIAL

Risk Classification: L Risk Class Based On Review: 1

Corrective Action Plan Type: Not reported

NOV Issue Date: Not reported NORR Issue Date: Not reported Site Priority: 60 E Phase Of LSA Req: Not reported Site Risk Reason: Not reported Land Use: Not reported Not reported MTBE: MTBE1: Unknown Flag: No Flag1: No

LUR Filed: Not reported

Release Detection:

Current Status: File Located in Archives

MAP FINDINGS Map ID

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

NC DOT 1441 (DIV FOURTEEN) (Continued)

U003138080

RBCA GW: Not reported PETOPT: Not reported RPL: False CD Num: 238 Reel Num: 0 False RPOW: RPOP: False Error Flag:

Error Code: Not reported Valid: False

35.0499 -83.8194 Lat/Long Decimal: Testlat: Not reported Regional Officer Project Mgr: DME Region: ASH

Company: JOHN M. BURNS, DIRECTOR NCDOT EQUIPMENT UNIT Contact Person:

Telephone: 919-733-2220 RP Address: 4809 BERYL DRIVE RP City,St,Zip: RALEIGH, NC 27606-

RP County: Not reported

NCDOT reassessed site, did proper soil and gw samples, requested site Comments:

closure. NFA letter sent May 18, 2004

5 Min Quad: Not reported

PIRF:

Facility Id: 5056

Date Occurred: 1989-05-02 00:00:00 Date Reported: 1989-05-24 00:00:00

Description Of Incident: A FARMER REPORTED STREAM POLLUTION TO DOT; DOT DISCOVERED WATER IN

DIESEL TANK.

Owner/Operator: JOHN M. BURNS, DIRECTOR

Ownership: 7 Operation Type: 1 Type: 3 Location: 8 Site Priority: 60 E

Priority Update: 1998-04-15 00:00:00

Wells Affected Y/N: Ν Samples Include: 0

7#5 Minute Quad: Not reported 5 Minute Quad: Not reported Pirf/Min Soil: Not reported Release Code: Not reported Source Code: Pirf

Err Type: Not reported Not reported Cause: Source: Not reported Ust Number: Not reported

Last Modified: 2004-05-18 00:00:00

Incident Phase: **Closed Out** NOV Issued: Not reported NORR Issued: Not reported 45 Day Report: Not reported Public Meeting Held: Not reported Corrective Action Planned: Not reported SOC Signed: Not reported Reclassification Report: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

NC DOT 1441 (DIV FOURTEEN) (Continued)

U003138080

EDR ID Number

RS Designation: Not reported Closure Request Date: Not reported Close-out Report: Not reported

UST:

Facility Id: 00-0-0000031492

Contact: NC DOT - EQUIPMENT UNIT

Contact Address1: 4809 BERYL ROAD

Contact Address2: Not reported

Contact City/State/Zip: RALEIGH, NC 27606

FIPS County Desc: Clay
Latitude: 35.04975
Longitude: -83.81921

 Tank Id:
 1441-2

 Tank Status:
 Removed

 Installed Date:
 12/30/1959

 Perm Close Date:
 10/30/1989

Product Name: Kerosene, Kero Mix

Tank Capacity: 7360
Root Tank Id: Not reported

Main Tank: No Compartment Tank: No

Manifold Tank: Not reported

Commercial: Yes
Regulated: Yes
Other CP Tank: Not re

Other CP Tank:

Overfill Protection Name:

Spill Protection Name:

Leak Detection Name:

Decode for TCONS_KEY:

Decode for PCONS_KEY:

Decode for PSYS_KEY:

Unknown

Not reported

Unknown

Unknown

Single Wall Steel

Decode for PSYS_KEY:

Unknown

Tank Id: 1441-3
Tank Status: Removed
Installed Date: 12/30/1964
Perm Close Date: 09/30/1989
Product Name: Diesel
Tank Capacity: 1000
Root Tank Id: Not reported

Main Tank: No Compartment Tank: No

Manifold Tank: Not reported

Commercial: Yes Regulated: Yes Other CP Tank: Not re

Other CP Tank:

Overfill Protection Name:

Spill Protection Name:

Leak Detection Name:

Decode for TCONS_KEY:

Decode for PCONS_KEY:

Decode for PSYS_KEY:

Unknown

Not reported

Unknown

Unknown

Single Wall Steel

Single Wall Steel

Unknown

Tank ld: 1441-4

Direction
Distance
Elevation

tion Site Database(s) EPA ID Number

NC DOT 1441 (DIV FOURTEEN) (Continued)

U003138080

EDR ID Number

Tank Status: Removed
Installed Date: 12/30/1964
Perm Close Date: 10/30/1989
Product Name: Unknown
Tank Capacity: 500
Root Tank Id: Not reported

Main Tank: No Compartment Tank: No

Manifold Tank: Not reported

Commercial: Yes Regulated: Yes

Other CP Tank:
Overfill Protection Name:
Spill Protection Name:
Leak Detection Name:
Decode for TCONS_KEY:
Decode for PCONS_KEY:
Single Wall Steel
Single Wall Steel

Decode for PSYS_KEY: Unknown

Tank ld: 2

Tank Status: Removed
Installed Date: 12/30/1979
Perm Close Date: 10/11/1993
Product Name: Gasoline, Gas Mix

Tank Capacity: Gasoline, Gas Mix

Root Tank Id: Not reported

Main Tank: No Compartment Tank: No

Manifold Tank: Not reported Commercial: Yes

Commercial: Yes Regulated: Yes Other CP Tank: Not r

Other CP Tank:

Overfill Protection Name:

Spill Protection Name:

Leak Detection Name:

Decode for TCONS_KEY:

Decode for PCONS_KEY:

Decode for PSYS_KEY:

Unknown

Unknown

Unknown

Unknown

Unknown

Unknown

Unknown

Unknown

Tank Id: C1441101
Tank Status: Current
Installed Date: 11/01/1989
Perm Close Date: Not reported
Product Name: Gasoline, Gas Mix

Tank Capacity: 10000 Root Tank Id: Not reported

Main Tank: No
Compartment Tank: No
Manifold Tank: 0
Commercial: Yes
Regulated: Yes

Other CP Tank: Not reported
Overfill Protection Name: Auto Shutoff Device
Spill Protection Name: Catchment Basin

Leak Detection Name: MLLD

Direction
Distance
Elevation

evation Site Database(s) EPA ID Number

NC DOT 1441 (DIV FOURTEEN) (Continued)

U003138080

EDR ID Number

Decode for TCONS_KEY: Single Wall FRP
Decode for PCONS_KEY: Single Wall FRP
Decode for PSYS_KEY: Unknown

Tank Id: C1441102
Tank Status: Current
Installed Date: 11/01/1989
Perm Close Date: Not reported
Product Name: Diesel
Tank Capacity: 10000
Root Tank Id: Not reported

Main Tank: No
Compartment Tank: No
Manifold Tank: 0
Commercial: Yes
Regulated: Yes

Other CP Tank: Not reported
Overfill Protection Name: Auto Shutoff Device
Spill Protection Name: Catchment Basin

Leak Detection Name: MLLD

Decode for TCONS_KEY: Single Wall FRP
Decode for PCONS_KEY: Single Wall FRP
Decode for PSYS_KEY: Unknown

Tank Id: C1441103
Tank Status: Removed
Installed Date: 11/01/1989
Perm Close Date: 03/29/2006
Product Name: Oil, New/Used/Mix

Tank Capacity: 2000
Root Tank Id: Not reported

Main Tank: No Compartment Tank: No

Manifold Tank: Not reported

Commercial: Yes Regulated: Yes

Other CP Tank: Not reported Overfill Protection Name: None

Spill Protection Name:

Leak Detection Name:

Decode for TCONS_KEY:

Decode for PCONS_KEY:

Decode for PSYS_KEY:

Unknown

Catchment Basin

Unknown

Single Wall FRP

Single Wall FRP

Unknown

Tank Id: UST-249
Tank Status: Removed
Installed Date: 12/30/1971
Perm Close Date: 10/30/1989
Product Name: Oil, New/Used/Mix

Tank Capacity: 500

Root Tank Id: Not reported

Main Tank: No Compartment Tank: No

Manifold Tank: Not reported

MAP FINDINGS Map ID

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

NC DOT 1441 (DIV FOURTEEN) (Continued)

U003138080

Commercial: Yes Regulated: Yes Other CP Tank: Not reported Overfill Protection Name: Unknown Spill Protection Name: Unknown Leak Detection Name: Unknown Single Wall Steel Decode for TCONS_KEY:

Single Wall Steel Decode for PCONS_KEY: Decode for PSYS_KEY: Unknown

UST-76 Tank Id: Tank Status: Removed Installed Date: 12/30/1964 Perm Close Date: 05/30/1989 Product Name: Diesel 6300 Tank Capacity: Root Tank Id: Not reported

Main Tank: No Compartment Tank: No

Manifold Tank: Not reported Commercial: Yes Regulated: Yes

Other CP Tank: Not reported Overfill Protection Name: Unknown Spill Protection Name: Unknown Leak Detection Name: Unknown

Decode for TCONS KEY: Single Wall Steel Decode for PCONS_KEY: Single Wall Steel Decode for PSYS_KEY: Unknown

3 JOHN MCCUNE'S GARAGE 285 - HIGHWAY 64 WEST ssw 1/8-1/4 HAYESVILLE, NC 28904

U000308484 UST N/A

0.198 mi. 1048 ft.

Higher

UST: Relative:

00-0-0000028046 Facility Id:

Contact: JOHN & MARY DBA MCCUNE SRVC CNTR

Actual: Contact Address1: 285 HIGHWAY 64 WEST 1922 ft. Contact Address2: Not reported

> Contact City/State/Zip: HAYESVILLE, NC 28904-7070

FIPS County Desc: Clay Latitude: 0 Longitude: 0

Tank Id:

Tank Status: Removed Installed Date: 09/24/1977 Perm Close Date: 04/30/2004 Product Name: Gasoline, Gas Mix

Tank Capacity: 6000 Root Tank Id: Not reported Main Tank: No

Compartment Tank: No Manifold Tank: Not reported

Commercial: Yes

Direction
Distance
Elevation

vation Site Database(s) EPA ID Number

JOHN MCCUNE'S GARAGE (Continued)

EDR ID Number

U000308484

Regulated: Yes

Other CP Tank: Not reported
Overfill Protection Name: Ball Float Valve
Spill Protection Name: Catchment Basin
Leak Detection Name: Unknown

Decode for TCONS_KEY: Single Wall Steel

Decode for PCONS_KEY: Other
Decode for PSYS_KEY: Unknown

Tank ld: 2

Tank Status: Removed
Installed Date: 09/24/1977
Perm Close Date: 04/30/2004
Product Name: Gasoline, Gas Mix

Tank Capacity: 6000
Root Tank Id: Not reported

Main Tank: No Compartment Tank: No

Manifold Tank:

Commercial:

Regulated:

Other CP Tank:

Overfill Protection Name:

Spill Protection Name:

Not reported

Not reported

Catchment Basin

Leak Detection Name: Unknown
Decode for TCONS_KEY: Single Wall Steel

Decode for PCONS_KEY: Other
Decode for PSYS_KEY: Unknown

Tank ld: 3

Tank Status: Removed
Installed Date: 09/24/1977
Perm Close Date: 04/30/2004
Product Name: Gasoline, Gas Mix

Tank Capacity: 2000
Root Tank Id: Not reported

Main Tank: No Compartment Tank: No

Manifold Tank: Not reported

Commercial: Yes Regulated: Yes

Other CP Tank: Not reported
Overfill Protection Name: Ball Float Valve
Spill Protection Name: Catchment Basin

Leak Detection Name: Unknown

Decode for TCONS_KEY: Single Wall Steel

Decode for PCONS_KEY: Other
Decode for PSYS_KEY: Unknown

Tank ld:

Tank Status: Removed Installed Date: 09/24/1977 Perm Close Date: 08/01/2000 Product Name: Diesel

MAP FINDINGS Map ID

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

JOHN MCCUNE'S GARAGE (Continued)

U000308484

Tank Capacity: 2000 Root Tank Id: Not reported

Main Tank: No Compartment Tank: No

Manifold Tank: Not reported Commercial: Yes Regulated: Yes

Other CP Tank: Not reported Overfill Protection Name: Ball Float Valve Spill Protection Name: Catchment Basin Leak Detection Name: Unknown

Single Wall Steel Decode for TCONS KEY:

Decode for PCONS_KEY: Other Decode for PSYS_KEY: Unknown

Α4 **CLAY CO SCH BUS GARAGE** UST U003369540 **ENE** 9 SCHOOL DRIVE N/A

1/8-1/4 0.211 mi. HAYESVILLE, NC 28904

Main Tank:

1115 ft. Site 1 of 2 in cluster A

Relative: Lower

UST:

00-0-0000012263 Facility Id:

Contact: CLAY COUNTY BOARD OF EDUCATION

Actual: 1844 ft. Contact Address1: PO BOX 178 Contact Address2: Not reported

Contact City/State/Zip: HAYESVILLE, NC 28904-0178

No

FIPS County Desc: Clay 35.04261 Latitude: Longitude: -83.81748

Tank Id:

Temporarily Closed Tank Status:

Installed Date: 03/23/1966 Not reported Perm Close Date: Product Name: Diesel Tank Capacity: 10000 Root Tank Id: Not reported

Compartment Tank: No Manifold Tank: 0 Commercial: Yes Regulated: Yes Other CP Tank: Not reported Overfill Protection Name: Unknown Spill Protection Name: Unknown Not reported Leak Detection Name: Decode for TCONS_KEY: Single Wall Steel Decode for PCONS KEY: Single Wall Steel Decode for PSYS_KEY: Unknown

Tank Id: 2 Tank Status: Current Installed Date: 03/23/1966 Not reported Perm Close Date: Product Name: Heating Oil/Fuel

Tank Capacity: 10000

Direction Distance Elevation

vation Site Database(s) EPA ID Number

CLAY CO SCH BUS GARAGE (Continued)

Root Tank Id: Not reported

Main Tank: No
Compartment Tank: No
Manifold Tank: 0
Commercial: Yes
Regulated: No

Other CP Tank:

Overfill Protection Name:

Spill Protection Name:

Leak Detection Name:

Decode for TCONS_KEY:

Decode for PCONS_KEY:

Decode for PSYS_KEY:

Unknown

Not reported

Single Wall Steel

Decode for PSYS_KEY:

Unknown

Tank Id: 3
Tank Status: Current
Installed Date: 03/23/1966
Perm Close Date: Not reported
Product Name: Heating Oil/Fuel

Tank Capacity: 10000
Root Tank Id: Not reported

Main Tank: No
Compartment Tank: No
Manifold Tank: 0
Commercial: Yes
Regulated: No

Other CP Tank:

Overfill Protection Name:

Spill Protection Name:

Leak Detection Name:

Decode for TCONS_KEY:

Decode for PCONS_KEY:

Decode for PSYS_KEY:

Unknown

Not reported

Single Wall Steel

Single Wall Steel

Unknown

Tank Id: 4

Tank Status: Temporarily Closed Installed Date: 03/23/1966
Perm Close Date: Not reported
Product Name: Gasoline, Gas Mix

Tank Capacity: 2000
Root Tank Id: Not reported

Main Tank: No
Compartment Tank: No
Manifold Tank: 0
Commercial: Yes
Regulated: Yes

Other CP Tank:

Overfill Protection Name:

Spill Protection Name:

Leak Detection Name:

Decode for TCONS_KEY:

Decode for PCONS_KEY:

Decode for PSYS_KEY:

Unknown

Not reported

Single Wall Steel

Single Wall Steel

Unknown

U003369540

EDR ID Number

Map ID MAP FINDINGS

Direction Distance Elevation

evation Site Database(s) EPA ID Number

CLAY CO SCH BUS GARAGE (Continued)

U003369540

EDR ID Number

Tank Id: 5
Tank Status: Current
Installed Date: 03/21/1974
Perm Close Date: Not reported
Product Name: Heating Oil/Fuel

Tank Capacity: 10000
Root Tank Id: Not reported

Main Tank: No
Compartment Tank: No
Manifold Tank: 0
Commercial: Yes
Regulated: No

Other CP Tank:

Overfill Protection Name:

Spill Protection Name:

Leak Detection Name:

Decode for TCONS_KEY:

Decode for PCONS_KEY:

Decode for PSYS_KEY:

Unknown

Not reported

Single Wall Steel

Single Wall Steel

Decode for PSYS_KEY:

Unknown

Tank Id: 6A Tank Status: Current Installed Date: 07/14/1998 Perm Close Date: Not reported Product Name: Diesel Tank Capacity: 10000 Root Tank Id: 265542 Main Tank: Yes Compartment Tank: Yes Manifold Tank: 0 Commercial: Yes Regulated: Yes

Other CP Tank:

Overfill Protection Name:

Spill Protection Name:

Leak Detection Name:

Decode for TCONS_KEY:

Decode for PSYS_KEY:

Not reported

Catchment Basin

Not reported

Single Wall Steel

Single Wall FRP

Unknown

Tank Id: 6B
Tank Status: Current
Installed Date: 07/14/1998
Perm Close Date: Not reported
Product Name: Gasoline, Gas Mix

Tank Capacity: 2000
Root Tank Id: 265542
Main Tank: No
Compartment Tank: Yes
Manifold Tank: 0
Commercial: Yes
Regulated: Yes

Other CP Tank: Not reported
Overfill Protection Name: Ball Float Valve
Spill Protection Name: Catchment Basin

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

CLAY CO SCH BUS GARAGE (Continued)

U003369540

Leak Detection Name: Not reported Single Wall Steel Decode for TCONS_KEY: Decode for PCONS_KEY: Single Wall FRP Decode for PSYS_KEY: Unknown

CLAY COUNTY SCHOOL BUS GARAGE Α5 LUST S104157269 **ENE**

SCHOOL DRIVE LUST TRUST N/A **IMD**

1/8-1/4 HAYESVILLE, NC 28904

0.213 mi.

1125 ft. Site 2 of 2 in cluster A

LUST: Relative:

Facility ID: 00-0-000 Lower **UST Number:** AS-1809 Actual: Incident Number: 20470

1845 ft. Contamination Type: GW

Source Type: Leak-underground

Product Type:

08/27/1999 Date Reported: 08/27/1999 Date Occur: Cleanup: 08/27/1999 Closure Request: Not reported Close Out: Not reported

Level Of Soil Cleanup Achieved: Residential

Tank Regulated Status:

Of Supply Wells: Not reported

Commercial/NonCommercial UST Site: COMMERCIAL

Risk Classification: Risk Class Based On Review: 1

Corrective Action Plan Type: Not reported

NOV Issue Date: Not reported NORR Issue Date: 08/31/1999 Not reported Site Priority:

Phase Of LSA Req:

Site Risk Reason: Surface water Land Use: Not reported MTBE: Not reported MTBE1: Unknown Flag: No Flag1: No LUR Filed: Not reported

Release Detection:

File Located in House **Current Status:**

RBCA GW: Not reported PETOPT: Not reported RPL: False 0 CD Num: 0 Reel Num: RPOW: False RPOP: False Error Flag:

Error Code: Not reported Valid: False

Lat/Long Decimal: 35.0424 -83.8183 Testlat: Not reported

Regional Officer Project Mgr: DPM Region: ASH

Company: CLAY COUNTY BOARD OF EDUCATION Map ID MAP FINDINGS

Direction Distance

Elevation Site Database(s) EPA ID Number

CLAY COUNTY SCHOOL BUS GARAGE (Continued)

S104157269

EDR ID Number

Contact Person: SCOTT PENLAND
Telephone: 828-389-8412
RP Address: P.O. BOX 178

RP City,St,Zip: HAYESVILLE, NC 28904-

RP County: CLAY

Comments: SITE IS INTERMEDIATE BASED UPON HIGH 2L LEVELS AND THE PRESENCE OF

THE CREEK TO THE RELEASE AREA. Levels are below GCLs. Site risk

changed to low on 07/09/2008.

5 Min Quad: Not reported

PIRF:

Facility Id: 20470

Date Occurred: 1999-08-27 00:00:00
Date Reported: 1999-08-31 00:00:00

Description Of Incident: ONE DIRTY SAMPLE AT TIME OF CLOSURE.

Owner/Operator: BILL MARTIN

 Ownership:
 6

 Operation Type:
 6

 Type:
 3

 Location:
 1

Site Priority: Not reported Priority Update: 1999-08-31 00:00:00

Wells Affected Y/N: Not reported Samples Include: Not reported 7#5 Minute Quad: Not reported 5 Minute Quad: Not reported Pirf/Min Soil: Not reported Not reported Release Code: Source Code: MIN SOIL Err Type: Not reported Not reported Cause: Not reported Source: Ust Number: Not reported

Last Modified: Not reported Incident Phase: Response NOV Issued: Not reported NORR Issued: Not reported 45 Day Report: Not reported Not reported Public Meeting Held: Not reported Corrective Action Planned: SOC Signed: Not reported Reclassification Report: Not reported **RS** Designation: Not reported Closure Request Date: Not reported Close-out Report: Not reported

LUST TRUST:

Facility ID: 0-012263
Site ID: 20470
Site Note: Not reported
Site Eligible?: False

Commercial Find: 100% Commercial Priority Rank: Not reported 75000

3rd Party Deductable Amt: 0 Sum 3rd Party Amt Applied: 0

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

CLAY COUNTY SCHOOL BUS GARAGE (Continued)

S104157269

IMD:

ASH Region: Facility ID: 20470 Date Occurred: 8/27/1999 Submit Date: 8/31/1999

GW Contam: Yes, Groundwater Contamination has been detected

Soil Contam:

ONE DIRTY SAMPLE AT TIME OF CLOSURE. Incident Desc:

Operator: SCOTT PENLAND Contact Phone: 828-389-8412

Owner Company: CLAY COUNTY BOARD OF EDUCATION

Operator Address:P.O. BOX 178 **HAYESVILLE** Operator City:

Oper City, St, Zip: HAYESVILLE, NC 28904-

Ownership: County Operation: Commercial **GASOLINE** Material: Qty Lost 1: Not reported Qty Recovered 1: Not reported Material: **DIESEL** Not reported Qty Lost: Not reported Qty Recovered: Source: Leak-underground Type: Gasoline/diesel

Location: Facility Setting: Rural Risk Site:

Site Priority:

Priority Code: Not reported Priority Update: 8/31/1999 Dem Contact: DPM Wells Affected: Not reported Num Affected: Not reported Not reported Wells Contam: Sampled By: Not reported Samples Include: Not reported

7.5 Min Quad: Not reported 5 Min Quad: Not reported 35.0425 Latitude: Longitude: -83.81833333 350233 Latitude Number: Longitude Number: 834906 Latitude Decimal: 35.0425

83.81833333333333 Longitude Decimal:

Not reported

GPS: NOD DWM Agency: Facility ID: 20470 Last Modified: Not reported

Incident Phase: RE

NOV Issued: Not reported NORR Issued: Not reported 45 Day Report: Not reported Public Meeting Held: Not reported Corrective Action Planned: Not reported SOC Sighned: Not reported Reclassification Report: Not reported RS Designation: Not reported Map ID MAP FINDINGS

Direction Distance

Distance Elevation Site EDR ID Number

Database(s) EPA ID Number

CLAY COUNTY SCHOOL BUS GARAGE (Continued)

S104157269

Closure Request Date: Not reported Close-out Report: Not reported

6 CLAY CO. NCDOT LUST TRUST S105764154
NNE TUSQUITTEE STREET IMD N/A

NNE TUSQUITTEE STREET
1/8-1/4 HAYESVILLE, NC

0.219 mi. 1154 ft.

Relative: LUST TRUST:

Lower Facility ID: 0-031492 Site ID: 5056

Actual: Site Note: 86% of costs are commercial with a \$50,000 ded and eligible for 100% of those costs exceeding the \$50,000 ded. The remaining 14% of costs are noncommercial with a \$5,000 ded and eligible for 90% of those

costs exceeding the \$5,000 ded. [CGS 10/16/07]

Site Eligible?: True

Commercial Find: 0.85999999999999999

Priority Rank: Not reported
Deductable Amount: 50000
3rd Party Deductable Amt: 0
Sum 3rd Party Amt Applied: 0

IMD:

 Region:
 ASH

 Facility ID:
 5056

 Date Occurred:
 5/20/1989

 Submit Date:
 5/24/1989

GW Contam: Yes, Groundwater Contamination has been detected

Soil Contam: No

Incident Desc: A FARMER REPORTED STREAM POLLUTION TO DOT; DOT DISCOVERED WATER IN

DIESEL TANK.

Operator: NCDOT EQUIPMENT UNIT

Contact Phone: 919-733-2220

Owner Company: JOHN M. BURNS, DIRECTOR

Public Service DIESEL FUEL

Operator Address:4809 BERYL DRIVE

Operator City: RALEIGH

Oper City, St, Zip: RALEIGH, NC 27606-

Ownership: State

Operation:

Material:

Qty Lost 1: Not reported
Qty Recovered 1: NONE
Material: KEROSENE
Qty Lost: Not reported
Qty Recovered: Not reported
Source: Leak-underground
Type: Gasoline/diesel

Location: 8
Setting: Rural
Risk Site: L
Site Priority: 60 E
Priority Code: L

Priority Update: 4/15/1998 Dem Contact: DME Wells Affected: No

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

CLAY CO. NCDOT (Continued)

S105764154

Num Affected:

Wells Contam: Not reported Not reported Sampled By: Samples Include: Not reported

7.5 Min Quad: Not reported Not reported 5 Min Quad: Latitude: 35.05 Longitude: -83.81944444 Latitude Number: 350300 Longitude Number: 834910 Latitude Decimal: 35.05

Longitude Decimal: 83.819444444444

GPS: NOD Agency: DWM Facility ID: 5056 Last Modified: 5/18/2004 Closed Out Incident Phase: NOV Issued: Not reported NORR Issued: Not reported 45 Day Report: Not reported Public Meeting Held: Not reported Corrective Action Planned: Not reported SOC Sighned: Not reported Reclassification Report: Not reported RS Designation: Not reported Closure Request Date: Not reported Close-out Report: Not reported

BY-PASS TEXACO LUST S105763458 **IMD** N/A

South **RR 2 BOX 54 C** 1/4-1/2 HAYESVILLE, NC 28904

0.262 mi. 1382 ft.

1921 ft.

LUST: Relative:

Higher Facility ID: Not reported **UST Number:** AS-1649 Actual: 18285 Incident Number:

> Contamination Type: SL Source Type: Leak-underground

Product Type:

Date Reported: 02/10/1998 Date Occur: Not reported 01/10/1998 Cleanup: Closure Request: Not reported 02/10/1998 Close Out:

Level Of Soil Cleanup Achieved: Not reported

Tank Regulated Status: R

Of Supply Wells: Not reported

Commercial/NonCommercial UST Site: COMMERCIAL

Risk Classification: Risk Class Based On Review:

Corrective Action Plan Type: Not reported

NOV Issue Date: Not reported NORR Issue Date: Not reported Site Priority: Not reported Phase Of LSA Req: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

BY-PASS TEXACO (Continued)

S105763458

Site Risk Reason: Not reported Land Use: Not reported MTBE: Not reported MTBE1: Unknown Flag: No Flag1: No LUR Filed: Not reported

Release Detection:

Current Status: File Located in Archives

RBCA GW: Not reported PETOPT: Not reported RPL: False CD Num: 101 Reel Num: RPOW: False RPOP: False Error Flag:

Error Code: Not reported Valid: False

Lat/Long Decimal: 35.0349 -83.8230 Testlat: Not reported

Regional Officer Project Mgr: MES Region: ASH Company: Not reported Contact Person: Not reported Not reported Telephone: RP Address: Not reported RP City,St,Zip: Not reported Not reported RP County:

CLOSED 2/10/98 Comments: 5 Min Quad: Not reported

PIRF:

Facility Id: 18285

Date Occurred: 1997-10-15 00:00:00 1998-02-10 00:00:00 Date Reported:

Description Of Incident: MINOR PETRO HYDROCARBON SOIL CONTAM. DETECTED DURING UST REMOVAL; 1/2

YD3 OF CONTAM. SOIL EXCAVATED AND TRANSPORTED; CONTAMINANT CONC. BELOW

ACTION LEVELS

Owner/Operator: **CHARLES SMITH**

Ownership: 4 Operation Type: 6

Type: Not reported Location: Not reported Site Priority: Not reported Priority Update: Not reported Wells Affected Y/N: Not reported

Samples Include:

7#5 Minute Quad: Not reported 5 Minute Quad: Not reported Pirf/Min Soil: Not reported Release Code: Not reported Min_Soil Source Code: Err Type: Not reported Cause: Not reported Source: Not reported Ust Number: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

BY-PASS TEXACO (Continued)

S105763458

Last Modified: 1998-03-09 00:00:00 Incident Phase: **Closed Out**

NOV Issued: Not reported NORR Issued: Not reported 45 Day Report: Not reported Public Meeting Held: Not reported Not reported Corrective Action Planned: SOC Signed: Not reported Reclassification Report: Not reported **RS** Designation: Not reported Closure Request Date: Not reported

1998-02-10 00:00:00 Close-out Report:

IMD:

ASH Region: Facility ID: 18285 Date Occurred: Not reported Submit Date: 2/10/1998

GW Contam: No Groundwater Contamination detected

Soil Contam: Yes

MINOR PETRO HYDROCARBON SOIL CONTAM, DETECTED DURING UST REMOVAL: 1/2 Incident Desc:

YD3 OF CONTAM. SOIL EXCAVATED AND TRANSPORTED; CONTAMINANT CONC. BELOW

ACTION LEVELS

Operator: Not reported Contact Phone: Not reported Owner Company: Not reported Operator Address:Not reported Operator City: Not reported Oper City, St, Zip: Not reported Ownership: Private Operation: Commercial Material: Not reported Qty Lost 1: Not reported Qty Recovered 1: Not reported Source: Leak-underground Type: Gasoline/diesel Location: Not reported Setting: Not reported

Risk Site:

Site Priority: Not reported Priority Code: Not reported Priority Update: Not reported Dem Contact: MES

Wells Affected: Not reported

Num Affected:

Wells Contam: Not reported Sampled By: Not reported Samples Include: Not reported

7.5 Min Quad: Not reported 5 Min Quad: Not reported Latitude: Not reported Longitude: Not reported Not reported Latitude Number: Not reported Longitude Number: Latitude Decimal: Not reported Longitude Decimal: Not reported GPS: NOD

Map ID MAP FINDINGS Direction

Distance Elevation Site EDR ID Number

Database(s) EPA ID Number

BY-PASS TEXACO (Continued)

S105763458

DWM Agency: Facility ID: 18285 Last Modified: 3/9/1998 Incident Phase: Closed Out NOV Issued: Not reported NORR Issued: Not reported 45 Day Report: Not reported Public Meeting Held: Not reported Corrective Action Planned: Not reported SOC Sighned: Not reported Reclassification Report: Not reported RS Designation: Not reported Closure Request Date: Not reported Close-out Report: 2/10/1998

Count: 1 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
HAYESVILLE	S105218746	HUBERT & CAROL'S STORE	OLD HIGHWAY 64		LUST TRUST

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 05/30/2017 Source: EPA
Date Data Arrived at EDR: 06/08/2017 Telephone: N/A

Number of Days to Update: 99 Next Scheduled EDR Contact: 01/15/2018
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources

EPA's Environmental Photographic Interpretation Center (EPIC)

Telephone: 202-564-7333

EPA Region 1 EPA Region 6

Telephone 617-918-1143 Telephone: 214-655-6659

EPA Region 3 EPA Region 7

Telephone 215-814-5418 Telephone: 913-551-7247

EPA Region 4 EPA Region 8

Telephone 404-562-8033 Telephone: 303-312-6774

EPA Region 5 EPA Region 9

Telephone 312-886-6686 Telephone: 415-947-4246

EPA Region 10

Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 05/30/2017 Source: EPA
Date Data Arrived at EDR: 06/09/2017 Telephone: N/A
Date Made Active in Reports: 09/15/2017 Last EDR Contact: 10/05/2017

Number of Days to Update: 98 Next Scheduled EDR Contact: 01/15/2018

Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991 Date Data Arrived at EDR: 02/02/1994 Date Made Active in Reports: 03/30/1994

Number of Days to Update: 56

Source: EPA Telephone: 202-564-4267 Last EDR Contact: 08/15/2011

Next Scheduled EDR Contact: 11/28/2011 Data Release Frequency: No Update Planned

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 05/30/2017 Date Data Arrived at EDR: 06/09/2017 Date Made Active in Reports: 09/15/2017

Number of Days to Update: 98

Source: EPA Telephone: N/A

Last EDR Contact: 10/05/2017

Next Scheduled EDR Contact: 01/15/2018 Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 11/07/2016
Date Data Arrived at EDR: 01/05/2017
Date Made Active in Reports: 04/07/2017

Number of Days to Update: 92

Source: Environmental Protection Agency

Telephone: 703-603-8704 Last EDR Contact: 10/06/2017

Next Scheduled EDR Contact: 01/15/2018 Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 07/11/2017 Date Data Arrived at EDR: 07/21/2017 Date Made Active in Reports: 10/06/2017

Number of Days to Update: 77

Source: EPA

Telephone: 800-424-9346 Last EDR Contact: 10/20/2017

Next Scheduled EDR Contact: 01/29/2018
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 07/11/2017 Date Data Arrived at EDR: 07/28/2017 Date Made Active in Reports: 10/06/2017

Number of Days to Update: 70

Source: EPA

Telephone: 800-424-9346 Last EDR Contact: 10/20/2017

Next Scheduled EDR Contact: 01/29/2018 Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 09/13/2017 Date Data Arrived at EDR: 09/26/2017 Date Made Active in Reports: 10/06/2017

Number of Days to Update: 10

Source: EPA

Telephone: 800-424-9346 Last EDR Contact: 09/26/2017

Next Scheduled EDR Contact: 01/08/2018 Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 09/13/2017 Date Data Arrived at EDR: 09/26/2017 Date Made Active in Reports: 10/06/2017

Number of Days to Update: 10

Source: Environmental Protection Agency

Telephone: (404) 562-8651 Last EDR Contact: 09/26/2017

Next Scheduled EDR Contact: 01/08/2018 Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 09/13/2017 Date Data Arrived at EDR: 09/26/2017 Date Made Active in Reports: 10/06/2017

Number of Days to Update: 10

Source: Environmental Protection Agency Telephone: (404) 562-8651

Last EDR Contact: 09/26/2017

Next Scheduled EDR Contact: 01/08/2018 Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 09/13/2017 Date Data Arrived at EDR: 09/26/2017 Date Made Active in Reports: 10/06/2017

Number of Days to Update: 10

Source: Environmental Protection Agency

Telephone: (404) 562-8651 Last EDR Contact: 09/26/2017

Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 09/13/2017 Date Data Arrived at EDR: 09/26/2017 Date Made Active in Reports: 10/06/2017

Number of Days to Update: 10

Source: Environmental Protection Agency

Telephone: (404) 562-8651 Last EDR Contact: 09/26/2017

Next Scheduled EDR Contact: 01/08/2018 Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 05/22/2017 Date Data Arrived at EDR: 06/13/2017 Date Made Active in Reports: 09/15/2017

Number of Days to Update: 94

Source: Department of the Navy Telephone: 843-820-7326 Last EDR Contact: 08/10/2017

Next Scheduled EDR Contact: 11/27/2017 Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 08/10/2017 Date Data Arrived at EDR: 08/30/2017 Date Made Active in Reports: 10/13/2017

Number of Days to Update: 44

Source: Environmental Protection Agency

Telephone: 703-603-0695 Last EDR Contact: 08/30/2017

Next Scheduled EDR Contact: 12/11/2017 Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 08/10/2017 Date Data Arrived at EDR: 08/30/2017 Date Made Active in Reports: 10/13/2017

Number of Days to Update: 44

Source: Environmental Protection Agency

Telephone: 703-603-0695 Last EDR Contact: 08/30/2017

Next Scheduled EDR Contact: 12/11/2017

Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous

substances.

