

**PRELIMINARY SITE ASSESSMENT
STAFFORD LAND COMPANY PROPERTY – PARCEL 022
JOHNSON BEAUTY CENTER
2281 RAY ROAD
SPRING LAKE, HARNETT COUNTY, NORTH CAROLINA
STATE PROJECT: U-3465
WBS ELEMNT: 39017.1.1
OCTOBER 24, 2012**

Report prepared for:

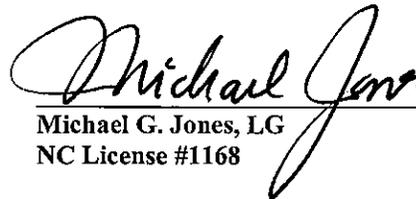
Mr. Gordon Box, LG
GeoEnvironmental Project Manager
GeoEnvironmental Section
Geotechnical Engineering Unit
North Carolina Department of Transportation
1020 Birch Ridge Drive
Raleigh, NC 27610

Report prepared by:


Timothy D. Leatherman
Project Manager



Report reviewed by:


Michael G. Jones, LG
NC License #1168



PYRAMID ENVIRONMENTAL & ENGINEERING, P.C.
P.O. BOX 16265
GREENSBORO, NC 27416-0265
(336) 335-3174

C257 –Geology
C-1251 - Engineering

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 - Appendix F: Personnel Logs
-

**PRELIMINARY SITE ASSESSMENT
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JOHNSON BEAUTY CENTER
SPRING LAKE, HARNETT COUNTY, NORTH CAROLINA**

1.0 Introduction

Pyramid Environmental & Engineering P.C. (Pyramid) has prepared this Preliminary Site Assessment (PSA) report documenting background information, field activities, assessment activities, findings, conclusions, and recommendations for the Stafford Land Company Property (Parcel 022). The Stafford Land Company Property (Parcel 022) is currently an active hair salon (Johnson Beauty Center) located at 2281 Ray Road, Spring Lake, Harnett County, North Carolina. This preliminary site assessment was conducted on behalf of the North Carolina Department of Transportation (NCDOT) in accordance with Pyramid's August 17, 2012 technical proposal.

The purpose of this assessment was to determine the presence or absence of underground storage tanks (USTs) and impacted soils at the subject property in the proposed right-of-way and construction easement areas related to the widening of Ray Road (State Project U-3465). The location of the subject site is shown on **Figure 1**, and a site map is presented as **Figure 2**. **Figure 3** presents a scaled out perspective of the entire Parcel showing property boundaries, property owner name, and station number/alignment, from the NCDOT engineering files provided to Pyramid.

1.1 Background Information

Based on the NCDOT's July 23, 2012, *Request for Technical and Cost Proposal*, the PSA was conducted within the NCDOT right of way (ROW), easements, or proposed utility easements. The PSA included the following:

- Research the property for past uses and possible releases.
- Conduct a preliminary geophysical site assessment and limited soil assessment in the proposed ROW and easements.
- Report the depth to groundwater and obtain one groundwater sample for the site for laboratory analysis by installing a temporary monitoring well.

1.2 Project Information

Prior to field activities, a Health and Safety Plan was prepared. Prior to drilling activities, the public underground utilities were located and marked by the North Carolina One-Call Service. A private utility locator, Northstate Utility Locating Incorporated of Colfax, North Carolina was used to mark the on-site private, buried utilities.

As stated previously, the Stafford Land Company Property (Parcel 022) is currently an active hair salon (Johnson Beauty Center).

Pyramid also completed PSAs for an additional six properties along Ray Road (Parcel #'s 004, 009, 019, 021, 038, and 069). As requested by the NCDOT, Pyramid prepared separate PSA reports for each property.