Date of Government Version: 09/18/2017 Date Data Arrived at EDR: 09/21/2017 Date Made Active in Reports: 10/13/2017

Number of Days to Update: 22

Source: National Response Center, United States Coast Guard

Telephone: 202-267-2180 Last EDR Contact: 09/21/2017

Next Scheduled EDR Contact: 01/08/2018 Data Release Frequency: Quarterly

State- and tribal - equivalent NPL

HSDS: Hazardous Substance Disposal Site

Locations of uncontrolled and unregulated hazardous waste sites. The file includes sites on the National Priority

List as well as those on the state priority list.

Date of Government Version: 08/09/2011 Date Data Arrived at EDR: 11/08/2011 Date Made Active in Reports: 12/05/2011

Number of Days to Update: 27

Source: North Carolina Center for Geographic Information and Analysis

Telephone: 919-754-6580 Last EDR Contact: 09/21/2017

Next Scheduled EDR Contact: 11/08/2017 Data Release Frequency: Biennially

State- and tribal - equivalent CERCLIS

SHWS: Inactive Hazardous Sites Inventory

State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: 08/16/2017 Date Data Arrived at EDR: 09/13/2017 Date Made Active in Reports: 09/22/2017

Number of Days to Update: 9

Source: Department of Environment, Health and Natural Resources

Telephone: 919-508-8400 Last EDR Contact: 09/13/2017

Next Scheduled EDR Contact: 12/25/2017 Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF: List of Solid Waste Facilities

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 09/28/2017 Date Data Arrived at EDR: 09/28/2017 Date Made Active in Reports: 10/19/2017

Number of Days to Update: 21

Source: Department of Environment and Natural Resources

Telephone: 919-733-0692 Last EDR Contact: 09/28/2017

Next Scheduled EDR Contact: 01/08/2018 Data Release Frequency: Varies

OLI: Old Landfill Inventory

Old landfill inventory location information. (Does not include no further action sites and other agency lead sites).

Date of Government Version: 08/08/2016 Date Data Arrived at EDR: 01/17/2017 Date Made Active in Reports: 03/08/2017

Number of Days to Update: 50

Source: Department of Environment & Natural Resources

Telephone: 919-733-4996 Last EDR Contact: 10/10/2017

Next Scheduled EDR Contact: 01/22/2018 Data Release Frequency: Varies

State and tribal leaking storage tank lists

LAST: Leaking Aboveground Storage Tanks

A listing of leaking aboveground storage tank site locations.

Date of Government Version: 08/04/2017 Date Data Arrived at EDR: 08/10/2017 Date Made Active in Reports: 09/25/2017

Number of Days to Update: 46

Source: Department of Environment & Natural Resources

Telephone: 877-623-6748 Last EDR Contact: 08/10/2017

Next Scheduled EDR Contact: 11/20/2017 Data Release Frequency: Quarterly

LUST: Regional UST Database

This database contains information obtained from the Regional Offices. It provides a more detailed explanation of current and historic activity for individual sites, as well as what was previously found in the Incident Management Database. Sites in this database with Incident Numbers are considered LUSTs.

Date of Government Version: 08/04/2017 Date Data Arrived at EDR: 08/10/2017 Date Made Active in Reports: 09/25/2017

Number of Days to Update: 46

Source: Department of Environment and Natural Resources

Telephone: 919-733-1308 Last EDR Contact: 08/10/2017

Next Scheduled EDR Contact: 11/20/2017 Data Release Frequency: Quarterly

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 04/24/2017 Date Data Arrived at EDR: 07/27/2017 Date Made Active in Reports: 10/06/2017

Number of Days to Update: 71

Source: EPA Region 6 Telephone: 214-665-6597 Last EDR Contact: 07/27/2017

Next Scheduled EDR Contact: 11/08/2017 Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 04/14/2017 Date Data Arrived at EDR: 07/27/2017 Date Made Active in Reports: 10/06/2017

Number of Days to Update: 71

Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 07/27/2017

Next Scheduled EDR Contact: 11/08/2017 Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 05/01/2017 Date Data Arrived at EDR: 07/27/2017 Date Made Active in Reports: 10/13/2017

Number of Days to Update: 78

Source: EPA Region 8 Telephone: 303-312-6271 Last EDR Contact: 07/27/2017

Next Scheduled EDR Contact: 11/08/2017 Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 10/14/2016 Date Data Arrived at EDR: 01/27/2017 Date Made Active in Reports: 05/05/2017

Number of Days to Update: 98

Source: EPA Region 4 Telephone: 404-562-8677 Last EDR Contact: 07/28/2017

Next Scheduled EDR Contact: 11/08/2017 Data Release Frequency: Semi-Annually

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 04/14/2017 Date Data Arrived at EDR: 07/27/2017 Date Made Active in Reports: 10/06/2017

Number of Days to Update: 71

Source: EPA Region 1 Telephone: 617-918-1313 Last EDR Contact: 07/27/2017

Next Scheduled EDR Contact: 11/08/2017 Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land

Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/26/2017 Date Data Arrived at EDR: 07/27/2017 Date Made Active in Reports: 10/13/2017

Number of Days to Update: 78

Source: EPA, Region 5 Telephone: 312-886-7439 Last EDR Contact: 07/27/2017

Next Scheduled EDR Contact: 11/08/2017 Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 04/13/2017 Date Data Arrived at EDR: 07/27/2017 Date Made Active in Reports: 10/13/2017

Number of Days to Update: 78

Source: Environmental Protection Agency

Telephone: 415-972-3372 Last EDR Contact: 07/27/2017

Next Scheduled EDR Contact: 11/08/2017 Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 10/07/2016 Date Data Arrived at EDR: 01/26/2017 Date Made Active in Reports: 05/05/2017

Number of Days to Update: 99

Source: EPA Region 10 Telephone: 206-553-2857 Last EDR Contact: 07/27/2017

Next Scheduled EDR Contact: 11/08/2017 Data Release Frequency: Quarterly

LUST TRUST: State Trust Fund Database

This database contains information about claims against the State Trust Funds for reimbursements for expenses incurred while remediating Leaking USTs.

Date of Government Version: 10/09/2017 Date Data Arrived at EDR: 10/10/2017 Date Made Active in Reports: 10/10/2017

Number of Days to Update: 0

Source: Department of Environment and Natural Resources

Telephone: 919-733-1315 Last EDR Contact: 10/10/2017

Next Scheduled EDR Contact: 01/22/2018 Data Release Frequency: Quarterly

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 05/15/2017 Date Data Arrived at EDR: 05/30/2017 Date Made Active in Reports: 10/13/2017

Number of Days to Update: 136

Source: FEMA

Telephone: 202-646-5797 Last EDR Contact: 10/13/2017

Next Scheduled EDR Contact: 01/22/2018 Data Release Frequency: Varies

UST: Petroleum Underground Storage Tank Database

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 10/06/2017 Date Data Arrived at EDR: 10/11/2017 Date Made Active in Reports: 10/11/2017

Number of Days to Update: 0

Source: Department of Environment and Natural Resources

Telephone: 919-733-1308 Last EDR Contact: 10/11/2017

Next Scheduled EDR Contact: 11/20/2017 Data Release Frequency: Quarterly

AST: AST Database

Facilities with aboveground storage tanks that have a capacity greater than 21,000 gallons.

Date of Government Version: 08/24/2017 Date Data Arrived at EDR: 09/19/2017 Date Made Active in Reports: 09/25/2017

Number of Days to Update: 6

Source: Department of Environment and Natural Resources

Telephone: 919-715-6183 Last EDR Contact: 09/18/2017

Next Scheduled EDR Contact: 01/01/2018 Data Release Frequency: Semi-Annually

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 05/01/2017 Date Data Arrived at EDR: 07/27/2017 Date Made Active in Reports: 10/13/2017

Number of Days to Update: 78

Source: EPA Region 8 Telephone: 303-312-6137 Last EDR Contact: 07/27/2017

Next Scheduled EDR Contact: 11/08/2017

Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 04/13/2017 Date Data Arrived at EDR: 07/27/2017 Date Made Active in Reports: 10/13/2017

Number of Days to Update: 78

Source: EPA Region 9 Telephone: 415-972-3368 Last EDR Contact: 07/27/2017

Next Scheduled EDR Contact: 11/08/2017 Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 04/14/2017 Date Data Arrived at EDR: 07/27/2017 Date Made Active in Reports: 10/06/2017

Number of Days to Update: 71

Source: EPA, Region 1 Telephone: 617-918-1313 Last EDR Contact: 07/27/2017

Next Scheduled EDR Contact: 11/08/2017 Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 10/01/2016 Date Data Arrived at EDR: 01/26/2017 Date Made Active in Reports: 05/05/2017

Number of Days to Update: 99

Source: EPA Region 6 Telephone: 214-665-7591 Last EDR Contact: 07/27/2017

Next Scheduled EDR Contact: 11/08/2017 Data Release Frequency: Semi-Annually

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/26/2017 Date Data Arrived at EDR: 07/27/2017 Date Made Active in Reports: 10/06/2017

Number of Days to Update: 71

Source: EPA Region 5 Telephone: 312-886-6136 Last EDR Contact: 07/27/2017

Next Scheduled EDR Contact: 11/08/2017 Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 05/02/2017 Date Data Arrived at EDR: 07/27/2017 Date Made Active in Reports: 10/06/2017

Number of Days to Update: 71

Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 07/27/2017

Next Scheduled EDR Contact: 11/08/2017

Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 04/25/2017 Date Data Arrived at EDR: 07/27/2017 Date Made Active in Reports: 10/13/2017

Number of Days to Update: 78

Source: EPA Region 10 Telephone: 206-553-2857 Last EDR Contact: 07/27/2017

Next Scheduled EDR Contact: 11/08/2017 Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 10/14/2016 Date Data Arrived at EDR: 01/27/2017 Date Made Active in Reports: 05/05/2017

Number of Days to Update: 98

Source: EPA Region 4 Telephone: 404-562-9424 Last EDR Contact: 07/28/2017

Next Scheduled EDR Contact: 11/08/2017 Data Release Frequency: Semi-Annually

State and tribal institutional control / engineering control registries

INST CONTROL: No Further Action Sites With Land Use Restrictions Monitoring

A land use restricted site is a property where there are limits or requirements on future use of the property due to varying levels of cleanup possible, practical, or necessary at the site.

Date of Government Version: 08/16/2017 Date Data Arrived at EDR: 09/13/2017 Date Made Active in Reports: 09/22/2017

Number of Days to Update: 9

Source: Department of Environment, Health and Natural Resources

Telephone: 919-508-8400 Last EDR Contact: 09/13/2017

Next Scheduled EDR Contact: 12/25/2017 Data Release Frequency: Quarterly

State and tribal voluntary cleanup sites

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008 Date Data Arrived at EDR: 04/22/2008 Date Made Active in Reports: 05/19/2008

Number of Days to Update: 27

Source: EPA, Region 7 Telephone: 913-551-7365 Last EDR Contact: 04/20/2009

Next Scheduled EDR Contact: 07/20/2009

Data Release Frequency: Varies

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015 Date Data Arrived at EDR: 09/29/2015 Date Made Active in Reports: 02/18/2016

Number of Days to Update: 142

Source: EPA, Region 1 Telephone: 617-918-1102 Last EDR Contact: 09/25/2017

Next Scheduled EDR Contact: 01/08/2018 Data Release Frequency: Varies

VCP: Responsible Party Voluntary Action Sites Responsible Party Voluntary Action site locations.

Date of Government Version: 08/16/2017 Date Data Arrived at EDR: 09/13/2017 Date Made Active in Reports: 09/25/2017

Number of Days to Update: 12

Source: Department of Environment and Natural Resources

Telephone: 919-508-8400 Last EDR Contact: 09/13/2017

Next Scheduled EDR Contact: 12/25/2017 Data Release Frequency: Semi-Annually

State and tribal Brownfields sites

BROWNFIELDS: Brownfields Projects Inventory

A brownfield site is an abandoned, idled, or underused property where the threat of environmental contamination has hindered its redevelopment. All of the sites in the inventory are working toward a brownfield agreement for cleanup and liabitly control.

Date of Government Version: 09/01/2017 Date Data Arrived at EDR: 09/21/2017 Date Made Active in Reports: 09/22/2017

Number of Days to Update: 1

Source: Department of Environment and Natural Resources

Telephone: 919-733-4996 Last EDR Contact: 09/21/2017

Next Scheduled EDR Contact: 01/15/2018

Data Release Frequency: Varies

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 06/19/2017 Date Data Arrived at EDR: 06/20/2017 Date Made Active in Reports: 09/15/2017

Number of Days to Update: 87

Source: Environmental Protection Agency

Telephone: 202-566-2777 Last EDR Contact: 09/20/2017

Next Scheduled EDR Contact: 01/01/2018 Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

SWRCY: Recycling Center Listing

A listing of recycling center locations.

Date of Government Version: 08/18/2017 Date Data Arrived at EDR: 08/22/2017 Date Made Active in Reports: 09/25/2017

Number of Days to Update: 34

Source: Department of Environment & Natural Resources

Telephone: 919-707-8137 Last EDR Contact: 05/01/2017

Next Scheduled EDR Contact: 08/14/2017

Data Release Frequency: Varies

HIST LF: Solid Waste Facility Listing A listing of solid waste facilities.

Date of Government Version: 11/06/2006 Date Data Arrived at EDR: 02/13/2007 Date Made Active in Reports: 03/02/2007

Number of Days to Update: 17

Source: Department of Environment & Natural Resources

Telephone: 919-733-0692 Last EDR Contact: 01/19/2009 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998 Date Data Arrived at EDR: 12/03/2007 Date Made Active in Reports: 01/24/2008

Number of Days to Update: 52

Source: Environmental Protection Agency

Telephone: 703-308-8245 Last EDR Contact: 08/01/2017

Next Scheduled EDR Contact: 11/13/2017 Data Release Frequency: Varies

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside

County and northern Imperial County, California.

Date of Government Version: 01/12/2009 Date Data Arrived at EDR: 05/07/2009 Date Made Active in Reports: 09/21/2009

Number of Days to Update: 137

Source: EPA, Region 9 Telephone: 415-947-4219 Last EDR Contact: 10/20/2017

Next Scheduled EDR Contact: 02/05/2018

Data Release Frequency: No Update Planned

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258

Subtitle D Criteria.

Date of Government Version: 06/30/1985 Date Data Arrived at EDR: 08/09/2004 Date Made Active in Reports: 09/17/2004

Number of Days to Update: 39

Source: Environmental Protection Agency

Telephone: 800-424-9346 Last EDR Contact: 06/09/2004 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014 Date Data Arrived at EDR: 08/06/2014 Date Made Active in Reports: 01/29/2015

Number of Days to Update: 176

Source: Department of Health & Human Serivces, Indian Health Service

Telephone: 301-443-1452 Last EDR Contact: 08/29/2017

Next Scheduled EDR Contact: 11/13/2017 Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 07/13/2017 Date Data Arrived at EDR: 09/06/2017 Date Made Active in Reports: 10/06/2017

Number of Days to Update: 30

Source: Drug Enforcement Administration Telephone: 202-307-1000

Last EDR Contact: 08/30/2017

Next Scheduled EDR Contact: 12/11/2017 Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 07/13/2017 Date Data Arrived at EDR: 09/06/2017 Date Made Active in Reports: 10/06/2017

Number of Days to Update: 30

Source: Drug Enforcement Administration

Telephone: 202-307-1000 Last EDR Contact: 08/30/2017

Next Scheduled EDR Contact: 12/11/2017 Data Release Frequency: Quarterly

Local Land Records

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 07/11/2017 Date Data Arrived at EDR: 07/26/2017 Date Made Active in Reports: 10/13/2017

Number of Days to Update: 79

Source: Environmental Protection Agency

Telephone: 202-564-6023 Last EDR Contact: 07/26/2017

Next Scheduled EDR Contact: 11/08/2017 Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 09/21/2017 Date Data Arrived at EDR: 09/21/2017 Date Made Active in Reports: 10/13/2017

Number of Days to Update: 22

Source: U.S. Department of Transportation

Telephone: 202-366-4555 Last EDR Contact: 09/21/2017

Next Scheduled EDR Contact: 01/08/2018 Data Release Frequency: Quarterly

SPILLS: Spills Incident Listing

A listing spills, hazardous material releases, sanitary sewer overflows, wastewater treatment plant bypasses and upsets, citizen complaints, and any other environmental emergency calls reported to the agency.

Date of Government Version: 09/14/2017 Date Data Arrived at EDR: 09/19/2017 Date Made Active in Reports: 09/22/2017

Number of Days to Update: 3

Source: Department of Environment & Natural Resources

Telephone: 919-807-6308 Last EDR Contact: 09/08/2017

Next Scheduled EDR Contact: 12/25/2017 Data Release Frequency: Varies

IMD: Incident Management Database

Groundwater and/or soil contamination incidents

Date of Government Version: 07/21/2006 Date Data Arrived at EDR: 08/01/2006 Date Made Active in Reports: 08/23/2006

Number of Days to Update: 22

Source: Department of Environment and Natural Resources

Telephone: 919-733-3221 Last EDR Contact: 07/01/2011

Next Scheduled EDR Contact: 10/17/2011 Data Release Frequency: No Update Planned

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 09/27/2012 Date Data Arrived at EDR: 01/03/2013 Date Made Active in Reports: 03/06/2013

Number of Days to Update: 62

Source: FirstSearch Telephone: N/A

Last EDR Contact: 01/03/2013 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

SPILLS 80: SPILLS80 data from FirstSearch

Spills 80 includes those spill and release records available from FirstSearch databases prior to 1990. Typically, they may include chemical, oil and/or hazardous substance spills recorded before 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 80.

Date of Government Version: 06/14/2001 Date Data Arrived at EDR: 01/03/2013 Date Made Active in Reports: 03/06/2013

Number of Days to Update: 62

Source: FirstSearch Telephone: N/A

Last EDR Contact: 01/03/2013 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 09/13/2017 Date Data Arrived at EDR: 09/26/2017 Date Made Active in Reports: 10/06/2017

Number of Days to Update: 10

Source: Environmental Protection Agency

Telephone: (404) 562-8651 Last EDR Contact: 09/26/2017

Next Scheduled EDR Contact: 01/08/2018 Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015 Date Data Arrived at EDR: 07/08/2015 Date Made Active in Reports: 10/13/2015

Number of Days to Update: 97

Source: U.S. Army Corps of Engineers

Telephone: 202-528-4285 Last EDR Contact: 08/25/2017

Next Scheduled EDR Contact: 12/04/2017 Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005 Date Data Arrived at EDR: 11/10/2006 Date Made Active in Reports: 01/11/2007

Number of Days to Update: 62

Source: USGS

Telephone: 888-275-8747 Last EDR Contact: 10/13/2017

Next Scheduled EDR Contact: 01/22/2018 Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005 Date Data Arrived at EDR: 02/06/2006 Date Made Active in Reports: 01/11/2007

Number of Days to Update: 339

Source: U.S. Geological Survey Telephone: 888-275-8747 Last EDR Contact: 10/11/2017

Next Scheduled EDR Contact: 01/22/2018

Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017 Date Data Arrived at EDR: 02/03/2017 Date Made Active in Reports: 04/07/2017

Number of Days to Update: 63

Source: Environmental Protection Agency

Telephone: 615-532-8599 Last EDR Contact: 08/18/2017

Next Scheduled EDR Contact: 11/27/2017 Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 05/10/2017 Date Data Arrived at EDR: 05/17/2017 Date Made Active in Reports: 09/15/2017

Number of Days to Update: 121

Source: Environmental Protection Agency

Telephone: 202-566-1917 Last EDR Contact: 09/26/2017

Next Scheduled EDR Contact: 01/08/2018 Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013 Date Data Arrived at EDR: 03/21/2014 Date Made Active in Reports: 06/17/2014

Number of Days to Update: 88

Source: Environmental Protection Agency

Telephone: 617-520-3000 Last EDR Contact: 08/07/2017

Next Scheduled EDR Contact: 11/20/2017 Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 04/22/2013 Date Data Arrived at EDR: 03/03/2015 Date Made Active in Reports: 03/09/2015

Number of Days to Update: 6

Source: Environmental Protection Agency

Telephone: 703-308-4044 Last EDR Contact: 08/24/2017

Next Scheduled EDR Contact: 11/20/2017 Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2012 Date Data Arrived at EDR: 01/15/2015 Date Made Active in Reports: 01/29/2015

Number of Days to Update: 14

Source: EPA

Telephone: 202-260-5521 Last EDR Contact: 09/22/2017

Next Scheduled EDR Contact: 01/01/2018 Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2014 Date Data Arrived at EDR: 11/24/2015 Date Made Active in Reports: 04/05/2016

Number of Days to Update: 133

Source: EPA

Telephone: 202-566-0250 Last EDR Contact: 08/23/2017

Next Scheduled EDR Contact: 12/04/2017 Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009 Date Data Arrived at EDR: 12/10/2010 Date Made Active in Reports: 02/25/2011

Number of Days to Update: 77

Source: EPA

Telephone: 202-564-4203 Last EDR Contact: 07/28/2017

Next Scheduled EDR Contact: 11/08/2017 Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 09/27/2017 Date Data Arrived at EDR: 10/12/2017 Date Made Active in Reports: 10/20/2017

Number of Days to Update: 8

Source: EPA

Telephone: 703-416-0223 Last EDR Contact: 09/08/2017

Next Scheduled EDR Contact: 12/18/2017 Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 02/01/2017 Date Data Arrived at EDR: 02/09/2017 Date Made Active in Reports: 04/07/2017

Number of Days to Update: 57

Source: Environmental Protection Agency

Telephone: 202-564-8600 Last EDR Contact: 10/23/2017

Next Scheduled EDR Contact: 02/05/2018 Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995 Date Data Arrived at EDR: 07/03/1995 Date Made Active in Reports: 08/07/1995

Number of Days to Update: 35

Source: EPA

Telephone: 202-564-4104 Last EDR Contact: 06/02/2008

Next Scheduled EDR Contact: 09/01/2008 Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013 Date Data Arrived at EDR: 10/17/2014 Date Made Active in Reports: 10/20/2014

Number of Days to Update: 3

Source: EPA

Telephone: 202-564-6023 Last EDR Contact: 08/08/2017

Next Scheduled EDR Contact: 11/20/2017 Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 06/01/2017 Date Data Arrived at EDR: 06/09/2017 Date Made Active in Reports: 10/13/2017

Number of Days to Update: 126

Source: EPA

Telephone: 202-566-0500 Last EDR Contact: 10/13/2017

Next Scheduled EDR Contact: 01/22/2018 Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016 Date Data Arrived at EDR: 11/23/2016 Date Made Active in Reports: 02/10/2017

Number of Days to Update: 79

Source: Environmental Protection Agency

Telephone: 202-564-2501 Last EDR Contact: 10/11/2017

Next Scheduled EDR Contact: 01/22/2018
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009 Date Data Arrived at EDR: 04/16/2009 Date Made Active in Reports: 05/11/2009

Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances

Telephone: 202-566-1667 Last EDR Contact: 08/18/2017

Next Scheduled EDR Contact: 12/04/2017 Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act) A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009 Date Data Arrived at EDR: 04/16/2009 Date Made Active in Reports: 05/11/2009

Number of Days to Update: 25

Source: EPA

Telephone: 202-566-1667 Last EDR Contact: 08/18/2017

Next Scheduled EDR Contact: 12/04/2017 Data Release Frequency: Quarterly

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/30/2016 Date Data Arrived at EDR: 09/08/2016 Date Made Active in Reports: 10/21/2016

Number of Days to Update: 43

Source: Nuclear Regulatory Commission Telephone: 301-415-7169

Next Scheduled EDR Contact: 11/20/2017 Data Release Frequency: Quarterly

Last EDR Contact: 10/16/2017

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005 Date Data Arrived at EDR: 08/07/2009 Date Made Active in Reports: 10/22/2009

Number of Days to Update: 76

Source: Department of Energy Telephone: 202-586-8719 Last EDR Contact: 10/03/2017

Next Scheduled EDR Contact: 12/18/2017 Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014 Date Data Arrived at EDR: 09/10/2014 Date Made Active in Reports: 10/20/2014

Number of Days to Update: 40

Source: Environmental Protection Agency

Telephone: N/A

Last EDR Contact: 09/08/2017

Next Scheduled EDR Contact: 12/18/2017 Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011 Date Data Arrived at EDR: 10/19/2011 Date Made Active in Reports: 01/10/2012

Number of Days to Update: 83

Source: Environmental Protection Agency

Telephone: 202-566-0517 Last EDR Contact: 07/28/2017

Next Scheduled EDR Contact: 11/08/2017

Data Release Frequency: Varies

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 10/02/2017 Date Data Arrived at EDR: 10/05/2017 Date Made Active in Reports: 10/13/2017

Number of Days to Update: 8

Source: Environmental Protection Agency

Telephone: 202-343-9775 Last EDR Contact: 10/05/2017

Next Scheduled EDR Contact: 01/15/2018 Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006 Date Data Arrived at EDR: 03/01/2007 Date Made Active in Reports: 04/10/2007

Number of Days to Update: 40

Source: Environmental Protection Agency

Telephone: 202-564-2501 Last EDR Contact: 12/17/2007

Next Scheduled EDR Contact: 03/17/2008 Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006 Date Data Arrived at EDR: 03/01/2007 Date Made Active in Reports: 04/10/2007

Number of Days to Update: 40

Source: Environmental Protection Agency

Telephone: 202-564-2501 Last EDR Contact: 12/17/2008

Next Scheduled EDR Contact: 03/17/2008 Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012 Date Data Arrived at EDR: 08/07/2012 Date Made Active in Reports: 09/18/2012

Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety

Telephone: 202-366-4595 Last EDR Contact: 08/01/2017

Next Scheduled EDR Contact: 11/13/2017 Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 06/30/2017 Date Data Arrived at EDR: 08/03/2017 Date Made Active in Reports: 10/20/2017

Number of Days to Update: 78

Source: Department of Justice, Consent Decree Library

Telephone: Varies

Last EDR Contact: 09/25/2017

Next Scheduled EDR Contact: 01/08/2018 Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2015 Date Data Arrived at EDR: 02/22/2017 Date Made Active in Reports: 09/28/2017

Number of Days to Update: 218

Source: EPA/NTIS Telephone: 800-424-9346 Last EDR Contact: 09/21/2017

Next Scheduled EDR Contact: 12/04/2017 Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014 Date Data Arrived at EDR: 07/14/2015 Date Made Active in Reports: 01/10/2017

Number of Days to Update: 546

Source: USGS

Telephone: 202-208-3710 Last EDR Contact: 10/11/2017

Next Scheduled EDR Contact: 01/22/2018 Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 12/23/2016 Date Data Arrived at EDR: 12/27/2016 Date Made Active in Reports: 02/17/2017

Number of Days to Update: 52

Source: Department of Energy Telephone: 202-586-3559 Last EDR Contact: 08/03/2017

Next Scheduled EDR Contact: 11/20/2017 Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010 Date Data Arrived at EDR: 10/07/2011 Date Made Active in Reports: 03/01/2012

Number of Days to Update: 146

Source: Department of Energy Telephone: 505-845-0011 Last EDR Contact: 10/10/2017

Next Scheduled EDR Contact: 12/04/2017 Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 05/30/2017 Date Data Arrived at EDR: 06/09/2017 Date Made Active in Reports: 09/15/2017

Number of Days to Update: 98

Source: Environmental Protection Agency

Telephone: 703-603-8787 Last EDR Contact: 10/05/2017

Next Scheduled EDR Contact: 01/15/2018 Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites

may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001 Date Data Arrived at EDR: 10/27/2010 Date Made Active in Reports: 12/02/2010

Number of Days to Update: 36

Source: American Journal of Public Health Telephone: 703-305-6451

Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016 Date Data Arrived at EDR: 10/26/2016 Date Made Active in Reports: 02/03/2017

Number of Days to Update: 100

Source: EPA

Telephone: 202-564-2496 Last EDR Contact: 09/26/2017

Next Scheduled EDR Contact: 01/08/2018 Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data A listing of minor source facilities.

Date of Government Version: 10/12/2016 Date Data Arrived at EDR: 10/26/2016 Date Made Active in Reports: 02/03/2017

Number of Days to Update: 100

Source: EPA

Telephone: 202-564-2496 Last EDR Contact: 09/26/2017

Next Scheduled EDR Contact: 01/08/2018 Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 07/31/2017 Date Data Arrived at EDR: 08/30/2017 Date Made Active in Reports: 10/13/2017

Number of Days to Update: 44

Source: Department of Labor, Mine Safety and Health Administration

Telephone: 303-231-5959 Last EDR Contact: 08/30/2017

Next Scheduled EDR Contact: 12/11/2017 Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005 Date Data Arrived at EDR: 02/29/2008 Date Made Active in Reports: 04/18/2008

Number of Days to Update: 49

Source: USGS

Telephone: 703-648-7709 Last EDR Contact: 09/01/2017

Next Scheduled EDR Contact: 12/11/2017 Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011 Date Data Arrived at EDR: 06/08/2011 Date Made Active in Reports: 09/13/2011

Number of Days to Update: 97

Source: USGS

Telephone: 703-648-7709 Last EDR Contact: 09/01/2017

Next Scheduled EDR Contact: 12/11/2017

Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 09/25/2017 Date Data Arrived at EDR: 09/26/2017 Date Made Active in Reports: 10/20/2017

Number of Days to Update: 24

Source: Department of Interior Telephone: 202-208-2609 Last EDR Contact: 09/25/2017

Next Scheduled EDR Contact: 12/25/2017 Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 07/23/2017 Date Data Arrived at EDR: 09/06/2017 Date Made Active in Reports: 09/15/2017

Number of Days to Update: 9

Source: EPA

Telephone: (404) 562-9900 Last EDR Contact: 09/06/2017

Next Scheduled EDR Contact: 12/18/2017 Data Release Frequency: Quarterly

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 09/02/2017 Date Data Arrived at EDR: 09/06/2017 Date Made Active in Reports: 10/20/2017

Number of Days to Update: 44

Source: Environmental Protection Agency

Telephone: 202-564-2280 Last EDR Contact: 09/06/2017

Next Scheduled EDR Contact: 12/18/2017 Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 06/02/2016 Date Data Arrived at EDR: 06/03/2016 Date Made Active in Reports: 09/02/2016

Number of Days to Update: 91

Source: Environmental Protection Agency

Telephone: 202-564-0527 Last EDR Contact: 09/21/2017

Next Scheduled EDR Contact: 12/11/2017 Data Release Frequency: Varies

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 10/25/2016 Date Data Arrived at EDR: 06/02/2017 Date Made Active in Reports: 10/13/2017

Number of Days to Update: 133

Source: Department of Defense Telephone: 703-704-1564 Last EDR Contact: 10/16/2017

Next Scheduled EDR Contact: 01/29/2018 Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels

Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 08/17/2017 Date Data Arrived at EDR: 08/17/2017 Date Made Active in Reports: 09/15/2017

Number of Days to Update: 29

Source: EPA Telephone: 800-385-6164 Last EDR Contact: 08/17/2017

Next Scheduled EDR Contact: 12/04/2017 Data Release Frequency: Quarterly

COAL ASH: Coal Ash Disposal Sites

A listing of coal combustion products distribution permits issued by the Division for the treatment, storage, transportation, use and disposal of coal combustion products.

Date of Government Version: 12/14/2015 Date Data Arrived at EDR: 02/23/2016 Date Made Active in Reports: 05/18/2016

Number of Days to Update: 85

Source: Department of Environment & Natural Resources

Telephone: 919-807-6359 Last EDR Contact: 07/31/2017

Next Scheduled EDR Contact: 11/13/2017

Data Release Frequency: Varies

DRYCLEANERS: Drycleaning Sites

Potential and known drycleaning sites, active and abandoned, that the Drycleaning Solvent Cleanup Program has knowledge of and entered into this database.

Date of Government Version: 04/04/2017 Date Data Arrived at EDR: 06/20/2017 Date Made Active in Reports: 08/10/2017

Number of Days to Update: 51

Source: Department of Environment & Natural Resources

Telephone: 919-508-8400 Last EDR Contact: 09/22/2017

Next Scheduled EDR Contact: 01/01/2018 Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

A listing of financial assurance information for underground storage tank facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 10/06/2017 Date Data Arrived at EDR: 10/11/2017 Date Made Active in Reports: 10/11/2017

Number of Days to Update: 0

Source: Department of Environment & Natural Resources

Telephone: 919-733-1322 Last EDR Contact: 10/11/2017

Next Scheduled EDR Contact: 11/20/2017 Data Release Frequency: Quarterly

Financial Assurance 2: Financial Assurance Information Listing

Information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 10/02/2012 Date Data Arrived at EDR: 10/03/2012 Date Made Active in Reports: 10/26/2012

Number of Days to Update: 23

Source: Department of Environmental & Natural Resources

Telephone: 919-508-8496 Last EDR Contact: 09/25/2017

Next Scheduled EDR Contact: 01/08/2018

Data Release Frequency: Varies

Financial Assurance 3: Financial Assurance Information Hazardous waste financial assurance information.

Date of Government Version: 09/11/2017 Date Data Arrived at EDR: 09/12/2017 Date Made Active in Reports: 10/11/2017

Number of Days to Update: 29

Source: Department of Environment & Natural Resources

Telephone: 919-707-8222 Last EDR Contact: 09/08/2017

Next Scheduled EDR Contact: 12/25/2017 Data Release Frequency: Varies

NPDES: NPDES Facility Location Listing

General information regarding NPDES(National Pollutant Discharge Elimination System) permits.

Date of Government Version: 07/03/2017 Date Data Arrived at EDR: 08/03/2017 Date Made Active in Reports: 10/06/2017

Number of Days to Update: 64

Source: Department of Environment & Natural Resources

Telephone: 919-733-7015 Last EDR Contact: 08/03/2017

Next Scheduled EDR Contact: 11/13/2017

Data Release Frequency: Varies

UIC: Underground Injection Wells Listing

A listing of uncerground injection wells locations.

Date of Government Version: 09/01/2017 Date Data Arrived at EDR: 09/06/2017 Date Made Active in Reports: 10/06/2017

Number of Days to Update: 30

Source: Department of Environment & Natural Resources

Telephone: 919-807-6412 Last EDR Contact: 08/31/2017

Next Scheduled EDR Contact: 12/18/2017 Data Release Frequency: Quarterly

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A

Number of Days to Update: N/A

Source: EDR, Inc. Telephone: N/A Last EDR Contact: N/A

Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historic Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A

Number of Days to Update: N/A

Source: EDR, Inc. Telephone: N/A Last EDR Contact: N/A

Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A
Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR C

Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA HWS: Recovered Government Archive State Hazardous Waste Facilities List

The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environment, Health and Natural Resources in North Carolina.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/24/2013
Number of Days to Update: 176

Telephone: N/A Last EDR Conta

Last EDR Contact: 06/01/2012 Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environment, Health and Natural Resources in North Carolina.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Environment, Health and Natural Resources

Source: Department of Environment, Health and Natural Resources

Telephone: N/A

Last EDR Contact: 06/01/2012 Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environment, Health and Natural Resources in North Carolina.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/20/2013
Number of Days to Update: 172

Source: Department of Environment, Health and Natural Resources

Telephone: N/A

Last EDR Contact: 06/01/2012 Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 07/30/2013 Date Data Arrived at EDR: 08/19/2013 Date Made Active in Reports: 10/03/2013

Number of Days to Update: 45

Source: Department of Energy & Environmental Protection

Telephone: 860-424-3375 Last EDR Contact: 08/18/2017

Next Scheduled EDR Contact: 11/27/2017 Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2016 Date Data Arrived at EDR: 04/11/2017 Date Made Active in Reports: 07/27/2017

Number of Days to Update: 107

Source: Department of Environmental Protection

Telephone: N/A

Last EDR Contact: 10/05/2017

Next Scheduled EDR Contact: 01/22/2018 Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD

facility.

Date of Government Version: 07/31/2017 Date Data Arrived at EDR: 08/03/2017 Date Made Active in Reports: 10/12/2017

Number of Days to Update: 70

Source: Department of Environmental Conservation

Telephone: 518-402-8651 Last EDR Contact: 08/03/2017

Next Scheduled EDR Contact: 11/13/2017 Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2016 Date Data Arrived at EDR: 07/25/2017 Date Made Active in Reports: 09/25/2017

Number of Days to Update: 62

Source: Department of Environmental Protection

Telephone: 717-783-8990 Last EDR Contact: 10/16/2017

Next Scheduled EDR Contact: 01/29/2018 Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2013 Date Data Arrived at EDR: 06/19/2015 Date Made Active in Reports: 07/15/2015

Number of Days to Update: 26

Source: Department of Environmental Management

Telephone: 401-222-2797 Last EDR Contact: 08/21/2017

Next Scheduled EDR Contact: 12/04/2017 Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2016 Date Data Arrived at EDR: 04/13/2017 Date Made Active in Reports: 07/14/2017

Number of Days to Update: 92

Source: Department of Natural Resources

Telephone: N/A

Last EDR Contact: 09/11/2017

Next Scheduled EDR Contact: 12/25/2017 Data Release Frequency: Annually

Oil/Gas Pipelines

Source: PennWell Corporation

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data

Source: PennWell Corporation

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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services,

a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary

and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Child Care Facility List

Source: Department of Health & Human Services

Telephone: 919-662-4499

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory Source: US Fish & Wildlife Service

Telephone: 703-358-2171

Current USGS 7.5 Minute Topographic Map Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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NCDOT R-5863

Highway 64 Business Hayesville, NC 28904

Inquiry Number: 5086450.5

October 25, 2017

The EDR Aerial Photo Decade Package



EDR Aerial Photo Decade Package

10/25/17

Site Name: Client Name:

NCDOT R-5863 ECS Carolinas, LLP
Highway 64 Business 4811 Koger Blvd
Hayesville, NC 28904 Greensboro, NC 27407
EDR Inquiry # 5086450.5 Contact: Ashley Barham



Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

<u>Year</u>	<u>Scale</u>	<u>Details</u>	Source
2012	1"=625'	Flight Year: 2012	USDA/NAIP
2010	1"=625'	Flight Year: 2010	USDA/NAIP
2009	1"=625'	Flight Year: 2009	USDA/NAIP
2008	1"=625'	Flight Year: 2008	USDA/NAIP
2006	1"=625'	Flight Year: 2006	USDA/NAIP
2005	1"=625'	Flight Year: 2005	USDA/NAIP
1993	1"=625'	Acquisition Date: April 12, 1993	USGS/DOQQ
1988	1"=625'	Flight Date: February 07, 1988	USGS
1984	1"=625'	Flight Date: April 07, 1984	USGS
1977	1"=625'	Flight Date: March 14, 1977	USGS
1975	1"=625'	Flight Date: April 01, 1975	USGS
1958	1"=625'	Flight Date: February 21, 1958	USGS
1937	1"=625'	Flight Date: January 01, 1937	FirstSearch

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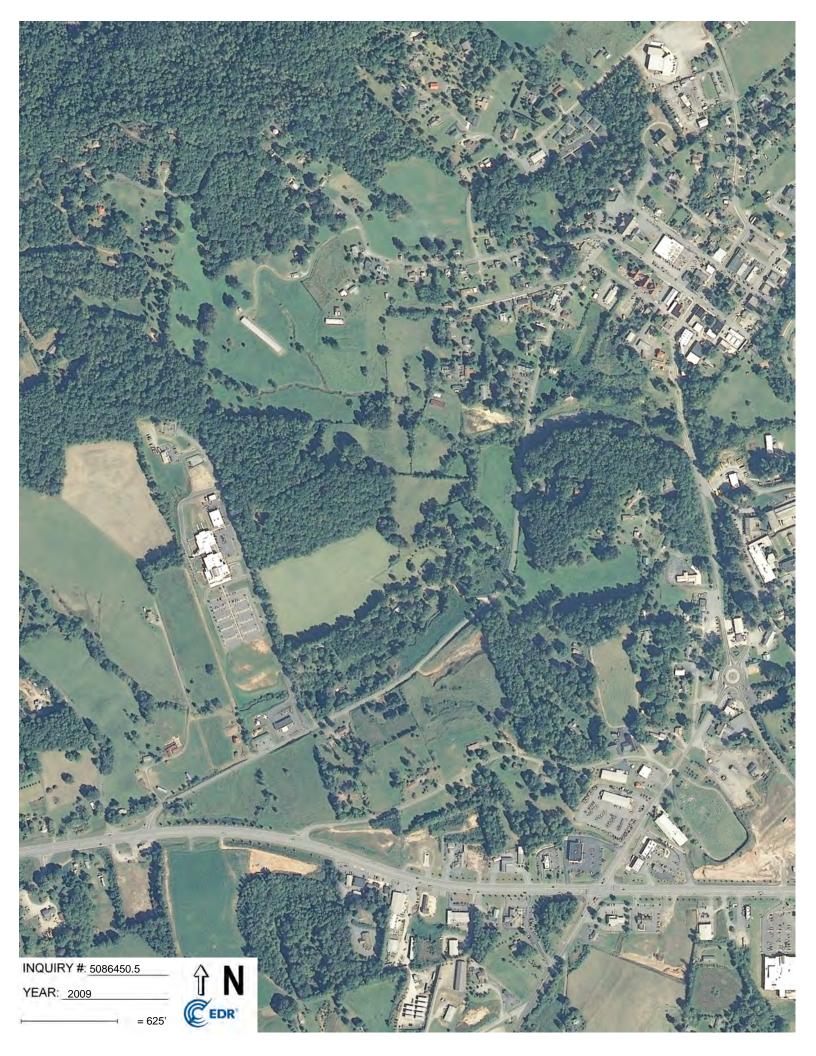
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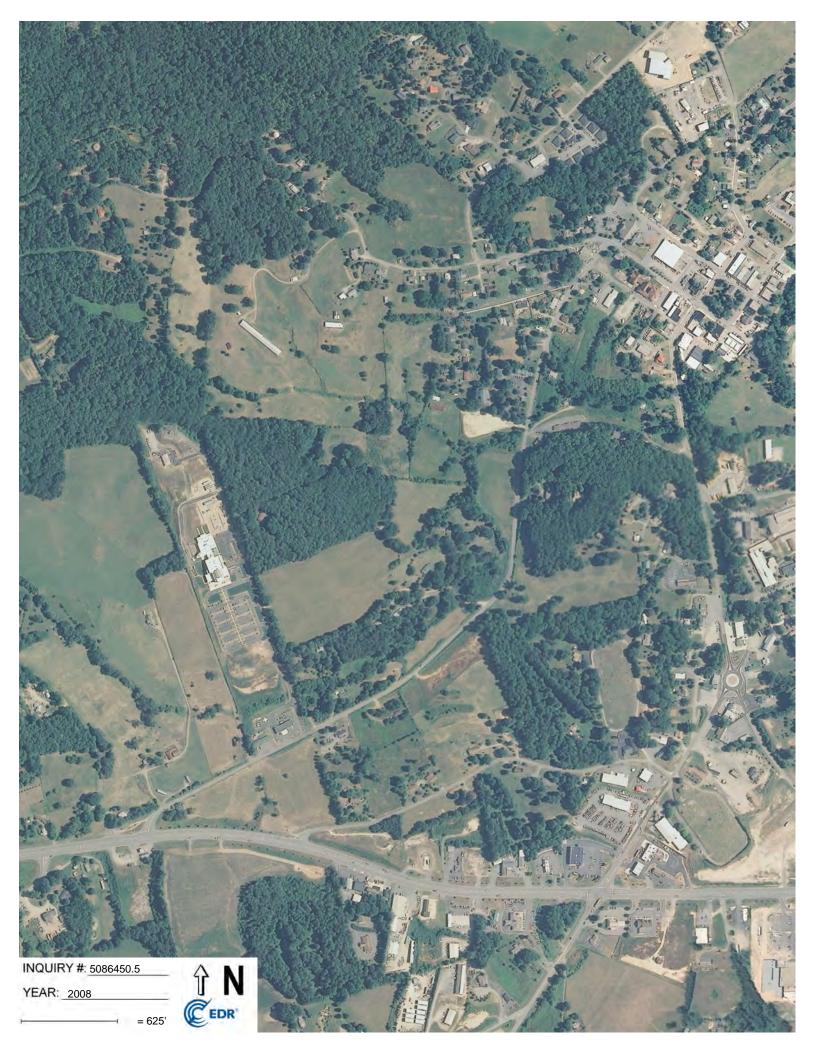
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July 1, 2022 Kleinfelder File No. RAL22R142156

Mr. John L. Pilipchuk, LG, PE North Carolina Department of Transportation State Geotechnical Engineer Geotechnical Engineering Unit 1589 Mail Service Center Raleigh, North Carolina 27699-1589

SUBJECT: Preliminary Site Assessment Report

Parcel 032, Dora Belcher

WBS Element No. 47516.1.1, TIP No. R-5863

Proposed improvements to US 64 Business from US 64 to SR 1307 (Main

Street), Hayesville, Clay County, NC 28904 Kleinfelder Project No. 20230304.001A

Dear Mr. Pilipchuk,

Kleinfelder is pleased to provide its report detailing the activities conducted as part of the preliminary site assessment for the subject project.

Kleinfelder appreciates the opportunity to be of service to you. Should you have questions or require additional information, please do not hesitate to contact the undersigned.

Sincerely,

KLEINFELDER, INC.

Evan D. Amber

Environmental Staff Professional I

Michael J Burns

Environmental Program Manager, LG

EDA/MJB:asp



PRELIMINARY SITE ASSESSMENT REPORT PARCEL 032, DORA BELCHER PIN 555011763556 47 HICKORY STREET HAYESVILLE, CLAY COUNTY, NORTH CAROLINA

NCDOT WBS ELEMENT 47516.1.1 STATE PROJECT R-5863 PROPOSED IMPROVEMENTS TO US 64 BUSINESS FROM US 64 TO SR 1307 (MAIN STREET)

KLEINFELDER PROJECT NO. 20230304.001A

JULY 1, 2022

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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:

Mr. John L. Pilipchuk, LG, PE North Carolina Department of Transportation State Geotechnical Engineer Geotechnical Engineering Unit 1589 Mail Service Center Raleigh, North Carolina 27699-1589

PRELIMINARY SITE ASSESSMENT REPORT PARCEL 032, DORA BELCHER PIN 555011763556 47 HICKORY STREET HAYESVILLE, CLAY COUNTY, NORTH CAROLINA

NCDOT WBS ELEMENT 47516.1.1 STATE PROJECT R-5863 PROPOSED IMPROVEMENTS TO US 64 BUSINESS FROM US 64 TO SR 1307 (MAIN STREET)

Prepared by:

Evan D. Amber Staff Professional I

Reviewed by:

Michael J. Burns

Environmental Program Manager, LG

KLEINFELDER

3200 Gateway Centre Blvd. | Suite 100 Raleigh, North Carolina 27560 P | 919.755.5011

July 1, 2022

Kleinfelder Project No. 20230304.001A



PRELIMINARY SITE ASSESSMENT REPORT

Site Name and Location: Parcel 032

47 Hickory Street

Hayesville, Clay County, North Carolina

Latitude and Longitude: 35.045617°N, -83.821693°W

County Parcel Number 5550117633556

N/A **Facility ID Number:**

Leaking UST Incident: N/A

R-5863 State Project No.:

NCDOT Project No.: NCDOT WBS Element 47516.1.1

Description: Proposed improvements to US 64 Business from

US 64 to SR 1307 (Main Street), Hayesville,

Clay County, NC 28904

July 1, 2022 **Date of Report:**

Consultant: Kleinfelder, Inc.

3200 Gateway Center Boulevard | Suite 100

Morrisville, North Carolina 27560 Corporate Geology License No. C-521 Corporate Licensure for Engineering F-1312

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.

07/12/2022

Michael J Burns, LG

NC License No. 1645



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PRELIMINARY SITE ASSESSMENT REPORT PARCEL 032, DORA BELCHER PIN 555011763556 47 HICKORY STREET HAYESVILLE, CLAY COUNTY, NORTH CAROLINA

NCDOT WBS ELEMENT 47516.1.1 STATE PROJECT R-5863 PROPOSED IMPROVEMENTS TO US 64 BUSINESS FROM US 64 TO SR 1307 (MAIN STREET)

1 INTRODUCTION

Kleinfelder, Inc. (Kleinfelder) has prepared this Preliminary Site Assessment (PSA) report to document assessment activities performed on Parcel 032 (the assessment area is hereafter referred to as the "Project Study Area"). The Project Study Area consists of the eastern and northeastern portions of one (1) 1.25-acre parcel of land that are within the right-of-way and/or easement on Clay County, North Carolina Tax Assessor's Office Parcel Identification Number (PIN) 555011763556. Parcel 032 is located southwest of the intersection of Hickory Street and US Highway 64 Business in Hayesville, Clay County, North Carolina (Figure 1).

Based on the information provided in a GeoEnvironmental Report for Planning, prepared by ECS Southeast, LLP. (ECS) for the North Carolina Department of Transportation (NCDOT) and dated November 14, 2017, Parcel 032 was not identified on a search of the North Carolina Department of Environmental Quality (NCDEQ) underground storage tank (UST) database, there was no evidence of active or former USTs based a review of databases by ECS, and there were no reported incidents associated with the parcel. The NCDOT submitted a Request for Technical and Cost Proposal (RFP), dated March 16, 2022, to Kleinfelder that indicated that the purpose of this PSA was to:

- Conduct a geophysical survey to evaluate for the presence of USTs, magnetic anomalies, and/or buried debris within the Project Study Area.
- Conduct a Phase II Investigation to determine if contaminated soils are present within the Project Study Area and, if contamination is found, to determine the approximate quantity and area of impacted soil.
- Install and sample one (1) temporary groundwater monitoring well to determine if impacted groundwater is present within the Project Study Area, only if groundwater is encountered as part of soil sampling activities.



- Determine if hydraulic lifts are present in the automotive repair shop located on-site.
- Recommend additional assessments to the NCDOT if the geophysical survey, Phase II Investigations, and/or observations at the time of site exploration identified conditions that may warrant further environmental investigation on Parcel 032.

1.1 SITE DESCRIPTION

Parcel 032 has a listed owner of Mrs. Dora Belcher and is currently occupied by Wood Automotive and Towing Services, an automotive repair shop and wrecker service. The parcel's street address is 47 Hickory Street, Hayesville, North Carolina 28904. The parcel consists of one (1) reportedly 2,250-ft² metal-frame active automotive repair shop in the eastern portion of the parcel. The repair shop has three (3) garage bay doors and a small office area at the northern end of the building. One (1) residential home is located in the west-central portion of the parcel, and reportedly encompasses 1,284-ft². Both structures are located outside of the Project Study Area. Central and western portions of the parcel are apparently used for automotive vehicle storage. The eastern and northeastern portions of the parcel, within the Project Study Area, are gravel and asphalt surfaces used for vehicle storage and active automotive repair shop service operations.

The parcel is bound to the east by US Highway 64 Business, beyond which residential homes and associated maintained grass lawns are apparent; to the south by residential homes; to the west by property associated with the Small Blessings Christian Church, beyond which residential homes are apparent; and to the north by Hickory Street, beyond which residential homes, undeveloped wooded land, an apparent marine equipment repair and sales operation (B&T Marine), and a paved asphalt parking lot associated with the Hayesville Presbyterian Church are apparent.

Photographs of the Project Study Area and surrounding area are provided in Appendix A.



1.2 SCOPE OF WORK

Kleinfelder conducted this PSA in accordance with the NCDOT's March 16, 2022 RFP and Kleinfelder's April 11, 2022 Technical and Cost Proposal (TCP). The TCP determined that the primary chemicals of concern (COCs) were volatile organic compounds (VOCs), semi-VOCs, and metals. The NCDOT granted a formal Notice to Proceed (NTP) on April 19, 2022. The NTP indicated the description of the project as improvements to US Highway 64 Business from US Highway 64 to State Route 1307 (Main Street). The project proposed to modernize the roadway by adding sidewalk, a bike lane, and several drainage improvements.



2 HISTORY

2.1 PARCEL USAGE

The parcel is occupied by Wood Automotive and Towing Services, an automotive repair shop and wrecker service.

ECS had contracted a commercial database service, EDR Lightbox (EDR) of Shelton, Connecticut to perform the government database search for listings within 1-mile of a broader area of study that encompassed Parcel 032. The November 14, 2017 GeoEnvironmental Report for Planning, prepared by ECS, did not identify records of USTs or other environmental listings of concern associated with Parcel 032.

Kleinfelder conducted historical research to determine whether additional environmental listings were identified for Parcel 032. The following are the results of the additional research conducted on June 6 and 7, 2022:

- Based on information obtained from Clay County parcel tax records, Parcel 032 was listed as a commercial 1.25-acre lot. One (1) 912-ft² single-family residential home with an additional 372-ft² of finished open/enclosed porch space was listed on the parcel. The home was reportedly constructed in 1901 and was listed as in poor condition. The home was reported to have concrete foundation and aluminum/vinyl finish, but observations at the time of site exploration, June 1, 2022, noted that these materials appeared to be for the automotive repair shop while the residential home was apparently constructed of wood. One (1) 2,250-ft² rectangular garage structure was listed on the parcel. The garage reportedly has a concrete slab foundation, metal finish and roofing, and is not serviced by heating or cooling. The garage was reportedly constructed in 1973 and was listed as in fair condition. A 250-ft² area of chain link fence was associated with the garage structure. No septic system or a bathroom facility were reported for the garage structure. Both the garage and the residential home are located outside of the Project Study Area.
- Based on a review of historical aerial photographs using Google Earth Pro, NC
 OneMap Orthoimagery, and the NCDOT Historical Aerial Imagery Index, the site
 appeared to be occupied by one residential structure as of March 17, 1964, the earliest
 available aerial imagery, although image resolution was too poor to accurately discern
 the development of the site. US Highway 64 Business and Hickory Street were



apparent at this time. The parcel was occupied by one residential building in the western portion of the parcel in 1966. Agricultural land use was apparent in the southwestern corner of the parcel (beyond the Project Study Area) and extending onto the southern adjoining property at this time. Remaining portions of the parcel appeared occupied by maintained grass lawn and scattered residential trees. Between 1966 and 1976, a garage structure was apparent in the eastern portion of the parcel, consistent with the repair shop building observed at the time of site exploration, June 1, 2022. Much of the parcel in areas surrounding the residential home appeared to have been developed to gravel and bare earthen surfaces used for automotive vehicle storage. Aerial imagery reviewed between 1981 and 2009 depicted conditions similar to those observed in 1976, with apparent on-going automotive maintenance/storage operations. In 2010, areas between the maintenance shop and US Highway 64 Business and Hickory Street appeared to have been improved with gravel and asphalt surfaces. A fence structure was apparently constructed in the northeastern portion of the parcel around this time, where towing/wrecker vehicles were parked. Conditions in 2015 and 2019 aerial imagery appeared similar to those observed in 2010, with much of the parcel occupied by parked automotive vehicles, consistent with observations at the time of site exploration, June 1, 2022. Aerial imagery more current than 2019 was not available.

- Kleinfelder searched the Registered UST, Leaking UST, UST Facility, and UST Incident databases, maintained by the NCDEQ. Parcel 032 was not listed in these databases.
- Kleinfelder searched the NCDEQ Division of Waste Management Site Locator Tool.
 Parcel 032 was not listed in this database.
- Kleinfelder searched the UST Finder database, maintained by the US Environmental Protection Agency (EPA). Parcel 032 was not listed in this database.
- Kleinfelder searched the Digital NC database and records maintained by the Town of Hayesville for historical city directories and other pertinent environmental records in the vicinity of the Project Study Area. No city directories of the Project Study Area vicinity or additional documentation associated with Parcel 032 were identified.
- Kleinfelder searched the North Carolina Collection of Sanborn fire insurance maps,
 maintained by the University of North Carolina at Chapel Hill. No Sanborn fire



- insurance maps were available online for Clay County to discern additional information regarding the buildings on-site.
- No other listings for Parcel 032 were identified on any of the other available NCDEQ
 pollution incident databases. No additional documentation associated with the Project
 Study Area was identified through a review of the NC Live or the Digital NC databases.

2.2 FACILITY ID NUMBERS

Kleinfelder reviewed the NCDEQ UST database for Parcel 032. The parcel was not listed in the database.

2.3 GROUNDWATER INCIDENT NUMBERS

No active groundwater incidents are known to be associated with Parcel 032 at this time.



3 OBSERVATIONS

3.1 GROUNDWATER MONITORING WELLS

No (0) active groundwater monitoring wells were observed on Parcel 032 at the time of site exploration, June 1, 2022.

3.2 ACTIVE USTS

Based on review of the NCDEQ UST database, site visits and previous reports, there are no (0) active regulated USTs located in the Project Study Area. At the time of site exploration, June 1, 2022, no evidence of active USTs was observed within the Project Study Area.

3.3 OTHER FEATURES APPARENT BEYOND PROJECT STUDY AREA

The Project Study Area consisted of the eastern and northeastern portions of the parcel within the NCDOT right-of-way or easement. Both the residential home and automotive repair shop were located outside of the Project Study Area. The repair shop was observed to have three (3) garage bay doors along its eastern side facing US Highway 64 Business. Aboveground hydraulic lifts were observed in the southern and central garage bays where active automotive repair service operations were apparent. No above or in-ground hydraulic lifts were observed in the northern garage bay at the time of site exploration, June 1, 2022. However, the owner of the automotive repair shop indicated that an in-ground hydraulic lift was historically located in the northern garage bay but had been removed, and that the bay was currently used for equipment storage rather than active automotive repair operations. Minor staining on concrete surface was observed throughout the automotive repair shop that did not appear indicative of a significant release, as viewed from the Project Study Area. Photographs of the hydraulic lifts and garage bays are included in Appendix A. There were no other features of concern observed in other portions of the parcel beyond the Project Study Area or on adjoining areas.



4 METHODS

4.1 PROPERTY OWNER CONTACTS

As part of Kleinfelder's scope of work, the listed property owner (Mrs. Dora Belcher) was contacted about the work schedule for the field work and the type of work being performed. The owner did not express any concern or special conditions associated with the work being performed. The owner of the automotive repair shop, apparently Mrs. Belcher's son, indicated that he and Mrs. Belcher would prefer future contact to be directed to him.

4.2 HEALTH AND SAFETY

Prior to commencing the field work, Kleinfelder personnel developed a Site-Specific Health and Safety Plan (HASP) covering activities to be performed. The site-specific HASP was discussed with all Kleinfelder personnel involved with the project and at a daily on-site "tail gate" safety meetings with subcontractors and sub consultants. In addition to the HASP, Kleinfelder utilized its comprehensive Corporate Health and Safety Program, targeted to address those specific and critical tasks that involve Kleinfelder personnel and subcontractors. The Loss Prevention System (LPS™), a behavior-based program, is Kleinfelder's company-wide safety system implemented and embraced by all levels of the company.

4.3 GEOPHYSICAL INVESTIGATION

Pyramid Geophysical Services of Greensboro, North Carolina (Pyramid) conducted a geophysical investigation in the Project Study Area on May 19, 2022. Pyramid attempted to utilize electromagnetic (EM) induction technology and ground penetrating radar (GPR) to locate potential geophysical anomalies and potential USTs within the Project Study Area. However, due to the significant quantity of vehicles present on-site, an EM metal detection survey was not performed and the GPR survey was limited to accessible areas. The GPR surveys identified evidence of utilities parallel to US Highway 64 Business. The geophysical survey also identified the following three (3) probable USTs in the fenced enclosure in the northeastern portion of the Project Study Area (numbered from east to west, respectively):

- UST # 1 and UST # 2 are both approximately 15 feet long and 5 feet wide.
- UST # 3 is approximately 13 feet long and 5 feet wide.

A copy of the Pyramid Geophysical Investigation Report, detailing the field methodology, is included in Appendix B.



4.4 SOIL ASSESSMENT

The scope of work for the soil assessment was to evaluate the presence of soil contamination along the existing right-of-way and/or easement. The soil borings were planned to be advanced to maximum depths of 10-feet below the ground surface (ft bgs) since the depth of the probable UST basin identified by the geophysical survey may be up to 7-9 ft bgs. Field screening using a photoionization detector (PID) was conducted at 1-foot intervals beginning from the ground surface to total boring depth. The soil sample with the highest PID reading above background or the sample from the maximum drilled depth was selected for on-site laboratory analyses.

Prior to the drilling activities, public utilities were marked by NC One Call and private utilities were marked by Pyramid.

Kleinfelder subcontracted South Atlantic Environmental Drilling and Construction Company (SAEDACCO) to perform the drilling on-site on June 1, 2022. SAEDACCO advanced ten (10) soil borings (SB-01 through SB-10) by a combination of hand auger and direct-push technology at locations specified by Kleinfelder. The borings were located within the right-of-way on all sides adjacent to the probable UST basin and adjacent to areas of observed petroleum surface staining. The soil boring locations are shown on Figure 2.

Soil samples were collected by hand auger to 4-ft bgs, and then by driving Macro Core™ samplers in 5-foot intervals to boring termination (where direct-push technology was applied). For the soils collected via hand auger, a sample was collected from the end of the auger after each 1-ft interval of soil was removed and soils were classified as each auger sample was removed. For the soils collected via MacroCore™ samplers, each soil core was cut open, the soil samples were classified, and the soil divided into 1-foot sections. Each 1-foot section, collected via either method, was screened in the field using a PID. The PID readings are summarized in Table 1.

Soils in the vicinity of the probable UST basin (SB-01 to SB-05) were generally reddish-brown silts and clayey silts from the surface to approximately 2-4-ft bgs, then yellowish-brown and reddish-brown clays to approximately 8-9-ft bgs, and then gray and white silts to boring termination. The soils were generally moderately to heavily micaceous. Moist soils were typically observed starting at 7-8-ft bgs, and soils were observed to be very moist but not saturated between 8-10-ft bgs. Soil boring SB-04, east adjacent to the probable UST basin, encountered practical refusal on an unknown hard surface (likely rock) at approximately 4-ft bgs. SAEDACCO



attempted to advance an offset boring, which yielded no recovery between 4-9-ft bgs but did recover a small amount of soil at 9-10-ft bgs, which was classified and screened using a PID.

Soils in the eastern portion of the parcel between the maintenance shop and US Highway 64 Business (SB-06 to SB-10) were generally reddish-brown silts and sandy silts with some minor veins of variegated/multi-colored silts. These soils were moderately to heavily micaceous and contained rock fragments, suggesting that these soils may overlay weathered rock. These soils were drier than those observed in the vicinity of the probable UST basin.

Groundwater was not encountered in any of the borings at the termination depths of 10-ft bgs. Therefore, a temporary groundwater monitoring well was not installed and groundwater was not sampled as part of this PSA. Copies of the boring logs are included in Appendix C.

4.5 SOIL ANALYSIS

The PID readings from advanced soil borings SB-01 and SB-05 through SB-10 were noted to be low, with a maximum PID reading of 7.0 parts per million (ppm) at 2-ft bgs of SB-01. The PID readings indicated mildly elevated total petroleum hydrocarbon (TPH) concentrations greater than 10 ppm in SB-02 (west adjacent to the probable UST basin) at 4 and 7-ft bgs. The PID readings indicated moderately to significantly elevated TPH concentrations (15.8 to 175.5 ppm) in the soils north (SB-03) and east (SB-04) adjacent to the probable UST basin from 8 to10-ft bgs and 1 to4-ft bgs, respectively. Based on the PID data and visual observations, between one (1) and three (3) of the samples from each boring was selected for on-site laboratory analysis.

Selected samples were analyzed by RED Lab, LLC utilizing ultraviolet fluorescence (UVF) methodology to provide real-time analytical results of TPH, Gasoline Range Organics (GRO), Diesel Range Organics (DRO), and benzene, toluene, ethylbenzene, and total xylenes (BTEX). The UVF method was selected because of the known current use of petroleum products on Parcel 032. The UVF analysis also provided data regarding Environmental Protection Agency 16 total Polycyclic Aromatic Hydrocarbons (PAHs), and Benzo(a)pyrene (BaP).

Additionally, soil samples were collected at 1-ft bgs and placed into laboratory prepared containers on wet ice. Samples were sent to Waypoint Analytical Laboratories in Charlotte, NC (Waypoint) for laboratory testing for eight (8) RCRA metals by EPA Method 6010D/7471B. Kleinfelder compared the metal contaminant analytical results to the applicable NCDEQ Soil-to-Water Maximum Soil Contaminant Concentrations (MSCCs), effective March 7, 2022.



Contaminants without listed MSCCs were by default compared to the applicable laboratory method detection limits. To evaluate whether concentrations were within published background levels or were statistically within range of the other samples collected, a statistical analysis was conducted to evaluate the mean concentrations and standard deviations for each metal. Metal concentrations outside of two standard deviations of the mean were considered to be statistical outliers, which were then compared to known naturally occurring concentrations in the area using a geochemical atlas¹. A summary of the statistical analysis and reported known naturally occurring concentrations in the area is presented in Tables 3 and 4. Any sample concentrations that appeared to be both a statistical outlier and greater than known concentrations in the area were evaluated to determine whether other metals concentrations in the sample indicated a probable significant release. None of the samples evaluated indicated stained areas were more than surface releases which did not extend to one (1) foot bgs. Therefore, additional analysis via Synthetic Precipitation Leaching Procedure (SPLP) was not conducted.

¹Smith, D.B., Cannon, W.F., Woodruff, L.G., Solano, Federico, and Ellefsen, K.J., 2014. Geochemical and Mineralogical Maps for Soils of the Conterminous United States. U.S. Geological Survey Open-File Report 2014–1082, 386 p., http://dx.doi.org/10.3133/ofr20141082.



5 RESULTS

5.1 GEOPHYSICAL INVESTIGATION

The GPR geophysical survey identified the following three (3) probable USTs in the fenced enclosure in the northeastern portion of the Project Study Area (numbered from east to west, respectively):

- UST # 1 and UST # 2 are both approximately 15 feet long and 5 feet wide.
- UST # 3 is approximately 13 feet long and 5 feet wide.

Kleinfelder estimates UST # 1 and UST # 2 to both be approximately 2,200-gallon capacity, and estimates UST # 3 to be approximately 2,000-gallon capacity.

The locations of the three probable USTs are depicted on Figure 2.

5.2 SOIL SAMPLING DATA

The UVF analysis of soil samples indicated that petroleum contaminated soil may be present in adjacent soils to the probable UST basin, particularly in west adjacent soils (SB-02) between 4-7-ft bgs. Petroleum contamination in shallow soils (0-1-ft bgs) may also be present in soils east of the southern garage bay (SB-10). However, no petroleum impacts were identified above applicable NCDEQ Action Levels in the existing right-of-way.

A summary of soil sample PID readings are presented in Table 1, and the UVF analytical results are presented in Table 2.

Six (6) RCRA metals were detected in soil borings SB-01 to SB-03 and SB-05 to SB-09, seven (7) RCRA metals were detected in SB-04, and five (5) RCRA metals were detected in soil boring SB-10. Silver was detected in only one soil boring, SB-04, but the other metal analytical results are not indicative of impacts in the area and so this result appears to be an error. The reported silver concentration in SB-04 was also below the applicable Soil-to-Water MSCC. Arsenic, cadmium, total mercury, and selenium did not have listed MSCCs; selenium was not detected in any samples, and the other analytes were within or less than known naturally occurring concentration ranges in the area. An exception was an apparently elevated concentration of cadmium reported in SB-05. However, cadmium was also detected in blank laboratory analyses



for SB-02 to SB-04, indicative of possible laboratory cross-contamination. Chromium was detected above the applicable MSCC in all soil borings. However, reported chromium concentrations were less than those known to be naturally occurring in the area. No other analytes were detected above applicable MSCCs.

A summary of the statistical analysis and reported known naturally occurring concentrations¹ in the area is presented in Table 3. RCRA metal analytical results are presented in Table 4 and depicted on Figure 2.

The laboratory reports are included in Appendix D.

5.3 SAMPLE OBSERVATIONS

Soils were observed for any obvious evidence of contamination. Mild to moderate odors of petroleum were detected in soil borings adjacent to the probable UST basin (SB-01 to SB-04) and in shallow soil in the vicinity of staining east of the southern garage bay door (SB-10). Observations are summarized in Table 1. No visual evidence of contamination was noted in any of the soil samples from the borings apart from observed petroleum staining on gravel surfaces throughout the Project Study Area.

5.4 QUANTITY CALCULATIONS

Kleinfelder did not identify soil petroleum impact in the current right-of-way above applicable NCDEQ Action Levels for TPH GRO and DRO.

Although chromium was detected in all soil boring samples above the applicable Soil-to-Water MSCC, concentrations were less than those known to be naturally occurring in the area. Cadmium did not have a listed MSCC and was detected at elevated levels in SB-05 above known natural occurrence for the area, but this result may be due to laboratory cross-contamination. All other detected metals were below applicable MSCCs and/or within or less than known naturally occurring concentrations in the area. Therefore, it is Kleinfelder's opinion that detected RCRA metals are not indicative of impacts in the current right-of-way.

¹Smith, D.B., Cannon, W.F., Woodruff, L.G., Solano, Federico, and Ellefsen, K.J., 2014. Geochemical and Mineralogical Maps for Soils of the Conterminous United States. U.S. Geological Survey Open-File Report 2014–1082, 386 p., http://dx.doi.org/10.3133/ofr20141082.



6 CONCLUSIONS

Based on results of the GPR survey, historical review, soil assessment and field observations, Kleinfelder has reached the following conclusions:

- Parcel 032 has been occupied by a single-family residential home since at least 1964, beyond the Project Study Area. The automotive repair shop was reportedly constructed in 1973. The parcel had since been primarily occupied by automotive repair and towing operations, with much of the parcel surrounding the residential home used for automotive vehicle storage. Improved gravel and asphalt surfaces and a chain link fence around the probable UST area in the northeastern portion of the parcel were apparently constructed around 2010.
- The residential home and the automotive repair shop are located outside of the Project Study Area. No records of septic systems were identified on Parcel 032. Observed surface staining inside of the repair shop appeared to be minor and on concrete surface, as viewed from the right-of-way.
- Above-ground hydraulic lifts were observed in the southern and central garage bays.
 No hydraulic lifts were observed in the northern garage bay, although the repair shop owner indicated that the garage formerly operated an in-ground hydraulic lift.
- The GPR geophysical survey identified the following three (3) probable USTs in the fenced enclosure in the northeastern portion of the Project Study Area (numbered from east to west, respectively):
 - UST # 1 and UST # 2 are both approximately 15 feet long and 5 feet wide.
 - UST # 3 is approximately 13 feet long and 5 feet wide.
- Kleinfelder estimates UST # 1 and UST # 2 to both be approximately 2,200-gallon capacity, and estimates UST # 3 to be approximately 2,000-gallon capacity.
- No soil impact was detected in borings advanced within the current right-of-way above the NCDEQ Action Levels for TPH GRO and DRO.
- No RCRA metal impact was detected within in the current right-of-way.
- Groundwater was not encountered in the soil borings at a depth of 10-ft bgs. Therefore, a temporary groundwater monitoring well was not installed and groundwater was not sampled as part of this PSA.



7 RECOMMENDATIONS

Based on results of this Preliminary Site Assessment, Kleinfelder recommends no additional sampling or special handling of soils be performed within the Project Study Area on Parcel 032 in Hayesville, Clay County, North Carolina.

The probable USTs should be removed and properly disposed.



8 LIMITATIONS

Kleinfelder's work will be 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



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.



TABLES

TABLE 1: Soil Sample Screening Results

Dete	Carrala ID	D==4h (f4)	DID Danding	Netes
Date	Sample ID	Depth (ft)	PID Reading 0.7	Notes
		2	7.0	UVF Analysis
		3	1.5	
		4	2.1	UVF Analysis
6/1/22	SB-01	5 6	0.3	
		7	0.0	
		8	0.0	
		9	0.0	
		10	0.1 0.0	
		2	3.0	
		3	0.0	
		4	15.2	UVF Analysis
6/1/22	SB-02	5	3.0	UVF Analysis
O IIZZ	05 02	6	0.5	
		7	12.6	UVF Analysis
		<u>8</u> 9	0.5 0.1	
		10	NA	No recovery
		1	0.3	
		2	0.6	
		3	1.0	
		5	1.1 0.2	
6/1/22	SB-03	6	2.0	
		7	1.2	UVF Analysis
		8	100.3	
		9	70.1	18/57
		10	175.5	UVF Analysis
		2	123.9 112.1	UVF Analysis
		3	31.2	
		4	15.8	
6/1/22	SB-04	5	NA	No recovery
U/ 1/22	SD-04	6	NA	No recovery
		7	NA NA	No recovery
		<u>8</u> 9	NA NA	No recovery No recovery
		10	1.5	Offset boring
		1	0.1	Oncot boning
		2	0.6	
		3	0.7	
		4	0.5	
6/1/22	SB-05	<u>5</u>	0.6 0.7	
		7	0.7	UVF Analysis
		8	0.6	OVI Allalysis
		9	0.5	
		10	0.4	
		1	0.5	
		2	0.6	
		<u>3</u>	1.2 1.4	UVF Analysis
0/4/00	00.00	5	0.6	O VI 7 III III YOO
6/1/22	SB-06	6	0.7	
		7	0.5	
		8	0.5	
		9	0.7 0.4	
		10	0.4	
		2	0.7	
		3	0.8	UVF Analysis
		4	0.7	
6/1/22	SB-07	5	0.7	
		6	0.6	
		- 7 8	0.5 0.5	
		9	0.6	
		10	0.4	
		1	0.9	
		2	0.9	
		3	1.2	
		<u>4</u> 5	1.2 0.9	
6/1/22	SB-08	6	1.3	UVF Analysis
		7	0.8	
		8	0.7	-
		9	0.5	
		10	0.8	
		2	1.4 1.3	
		3	1.5	UVF Analysis
		4	1.4	
6/1/22	SB-09	5	0.9	
		6	0.9	
		7 8	0.5	
		9	0.6 0.5	
		10	0.6	
		1	6.1	UVF Analysis
		2	1.6	
		3	1.9	
		4	1.2	
		5	1.0	
6/1/22	SB-10	^		
6/1/22	SB-10	6 7	1.3	
6/1/22	SB-10	6 7 8	1.3 0.8 0.5	
6/1/22	SB-10	7	0.8	

Notes:

1) PID = Photoionization Detector
2) PID readings in parts per million (ppm)
3) NA = Not Analyzed
4) UVF = Ultraviolet Flourescence

TABLE 2: Soil Sample UVF Analytical Summary

Parameter		Analytical Results								Comparison Criteria							
		Soil Sample Results															
Sample ID	SB-01_1-2	SB-01_3-4	SB-02_3-4	SB-02_4-5	SB-02_6-7	SB-03_6-7	SB-03_9-10	SB-04_0-1	SB-05_6-7	SB-06_3-4	SB-07_2-3	SB-08_5-6	SB-09_2-3	SB-10_0-1			
PID Reading (ppm)	7.0	2.1	15.2	3.0	12.6	1.2	175.5	123.9	0.7	1.4	0.8	1.3	1.5	6.1	State Action Level	Protection of	Residential
Collection Depth (ft bgs)	2	4	4	5	7	7	10	1	7	4	3	6	3	1	State Action Level	Groundwater	Health
Collection Date	6/1/22	6/1/22	6/1/22	6/1/22	6/1/22	6/1/22	6/1/22	6/1/22	6/1/22	6/1/22	6/1/22	6/1/22	6/1/22	6/1/22			
UVF Method																	
Gasoline Range Organics (GRO)	1.3	1.4	11.4	3.8	27.8	6.1	37.1	2.8	<0.6	<0.61	< 0.29	<0.28	<0.28	7.2	50		
Diesel Range Organics (DRO)	16.6	4.9	90.6	69.9	87.4	<0.54	<0.54	48.3	<0.6	0.61	<0.29	<0.28	0.28	80.8	100		

Notes:

Results displayed in milligrams per kilogram (mg/kg)
ft bgs = Feet below ground surface
Bold = Above Laboratory Detection Level
Highlighted concentrations exceed the NCDEQ action level
UVF = Ultraviolet Flouresence

TABLE 3: Soil Sample RCRA Metals Statistical Analysis and Known Natural Occurrence

Analyte	Mean	2 Std Dev (+/-)	Site-Specific Range	Natural Range
Arsenic	2.14	0.94	1.2 - 3.08	<0.6 - 4.3
Barium	NA	NA	NA	NA
Cadmium	0.218	0.221	0 - 0.436	0.1 - 0.5
Chromium	15.31	3.08	12.23 - 18.39	21 - 55
Lead	NA	NA	NA	NA
Mercury (Total)	0.038	0.032	0.006 - 0.07	0.05 - 3.55
Selenium	NA	NA	NA	NA
Silver	2.09*	NA	NA	NA

Notes:

Results displayed in milligrams per kilogram (mg/kg)
Std Dev = Standard Deviation

Natural Range = Natural occuring concentration range per the geochemical atlas for the area

ND = Not detected above laboratory method detection limits

<STW = all concentrations below the applicable soil-to-water (STW) Maximum Soil Contaminant Concentration (MSCC)

NA = Not applicable

*One sample location, SB-04, with detection. Other metals not indicative of an area of impact. Result appears to be an error

TABLE 4: Soil Sample RCRA Metals Analytical Summary

					Analytic	al Results							
Analyte		Soil Sample Results							Comparison Criteria				
	SB-01	SB-02	SB-03	SB-04	SB-05	SB-06	SB-07	SB-08	SB-09	SB-10	Soil-to-Water MSCC	Site-Specific Range	Natural Range
Arsenic	2.44	2.48	2.62	2.67	4.11	2.28	1.80	1.23	1.05	0.684	NE	1.2 - 3.08	<0.6 - 4.3
Barium	70.60	73.70	75.20	70.90	44.00	104.00	46.30	53.00	46.60	25.40	620	NA	NA
Cadmium	0.464	0.103 J,B	0.192 B	0.104 J,B	0.791*	0.156	0.0663 J	0.0514 J	0.112 J	0.137	NE	0 - 0.436	0.1 - 0.5
Chromium	16.50	20.30	18.30	20.10	16.10	17.50	13.30	13.90	12.50	9.58	3.8	12.23 - 18.39	21 - 55
Lead	27.50	20.80	36.20	32.80	39.30	69.50	16.80	16.30	30.80	32.40	270	NA	NA
Mercury (Total)	0.0386	0.0478	0.0612	0.0574	0.0395	0.0146 J	0.0186 J	0.0144 J	0.0329 J	BDL	NE	0.006 - 0.07	0.05 - 3.55
Selenium	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NE	NA	NA
Silver	BDL	BDL	BDL	2.09	BDL	BDL	BDL	BDL	BDL	BDL	4.8	NA	NA

Notes:

Results displayed in milligrams per kilogram (mg/kg)

Bold = Concentrations exceed the laboratory method detection limits

BDL = Concentrations below the laboratory method detection limits

Highlighted concentrations exceed the Soil-to-Water MSCC, site-specific range, and naturally occurring range

MSCC = Maximum Soil Contaminant Concentration, effective March 7, 2022

 ${\sf NE}={\sf No}$ listed standard. Default standard is the laboratory method detection limit

NA = Not applicable

Analysis by EPA Method 6010D/7471B

J = Estimated concentration above the laboratory method detection limits

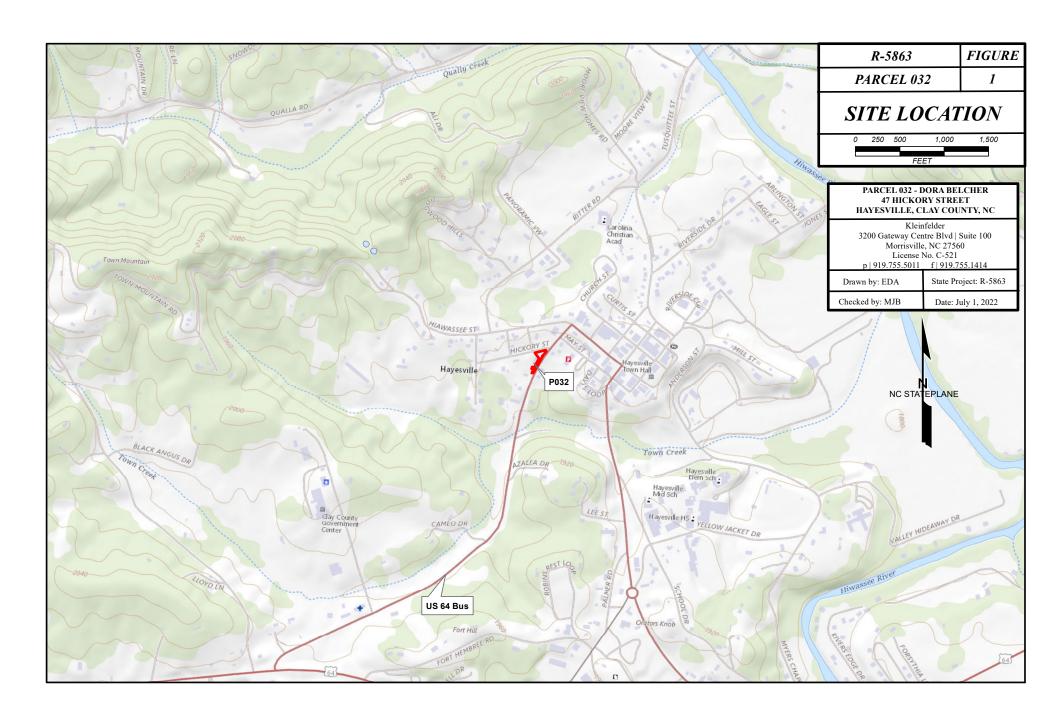
B = Analyte was detected in the blank sample

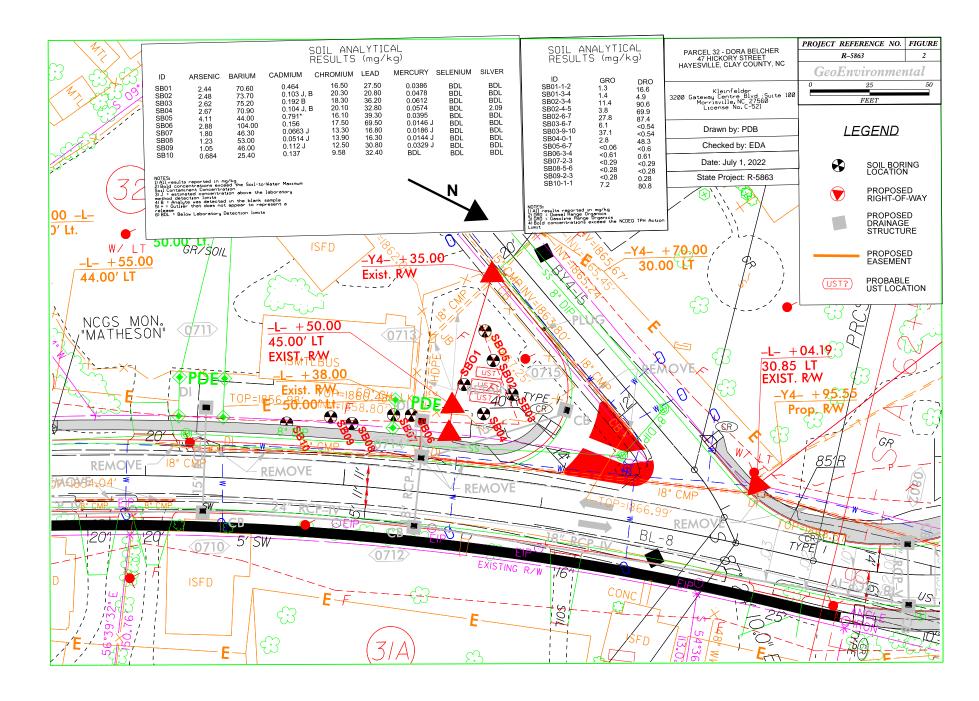
Samples collected from 1-foot below ground surface

* Outlier that does not appear to represent a release



FIGURES







APPENDIX A SITE PHOTOGRAPHS



View facing west from US-64 Business towards the front of Wood Automotive and Towing Services.



View facing northwest from US-64 Business towards the front of Wood Automotive and Towing Services.

Original in Color



PROJECT NO:2023	30304.001A
DRAWN:	June 2022
DRAWN BY:	EDA
CHECKED BY:	MB
FILE NAME:	
Photo Pages	

SITE PHOTOGRAPHS

Preliminary Site Assessment Report R-5863 – Parcel 032, Dora Belcher 47 Hickory Street Hayesville, Clay County, NC 28904 FIGURE



View facing north along US-64 Business towards the north adjoining property and Hickory Street.



View facing east from US-64 Business towards the eastern adjoining property.

Original in Color



PROJECT NO:2023	30304.001A
DRAWN:	June 2022
DRAWN BY:	EDA
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FILE NAME:	
Photo Pages	

SITE PHOTOGRAPHS

Preliminary Site Assessment Report R-5863 – Parcel 032, Dora Belcher 47 Hickory Street Hayesville, Clay County, NC 28904 FIGURE



View facing south along US-64 Business towards the southern adjoining property and Hickory Street.



View facing west from the UST basin area in the northern portion of the Project Study Area towards a residential home in the remaining western portion of the parcel beyond the Project Study Area.

Original in Color



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DRAWN:	June 2022
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Photo Page	es

SITE PHOTOGRAPHS

Preliminary Site Assessment Report R-5863 – Parcel 032, Dora Belcher 47 Hickory Street Hayesville, Clay County, NC 28904 FIGURE



UST basin area in the northern portion of the site with apparent surface staining. Soil Borings 1-4 advanced around all sides of the UST basin area.



Surface staining apparent west of the UST basin and location of Soil Boring 5. A wrecker/towing vehicle was formerly parked where the staining was apparent.

Original in Color



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SITE PHOTOGRAPHS

Preliminary Site Assessment Report R-5863 – Parcel 032, Dora Belcher 47 Hickory Street Hayesville, Clay County, NC 28904 FIGURE



Apparent surface staining in front of the northern bay door. Location of Soil Boring 6.



Representative view of apparent surface staining in front of the central and northern bay doors. Staining areas (right to left) are location of Soil Borings 7-9, respectively.

Original in Color



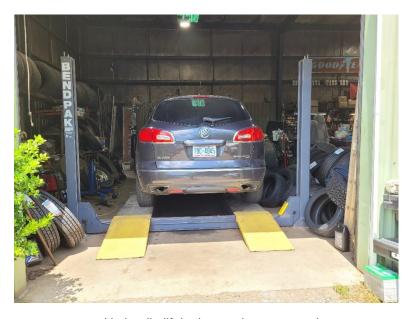
PROJECT NO:202	30304.001 <i>A</i>
DRAWN:	June 2022
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SITE PHOTOGRAPHS

Preliminary Site Assessment Report R-5863 – Parcel 032, Dora Belcher 47 Hickory Street Hayesville, Clay County, NC 28904 FIGURE



Apparent surface staining in front of the southern bay door. Staining closest to the bay door was outside of the right-of-way. Location of Soil Boring 10.



Hydraulic lift in the southern garage bay.

Original in Color

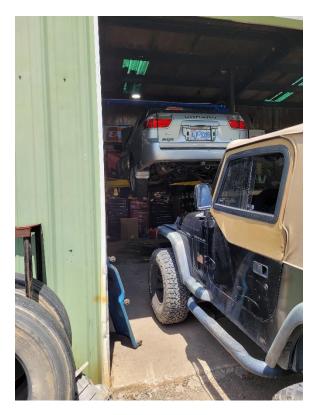


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SITE PHOTOGRAPHS

Preliminary Site Assessment Report R-5863 – Parcel 032, Dora Belcher 47 Hickory Street Hayesville, Clay County, NC 28904 FIGURE





Hydraulic lift in the central garage bay.



Northern garage bay and adjoining office.

Original in Color



PROJECT NO:202	30304.001A
DRAWN:	June 2022
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Photo Pages	;

SITE PHOTOGRAPHS

Preliminary Site Assessment Report R-5863 – Parcel 032, Dora Belcher 47 Hickory Street Hayesville, Clay County, NC 28904 FIGURE



APPENDIX B GEOPHYSICAL SURVEY REPORT



PYRAMID GEOPHYSICAL SERVICES (PROJECT 2022-152)

GEOPHYSICAL SURVEY

METALLIC UST INVESTIGATION: PARCEL 32 **NCDOT PROJECT R-5863**

47 HICKORY STREET, HAYESVILLE, NC May 26, 2022

Report prepared for: Michael Burns, P.G.

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Prepared by:

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Reviewed by: _

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NC License #1066

GEOPHYSICAL INVESTIGATION REPORT

Parcel 32 - 47 Hickory Street Hayesville, Clay County, North Carolina

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Executive Summary	1
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- Figure 2 Parcel 32 GPR Transect Locations and Select Images
- Figure 3 Parcel 32 Locations and Sizes of Three Probable USTs
- Figure 4 Overlay of Three Probable USTs on NCDOT Engineering Plans

Appendices

Appendix A – GPR Transect Images

LIST OF ACRONYMS

CADD	Computer Assisted Drafting and Design
DF	Dual Frequency
EM	Electromagnetic
GPR	Ground Penetrating Radar
GPS	Global Positioning System
NCDOT	North Carolina Department of Transportation
ROW	
UST	Underground Storage Tank

Project Description: Pyramid Geophysical Services (Pyramid), a department of Pyramid Environmental & Engineering, P.C., conducted a geophysical investigation for Kleinfelder, Inc. at Parcel 32, located at 47 Hickory Street, in Hayesville, NC. The survey was part of a North Carolina Department of Transportation (NCDOT) Right-of-Way (ROW) investigation (NCDOT Project R-5863). The survey was designed to extend from the existing edge of pavement into the proposed ROW and/or easements, whichever distance was greater. Conducted on May 19, 2022, the geophysical investigation was performed to determine if unknown, metallic underground storage tanks (USTs) were present beneath the survey area.

Geophysical Results: Due to the significant quantity of vehicles present at the site, an electromagnetic (EM) metal detection survey was not performed. The geophysical investigation consisted solely of a limited ground penetrating radar (GPR) survey across accessible areas. The GPR survey identified three buried metallic objects whose sizes, orientations, and amplitudes of reflection were consistent with USTs. Therefore, these features have been classified as three probable USTs (from east to west: UST #1, UST #2, and UST #3).

- UST #1 and UST #2 are approximately 15 feet long and 5 feet wide.
- UST #3 is approximately 13 feet long and 5 feet wide.

The geophysical survey also identified evidence of utilities parallel to the existing roadway (US-64 BUS). Collectively, the geophysical data <u>recorded evidence of three probable</u> <u>metallic USTs at Parcel 32</u>. It should be noted that significant portions of the survey area were not accessible due to parked vehicles at the site.

INTRODUCTION

Pyramid Geophysical Services (Pyramid), a department of Pyramid Environmental & Engineering, P.C., conducted a geophysical investigation for Kleinfelder, Inc. at Parcel 32, located at 47 Hickory Street, in Hayesville, NC. The survey was part of a North Carolina Department of Transportation (NCDOT) Right-of-Way (ROW) investigation (NCDOT Project R-5863). The survey was designed to extend from the existing edge of pavement into the proposed ROW and/or easements, whichever distance was greater. Conducted on May 19, 2022, the geophysical investigation was performed to determine if unknown, metallic underground storage tanks (USTs) were present beneath the survey area.

The site consisted of an active automotive repair building surrounded by gravel and asphalt surfaces. It should be noted that a significant number of vehicles were parked throughout the survey area, resulting in highly limited access for the geophysical instruments. An aerial photograph, showing the survey area boundaries and ground-level photographs, is shown in **Figure 1**.

FIELD METHODOLOGY

Due to the significant quantity of vehicles present at the site, an EM metal detection survey was not performed. The geophysical investigation consisted solely of a limited ground penetrating radar (GPR) survey across accessible areas.

GPR data were acquired across accessible portions of the survey area on May 19, 2022, using a Geophysical Survey Systems, Inc. (GSSI) SIR 4000 control unit equipped with a 350 MHz antenna. Data were collected both in reconnaissance fashion as well as along formal transect lines. The GPR data were viewed in real-time using a vertical scan of 512 samples, at a rate of 48 scans per second. GPR data were viewed down to a maximum depth of approximately 8 feet, based on dielectric constants calculated by the SIR 4000 unit in the field during the reconnaissance scans. GPR transects across specific anomalies were saved to the hard drive of the DF unit for post-processing and figure generation.

Pyramid's classifications of USTs for the purposes of this report are based directly on the geophysical UST ratings provided by the NCDOT. These ratings are as follows:

,	Geophysical Surveys for on NCD	Underground Stora OOT Projects	ge Tanks
High Confidence	Intermediate Confidence	Low Confidence	No Confidence
Known UST Active tank - spatial location, orientation, and approximate depth determined by geophysics.	Probable UST Sufficient geophysical data from both magnetic and radar surveys that is characteristic of a tank. Interpretation may be supported by physical evidence such as fill/vent pipe, metal cover plate, asphalt/concrete patch, etc.	Possible UST Sufficient geophysical data from either magnetic or radar surveys that is characteristic of a tank. Additional data is not sufficient enough to confirm or deny the presence of a UST.	Anomaly noted but not characteristic of a UST. Should be noted in the text and may be called out in the figures at the geophysicist's discretion.

DISCUSSION OF RESULTS

Discussion of GPR Results

GPR transects were performed between vehicles across accessible portions of the survey area. **Figure 2** presents the locations of the formal GPR transects performed at the property as well as select transect images. All of the GPR transect images are included in **Appendix A**. A total of fourteen formal GPR transects were performed at the site.

The majority of the GPR transects recorded evidence of general soil behavior with isolated buried utility lines extending parallel to the roadway (US-64 BUS). However, GPR Transects 3-7 recorded three discreet, high-amplitude hyperbolic reflectors and three isolated lateral reflectors that are characteristic of the widths and lengths of metallic USTs. Although an EM survey was not performed, the amplitudes of these features are consistent with buried metal. Therefore, these features have been classified as three probable metallic USTs (from east to west: UST #1, UST #2, and UST #3). UST #1 and UST #2 are approximately 15 feet long and 5 feet wide. UST #3 is approximately 13 feet long and 5 feet wide. Figure 3 provides the locations and sizes of the three probable USTs, overlain on an aerial photograph, along with a ground-level photograph.

Collectively, the geophysical data <u>recorded evidence of three probable metallic USTs at Parcel 32</u>. It should be noted that significant portions of the survey area were not accessible due to parked vehicles at the site. **Figure 4** provides an overlay of the locations of the probable USTs on the NCDOT engineering plans for reference.

SUMMARY & CONCLUSIONS

Pyramid's evaluation of the GPR data collected at Parcel 32 in Hayesville, North Carolina, provides the following summary and conclusions:

- Significant quantities of vehicles were parked throughout the survey area, preventing an EM metal detection survey from being performed. GPR transects were performed across the accessible portions of the survey area.
- The GPR surveys provided reliable results for the detection of metallic USTs within the accessible portions of the geophysical survey area.
- The GPR survey identified three buried metallic objects whose sizes, orientations, and amplitudes of reflection were consistent with USTs. Therefore, these features have been classified as three probable USTs (from east to west: UST #1, UST #2, and UST #3).
 - o UST #1 and UST #2 are approximately 15 feet long and 5 feet wide.
 - o UST #3 is approximately 13 feet long and 5 feet wide
- The geophysical survey identified evidence of utilities parallel to the existing roadway (US-64 BUS).
- Collectively, the geophysical data <u>recorded evidence of three probable metallic</u> USTs at Parcel 32.
- It should be noted that significant portions of the survey area were not accessible due to parked vehicles at the site.

LIMITATIONS

Geophysical surveys have been performed and this report was prepared for Kleinfelder, Inc. in accordance with generally accepted guidelines for EM61 and GPR surveys. It is generally recognized that the results of the EM61 and GPR surveys are non-unique and may not represent actual subsurface conditions. The EM61 and GPR results obtained for this project have not conclusively determined the definitive presence or absence of metallic USTs, but the evidence collected is sufficient to result in the conclusions made in this report. Additionally, it should be understood that areas containing extensive vegetation, reinforced concrete, or other restrictions to the accessibility of the geophysical instruments could not be fully investigated.

APPROXIMATE BOUNDARIES OF GEOPHYSICAL SURVEY AREA (LIMITED ACCESS DUE TO VEHICLES)





View of Survey Area (Facing Approximately Southwest)



View of Survey Area (Facing Approximately West)



503 INDUSTRIAL AVENUE GREENSBORO, NC 27406 (336) 335-3174 (p) (336) 691-0648 (f) License # C1251 Eng. / License # C257 Geology PROJECT

PARCEL 32 HAYESVILLE, NORTH CAROLINA NCDOT PROJECT R-5863 TITLE

PARCEL 32 -GEOPHYSICAL SURVEY BOUNDARIES AND SITE PHOTOGRAPHS

DATE	5/19/2022	CLIENT	KLEINFELDER	
PYRAMID PROJECT #:	2022-152		FIGURE 1	

GPR TRANSECT LOCATIONS (LIMITED ACCESS DUE TO VEHICLES)





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PROJECT PARCEL 32 HAYESVILLE, NORTH CAROLINA NCDOT PROJECT R-5863

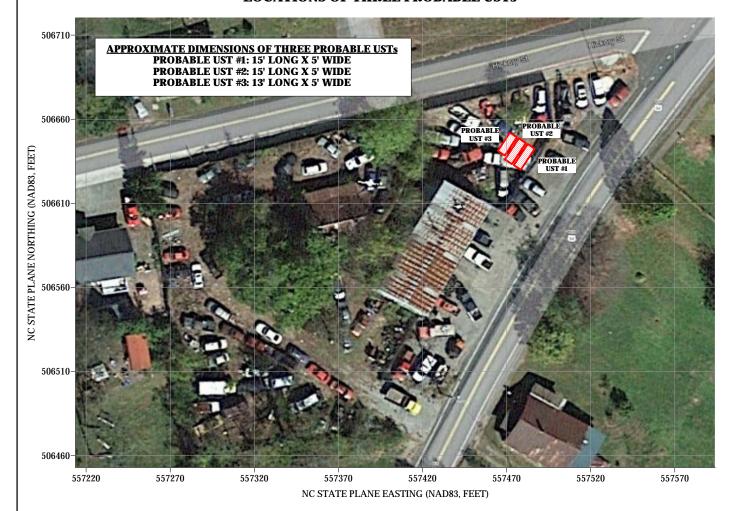
GPR TRANSECT LOCATIONS AND SELECT IMAGES

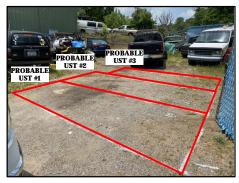
DATE	5/19/2022	CLIENT	KLEINFELDER
PYRAMID PROJECT #:	2022-152		FIGURE 2

TITLE

PARCEL 32 -

LOCATIONS OF THREE PROBABLE USTs





View of Three Probable USTs (Facing Approximately West)

503 INDUSTRIAL AVENUE GREENSBORO, NC 27406 (336) 335-3174 (p) (336) 691-0648 (f) License # C1251 Eng. / License # C257 Geology

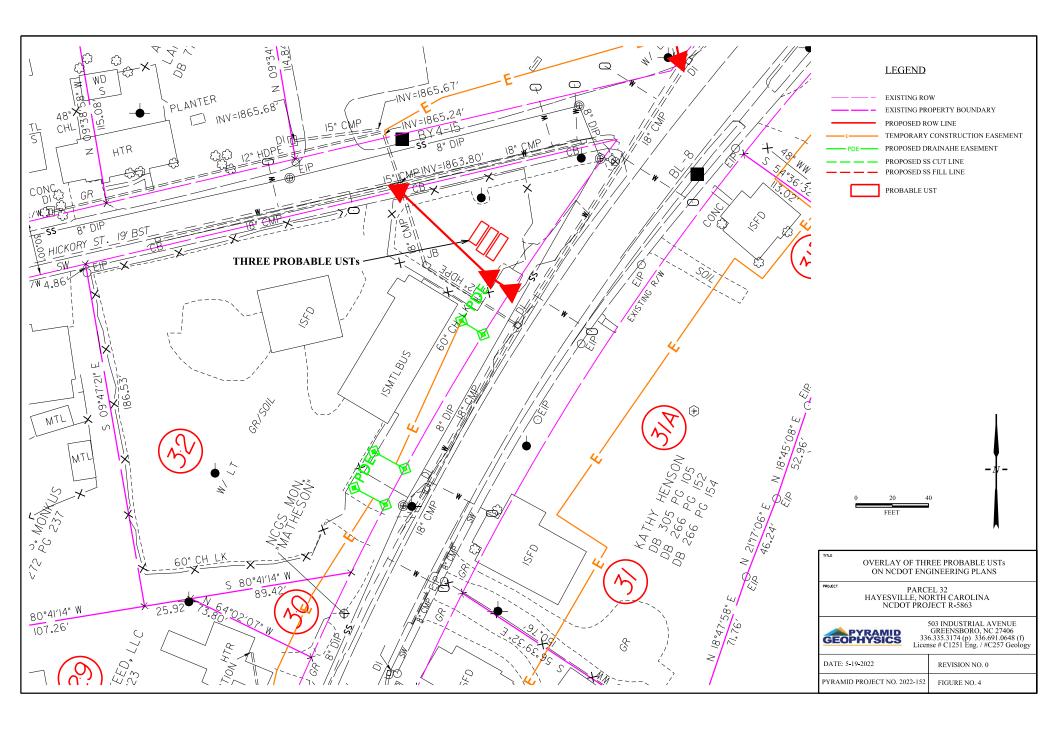
PROJECT HAYESVILLE, NORTH CAROLINA NCDOT PROJECT R-5863

PARCEL 32 -LOCATIONS AND SIZES OF THREE PROBABLE USTs

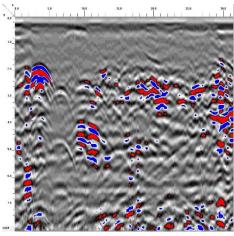
DATE	5/19/2022	CLIENT	KLEINFELDER	
PYRAMID PROJECT #:	2022-152		FIGURE 3	

PARCEL 32

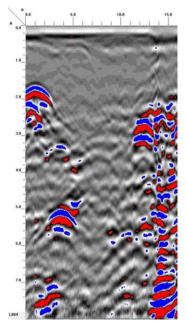
TITLE



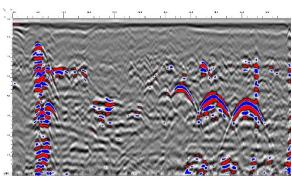




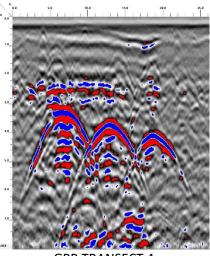
GPR TRANSECT 1



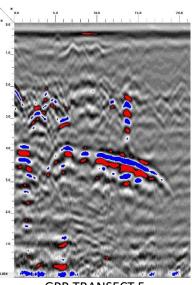
GPR TRANSECT 2



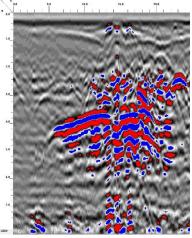
GPR TRANSECT 3



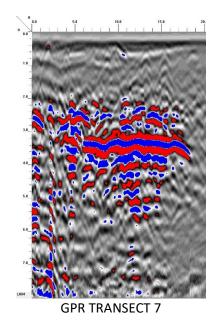
GPR TRANSECT 4

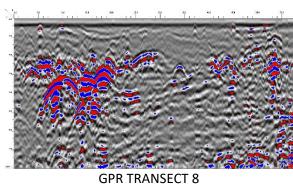


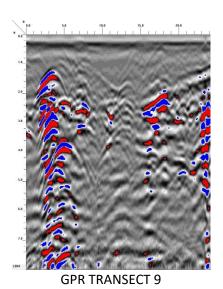
GPR TRANSECT 5

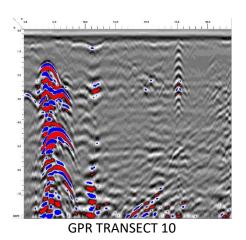


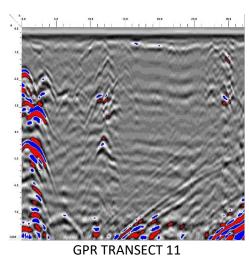
GPR TRANSECT 6

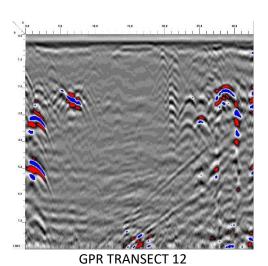


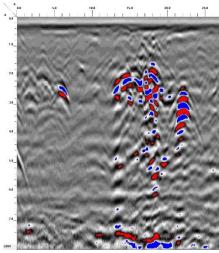




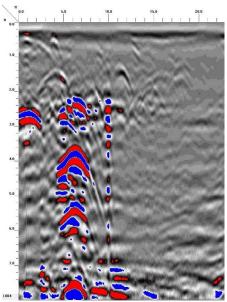








GPR TRANSECT 13



GPR TRANSECT 14



APPENDIX C BORING LOGS

Date Begin - End: 6/01/2022 **Drilling Company:** SAEDACCO **ENVIRONMENTAL BORING LOG SB-01** EDA **Drill Crew:** Logged By: Stephen & Caileb Hor.-Vert. Datum: Not Available **Drilling Equipment:** 6620DT GeoProbe Plunge: **Drilling Method:** -90 degrees See Drilling Method Column Weather: Sunny **Borehole Diameter:** FIELD EXPLORATION Recovery (NR=No Recovery) PID / FID (ppmv) Sample Number **Drilling Method** Log Sample Type Surface Condition: Gravel Depth (feet) Graphical Lithologic Description **GRAVEL**: gray 0.7 SILT with Sand: brown, weak odor Clayey SILT: brown, odor 7.0 Hand Auger 2 CLAY: brown and yellowish brown, weak odor, mica 1.5 2.1 0.3 CLAY: yellowish brown, weak odor, mica 0.0 6 CLAY: yellowish brown, moist 0.0 Geoprobe 0.0 8-0.0 Sandy SILT: white and gray, moist 0.1 GROUNDWATER LEVEL INFORMATION:
Groundwater was not observed during drilling or after completion. The borehole was terminated at approximately 10 ft. below ground surface. GENERAL NOTES:
The environmental boring was backfilled with excavated material. PROJECT NO .: **ENVIRONMENTAL BORING LOG SB-01** 20230304.001A DRAWN BY: EDA *EINFELDER* NCDOT R-5863 Bright People. Right Solutions. CHECKED BY: MB 47 Hickory Street Hayesville, NC



DATE:

6/7/2022

Page: 1 of 1

Drilling Company: Date Begin - End: 6/01/2022 SAEDACCO **ENVIRONMENTAL BORING LOG SB-02** EDA Logged By: **Drill Crew:** Stephen & Caileb Hor.-Vert. Datum: **Drilling Equipment:** 6620DT GeoProbe Not Available **Drilling Method:** Plunge: -90 degrees See Drilling Method Column Weather: Sunny **Borehole Diameter:** FIELD EXPLORATION Recovery (NR=No Recovery) PID / FID (ppmv) Sample Number **Drilling Method** Log Sample Type Surface Condition: Gravel Depth (feet) Graphical Lithologic Description **GRAVEL**: gray 0.0 SILT: reddish brown 3.0 Hand Auger 2 CLAY: reddish brown and yellowish brown, some mica 0.0 CLAY: reddish brown and yellowish brown, odor, some mica 15.2 CLAY: reddish brown and yellowish brown, some mica 3.0 CLAY: reddish brown and gray 0.5 6 CLAY: reddish brown and gray, dry to moist 12.6 Geoprobe CLAY: yellowish brown, moist, mica 0.5 8-CLAY: white, moist to wet 0.1 10 GROUNDWATER LEVEL INFORMATION:
Groundwater was not observed during drilling or after completion. The borehole was terminated at approximately 10 ft. below ground surface. **GENERAL NOTES:** No recovery from 9-10-ft bgs. The environmental boring was backfilled with excavated material. PROJECT NO .: **ENVIRONMENTAL BORING LOG SB-02** 20230304.001A DRAWN BY: EDA *EINFELDER* NCDOT R-5863 Bright People. Right Solutions. 47 Hickory Street CHECKED BY: MB Hayesville, NC

DATE:

6/7/2022

Page: 1 of 1

Drilling Company: SAEDACCO

Stephen & Caileb

Drilling Equipment:

6620DT GeoProbe

Drilling Method: See Drilling Method Column

Borehole Diameter:

FIELD EXPLORATION

Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recover	PID / FID (ppmv	Graphical Log	Surface Condition: Gravel
De	Dri	Sa	Sa	8 Z		Gra	Lithologic Description
						500	GRAVEL: gray
					0.3	Ш	SILT: reddish brown
-							
					0.6		
	Auger				0.6		
2-	Hand Auger						Clayey SILT: reddish brown
					1.0	Ш	
-							CLAY: reddish brown, mica
							<u></u>
					1.1		
4-							
					0.2		
_							
					2.0		
6-							CLAY: yellowish brown
					1.2		
_	Geoprobe				1.2		
_	Geop						CLAY: yellowish brown and gray, weak odor, dry to moist, mica
					100.3		
8-							SILT: gray, weak odor, moist, mica
							6.2 .
					70.1		
-							SILT: gray, odor, moist to wet, mica
					175.5		
10-							
							GROUNDWATER LEVEL INFORMATION:

The borehole was terminated at approximately 10 ft. below ground surface.

GROUNDWATER LEVEL INFORMATION:
Groundwater was not observed during drilling or after completion.

GENERAL NOTES:
The environmental boring was backfilled with excavated material.

ENVIRONMENTAL BORING LOG SB-03



PROJECT NO.: 20230304.001A

DATE:

DRAWN BY: EDA CHECKED BY: MB

6/7/2022

ENVIRONMENTAL BORING LOG SB-03

NCDOT R-5863 47 Hickory Street Hayesville, NC

Page: 1 of 1

OFFICE FILTER: RALEIGH



DRAWN BY: EDA

CHECKED BY: MB DATE: 6/7/2022 NCDOT R-5863 47 Hickory Street Hayesville, NC

Date Begin - End: 6/01/2022 **Drilling Company:** SAEDACCO **ENVIRONMENTAL BORING LOG SB-05** EDA **Drill Crew:** Logged By: Stephen & Caileb Hor.-Vert. Datum: Not Available **Drilling Equipment:** 6620DT GeoProbe Plunge: **Drilling Method:** -90 degrees See Drilling Method Column Weather: Sunny **Borehole Diameter:** FIELD EXPLORATION Recovery (NR=No Recovery) PID / FID (ppmv) Sample Number **Drilling Method** Pog Sample Type Surface Condition: Gravel Depth (feet) Graphical Lithologic Description **GRAVEL**: gray 0.1 SILT: reddish brown Clayey SILT: reddish brown, mica 0.6 Hand Auger 2 CLAY: reddish brown, mica 0.7 0.5 0.6 CLAY: yellowish brown, mica 0.7 6 0.7 Geoprobe Clayey SILT: gray, moist, mica 0.6 8-0.5 SILT: gray, moist, mica 0.4 10 GROUNDWATER LEVEL INFORMATION:
Groundwater was not observed during drilling or after completion. The borehole was terminated at approximately 10 ft. below ground surface. GENERAL NOTES:
The environmental boring was backfilled with excavated material. PROJECT NO .: **ENVIRONMENTAL BORING LOG SB-05** 20230304.001A DRAWN BY: EDA *EINFELDER* NCDOT R-5863 Bright People. Right Solutions. CHECKED BY: 47 Hickory Street MB Hayesville, NC

DATE:

6/7/2022

Page: 1 of 1

Date Begin - End: 6/01/2022 **Drilling Company:** SAEDACCO **ENVIRONMENTAL BORING LOG SB-06** EDA **Drill Crew:** Logged By: Stephen & Caileb Hor.-Vert. Datum: Not Available **Drilling Equipment:** 6620DT GeoProbe Plunge: **Drilling Method:** -90 degrees See Drilling Method Column Weather: Sunny **Borehole Diameter:** FIELD EXPLORATION Recovery (NR=No Recovery) PID / FID (ppmv) Sample Number **Drilling Method** Log Sample Type Surface Condition: Gravel Depth (feet) Graphical Lithologic Description **GRAVEL**: gray 0.5 Sandy SILT: reddish brown 0.6 Hand Auger 2 1.2 Sandy SILT: brown 1.4 Clayey SILT: brown, mica 0.6 Clayey SILT: reddish brown, very micaceous 0.7 6 SILT: red and yellowish brown with black, very micaceous 0.5 Geoprobe 0.5 8-0.7 SILT: white, moist, Rock fragments and mica, likely above weathered rock 0.4 GROUNDWATER LEVEL INFORMATION:
Groundwater was not observed during drilling or after completion. The borehole was terminated at approximately 10 ft. below ground surface. GENERAL NOTES:
The environmental boring was backfilled with excavated material. PROJECT NO .: **ENVIRONMENTAL BORING LOG SB-06** 20230304.001A DRAWN BY: EDA *EINFELDER* NCDOT R-5863 Bright People. Right Solutions. CHECKED BY: 47 Hickory Street MB Hayesville, NC

DATE:

6/7/2022

Page: 1 of 1

Date Begin - End:

Logged By:

6/01/2022

EDA

Drilling Company:

Drill Crew:

SAEDACCO

Stephen & Caileb

ENVIRONMENTAL BORING LOG SB-07

Page: 1 of 1

Hor.-Vert. Datum: Not Available **Drilling Equipment:** 6620DT GeoProbe Plunge: **Drilling Method:** -90 degrees See Drilling Method Column Weather: Sunny **Borehole Diameter:** FIELD EXPLORATION Recovery (NR=No Recovery) PID / FID (ppmv) Sample Number **Drilling Method** Log Sample Type Surface Condition: Gravel Depth (feet) Graphical Lithologic Description **GRAVEL**: gray 0.6 Sandy SILT: brown, mica SILT: brown, mica 0.7 Hand Auger 2 8.0 SILT: reddish brown, mica 0.7 0.7 0.6 6 0.5 Geoprobe SILT: reddish brown and yellowish brown and black, mica 0.5 8-SILT: reddish brown and white and pink 0.6 SILT: reddish brown and yellowish brown 0.4 GROUNDWATER LEVEL INFORMATION:
Groundwater was not observed during drilling or after completion. The borehole was terminated at approximately 10 ft. below ground surface. GENERAL NOTES:
The environmental boring was backfilled with excavated material. PROJECT NO .: **ENVIRONMENTAL BORING LOG SB-07** 20230304.001A DRAWN BY: EDA *EINFELDER* NCDOT R-5863 Bright People. Right Solutions. CHECKED BY: MB 47 Hickory Street Hayesville, NC DATE: 6/7/2022

Date Begin - End: 6/01/2022 **Drilling Company:** SAEDACCO **ENVIRONMENTAL BORING LOG SB-08** EDA **Drill Crew:** Logged By: Stephen & Caileb Hor.-Vert. Datum: Not Available **Drilling Equipment:** 6620DT GeoProbe Plunge: -90 degrees **Drilling Method:** See Drilling Method Column Weather: Sunny **Borehole Diameter:** FIELD EXPLORATION Recovery (NR=No Recovery) PID / FID (ppmv) Sample Number **Drilling Method** Graphical Log Sample Type Surface Condition: Gravel Depth (feet) Lithologic Description **GRAVEL**: gray 0.9 Sandy SILT: reddish brown SILT: reddish brown 0.9 Hand Auger 2 1.2 1.2 0.9 SILT: reddish brown and yellowish brown, mica 1.3 6 8.0 Geoprobe 0.7 8-0.5 8.0 10 GROUNDWATER LEVEL INFORMATION:
Groundwater was not observed during drilling or after completion. The borehole was terminated at approximately 10 ft. below ground surface. GENERAL NOTES:
The environmental boring was backfilled with excavated material. PROJECT NO .: **ENVIRONMENTAL BORING LOG SB-08** 20230304.001A DRAWN BY: EDA *EINFELDER* NCDOT R-5863 Bright People. Right Solutions. CHECKED BY: MB 47 Hickory Street Hayesville, NC

DATE:

6/7/2022

Page: 1 of 1

Z 5	10-	
PROJECT N SINT_LIBRARY_2023.GI	-	The b
gINT FILE: KIF_gint_master_2023 giNT TEMPLATE: E:KLF_STANDARD_GINT_LIBRARY_2023.GI		E

10:44 AM BY: EAmber	Date Beg	gin -	End	6/01/2022			Dri	Illing Company:	SAE	DACCO	ENVIRONMENTAL BORING LOG SB-09
Y: E/	Logged I	Ву:		EDA			Dr	II Crew:	Step	hen & Caileb	
MM B	HorVer	t. Da	atum	Not Available		_	Dri	Illing Equipment:	6620	DT GeoProbe	
0:44 /	Plunge:			-90 degrees		_	Dri	Illing Method:	See D	rilling Method Column	
- 1	Weather	:		Sunny			Во	rehole Diameter:			
7.7.0.7.7.0.9.0								FIE	LD EXF	PLORATION	
PLOTIED: 06/	Depth (feet)	Drilling Method	Sample Type	Sample Number	Recovery (NR=No Recovery)	PID / FID (ppmv)	Graphical Log			Surface Conditi	on: Gravel
	Dep	Drill	San	San	Rec (NR	PID				Lithologic De	escription
Ī							00	GRAVEL: gray			
	-					1.4		SILT: reddish brow	n, mica		
	2-	Hand Auger				1.5					
	4-		-			1.4		SILT: reddish brow	n and y	ellowish brown and pink, rock	fragments and mica
	-	_				0.9		SILT: reddish brow	/n		
	6-					0.9		SILT: reddish brow	n with y	ellowish brown	
	-	Geoprobe				0.5					
NI AL LOG	8-					0.6		SILT: reddish brow	n and b	lack with yellowish brown, mi	са
KLF_ENVIKONME	-					0.6					
<u> </u>						0.6					
E:KLF_STANDARD_GINI_LIBRARY_2023.GLB	10-	-	The b	oorehole was terminated a	at approx	ximately	1111	below ground surface.		Groundwater was r GENERAL NOTES	LEVEL INFORMATION: not observed during drilling or after completion. boring was backfilled with excavated material.
E:KLF_STAN		_		\				PROJECT NO.: 20230304.001A		ENVIRONM	IENTAL BORING LOG SB-09
gini iemplaie: I		< <u>/</u>		INFELL Bright People. Right				DRAWN BY: CHECKED BY: DATE: 6/7	EDA MB		NCDOT R-5863 47 Hickory Street Hayesville, NC
É L											Page: 1 of 1

Date Begin - End:

6/01/2022

Drilling Company:

SAEDACCO

ENVIRONMENTAL BORING LOG SB-10

Page: 1 of 1

EDA Logged By: **Drill Crew:** Stephen & Caileb Hor.-Vert. Datum: **Drilling Equipment:** 6620DT GeoProbe Not Available **Drilling Method:** Plunge: -90 degrees See Drilling Method Column Weather: Sunny **Borehole Diameter:** FIELD EXPLORATION Recovery (NR=No Recovery) PID / FID (ppmv) Sample Number **Drilling Method** Log Sample Type Surface Condition: Gravel Depth (feet) Graphical Lithologic Description **GRAVEL**: gray 6.1 SILT: brown, weak odor SILT: brown and greenish brown 1.6 Hand Auger 2 SILT: reddish brown and greenish brown and yellowish brown 1.9 Clayey SILT: orange brown 1.2 SILT: orange brown and reddish brown 1.0 SILT: reddish brown with yellowish brown, mica 1.3 6 SILT: reddish brown, mica 8.0 Geoprobe SILT: reddish brown with white, rock fragments and mica 0.5 8-0.4 0.3 10 GROUNDWATER LEVEL INFORMATION:
Groundwater was not observed during drilling or after completion. The borehole was terminated at approximately 10 ft. below ground surface. GENERAL NOTES:
The environmental boring was backfilled with excavated material. PROJECT NO .: **ENVIRONMENTAL BORING LOG SB-10** 20230304.001A DRAWN BY: EDA *EINFELDER* NCDOT R-5863 Bright People. Right Solutions. CHECKED BY: 47 Hickory Street MB Hayesville, NC DATE: 6/7/2022



APPENDIX D ANALYTICAL REPORTS AND GRAPHS







Hydrocarbon Analysis Results

Client:KLEINFELDERSamples takenWednesday, June 1, 2022Address:Samples extractedWednesday, June 1, 2022

Samples analysed Wednesday, June 1, 2022

Contact: EVAN AMBER Operator MAX MOYER

Project: NCDOT R-5863

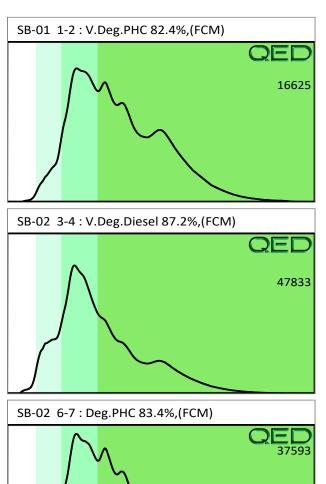
														H09382
Matrix	Sá	ample ID Dilu		BTEX C6 - C9)	GRO (C5 - C10)	DRO (C10 - C35)	TPH (C5 - C35)	Total Aromatics (C10-C35)	16 EPA PAHs	ВаР		Ratios		HC Fingerprint Match
											% light	% mid	% heavy	
S	SB-01 1-2		17.6	<0.44	1.3	16.6	17.9	7.6	0.36	<0.018	17.6	68	14.4	V.Deg.PHC 82.4%,(FCM)
S	SB-01 3-4		19.5	<0.49	1.4	4.9	6.3	2.5	<0.16	< 0.02	41.4	48.1	10.6	Deg.PHC 83%,(FCM)
S	SB-02 3-4		17.9	<0.45	11.4	90.6	102	50.9	2.4	<0.018	28	66.8	5.2	V.Deg.Diesel 87.2%,(FCM)
S	SB-02 4-5		20.3	<0.51	3.8	69.9	73.7	14.1	0.74	< 0.02	22.8	66.9	10.3	V.Deg.PHC 87%,(FCM)
S	SB-02 6-7		22.4	<0.56	27.8	87.4	115.2	39.3	1.7	<0.022	47.6	44.2	8.2	Deg.PHC 83.4%,(FCM)
		Initial Calibra	ator OC	check	OK					Final FC	M OC	Check	OK	100.5 %

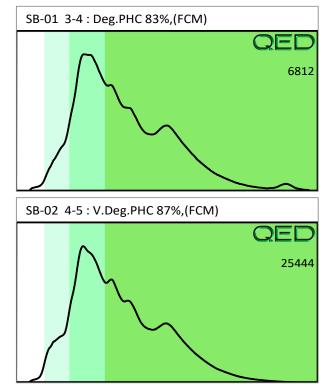
Results generated by a QED HC-1 analyser. Concentration values in mg/kg for soil samples and mg/L for water samples. Soil values are not corrected for moisture or stone content

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

Project: NCDOT R-5863











Hydrocarbon Analysis Results

Client:KLEINFELDERSamples takenWednesday, June 1, 2022Address:Samples extractedWednesday, June 1, 2022

Samples analysed Wednesday, June 1, 2022

Contact: EVAN AMBER Operator MAX MOYER

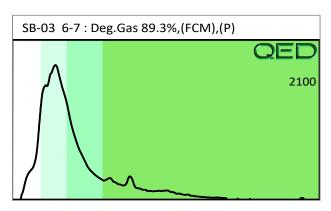
Project: NCDOT R-5863

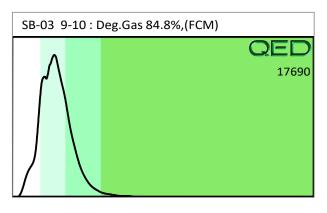
													H09382
Matrix	Sample ID	Dilution used	BTEX (C6 - C9)	GRO (C5 - C10)	DRO (C10 - C35)	TPH (C5 - C35)	Total Aromatics (C10-C35)	16 EPA PAHs	ВаР		Ratios		HC Fingerprint Match
										% light	% mid	% heavy	
S	SB-03 6-7	21.7	2.7	6.1	<0.54	6.1	2.7	<0.17	<0.022	98	1.8	0.2	Deg.Gas 89.3%,(FCM),(P)
S	SB-03 9-10	21.7	26.8	37.1	<0.54	37.1	24.8	0.97	<0.022	98.7	1.3	0	Deg.Gas 84.8%,(FCM)
	Initial C	alibrator (OC check	OK					Final FO	M OC	Check	OK	96.3 %

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

Project: NCDOT R-5863 Wednesday, June 1, 2022











Hydrocarbon Analysis Results

Client:KLEINFELDERSamples takenWednesday, June 1, 2022Address:Samples extractedWednesday, June 1, 2022

Samples analysed Wednesday, June 1, 2022

Contact: EVAN AMBER Operator MAX MOYER

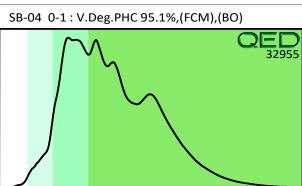
Project: NCDOT R-5863

													H09382
Matrix	Sample ID	Dilution used	BTEX (C6 - C9)	GRO (C5 - C10)	DRO (C10 - C35)	TPH (C5 - C35)	Total Aromatics (C10-C35)	16 EPA PAHs	ВаР		Ratios		HC Fingerprint Match
										% light	% mid	% heavy	
S	SB-04 0-1	18.1	<0.45	2.8	48.3	51.1	22.8	1	<0.018	12	72.5	15.5	V.Deg.PHC 95.1%,(FCM),(BO)
												·	
	Initial C	alibrator	OC check	OK					Final F	см ос	Check	OK	98.4 %

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

Project: NCDOT R-5863









Hydrocarbon Analysis Results

Client:KLEINFELDERSamples takenWednesday, June 1, 2022

Address:Samples extractedWednesday, June 1, 2022Samples analysedWednesday, June 1, 2022

Contact: EVAN AMBER Operator MAX MOYER

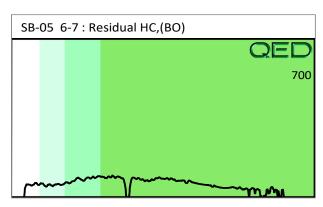
Project: NCDOT R-5863

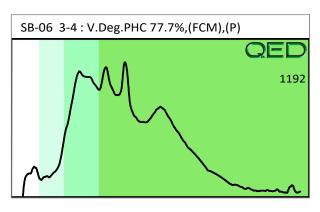
													H09382
Matrix	Sample ID	Dilution used	BTEX (C6 - C9)	GRO (C5 - C10)	DRO (C10 - C35)	TPH (C5 - C35)	Total Aromatics (C10-C35)	16 EPA PAHs	BaP		Ratios		HC Fingerprint Match
										% light	% mid	% heavy	
S	SB-05 6-7	23.9	<0.6	<0.6	<0.6	<0.6	<0.12	<0.19	<0.024	100	0	0	Residual HC,(BO)
S	SB-06 3-4	24.5	<0.61	<0.61	0.61	0.61	0.42	<0.2	<0.025	0	67.1	32.9	V.Deg.PHC 77.7%,(FCM),(P)
	Initial	Calibrator	OC check	OK					Final F	M OC	Check	ΟK	98 %

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

Project: Wednesday, June 1, 2022 NCDOT R-5863











Hydrocarbon Analysis Results

Client:KLEINFELDERSamples takenWednesday, June 1, 2022Address:Samples extractedWednesday, June 1, 2022

dress:Samples extractedWednesday, June 1, 2022Samples analysedWednesday, June 1, 2022

Contact: EVAN AMBER Operator MAX MOYER

Project: NCDOT R-5863

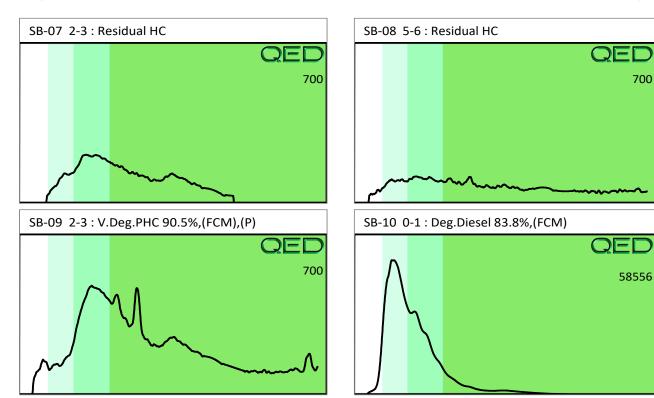
													H09382
Matrix	Sample ID	Dilution used	BTEX (C6 - C9)	GRO (C5 - C10)	DRO (C10 - C35)	TPH (C5 - C35)	Total Aromatics (C10-C35)	16 EPA PAHs	ВаР		Ratios		HC Fingerprint Match
										% light	% mid	% heavy	
S	SB-07 2-3	11.5	<0.29	<0.29	<0.29	0.19	0.19	<0.09	<0.011	0	100	0	Residual HC
S	SB-08 5-6	11.4	<0.57	<0.28	<0.28	<0.28	<0.06	<0.09	<0.011	100	0	0	Residual HC
S	SB-09 2-3	11.0	<0.28	<0.28	0.28	0.28	0.25	<0.09	<0.011	0	67.3	32.7	V.Deg.PHC 90.5%,(FCM),(P)
S	SB-10 0-1	12.6	<0.32	7.2	80.8	88	49.3	1.8	<0.013	53.3	44.6	2.1	Deg.Diesel 83.8%,(FCM)
	Initial C	alibrator (QC check	OK					Final FC	CM QC	Check	OK	100 %

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

Project: NCDOT R-5863 Wednesday, June 1, 2022





6/27/2022

Kleinfelder SE, Inc. (Morrisville) Evan Amber 3200 Gateway Centre Blvd. Suite 100 Morrisville, NC, 27560

Ref: Analytical Testing

Lab Report Number: 22-154-0013

Client Project Description: NCDOT Project R-5863

Dear Evan Amber:

Waypoint Analytical, LLC (Charlotte) received sample(s) on 6/3/2022 for the analyses presented in the following report.

The above referenced project has been analyzed per your instructions. The analyses were performed in accordance with the applicable analytical method.

The analytical data has been validated using standard quality control measures performed as required by the analytical method. Quality Assurance, method validations, instrumentation maintenance and calibration for all parameters were performed in accordance with guidelines established by the USEPA (including 40 CFR 136 Method Update Rule May 2021) unless otherwise indicated.

Certain parameters (chlorine, pH, dissolved oxygen, sulfite...) are required to be analyzed within 15 minutes of sampling. Usually, but not always, any field parameter analyzed at the laboratory is outside of this holding time. Refer to sample analysis time for confirmation of holding time compliance.

The results are shown on the attached Report of Analysis(s). Results for solid matrices are reported on an asreceived basis unless otherwise indicated. This report shall not be reproduced except in full and relates only to the samples included in this report.

Please do not hesitate to contact me or client services if you have any questions or need additional information.

Sincerely,

Angela D Overcash Senior Project Manager



Certification Summary

Laboratory ID: WP CNC: Waypoint Analytical Carolina, Inc. (C), Charlotte, NC

State	Program	Lab ID	Expiration Date
North Carolina	State Program	37735	07/31/2022
North Carolina	State Program	402	12/31/2022
South Carolina	State Program	99012	07/31/2022
South Carolina	State Program	99012	12/31/2022

Page 1 of 1 00016/22-154-0013

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Sample Summary Table

Report Number: 22-154-0013

Client Project Description: NCDOT Project R-5863

Lab No	Client Sample ID	Matrix	Date Collected	Date Received
91333	SB-01	Solids	06/01/2022 08:25	06/03/2022 13:30
91335	SB-02	Solids	06/01/2022 08:55	06/03/2022 13:30
91337	SB-03	Solids	06/01/2022 09:30	06/03/2022 13:30
91339	SB-04	Solids	06/01/2022 10:00	06/03/2022 13:30
91341	SB-05	Solids	06/01/2022 11:20	06/03/2022 13:30
91343	SB-06	Solids	06/01/2022 12:00	06/03/2022 13:30
91345	SB-07	Solids	06/01/2022 13:25	06/03/2022 13:30
91347	SB-08	Solids	06/01/2022 13:55	06/03/2022 13:30
91349	SB-09	Solids	06/01/2022 14:30	06/03/2022 13:30
91351	SB-10	Solids	06/01/2022 15:05	06/03/2022 13:30



Summary of Detected Analytes

Project: NCDOT Project R-5863

Report Number: 22-154-0013

Client Sample ID	Lab Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
SB-01	V 91333					
6010D	Arsenic	2.44	mg/Kg - dry	0.173	06/16/2022 18:16	
6010D	Barium	70.6	mg/Kg - dry	0.032	06/16/2022 18:16	
6010D	Cadmium	0.464	mg/Kg - dry	0.0093	06/16/2022 18:16	
6010D	Chromium	16.5	mg/Kg - dry	0.196	06/16/2022 18:16	
6010D	Lead	27.5	mg/Kg - dry	0.091	06/16/2022 18:16	
7471B	Mercury (Total)	0.0386	mg/Kg - dry	0.0139	06/17/2022 10:23	
SW-DRYWT	Moisture	13.4	%		06/07/2022 11:14	
SB-02	V 91335					
6010D	Arsenic	2.48	mg/Kg - dry	0.168	06/16/2022 18:36	
6010D	Barium	73.7	mg/Kg - dry	0.031	06/16/2022 18:36	
6010D	Cadmium	0.103	mg/Kg - dry	0.0091	06/21/2022 17:28	JB
6010D	Chromium	20.3	mg/Kg - dry	0.191	06/16/2022 18:36	
6010D	Lead	20.8	mg/Kg - dry	0.088	06/16/2022 18:36	
7471B	Mercury (Total)	0.0478	mg/Kg - dry	0.0135	06/17/2022 10:26	
SW-DRYWT	Moisture	11.0	%		06/07/2022 11:14	
SB-03	V 91337					
6010D	Arsenic	2.62	mg/Kg - dry	0.176	06/16/2022 18:48	
6010D	Barium	75.2	mg/Kg - dry	0.032	06/16/2022 18:48	
6010D	Cadmium	0.192	mg/Kg - dry	0.0095	06/21/2022 17:32	В
6010D	Chromium	18.3	mg/Kg - dry	0.199	06/16/2022 18:48	
6010D	Lead	36.2	mg/Kg - dry	0.092	06/16/2022 18:48	
7471B	Mercury (Total)	0.0612	mg/Kg - dry	0.0141	06/17/2022 10:28	
SW-DRYWT	Moisture	14.9	%		06/06/2022 10:46	
SB-04	V 91339					
6010D	Arsenic	2.67	mg/Kg - dry	0.175	06/16/2022 18:52	
6010D	Barium	70.9	mg/Kg - dry	0.032	06/16/2022 18:52	
6010D	Cadmium	0.104	mg/Kg - dry	0.0094	06/21/2022 17:36	JB
6010D	Chromium	20.1	mg/Kg - dry	0.198	06/16/2022 18:52	
6010D	Lead	32.8	mg/Kg - dry	0.092	06/16/2022 18:52	
6010D	Silver	2.09	mg/Kg - dry	0.0338	06/16/2022 18:52	
7471B	Mercury (Total)	0.0574	mg/Kg - dry	0.0140	06/17/2022 10:31	
SW-DRYWT	Moisture	14.3	%		06/06/2022 10:46	
SB-05	V 91341					
6010D	Arsenic	4.11	mg/Kg - dry	0.173	06/16/2022 18:56	



Summary of Detected Analytes

Project: NCDOT Project R-5863

Report Number: 22-154-0013

Client Sample ID	Lab Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
SB-05	V 91341					
6010D	Barium	44.0	mg/Kg - dry	0.032	06/16/2022 18:56	
6010D	Cadmium	0.791	mg/Kg - dry	0.0093	06/16/2022 18:56	
6010D	Chromium	16.1	mg/Kg - dry	0.196	06/16/2022 18:56	
6010D	Lead	39.3	mg/Kg - dry	0.091	06/16/2022 18:56	
7471B	Mercury (Total)	0.0395	mg/Kg - dry	0.0139	06/17/2022 10:33	
SW-DRYWT	Moisture	13.7	%		06/06/2022 10:46	
SB-06	V 91343					
6010D	Arsenic	2.28	mg/Kg - dry	0.180	06/16/2022 19:00	
6010D	Barium	104	mg/Kg - dry	0.033	06/16/2022 19:00	
6010D	Cadmium	0.156	mg/Kg - dry	0.0097	06/21/2022 17:43	
6010D	Chromium	17.5	mg/Kg - dry	0.204	06/16/2022 19:00	
6010D	Lead	69.5	mg/Kg - dry	0.094	06/16/2022 19:00	
7471B	Mercury (Total)	0.0146	mg/Kg - dry	0.0144	06/17/2022 10:36	J
SW-DRYWT	Moisture	16.7	%		06/07/2022 11:14	
SB-07	V 91345					
6010D	Arsenic	1.80	mg/Kg - dry	0.179	06/16/2022 19:04	
6010D	Barium	46.3	mg/Kg - dry	0.033	06/16/2022 19:04	
6010D	Cadmium	0.0663	mg/Kg - dry	0.0097	06/21/2022 17:47	J
6010D	Chromium	13.3	mg/Kg - dry	0.203	06/16/2022 19:04	
6010D	Lead	16.8	mg/Kg - dry	0.094	06/16/2022 19:04	
7471B	Mercury (Total)	0.0186	mg/Kg - dry	0.0144	06/17/2022 10:38	J
SW-DRYWT	Moisture	16.5	%		06/06/2022 10:46	
SB-08	V 91347					
6010D	Arsenic	1.23	mg/Kg - dry	0.174	06/16/2022 19:08	
6010D	Barium	53.0	mg/Kg - dry	0.032	06/16/2022 19:08	
6010D	Cadmium	0.0514	mg/Kg - dry	0.0094	06/21/2022 17:51	J
6010D	Chromium	13.9	mg/Kg - dry	0.197	06/16/2022 19:08	
6010D	Lead	16.3	mg/Kg - dry	0.091	06/16/2022 19:08	
7471B	Mercury (Total)	0.0144	mg/Kg - dry	0.0139	06/17/2022 10:41	J
SW-DRYWT	Moisture	13.9	%		06/06/2022 10:46	
SB-09	V 91349					
6010D	Arsenic	1.05	mg/Kg - dry	0.173	06/16/2022 19:12	
6010D	Barium	46.6	mg/Kg - dry	0.032	06/16/2022 19:12	
6010D	Cadmium	0.112	mg/Kg - dry	0.0093	06/21/2022 18:03	J



Summary of Detected Analytes

Project: NCDOT Project R-5863

Report Number: 22-154-0013

Client Sample ID	Lab Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
SB-09	V 91349					
6010D	Chromium	12.5	mg/Kg - dry	0.196	06/16/2022 19:12	
6010D	Lead	30.8	mg/Kg - dry	0.091	06/16/2022 19:12	
7471B	Mercury (Total)	0.0329	mg/Kg - dry	0.0138	06/17/2022 10:43	J
SW-DRYWT	Moisture	13.3	%		06/06/2022 10:46	
SB-10	V 91351					
6010D	Arsenic	0.684	mg/Kg - dry	0.180	06/16/2022 19:15	
6010D	Barium	25.4	mg/Kg - dry	0.033	06/16/2022 19:15	
6010D	Cadmium	0.137	mg/Kg - dry	0.0097	06/21/2022 18:07	
6010D	Chromium	9.58	mg/Kg - dry	0.204	06/16/2022 19:15	
6010D	Lead	32.4	mg/Kg - dry	0.095	06/16/2022 19:15	
SW-DRYWT	Moisture	16.9	%		06/06/2022 10:46	



Client: Kleinfelder SE, Inc. (Morrisville) Project: NCDOT Project R-5863

Lab Report Number: 22-154-0013

Date: 6/22/2022

CASE NARRATIVE

Metals Analysis Method 6010D

Sample 91333 (SB-01) Analyte: Cadmium

QC Batch No: V20054/V19775

LRB failed high. Result 10X concentration. Result not affected.

Sample 91341 (SB-05) Analyte: Cadmium

QC Batch No: V20054/V19775

LRB failed high. Result 10X concentration. Result not affected.

Sample 91333 (SB-01)

Analyte: Lead

QC Batch No: V20054/V19775

The matrix spike and/or the matrix spike duplicate was outside quality control acceptance ranges. A post digestion spike was performed and passed quality control acceptance ranges. No matrix interference is suspected.

Sample 91333 (SB-01) Analyte: Selenium

QC Batch No: V20054/V19775

The matrix spike and/or the matrix spike duplicate was outside quality control acceptance ranges. A post digestion spike was performed and passed quality control acceptance ranges. No matrix interference is suspected.

Sample 91335 (SB-02) Analyte: Cadmium

QC Batch No: V20289/V20151

LRB failed above MDL. Result may be high biased.

Sample 91337 (SB-03) Analyte: Cadmium

QC Batch No: V20289/V20151

LRB failed above MDL. Result may be high biased.

Sample 91339 (SB-04) Analyte: Cadmium

QC Batch No: V20289/V20151

LRB failed above MDL. Result may be high biased.

Sample 99073 (Acre 15) Analyte: Cadmium

QC Batch No: V20289/V20151

LRB failed above MDL. Result may be high biased.



Sample 99073 (Acre 15) Analyte: Cadmium

QC Batch No: V20289/V20151

The matrix spike and/or the matrix spike duplicate was outside quality control acceptance ranges. A post digestion spike was performed and passed quality control acceptance ranges. No matrix interference is suspected.

Sample 99073 (Acre 15) Analyte: Chromium

QC Batch No: V20289/V20151

The matrix spike and/or the matrix spike duplicate was outside quality control acceptance ranges. A post digestion spike was performed and passed quality control acceptance ranges. No matrix interference is suspected.

Sample 91343 (SB-06) Analyte: Cadmium

QC Batch No: V20289/V20152

LRB failed above MDL. Result 10X concentration. Result may be high biased.

Sample 91345 (SB-07) Analyte: Cadmium

QC Batch No: V20289/V20152

LRB failed above MDL. Result may be high biased.

Sample 91347 (SB-08) Analyte: Cadmium

QC Batch No: V20289/V20152

LRB failed above MDL. Result may be high biased.

Sample 91349 (SB-09) Analyte: Cadmium

QC Batch No: V20289/V20152

LRB failed above MDL. Result 10X concentration. Result not affected.

Sample 91351 (SB-10) Analyte: Cadmium

QC Batch No: V20289/V20152

LRB failed above MDL. Result 10X concentration. Result not affected.

Sample 92523 (6/16 - 6/19 Gypsum Composite)

Analyte: Cadmium

QC Batch No: V20289/V20152

LRB failed above MDL. Result 10X concentration. Result not affected.

Sample 92523 (6/16 - 6/19 Gypsum Composite)

Analyte: Lead

QC Batch No: V20289/V20152

The matrix spike and/or the matrix spike duplicate was outside quality control acceptance ranges. A dilution test was performed and passed quality control acceptance ranges. No matrix interference is suspected.



01123

Kleinfelder SE, Inc. (Morrisville)

Evan Amber

3200 Gateway Centre Blvd. Suite 100

Morrisville, NC 27560

Project NCDOT Project R-5863

Information:

Received: 06/03/2022

Report Date: 06/27/2022

Report Number : 22-154-0013

REPORT OF ANALYSIS

Lab No: 91333 Matrix: Solids

Sample ID : **SB-01** Sampled: **6/1/2022 8:25**

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	Ву	Analytical Method
Moisture	13.4	%			1	06/07/22 11:14	ADC	SW-DRYWT
Arsenic	2.44	mg/Kg - dry	0.173	0.577	1	06/16/22 18:16	EDV	6010D
Barium	70.6	mg/Kg - dry	0.032	0.577	1	06/16/22 18:16	EDV	6010D
Cadmium	0.464	mg/Kg - dry	0.0093	0.115	1	06/16/22 18:16	EDV	6010D
Chromium	16.5	mg/Kg - dry	0.196	0.577	1	06/16/22 18:16	EDV	6010D
Lead	27.5	mg/Kg - dry	0.091	0.346	1	06/16/22 18:16	EDV	6010D
Mercury (Total)	0.0386	mg/Kg - dry	0.0139	0.0346	1	06/17/22 10:23	EDV	7471B
Selenium	<0.219	mg/Kg - dry	0.219	0.577	1	06/16/22 18:16	EDV	6010D
Silver	<0.0334	mg/Kg - dry	0.0334	0.289	1	06/16/22 18:16	EDV	6010D

Qualifiers/ Definitions B Analyte detected in blank
J Estimated value

DF Dilution Factor

MQL Method Quantitation Limit



01123

Kleinfelder SE, Inc. (Morrisville)

Evan Amber

3200 Gateway Centre Blvd. Suite 100

Morrisville, NC 27560

NCDOT Project R-5863 Project

Report Date: 06/27/2022 Information:

Received: 06/03/2022

Report Number: 22-154-0013

REPORT OF ANALYSIS

Lab No: 91335 Matrix: Solids

Sample ID: SB-02 Sampled: 6/1/2022 8:55

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	Ву	Analytical Method
Moisture	11.0	%			1	06/07/22 11:14	ADC	SW-DRYWT
Arsenic	2.48	mg/Kg - dry	0.168	0.561	1	06/16/22 18:36	EDV	6010D
Barium	73.7	mg/Kg - dry	0.031	0.561	1	06/16/22 18:36	EDV	6010D
Cadmium	0.103 JB	mg/Kg - dry	0.0091	0.112	1	06/21/22 17:28	EDV	6010D
Chromium	20.3	mg/Kg - dry	0.191	0.561	1	06/16/22 18:36	EDV	6010D
Lead	20.8	mg/Kg - dry	0.088	0.337	1	06/16/22 18:36	EDV	6010D
Mercury (Total)	0.0478	mg/Kg - dry	0.0135	0.0337	1	06/17/22 10:26	EDV	7471B
Selenium	<0.213	mg/Kg - dry	0.213	0.561	1	06/16/22 18:36	EDV	6010D
Silver	< 0.0325	mg/Kg - dry	0.0325	0.281	1	06/16/22 18:36	EDV	6010D

Qualifiers/ **Definitions** В Analyte detected in blank J Estimated value

DF Dilution Factor

MQL Method Quantitation Limit



01123

Kleinfelder SE, Inc. (Morrisville)

Evan Amber

3200 Gateway Centre Blvd. Suite 100

Morrisville, NC 27560

Project NCDOT Project R-5863

Information:

Received: 06/03/2022

Report Date: 06/27/2022

Report Number : 22-154-0013

REPORT OF ANALYSIS

Lab No: 91337 Matrix: Solids

Sample ID : **SB-03** Sampled: **6/1/2022 9:30**

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	Ву	Analytical Method
Moisture	14.9	%			1	06/06/22 10:46	ADC	SW-DRYWT
Arsenic	2.62	mg/Kg - dry	0.176	0.587	1	06/16/22 18:48	EDV	6010D
Barium	75.2	mg/Kg - dry	0.032	0.587	1	06/16/22 18:48	EDV	6010D
Cadmium	0.192 B	mg/Kg - dry	0.0095	0.118	1	06/21/22 17:32	EDV	6010D
Chromium	18.3	mg/Kg - dry	0.199	0.587	1	06/16/22 18:48	EDV	6010D
Lead	36.2	mg/Kg - dry	0.092	0.352	1	06/16/22 18:48	EDV	6010D
Mercury (Total)	0.0612	mg/Kg - dry	0.0141	0.0353	1	06/17/22 10:28	EDV	7471B
Selenium	<0.223	mg/Kg - dry	0.223	0.587	1	06/16/22 18:48	EDV	6010D
Silver	<0.0340	mg/Kg - dry	0.0340	0.294	1	06/16/22 18:48	EDV	6010D

Qualifiers/ Definitions B Analyte detected in blank
J Estimated value

DF Dilution Factor

MQL Method Quantitation Limit



01123

Lab No:

Kleinfelder SE, Inc. (Morrisville) Evan Amber

91339

3200 Gateway Centre Blvd. Suite 100

Morrisville, NC 27560

Project NCDOT Project R-5863

Information:

Received: 06/03/2022

Report Date: 06/27/2022

Matrix: Solids

Report Number : 22-154-0013

Sampled: **6/1/2022 10:00**

REPORT OF ANALYSIS

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	Ву	Analytical Method
Moisture	14.3	%			1	06/06/22 10:46	ADC	SW-DRYWT
Arsenic	2.67	mg/Kg - dry	0.175	0.583	1	06/16/22 18:52	EDV	6010D
Barium	70.9	mg/Kg - dry	0.032	0.583	1	06/16/22 18:52	EDV	6010D
Cadmium	0.104 JB	mg/Kg - dry	0.0094	0.117	1	06/21/22 17:36	EDV	6010D
Chromium	20.1	mg/Kg - dry	0.198	0.583	1	06/16/22 18:52	EDV	6010D
Lead	32.8	mg/Kg - dry	0.092	0.350	1	06/16/22 18:52	EDV	6010D
Mercury (Total)	0.0574	mg/Kg - dry	0.0140	0.0350	1	06/17/22 10:31	EDV	7471B
Selenium	<0.221	mg/Kg - dry	0.221	0.583	1	06/16/22 18:52	EDV	6010D
Silver	2.09	mg/Kg - dry	0.0338	0.292	1	06/16/22 18:52	EDV	6010D

Qualifiers/ Definitions B Analyte detected in blank
J Estimated value

DF Dilution Factor

MQL Method Quantitation Limit



01123

Kleinfelder SE, Inc. (Morrisville)

Evan Amber

3200 Gateway Centre Blvd. Suite 100

Morrisville, NC 27560

NCDOT Project R-5863 Project

Report Date: 06/27/2022 Information:

Received: 06/03/2022

Report Number: 22-154-0013

REPORT OF ANALYSIS

Lab No: 91341 Matrix: Solids

Sample ID : SB-05 Sampled: 6/1/2022 11:20

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	Ву	Analytical Method
Moisture	13.7	%			1	06/06/22 10:46	ADC	SW-DRYWT
Arsenic	4.11	mg/Kg - dry	0.173	0.579	1	06/16/22 18:56	EDV	6010D
Barium	44.0	mg/Kg - dry	0.032	0.579	1	06/16/22 18:56	EDV	6010D
Cadmium	0.791	mg/Kg - dry	0.0093	0.116	1	06/16/22 18:56	EDV	6010D
Chromium	16.1	mg/Kg - dry	0.196	0.579	1	06/16/22 18:56	EDV	6010D
Lead	39.3	mg/Kg - dry	0.091	0.347	1	06/16/22 18:56	EDV	6010D
Mercury (Total)	0.0395	mg/Kg - dry	0.0139	0.0348	1	06/17/22 10:33	EDV	7471B
Selenium	<0.220	mg/Kg - dry	0.220	0.579	1	06/16/22 18:56	EDV	6010D
Silver	< 0.0336	mg/Kg - dry	0.0336	0.290	1	06/16/22 18:56	EDV	6010D

Qualifiers/ **Definitions** В Analyte detected in blank J Estimated value

DF Dilution Factor

MQL Method Quantitation Limit



01123

Kleinfelder SE, Inc. (Morrisville)

Evan Amber

3200 Gateway Centre Blvd. Suite 100

Morrisville, NC 27560

Project NCDOT Project R-5863

Information:

Received: 06/03/2022

Report Date: 06/27/2022

Report Number: 22-154-0013

REPORT OF ANALYSIS

Lab No: 91343 Matrix: Solids

Sample ID : **SB-06** Sampled: **6/1/2022 12:00**

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	Ву	Analytical Method
Moisture	16.7	%			1	06/07/22 11:14	ADC	SW-DRYWT
Arsenic	2.28	mg/Kg - dry	0.180	0.600	1	06/16/22 19:00	EDV	6010D
Barium	104	mg/Kg - dry	0.033	0.600	1	06/16/22 19:00	EDV	6010D
Cadmium	0.156	mg/Kg - dry	0.0097	0.120	1	06/21/22 17:43	EDV	6010D
Chromium	17.5	mg/Kg - dry	0.204	0.600	1	06/16/22 19:00	EDV	6010D
Lead	69.5	mg/Kg - dry	0.094	0.360	1	06/16/22 19:00	EDV	6010D
Mercury (Total)	0.0146 J	mg/Kg - dry	0.0144	0.0360	1	06/17/22 10:36	EDV	7471B
Selenium	<0.228	mg/Kg - dry	0.228	0.600	1	06/16/22 19:00	EDV	6010D
Silver	<0.0348	mg/Kg - dry	0.0348	0.300	1	06/16/22 19:00	EDV	6010D

Qualifiers/ Definitions B Analyte detected in blank
J Estimated value

DF Dilution Factor

MQL Method Quantitation Limit



01123

Kleinfelder SE, Inc. (Morrisville)

Evan Amber

3200 Gateway Centre Blvd. Suite 100

Morrisville, NC 27560

Project NCDOT Project R-5863

Information:

Received: 06/03/2022

Report Date: 06/27/2022

Report Number: 22-154-0013

REPORT OF ANALYSIS

Lab No: 91345 Matrix: Solids

Sample ID : SB-07 Sampled: 6/1/2022 13:25

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	Ву	Analytical Method
Moisture	16.5	%			1	06/06/22 10:46	ADC	SW-DRYWT
Arsenic	1.80	mg/Kg - dry	0.179	0.598	1	06/16/22 19:04	EDV	6010D
Barium	46.3	mg/Kg - dry	0.033	0.598	1	06/16/22 19:04	EDV	6010D
Cadmium	0.0663 J	mg/Kg - dry	0.0097	0.120	1	06/21/22 17:47	EDV	6010D
Chromium	13.3	mg/Kg - dry	0.203	0.598	1	06/16/22 19:04	EDV	6010D
Lead	16.8	mg/Kg - dry	0.094	0.359	1	06/16/22 19:04	EDV	6010D
Mercury (Total)	0.0186 J	mg/Kg - dry	0.0144	0.0359	1	06/17/22 10:38	EDV	7471B
Selenium	<0.227	mg/Kg - dry	0.227	0.598	1	06/16/22 19:04	EDV	6010D
Silver	<0.0347	mg/Kg - dry	0.0347	0.299	1	06/16/22 19:04	EDV	6010D

Qualifiers/ **Definitions** В Analyte detected in blank J Estimated value

Dilution Factor

DF MQL Method Quantitation Limit



01123

Kleinfelder SE, Inc. (Morrisville)

Evan Amber

3200 Gateway Centre Blvd. Suite 100

Morrisville, NC 27560

NCDOT Project R-5863 Project

Report Date: 06/27/2022 Information:

Received: 06/03/2022

Report Number: 22-154-0013

REPORT OF ANALYSIS

Lab No: 91347 Matrix: Solids

Sample ID : SB-08 Sampled: 6/1/2022 13:55

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	Ву	Analytical Method
Moisture	13.9	%			1	06/06/22 10:46	ADC	SW-DRYWT
Arsenic	1.23	mg/Kg - dry	0.174	0.580	1	06/16/22 19:08	EDV	6010D
Barium	53.0	mg/Kg - dry	0.032	0.580	1	06/16/22 19:08	EDV	6010D
Cadmium	0.0514 J	mg/Kg - dry	0.0094	0.116	1	06/21/22 17:51	EDV	6010D
Chromium	13.9	mg/Kg - dry	0.197	0.580	1	06/16/22 19:08	EDV	6010D
Lead	16.3	mg/Kg - dry	0.091	0.348	1	06/16/22 19:08	EDV	6010D
Mercury (Total)	0.0144 J	mg/Kg - dry	0.0139	0.0348	1	06/17/22 10:41	EDV	7471B
Selenium	<0.220	mg/Kg - dry	0.220	0.580	1	06/16/22 19:08	EDV	6010D
Silver	<0.0336	mg/Kg - dry	0.0336	0.290	1	06/16/22 19:08	EDV	6010D

Qualifiers/ **Definitions** В Analyte detected in blank J

Estimated value

DF Dilution Factor

MQL Method Quantitation Limit



01123

Kleinfelder SE, Inc. (Morrisville)

Evan Amber

3200 Gateway Centre Blvd. Suite 100

Morrisville, NC 27560

NCDOT Project R-5863 Project

Report Date: 06/27/2022 Information:

Received: 06/03/2022

Report Number: 22-154-0013

REPORT OF ANALYSIS

Lab No: 91349 Matrix: Solids

Sample ID : SB-09 Sampled: 6/1/2022 14:30

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	Ву	Analytical Method
Moisture	13.3	%			1	06/06/22 10:46	ADC	SW-DRYWT
Arsenic	1.05	mg/Kg - dry	0.173	0.576	1	06/16/22 19:12	EDV	6010D
Barium	46.6	mg/Kg - dry	0.032	0.576	1	06/16/22 19:12	EDV	6010D
Cadmium	0.112 J	mg/Kg - dry	0.0093	0.115	1	06/21/22 18:03	EDV	6010D
Chromium	12.5	mg/Kg - dry	0.196	0.576	1	06/16/22 19:12	EDV	6010D
Lead	30.8	mg/Kg - dry	0.091	0.346	1	06/16/22 19:12	EDV	6010D
Mercury (Total)	0.0329 J	mg/Kg - dry	0.0138	0.0346	1	06/17/22 10:43	EDV	7471B
Selenium	<0.219	mg/Kg - dry	0.219	0.576	1	06/16/22 19:12	EDV	6010D
Silver	<0.0334	mg/Kg - dry	0.0334	0.288	1	06/16/22 19:12	EDV	6010D

Qualifiers/ **Definitions** В Analyte detected in blank J Estimated value

DF Dilution Factor

MQL Method Quantitation Limit



01123

Kleinfelder SE, Inc. (Morrisville)

Evan Amber

3200 Gateway Centre Blvd. Suite 100

Morrisville, NC 27560

NCDOT Project R-5863 Project

Report Date: 06/27/2022 Information:

Received: 06/03/2022

REPORT OF ANALYSIS Report Number: 22-154-0013

Lab No: 91351 Matrix: Solids

Sample ID : SB-10 Sampled: 6/1/2022 15:05

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	Ву	Analytical Method
Moisture	16.9	%			1	06/06/22 10:46	ADC	SW-DRYWT
Arsenic	0.684	mg/Kg - dry	0.180	0.601	1	06/16/22 19:15	EDV	6010D
Barium	25.4	mg/Kg - dry	0.033	0.601	1	06/16/22 19:15	EDV	6010D
Cadmium	0.137	mg/Kg - dry	0.0097	0.120	1	06/21/22 18:07	EDV	6010D
Chromium	9.58	mg/Kg - dry	0.204	0.601	1	06/16/22 19:15	EDV	6010D
Lead	32.4	mg/Kg - dry	0.095	0.361	1	06/16/22 19:15	EDV	6010D
Mercury (Total)	<0.0144	mg/Kg - dry	0.0144	0.0361	1	06/17/22 10:53	EDV	7471B
Selenium	<0.228	mg/Kg - dry	0.228	0.601	1	06/16/22 19:15	EDV	6010D
Silver	<0.0348	mg/Kg - dry	0.0348	0.301	1	06/16/22 19:15	EDV	6010D

Qualifiers/ **Definitions** В Analyte detected in blank J

Estimated value

DF Dilution Factor

MQL Method Quantitation Limit



Quality Control Data

Client ID: Kleinfelder SE, Inc. (Morrisville)

Project Description: NCDOT Project R-5863

Report No: 22-154-0013

QC Prep: V19775 QC Analytical Batch(es): V20054 QC Prep Batch Method: 3050B Analysis Method: 6010D

Analysis Description: Metals Analysis

Lab Reagent Blank LRB-V19775 Matrix: SOL

Associated Lab Samples: 91333, 91335, 91337, 91339, 91341, 91343, 91345, 91347, 91349, 91351

Parameter	Units	Blank Result	MDL	MQL	Analyzed
Arsenic	mg/Kg	<0.150	0.150	0.500	06/16/22 18:08
Barium	mg/Kg	<0.028	0.028	0.500	06/16/22 18:08
Cadmium	mg/Kg	0.0223	0.0081	0.100	06/16/22 18:08
Chromium	mg/Kg	<0.170	0.170	0.500	06/16/22 18:08
Lead	mg/Kg	<0.079	0.079	0.300	06/16/22 18:08
Selenium	mg/Kg	<0.190	0.190	0.500	06/16/22 18:08
Silver	mg/Kg	<0.0290	0.0290	0.250	06/16/22 18:08

Laboratory Control Sample LCS-V19775

Parameter	Units	Spike Conc.	LCS Result	LCS %Rec	% Rec Limits
Arsenic	mg/Kg	5.00	4.65	93.0	80-120
Barium	mg/Kg	50.0	53.7	107	80-120
Cadmium	mg/Kg	5.00	5.27	105	80-120
Chromium	mg/Kg	50.0	56.7	113	80-120
ead	mg/Kg	5.00	5.49	110	80-120
elenium	mg/Kg	5.00	4.86	97.0	80-120
Silver	mg/Kg	5.00	5.20	104	80-120

Matrix Spike & Matrix Spike DuplicateV 91333-MSD-V19775V 91333-MSD-V19775

Parameter	Units	Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS %Rec	MSD %Rec	%Rec Limits	RPD	Max RPD
Arsenic	mg/Kg	2.11	5.00	5.00	6.23	6.32	82.0	84.0	75-125	1.4	20
Barium	mg/Kg	61.1	50.0	50.0	111	110	100	98.0	75-125	0.9	20
Cadmium	mg/Kg	0.402	5.00	5.00	5.00	4.82	92.0	88.0	75-125	3.6	20
Chromium	mg/Kg	14.3	50.0	50.0	63.0	62.4	97.0	96.0	75-125	0.9	20

Date: 06/27/2022 01:11 PM

Page 1 of 7



Quality Control Data

Client ID: Kleinfelder SE, Inc. (Morrisville)

Project Description: NCDOT Project R-5863

Report No: 22-154-0013

QC Prep: V19775 QC Analytical Batch(es): V20054 QC Prep Batch Method: 3050B Analysis Method: 6010D

Analysis Description: Metals Analysis

Matrix Spike & Matrix Spike Duplicate V 91333-MS-V19775 V 91333-MSD-V19775

Parameter	Units	Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS %Rec	MSD %Rec	%Rec Limits	RPD	Max RPD
Lead	mg/Kg	23.8	5.00	5.00	31.4	27.7	152*	78.0	75-125	12.5	20
Selenium	mg/Kg	<0.190	5.00	5.00	3.79	3.71	76.0	74.0*	75-125	2.1	20
Silver	mg/Kg	<0.0290	5.00	5.00	4.35	4.25	87.0	85.0	75-125	2.3	20

Post Digestion Spike V 91333-PDS-V19775

Parameter	Units	PDS Result	% Recovery	Analyzed
Arsenic	mg/Kg	11.9	88.0	06/16/22 18:28
Barium	mg/Kg	151	97.0	06/16/22 18:28
Cadmium	mg/Kg	11.9	94.0	06/16/22 18:28
Chromium	mg/Kg	130	99.0	06/16/22 18:28
Lead	mg/Kg	24.4	100	06/16/22 18:28
Selenium	mg/Kg	10.9	87.0	06/16/22 18:28
Silver	mg/Kg	11.9	95.0	06/16/22 18:28

* QC Fail Date: 06/27/2022 01:11 PM Page 2 of 7

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Quality Control Data

Client ID: Kleinfelder SE, Inc. (Morrisville)

Project Description: NCDOT Project R-5863

Report No: 22-154-0013

QC Prep: V20151 QC Analytical Batch(es): V20289 QC Prep Batch Method: 3050B Analysis Method: 6010D

Analysis Description: Metals Analysis

Lab Reagent Blank LRB-V20151 Matrix: SOL

Associated Lab Samples: 91335, 91337, 91339

 Parameter
 Units
 Blank Result
 MDL MQL MQL Analyzed

 Cadmium
 mg/Kg
 0.0219
 0.0081
 0.100
 06/21/22 15:10

Laboratory Control Sample LCS-V20151

ParameterUnitsSpike Conc.LCS ResultLCS %Rec LimitsCadmiummg/Kg5.005.4610980-120

Matrix Spike & Matrix Spike Duplicate V 99073-MS-V20151 V 99073-MSD-V20151

MS Spike MSD **MS Result MSD** MS **MSD** %Rec Max **Parameter** Units Result Limits RPD **RPD** Conc. **Spike** Result %Rec %Rec Conc. Cadmium 0.155 5.00 5.00 3.57 3.79 68.0* 73.0* 75-125 5.9 20 mg/Kg

Post Digestion Spike V 99073-PDS-V20151

 Parameter
 Units
 PDS Result
 % Recovery
 Analyzed

 Cadmium
 mg/Kg
 10.8
 86.0
 06/21/22 17:20

* QC Fail Date: 06/27/2022 01:11 PM Page 3 of 7

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Quality Control Data

Client ID: Kleinfelder SE, Inc. (Morrisville)

Project Description: NCDOT Project R-5863

Report No: 22-154-0013

QC Prep: V20152 **QC Analytical Batch(es):** V20269,V20289

QC Prep Batch Method: 3050B Analysis Method: 6010D

Analysis Description: Metals Analysis

Lab Reagent Blank LRB-V20152 Matrix: SOL

Associated Lab Samples: 91343, 91345, 91347, 91349, 91351

 Parameter
 Units
 Blank Result
 MDL MQL
 Analyzed

 Cadmium
 mg/Kg
 0.0093
 0.0081
 0.100
 06/21/22 15:17

Laboratory Control Sample LCS-V20152

ParameterUnitsSpike Conc.LCS ResultLCS %Rec LimitsCadmiummg/Kg5.005.0210080-120

Matrix Spike & Matrix Spike Duplicate V 92523-MS-V20152 V 92523-MSD-V20152

MS Spike MSD **MS Result MSD** MS **MSD** %Rec Max **Parameter** Units Result Limits RPD **RPD** Conc. **Spike** Result %Rec %Rec Conc. Cadmium 5.00 5.00 15.8 16.2 78.0 86.0 75-125 2.5 20 mg/Kg 11.9

Post Digestion Spike V 92523-PDS-V20152

 Parameter
 Units
 PDS Result
 % Recovery
 Analyzed

 Cadmium
 mg/Kg
 17.6
 95.0
 06/21/22 18:51

Date: 06/27/2022 01:11 PM

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Page 4 of 7



Quality Control Data

Client ID: Kleinfelder SE, Inc. (Morrisville)

Project Description: NCDOT Project R-5863

Report No: 22-154-0013

QC Prep: V19984 QC Analytical Batch(es): V20056
QC Prep Batch Method: 7471B (Prep) Analysis Method: 7471B

Analysis Description: Solids Total Mercury Analysis - CVAA

Lab Reagent Blank LRB-V19984 Matrix: SOL

Associated Lab Samples: 91333, 91335, 91337, 91339, 91341, 91343, 91345, 91347, 91349, 91351

 Parameter
 Units
 Blank Result
 MDL MQL
 Analyzed

 Mercury (Total)
 mg/Kg
 <0.0120</td>
 0.0300
 06/17/22 09:44

Laboratory Control Sample LCS-V19984

ParameterUnitsSpike Conc.LCS ResultLCS %Rec LimitsMercury (Total)mg/Kg0.4170.43310480-120

Matrix Spike & Matrix Spike Duplicate V 91965-MS-V19984 V 91965-MSD-V19984

MS Spike MSD **MS Result MSD** MS **MSD** %Rec Max **Parameter** Units Result Spike Limits RPD **RPD** Conc. Result %Rec %Rec Conc. Mercury (Total) < 0.0120 0.417 0.417 0.347 0.337 83.0 81.0 80-120 2.9 20 mg/Kg

Post Digestion Spike V 91965-PDS-V19984

 Parameter
 Units
 PDS Result
 % Recovery
 Analyzed

 Mercury (Total)
 mg/Kg
 0.223
 107
 06/17/22 10:00

Date: 06/27/2022 01:11 PM

Page 23 of 27



Quality Control Data

Client ID: Kleinfelder SE, Inc. (Morrisville)

Project Description: NCDOT Project R-5863

Report No: 22-154-0013

QC Analytical Batch: V19606
Analysis Method: SW-DRYWT

Analysis Description: Dry Weight Determination

Duplicate V 91075-DUP

Parameter	Units	Result	DUP Result	RPD	Max RPD	Analyzed
Moisture	%	12.4	12.0	3.2	20.0	06/06/22 10:46

Duplicate V 91349-DUP

Parameter	Units	Result	DUP Result	RPD	Max RPD	Analyzed
Moisture	%	13.3	13.2	0.7	20.0	06/06/22 10:46

Date: 06/27/2022 01:11 PM

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Quality Control Data

Client ID: Kleinfelder SE, Inc. (Morrisville)

Project Description: NCDOT Project R-5863

Report No: 22-154-0013

QC Analytical Batch: V19657
Analysis Method: SW-DRYWT

Analysis Description: Dry Weight Determination

Duplicate V 91186-DUP

Parameter	Units	Result	DUP Result	RPD	Max RPD	Analyzed
Moisture	%	20.0	20.6	2.9	20.0	06/07/22 11:14

Duplicate V 91333-DUP

Parameter	Units	Result	DUP Result	RPD	Max RPD	Analyzed
Moisture	%	13.4	13.0	3.0	20.0	06/07/22 11:14

Date: 06/27/2022 01:11 PM

Page 25 of 27



Signature: Adam Crouch

449 Springbrook Rd, Charlotte, NC 28217 Main 704.529.6364 www.waypointanalytical.com

Shipment Receipt Form

Customer Number: 01123

Customer Name: Kleinfelder SE, Inc. (Morrisville)

Report Number: **22-154-0013**

Shipping Method

○ Fed Ex	US Postal	Lab	Other:	
UPS	Client	Courier	Thermometer ID	: IRT-15 7.0 C
Shipping conta	ainer/cooler uncomprom	ised?	Yes No	
Number of coo	olers/boxes received		1	
Custody seals	intact on shipping conta	ainer/cooler?	Yes No	Not Present
Custody seals	intact on sample bottles	s? O	Yes No	Not Present
Chain of Custo	ody (COC) present?	•	Yes	
COC agrees w	vith sample label(s)?	•	Yes	
COC properly	completed	•	Yes No	
Samples in pro	oper containers?	•	Yes No	
Sample contai	ners intact?	•	Yes	_
Sufficient sam	ple volume for indicated	I test(s)?	Yes	
All samples re	ceived within holding tin	ne?	Yes	
Cooler temper	ature in compliance?	•	Yes	
	es arrived at the laborate considered acceptable egun.		Yes No	
Water - Sampl	e containers properly p	reserved	Yes No	● N/A
Water - VOA vials free of headspace		<u> </u>	Yes O No	● N/A
Trip Blanks received with VOAs		\bigcirc	Yes	● N/A
Soil VOA method 5035 – compliance criteria met		criteria met 🔘 🗀	res No	● N/A
High conce	entration container (48 h	r)	Low concentration En	Core samplers (48 hr)
High concentration pre-weighed (methanol -14 d) Low conc pre-weighed vials (Sod Bis -14 d)				
Special precautions or instructions included?			Yes No	
Comments:				

Page 26 of 27

Date & Time: 06/03/2022 16:07:03

ORIGINAL	ead Space)	lysis (Zer	e Organio	/OA = Volatile	Lined Cap	= Teflon-	= Plastic; TL		0 =	A	70 -
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SEE REVERSE FOR	3.3.22	COC Group No.	TORY.	O THE LABORA	ISPORTATION T	AT THE LAE	JNTIL RECEIVED	AGAINST COC L	E COOLERS SHOULD BE TAPED : T ACCEPTED AND VERIFIED AGA II Waypoint Analytical Field Service	9 5	Method of Shipment: NOTE: ALL SAMI SAMPLES ARE N D Fed Ex DUPS D Hand-delivered
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Additional Comments: Site Departure Time:		ihr	1	N	Y		5		(ayor	C
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REMARKS ID NO.	W. C. F. C.	SPLP	R	TIVES	SIZE	NO.	SEE BELOW	WATER, OR SLUDGE)	MILITARY	COLLECTED	SAMPLE DESCRIPTION
		131		PRESERVA.	NER	SAMPLE CONTAINER	SAMP	MATRIX (SOIL,	TIME	DATE	CLIENT
TO BE FILLEDIN BY CLIENT/SAMPLING PERSONNEL Certification: NC X SC Other N/A Water Chlorinated: YES NO Samples Iced Upon Collection: YES NO	TO BE FILLED IN BY Certification: NC_ Othe Water Chlorinated: Samples Iced Upon	B ys B	3030* 14 Days 12 Rush 1 Pre Aprile	Chase Order No./Billing Reference 20230304.001A/case Order No./Billing Reference 20230304.001A/case usted Due Date 11 Day 22 Days 33 Days 45 Days with 15 Days 25 Days 35 Days 25 Days	illing Refere Day □ 2 Day 9 Days □ Sta 00 will be proc on business da RMS & CONDIT	der No./B Date 11 Date 16 B' Date 15 B' Date	Purchase Order No./Billing Reference 20230304.d014/ Requested Due Date 1 Day 2 Days 3 Days 4 Days 4 5 Days "Working Days" 6-9 Days 5 Standard 10 days Push Work Must Be Camples received after 15:00 will be processed next business day. Turnaround time is based on business days, excluding weekends and holidays (SEE REVERSE FOR TERMS & CONDITIONS REGARDING SERVICES RENDERED BY WAYPOINT ANALYTICAL, LLC TO CLIENT)		Hayesville Hayesville	1+KFax (Yes) n-be/ @ K n-be/ @ K Other Pa/Cal 32 Address: 4:	Phone: 114-5 22-5 1+8 Fax (Yes)(No)? Email Address: Pambel @ Klein Felle (I Commercial C
TEMP: Therm ID: 121-15 Observed 7.0 °C /Cor. 7:0 °C	TEMP: Therm ID: 12T-15				TIME	N/	Address:	'dy	1560	ille Mc	STE Ido Minsy
Samples INTACT upon arrival? Received IN ICE? PROPER PRESERVATIVES indicated? Received WITHIN HOLDING TIMES? CUSTODY SEALS INTACT? VOLATILES rec'd WIOUT HEADSPACE?	Samples INTACT upon arrival? Received IN ICE? PROPER PRESERVATIVES indicated Received WITHIN HOLDING TIMES? CUSTODY SEALS INTACT? VOLATILES rec'd W/OUT HEADSPACED CONTAINEDS INCAS	Project Name: NCOOL Project Project Name: NCOOL Project Name: NCOOL Project Name: NCOOL NO UST Project: (Yes) (NO) *Please ATTACH any project specific reporting (QC LEVEL I II III IV) provisions and/or QC Requirements Invoice To: (A) A	2-58 UST Project: orting (QC LEV	ysis (Yes) (NO) OF Project Project any project specific reporting (QC LE) OF QC Requirements	Ves (No)	e: NC analysis aCH any I nd/or QC	Project Name: VCDO Project Short Hold Analysis (Ves) (No *Please ATTACH any project specific provisions and/or QC Requirements Invoice To:		Clde Amber	ANALYTICAL A49 Springbrook Road · Charlotte, NC 28217 Phone 704/529-6364 · Fax: 704/525-0409 Pany Name: Klelnfelde ontact Name: Evan Ambur	All A49 Springbrook Phone 704/529 Client Company Name:Report To/Contact Name:
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July 1, 2022 Kleinfelder File No. RAL22R142157

Mr. John L. Pilipchuk, LG, PE North Carolina Department of Transportation State Geotechnical Engineer Geotechnical Engineering Unit 1589 Mail Service Center Raleigh, North Carolina 27699-1589

SUBJECT: Preliminary Site Assessment Report

Parcel 034, NC Department of Transportation WBS Element No. 47516.1.1, TIP No. R-5863

Proposed improvements to US 64 Business from US 64 to SR 1307 (Main

Street), Hayesville, Clay County, NC 28904 Kleinfelder Project No. 20230304.001A

Dear Mr. Pilipchuk,

Kleinfelder is pleased to provide its report detailing the activities conducted as part of the preliminary site assessment for the subject project.

Kleinfelder appreciates the opportunity to be of service to you. Should you have questions or require additional information, please do not hesitate to contact the undersigned.

Sincerely,

KLEINFELDER, INC.

Evan D. Amber Staff Professional I

Michael J Burns, LG

Environmental Program Manager

EDA/MJB:asp



PRELIMINARY SITE ASSESSMENT REPORT PARCEL 034, NC DEPARTMENT OF TRANSPORTATION PIN 555012766827 1088 HIGHWAY 64 BUSINESS HAYESVILLE, CLAY COUNTY, NORTH CAROLINA

NCDOT WBS ELEMENT 47516.1.1 STATE PROJECT R-5863 PROPOSED IMPROVEMENTS TO US 64 BUSINESS FROM US 64 TO SR 1307 (MAIN STREET)

KLEINFELDER PROJECT NO. 20230304.001A

JULY 1, 2022

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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:

Mr. John L. Pilipchuk, LG, PE North Carolina Department of Transportation State Geotechnical Engineer Geotechnical Engineering Unit 1589 Mail Service Center Raleigh, North Carolina 27699-1589

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Prepared by:

Evan D. Amber Staff Professional I

Reviewed by:

Michael J. Burns, LG

Environmental Program Manager

KLEINFELDER

3200 Gateway Centre Blvd. | Suite 100 Raleigh, North Carolina 27560 P | 919.755.5011

July 1, 2022

Kleinfelder Project No. 20230304.001A



PRELIMINARY SITE ASSESSMENT REPORT

Site Name and Location: Parcel 034

1088 Highway 64 Business

Hayesville, Clay County, North Carolina

Latitude and Longitude: 35.046655°N, -83.820836°W

County Parcel Number 555012766827

N/A **Facility ID Number:**

Leaking UST Incidents: N/A

State Project No.: R-5863

NCDOT Project No.: NCDOT WBS Element 47516.1.1

Description: Proposed improvements to US 64 Business from

US 64 to SR 1307 (Main Street), Hayesville,

Clay County, NC 28904

July 1, 2022 **Date of Report:**

Consultant: Kleinfelder, Inc.

3200 Gateway Center Boulevard | Suite 100

Morrisville, North Carolina 27560 Corporate Geology License No. C-521 Corporate Licensure for Engineering F-1312

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.

07/12/2022

Michael J Burns, LG

NC License No. 1645



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A Geophysical Survey Report



PRELIMINARY SITE ASSESSMENT REPORT PARCEL 034, NC DEPARTMENT OF TRANSPORTATION PIN 555012766827 1088 HIGHWAY 64 BUSINESS HAYESVILLE, CLAY COUNTY, NORTH CAROLINA

NCDOT WBS ELEMENT 47516.1.1 STATE PROJECT R-5863 PROPOSED IMPROVEMENTS TO US 64 BUSINESS FROM US 64 TO SR 1307 (MAIN STREET)

1 INTRODUCTION

Kleinfelder, Inc. (Kleinfelder) has prepared this Preliminary Site Assessment (PSA) report to document assessment activities performed on Parcel 034 (the assessment area is hereafter referred to as the "Project Study Area"). The Project Study Area consists of the majority of one (1) 0.59-acre parcel of land that is within the right-of-way and/or easement on Clay County, North Carolina Tax Assessor's Office Parcel Identification Number (PIN) 555012766827. Parcel 034 is located southwest of the intersection of Hiawassee Street and US Highway 64 Business in Hayesville, Clay County, North Carolina (Figure 1).

Based on the information provided in a GeoEnvironmental Report for Planning, prepared by ECS Southeast, LLP. (ECS) for the North Carolina Department of Transportation (NCDOT) and dated November 14, 2017, Parcel 034 was not identified on a search of the North Carolina Department of Environmental Quality (NCDEQ) underground storage tank (UST) database, there was no evidence of active or former USTs based a review of databases by ECS, and there were no reported incidents associated with the parcel. The NCDOT submitted a Request for Technical and Cost Proposal (RFP), dated March 16, 2022, to Kleinfelder that indicated that the purpose of this PSA was to: (A) conduct a geophysical survey to evaluate for the presence of USTs, magnetic anomalies, and/or buried debris within the Project Study Area; and to (B) recommend additional assessments to the NCDOT if the geophysical survey identified conditions that may warrant further environmental investigation on Parcel 034.

1.1 SITE DESCRIPTION

Parcel 034 has a listed owner of the NCDOT and was formerly occupied by B&T Marine, an apparent marine equipment repair and sales operation. The parcel's street address is 1088 Highway 64 Business, Hayesville, North Carolina 28904. The parcel is occupied by the concrete slab foundation of a former approximately 5,400-ft² retail storefront in the central and western



portions of the parcel, with a paved asphalt area between the eastern side of the former building area and US Highway 64 Business and the former building structure surrounded by grass and gravel surfaces. The parcel is currently vacant land.

The parcel is bounded to the east by US Highway 64 Business, beyond which residential homes and the Hayesville Child Development Center are apparent; to the south by Hickory Street, beyond which an automotive repair facility and wrecker service (Wood Automotive and Towing Services) is apparent; to the west by wooded land and the Hayesville Presbyterian Church, beyond which residential homes are apparent; and to the north by Hiawassee Street, beyond which is a larger church property.

1.2 SCOPE OF WORK

Kleinfelder conducted this PSA in accordance with the NCDOT's March 16, 2022 RFP and Kleinfelder's April 11, 2022 Technical and Cost Proposal. The NCDOT granted a formal Notice to Proceed (NTP) on April 19, 2022. The NTP indicated the description of the project as improvements to US Highway 64 Business from US Highway 64 to State Route 1307 (Main Street). The project proposed to modernize the roadway by adding sidewalk, a bike lane, and several drainage improvements.



2 HISTORY

2.1 PARCEL USAGE

The parcel was formerly occupied by B&T Marine, an apparent marine equipment repair and sales operation, and is currently vacant land.

ECS had contracted a commercial database service, EDR Lightbox (EDR) of Shelton, Connecticut to perform the government database search for listings within 1-mile of a broader area of study that encompassed Parcel 034. The November 14, 2017 GeoEnvironmental Report for Planning, prepared by ECS, did not identify records of USTs or other environmental listings of concern associated with Parcel 034.

Kleinfelder conducted historical research to determine whether additional environmental listings were identified for Parcel 034. The following are the results of the additional research conducted on June 6, 2022:

- Based on information obtained from Clay County parcel tax records, Parcel 034 is listed as a commercial 0.59-acre lot occupied by a marine building. No additional pertinent information about the parcel or the structure was maintained.
- Based on a review of historical aerial photographs using Google Earth Pro, NC OneMap Orthoimagery, and the NCDOT Historical Aerial Imagery Index, an approximately L-shaped building structure was apparent since at least March 17, 1964, the earliest available online aerial imagery, until at least 1981 in the central and western portions of the parcel. A possible small fuel island structure was apparent to the east of the building in the eastern portion of the parcel and serviced by paved and/or gravel surfaces between the two improved roadways that bound the parcel to the north and to the east. Observed conditions may suggest automotive fueling operations. Between 1981 and 1993, the northern portion of the building had apparently been demolished and junked/stored vehicles on the parcel were apparent at this time. Automotive vehicle storage operations on the parcel appeared to increase until to about 2006 and then remain consistent until about 2009. Aerial imagery available in 1998, 2005, and 2008 were too poor of resolution to accurately discern development of the parcel, although they appeared to be generally consistent with automotive vehicle storage apparent between 1993 and 2009. Boats and marine vehicles stored on the parcel were apparent from 2010 to 2019, the most current aerial



imagery available. The building structure had been demolished except for the concrete slab foundation and the marine vehicles removed by the time of site exploration, May 19, 2022.

- Kleinfelder searched the registered UST, Leaking UST, UST Facility, and UST Incident databases, maintained by the NCDEQ. Parcel 034 was not listed in these databases.
- Kleinfelder searched the NCDEQ Division of Waste Management Site Locator Tool.
 Parcel 034 was not listed in this database.
- Kleinfelder searched the UST Finder database, maintained by the US Environmental Protection Agency (US EPA). Parcel 034 was not listed in this database.
- Kleinfelder searched the Digital NC database and records maintained by the Town of Hayesville for historical city directories and other pertinent environmental records in the vicinity of the Project Study Area. No city directories of the Project Study Area vicinity or additional documentation associated with Parcel 034 was identified.
- Kleinfelder searched the North Carolina Collection of Sanborn fire insurance maps, maintained by the University of North Carolina at Chapel Hill. No Sanborn fire insurance maps were available online for Clay County to discern additional information regarding the building on-site.
- No other listings for Parcel 034 were identified on any of the other available NCDEQ
 pollution incident databases. No additional documentation associated with the Project
 Study Area was identified through a review of the NC Live or the Digital NC databases.

2.2 FACILITY ID NUMBERS

Kleinfelder reviewed the NCDEQ UST database for Parcel 034. The parcel was not listed in the database.

2.3 GROUNDWATER INCIDENT NUMBERS

No active groundwater incidents are known to be associated with Parcel 034 at this time.



3 OBSERVATIONS

3.1 GROUNDWATER MONITORING WELLS

No (0) active groundwater monitoring wells were observed on Parcel 034 at the time of site exploration, May 19, 2022.

3.2 ACTIVE USTS

Based on review of the NCDEQ UST database, site visits and previous reports, there are no (0) active regulated USTs located in the Project Study Area. At the time of site exploration, May 19, 2022, no evidence of active USTs was observed within the Project Study Area.

3.3 FEATURES APPARENT BEYOND THE PROJECT STUDY AREA

The Project Study Area consisted of the majority of the parcel within the NCDOT right-of-way or easement, which excluded only a small area of wooded land along the western parcel boundary. No features of concern were observed outside of the Project Study Area at the time of site exploration, May 19, 2022.



4 METHODS

4.1 PROPERTY OWNER CONTACTS

As part of Kleinfelder's scope of work, the listed property owner was contacted about the work schedule for the field work and the type of work being performed. The owner did not express any concern or special conditions associated with the work being performed.

4.2 HEALTH AND SAFETY

Prior to commencing the field work, Kleinfelder personnel developed a Site-Specific Health and Safety Plan (HASP) covering activities to be performed. The site-specific HASP was discussed with all Kleinfelder personnel involved with the project and at a daily on-site "tail gate" safety meetings with subcontractors and sub consultants. In addition to the HASP, Kleinfelder utilized its comprehensive Corporate Health and Safety Program, targeted to address those specific and critical tasks that involve Kleinfelder personnel and subcontractors. The Loss Prevention System (LPS™), a behavior-based program, is Kleinfelder's company-wide safety system implemented and embraced by all levels of the company.

4.3 GEOPHYSICAL INVESTIGATION

Pyramid Geophysical Services of Greensboro, North Carolina (Pyramid) conducted a geophysical investigation in the Project Study Area on May 19, 2022. Pyramid utilized electromagnetic (EM) induction technology and ground penetrating radar (GPR) to locate potential geophysical anomalies and potential USTs within the Project Study Area.

A total of ten (10) EM anomalies were identified, of which seven (7) were directly attributed to visible cultural features at the ground surface, including utilities, a utility box, a manhole, cut metal posts, vehicles, scattered metal debris, and reinforced concrete. One (1) EM anomaly (listed as Metallic Anomaly # 1 in the geophysical report) was attributed to buried metallic debris in the northwestern corner of the Project Study Area. One (1) EM anomaly (listed as Metallic Anomaly # 6 in the geophysical report) was attributed to an apparent former fuel pump island in the eastern portion of the Project Study Area.

One (1) EM Anomaly (listed as Metallic Anomaly # 4 in the geophysical report) in the northeastern portion of the Project Study Area, north of the apparent former fuel island and southeast adjacent



to the concrete foundation of the former building structure, was attributed to the following three (3) probable metallic USTs:

- UST #1 is approximately 16 feet long and 5 feet wide.
- UST #2 is approximately 12 feet long and 5 feet wide.
- UST #3 is approximately 13 feet long and 6 feet wide.

Isolated reinforced concrete, metallic debris, and utilities in the vicinity of the probable USTs were reportedly considered to be likely associated with the former UST system/product lines.

No evidence of other significant buried objects was reported.

A copy of the Pyramid Geophysical Investigation Report, detailing the field methodology, is included in Appendix A.



5 RESULTS

5.1 GEOPHYSICAL INVESTIGATION

The EM and GPR surveys identified three (3) probable metallic USTs in the northeastern portion of the Project Study Area, north of the apparent former fuel island and southeast adjacent to the concrete foundation of the former building structure. Isolated reinforced concrete, metallic debris, and utilities in the vicinity of the probable USTs was reportedly considered to be likely associated with the former UST system/product lines. No evidence of other significant buried objects was reported.

- UST #1 is approximately 16 feet long and 5 feet wide.
- UST #2 is approximately 12 feet long and 5 feet wide.
- UST #3 is approximately 13 feet long and 6 feet wide.

Kleinfelder estimates UST #1 to be approximately 2,350-gallon capacity, UST #2 to be approximately 1,800-gallon capacity, and UST #3 to be approximately 2,800-gallon capacity.



6 CONCLUSIONS

Based on results of the EM/GPR survey, historical review, and field observations, Kleinfelder has reached the following conclusions:

- Parcel 034 was possibly occupied by an automotive fueling station from at least 1964 to between 1981 and 1993, during which time the northern portion of the building structure on-site was apparently demolished. From 1993 to 2009, the parcel was apparently used for storage of automotive vehicles. From 2010 to at least 2019, the parcel had been occupied by a marine equipment retail service and repair operation. The building structure had been demolished except for the concrete slab foundation and the marine vehicles removed by the time of site exploration, May 19, 2022, and the parcel was vacant land.
- The EM and GPR surveys identified three (3) probable metallic USTs in the northeastern
 portion of the Project Study Area, north of the apparent former fuel island and southeast
 adjacent to the concrete foundation of the former building structure. Isolated reinforced
 concrete, metallic debris, and utilities in the vicinity of the probable USTs were reportedly
 considered to be likely associated with the former UST system/product lines. No evidence
 of other significant buried objects was reported.
 - UST #1 is approximately 16 feet long and 5 feet wide.
 - UST #2 is approximately 12 feet long and 5 feet wide.
 - UST #3 is approximately 13 feet long and 6 feet wide.
- Kleinfelder estimates UST #1 to be approximately 2,350-gallon capacity, UST #2 to be approximately 1,800-gallon capacity, and UST #3 to be approximately 2,800-gallon capacity.
- No other features of concern were observed at the time of site exploration, May 19, 2022.
- No listings of concern associated with Parcel 034 were identified from a review of available online databases.
- Based on the geophysical investigation, historical review of the site, and site observations, Kleinfelder identified conditions that may warrant further environmental investigation on Parcel 034 within the Project Study Area.



7 RECOMMENDATIONS

Based on results of this Preliminary Site Assessment, Kleinfelder recommends that additional sampling or special handling of soils be performed in the vicinity of the three (3) probable USTs identified by the geophysical survey, depicted on Figure 2, within the Project Study Area on Parcel 034 in Hayesville, Clay County, North Carolina.



8 LIMITATIONS

Kleinfelder's work will be 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.

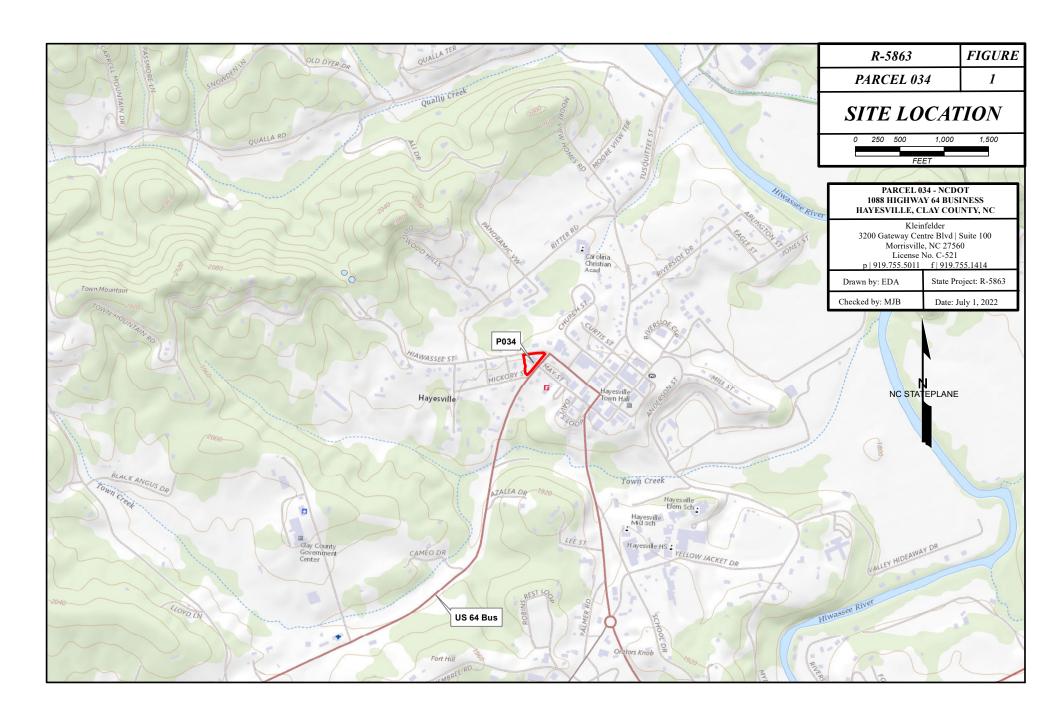
During the course of the performance of Kleinfelder's services, hazardous materials may have been discovered. Kleinfelder assumes no responsibility or liability whatsoever for any claim, loss of property value, damage, or injury that results from pre-existing hazardous materials being encountered or 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

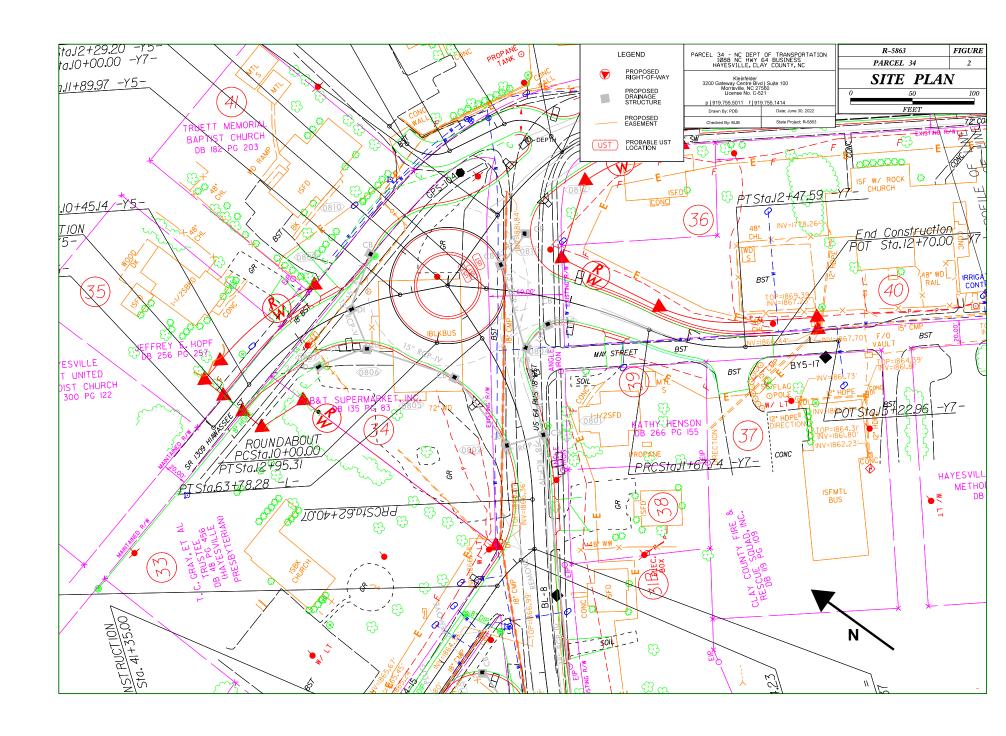


Kleinfelder's services. NCDOT is responsible for directing all arrangements to lawfully store, treat, recycle, dispose, or otherwise handle hazardous materials, including cuttings and samples resulting from Kleinfelder's services.



FIGURES







APPENDIX A GEOPHYSICAL SURVEY REPORT



PYRAMID GEOPHYSICAL SERVICES (PROJECT 2022-152)

GEOPHYSICAL SURVEY

METALLIC UST INVESTIGATION: PARCEL 34 NCDOT PROJECT R-5863

1088 US-64 BUSINESS, HAYESVILLE, NC May 26, 2022

Report prepared for: Michael Burns, P.G.

Kleinfelder, Inc.

3200 Gateway Centre Blvd., Suite 100

Morrisville, NC 27560

Prepared by:

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GEOPHYSICAL INVESTIGATION REPORT

Parcel 34 - 1088 US-64 Business Hayesville, Clay County, North Carolina

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- Figure 2 Parcel 34 EM61 Metal Detection Contour Map
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Appendices

Appendix A – GPR Transect Images

LIST OF ACRONYMS

CADD	Computer Assisted Drafting and Design
DF	Dual Frequency
EM	Electromagnetic
GPR	Ground Penetrating Radar
GPS	Global Positioning System
NCDOT	North Carolina Department of Transportation
ROW	
UST	Underground Storage Tank

EXECUTIVE SUMMARY

Project Description: Pyramid Geophysical Services (Pyramid), a department of Pyramid Environmental & Engineering, P.C., conducted a geophysical investigation for Kleinfelder, Inc. at Parcel 34, located at 1088 US-64 Business, in Hayesville, NC. The survey was part of a North Carolina Department of Transportation (NCDOT) Right-of-Way (ROW) investigation (NCDOT Project R-5863). The survey was designed to extend across all accessible portions of the property. Conducted on May 19, 2022, the geophysical investigation was performed to determine if unknown, metallic underground storage tanks (USTs) were present beneath the survey area.

Geophysical Results: The geophysical investigation consisted of electromagnetic (EM) induction-metal detection and ground penetrating radar (GPR) surveys. A total of ten EM anomalies were identified. The majority of the EM anomalies were directly attributed to visible cultural features at the ground surface. GPR was performed across all EM features not directly associated with known surface metal and around all sources of significant metallic interference to confirm that the interference did not obscure any significant structures such as USTs.

The geophysical survey identified evidence of three probable metallic USTs adjacent to the southeast corner of the former building foundation (from west to east: UST #1, UST #2, and UST #3).

- UST #1 is approximately 16 feet long and 5 feet wide.
- UST #2 is approximately 12 feet long and 5 feet wide.
- UST #3 is approximately 13 feet long and 6 feet wide.

The remaining GPR transects recorded evidence of isolated reinforced concrete, metallic debris, and utilities likely associated with the former UST system. No evidence of additional significant buried objects was recorded. Collectively, the geophysical data recorded evidence of three probable metallic USTs at Parcel 34.

INTRODUCTION

Pyramid Geophysical Services (Pyramid), a department of Pyramid Environmental & Engineering, P.C., conducted a geophysical investigation for Kleinfelder, Inc. at Parcel 34, located at 1088 US-64 Business, in Hayesville, NC. The survey was part of a North Carolina Department of Transportation (NCDOT) Right-of-Way (ROW) investigation (NCDOT Project R-5863). The survey was designed to extend across all accessible portions of the property. Conducted on May 19, 2022, the geophysical investigation was performed to determine if unknown, metallic underground storage tanks (USTs) were present beneath the survey area.

The site contained the foundation of a former building surrounded by grass and gravel surfaces. An aerial photograph, showing the survey area boundaries and ground-level photographs, is shown in **Figure 1**.

FIELD METHODOLOGY

The geophysical investigation consisted of electromagnetic (EM) induction-metal detection and ground penetrating radar (GPR) surveys. Pyramid collected the EM data using a Geonics EM61-MK2 (EM61) metal detector integrated with a Geode External GPS/GLONASS receiver. The integrated GPS system allows the location of the instrument to be recorded in real-time during data collection, resulting in an EM data set that is georeferenced and can be overlain on aerial photographs and CADD drawings. A boundary grid was established around the perimeter of the site with marks every 10 feet to maintain orientation of the instrument throughout the survey and assure complete coverage of the area.

According to the instrument specifications, the EM61 can detect a metal drum down to a maximum depth of approximately 8 feet. Smaller objects (1-foot or less in size) can be detected to a maximum depth of 4 to 5 feet. The EM61 data were digitally collected at approximately 0.8-foot intervals along north-south trending or east-west trending, generally parallel survey lines, spaced five feet apart. The data were downloaded to a

computer and reviewed in the field and office using the Geonics NAV61 and Surfer for Windows Version 15.0 software programs.

GPR data were acquired across select EM anomalies on May 19, 2022, using a Geophysical Survey Systems, Inc. (GSSI) SIR 4000 control unit equipped with a 350 MHz antenna. Data were collected both in reconnaissance fashion as well as along formal transect lines across EM features. The GPR data were viewed in real-time using a vertical scan of 512 samples, at a rate of 48 scans per second. GPR data were viewed down to a maximum depth of approximately 6 feet, based on dielectric constants calculated by the SIR 4000 unit in the field during the reconnaissance scans. GPR transects across specific anomalies were saved to the hard drive of the DF unit for post-processing and figure generation.

Pyramid's classifications of USTs for the purposes of this report are based directly on the geophysical UST ratings provided by the NCDOT. These ratings are as follows:

	Geophysical Surveys for on NCI	Underground Stora OOT Projects	ge Tanks
High Confidence	Intermediate Confidence	Low Confidence	No Confidence
Known UST	Probable UST	Possible UST	Anomaly noted but not
Active tank - spatial location, orientation, and approximate depth determined by geophysics.	Sufficient geophysical data from both magnetic and radar surveys that is characteristic of a tank. Interpretation may be supported by physical evidence such as fill/vent pipe, metal cover plate, asphalt/concrete patch, etc.	Sufficient geophysical data from either magnetic or radar surveys that is characteristic of a tank. Additional data is not sufficient enough to confirm or deny the presence of a UST.	characteristic of a UST. Should be noted in the text and may be called out in the figures at the geophysicist's discretion.

DISCUSSION OF RESULTS

Discussion of EM Results

A contour plot of the EM61 results obtained across the survey area at the property is presented in **Figure 2**. Each EM anomaly is numbered for reference in the figure. The following table presents the list of EM anomalies and the cause of the metallic response, if known:

LIST OF METALLIC ANOMALIES IDENTIFIED BY EM SURVEY

Metallic Anomaly #	Cause of Anomaly	Investigated with GPR
1	Metallic Debris	✓
2	Utility Box	
3	Manhole	
4	Three Probable USTs	✓
5	Known Utilities	
6	Former Pump Island	✓
7	Cut Metal Posts	✓
8	Vehicles	✓
9	Scattered Visible Metallic Debris	
10	Reinforced Concrete	✓

The majority of the EM anomalies were directly attributed to visible cultural features at the ground surface, including visible metallic debris, utilities, a manhole, an apparent former pump island, cut metal posts, and vehicles. One significant feature (EM Anomaly 4) was located directly east of the building foundation and was investigated with GPR. GPR was also performed across suspected metallic debris associated with EM Anomaly 1, across features beneath the former foundation (EM Anomalies 7 and 10), and across the area of the former pump island (EM Anomaly 6). Lastly, GPR was performed around the vehicles in the southwest portion of the survey area (EM Anomaly 8) to confirm that the metallic interference did not obscure any significant structures such as USTs.

Discussion of GPR Results

Figure 3 presents the locations of the formal GPR transects performed at the property as well as select transect images. All of the GPR transect images are included in **Appendix A**. A total of thirteen formal GPR transects were performed at the site.

GPR Transects 1-4 were performed across the significant buried metal associated with EM Anomaly 4. These transects recorded three discreet, high-amplitude hyperbolic reflectors and three isolated lateral reflectors that are characteristic of the widths and lengths of metallic USTs. The combined geophysical data results in these features being classified as three probable metallic USTs (from west to east: UST #1, UST #2, and UST #3). UST #1

is approximately 16 feet long and 5 feet wide. UST #2 is approximately 12 feet long and 5 feet wide. UST #3 is approximately 13 feet long and 6 feet wide. **Figure 4** provides the locations and sizes of the three probable USTs, overlain on an aerial photograph, along with a ground-level photograph.

GPR Transect 5 was performed across EM Anomaly 1 and verified the presence of metallic debris at this location. GPR Transects 6-8 were performed across buried metal anomalies beneath the building foundation, and recorded evidence of isolated zones of reinforced concrete and the presence of cut metal pipes. GPR Transect 9 was performed across the apparent former pump island, and recorded evidence of minor utilities likely associated with product lines from the former UST system. The remaining GPR transects were performed around the vehicles in the southwest portion of the survey area. No significant buried objects were identified at this location.

Collectively, the geophysical data <u>recorded evidence of three probable metallic USTs at Parcel 34</u>. **Figure 5** provides an overlay of the metal detection results and three probable USTs on the NCDOT engineering plans for reference.

SUMMARY & CONCLUSIONS

Pyramid's evaluation of the EM61 and GPR data collected at Parcel 34 in Hayesville, North Carolina, provides the following summary and conclusions:

- The EM61 and GPR surveys provided reliable results for the detection of metallic USTs within the accessible portions of the geophysical survey area.
- The majority of the EM anomalies were directly attributed to visible cultural features at the ground surface.
- GPR was performed across all EM features not directly associated with known surface metal and around all sources of significant metallic interference to confirm that the interference did not obscure any significant structures such as USTs.
- The geophysical survey identified evidence of three probable metallic USTs adjacent to the southeast corner of the former building foundation (from west to

east: UST #1, UST #2, and UST #3).

- o UST #1 is approximately 16 feet long and 5 feet wide.
- o UST #2 is approximately 12 feet long and 5 feet wide.
- o UST #3 is approximately 13 feet long and 6 feet wide
- The remaining GPR transects recorded evidence of isolated reinforced concrete, metallic debris, and utilities likely associated with the former UST system. No evidence of additional significant buried objects was recorded.
- Collectively, the geophysical data <u>recorded evidence of three probable metallic</u> USTs at Parcel 34.

LIMITATIONS

Geophysical surveys have been performed and this report was prepared for Kleinfelder, Inc. in accordance with generally accepted guidelines for EM61 and GPR surveys. It is generally recognized that the results of the EM61 and GPR surveys are non-unique and may not represent actual subsurface conditions. The EM61 and GPR results obtained for this project have not conclusively determined the definitive presence or absence of metallic USTs, but the evidence collected is sufficient to result in the conclusions made in this report. Additionally, it should be understood that areas containing extensive vegetation, reinforced concrete, or other restrictions to the accessibility of the geophysical instruments could not be fully investigated.

APPROXIMATE BOUNDARIES OF GEOPHYSICAL SURVEY AREA





View of Survey Area (Facing Approximately Southwest)



View of Survey Area (Facing Approximately West)

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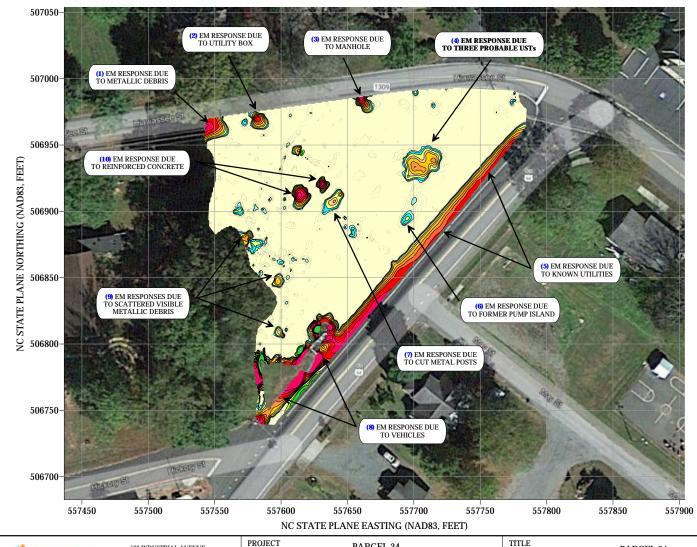
PROJECT

PARCEL 34 HAYESVILLE, NORTH CAROLINA NCDOT PROJECT R-5863

PARCEL 34 -GEOPHYSICAL SURVEY BOUNDARIES AND SITE PHOTOGRAPHS

ATE	5/19/2022	CLIENT KLEINFELDER	-
RAMID ROJECT #:	2022-152	FIGURE 1	

EM61 METAL DETECTION RESULTS



EVIDENCE OF THREE PROBABLE METALLIC USTs WAS OBSERVED.

The contour plot shows the differential results of the EM61 instrument in millivolts (mV). The differential results focus on larger metallic objects such as USTs and drums. The EM data were collected on May 19, 2022, using a Geonics EM61-MK2 instrument. Verification GPR data were collected using a GSSI SIR 4000 instrument with a 350 MHz HS antenna on May 19, 2022.

> EM61 Metal Detection Response (millivolts)





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PARCEL 34 -EM61 METAL DETECTION CONTOUR MAP

	DATE	5/19/2022	CLIENT	KLEINFELDER
	PYRAMID PROJECT #:	2022-152		FIGURE 2

GPR TRANSECT LOCATIONS 507050-WIDTHS OF THREE PROBABLE USTs LENGTH OF ONE PROBABLE UST 507000-506950-GPR TRANSECT 1 (T1) GPR TRANSECT 2 (T2) LENGTH OF ONE PROBABLE UST GPR TRANSECT 4 (T4) GPR TRANSECT 3 (T3) 506750-506700 557450 557500 557550 557600 557650 557700 557750 557800 557850 557900



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PARCEL 34 HAYESVILLE, NORTH CAROLINA NCDOT PROJECT R-5863

NC STATE PLANE EASTING (NAD83, FEET)

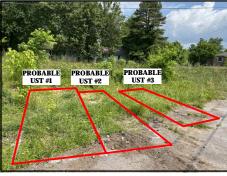
TITLE

PARCEL 34 -GPR TRANSECT LOCATIONS AND SELECT IMAGES

DATE	5/19/2022	CLIENT KLEINFELDER
PYRAMID PROJECT #:	2022-152	FIGURE 3

LOCATIONS OF THREE PROBABLE USTs





View of Three Probable USTs (Facing Approximately North)



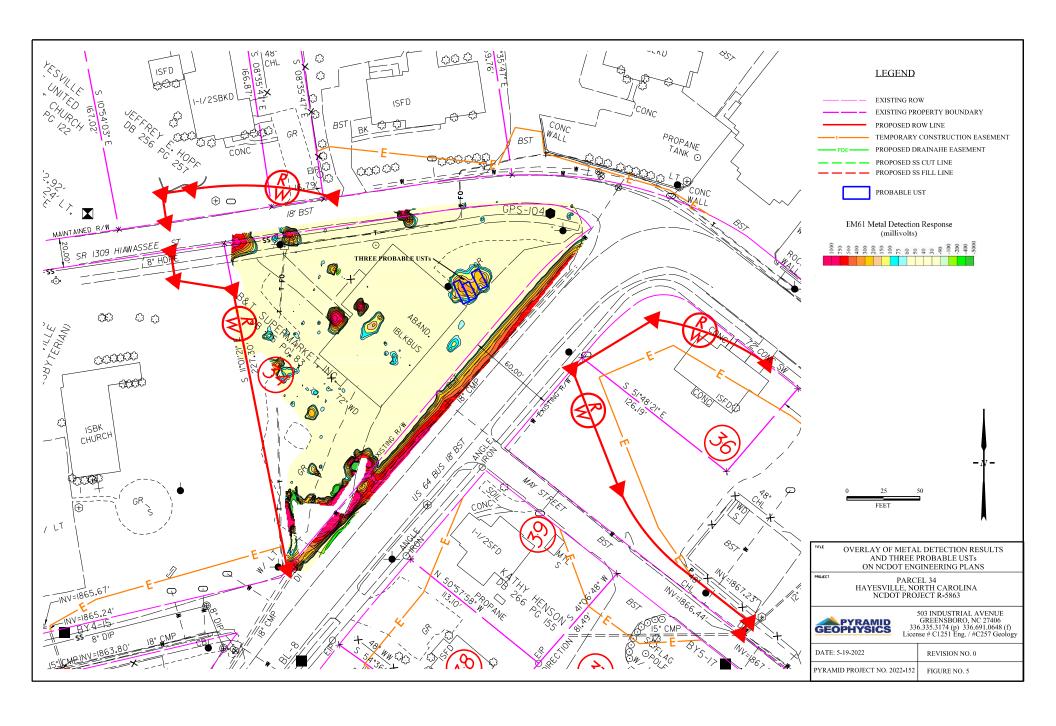
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PROJECT

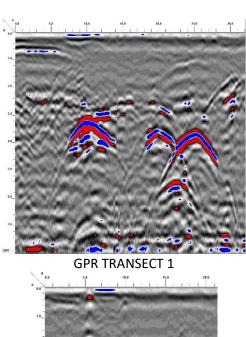
PARCEL 34 HAYESVILLE, NORTH CAROLINA NCDOT PROJECT R-5863

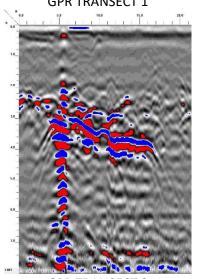
PARCEL 34 -LOCATIONS AND SIZES OF THREE PROBABLE USTs

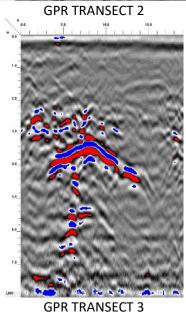
DATE	5/19/2022	CLIENT	KLEINFELDER
PYRAMID PROJECT #:	2022-152		FIGURE 4

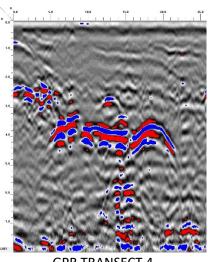


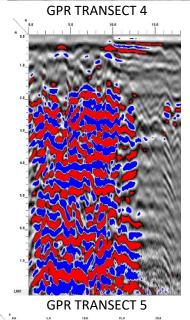


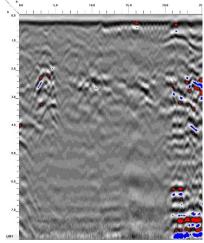




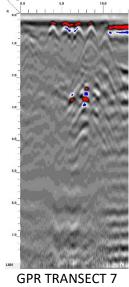


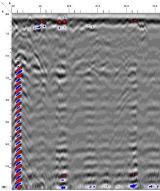




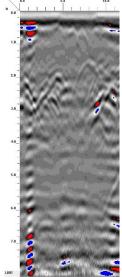


GPR TRANSECT 6

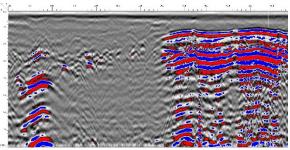




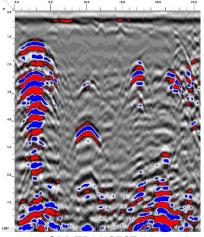
GPR TRANSECT 8



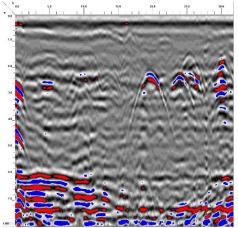
GPR TRANSECT 9



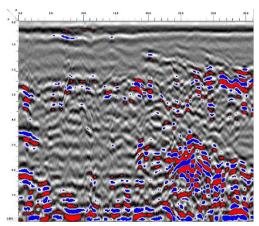
GPR TRANSECT 10



GPR TRANSECT 11



GPR TRANSECT 12



GPR TRANSECT 13