2.0 Site History

Pyramid completed a records review, NCDENR file review, interviewed NCDNER personnel, and reviewed aerial photographs in order to determine past uses of the property. Pyramid reviewed the 1938, 1955, 1964, 1971, 1993, 1999, and 2010 aerial photographs for past uses. The 1955, 1964, 1971, 1993, 2010 aerial photographs are included in **Appendix A**. Historical information reviewed as part of the PSA indicated that the subject site was **first developed for commercial use between 1971 and 1993**. The earliest aerial to show the beauty center building was the 1993 aerial. The 1938 air photo showed the property to be undeveloped wooded land. The 1955 aerial photograph showed that the trees had been cleared from the property, and the property was most likely used for agricultural purposes. The 1955 and 1964 aerial photographs indicate the land was most likely used for agricultural purposes. The 1964 and 1971 aerial photographs indicate the property was first developed for residential use during that time period.

On September 7, 2012, Pyramid interviewed Mr. James Brown, the incident manager for Harnett County with the NCDENR UST Section. Mr. Brown stated no incidents or releases were in the state database for the site.

As part of the PSA, a background review to identify onsite and potential off-site sources of environmental contamination was performed. The background review included Federal and Non-Federal database searches. FirstSearch Technology Corporation, a commercially available database service was used for the search. Pyramid ordered a road corridor search for the Ray Road sites. **The database search did not list Parcel 022 in any Federal, Non-Federal or State database.** The Environmental FirstSearch Report is included in **Appendix B**.

3.0 Geophysical Investigation

Pyramid has performed a geophysical survey at the property using a combination of electromagnetic (EM61) and Ground Penetrating Radar (GPR) methods. The purpose of the geophysical survey was to identify the presence and location of any metallic Underground Storage Tanks (USTs) at the property. The EM anomaly mapped in front of the Beauty Supply Store was suspected to be a possible metallic UST. GPR scans were performed across all anomalies that were not readily attributable to visible objects at the ground surface or utilities. The anomaly in front of the Beauty Supply Store exhibited

characteristics that were consistent with a possible metallic UST; however, the shape of the object appeared to be spherical rather than elongated like a typical UST, and thus this anomaly is classified as a Possible UST. The possible tank was observed to exhibit an average width of approximately 15 feet and was at a depth of approximately 7 feet below land surface (bls).

The geophysical investigation provides evidence that the area containing the proposed ROW and easement at Parcel 022 contains a possible metallic UST to the east of the Beauty Supply Store building. The full details of the geophysical investigation are included in the Geophysical Investigation Report as **Appendix C**.

4.0 Soil Sampling Activities & Results

4.1 Soil Assessment Field Activities

On September 13, 2012, Pyramid mobilized to the site to drill soil borings, install a temporary monitoring well, and collect the proposed soil samples and groundwater sample for the PSA. The soil borings and temporary well were completed using a track mounted Geoprobe® Direct-Push rig. Four (4) soil borings (22-1, 22-2, 22-3, and 22-4) were advanced on the subject property between the NCDOT ROW, Easement, and proposed utility easement. Soil boring 22-1 was installed between the ROW and Ray Road just north of Highgrove Road. Borings 22-2 and 22-4 were installed between the proposed utility easement and Ray Road along the ROW. Soil boring 22-3 was installed down-gradient of a possible UST in the proposed utility easement. The selected locations were chosen to avoid public utilities along Ray Road and private utilities associated with the former business. The locations of the borings are shown on **Figure 2**.

Soil samples were continuously collected in five foot long disposable sleeves from each boring for geologic description, and visual examination for signs of contamination. Soil recovered from each sleeve was field screened using a Photo-Ionization Detector (PID) every 2 to 2.5 feet depending on the soil recovery of each sleeve. In general, the soil sample with the highest PID readings was selected from each boring for laboratory analysis. The soil boring logs with the soil descriptions, visual examination, and PID screening results are included in **Appendix D**. The PID field screening results are summarized in **Table 1**.

To prevent cross contamination, new disposable nitrile gloves were worn by the sampling technician during the sampling activities, and were changed between samples. The soil samples selected for laboratory analyses were placed in laboratory prepared containers and shipped to SGS Laboratories in Wilmington, NC. The selected soil samples were analyzed for total petroleum hydrocarbons (TPH) as gasoline range organics (GRO) by EPA Method 8015C/5035 and diesel range organics (DRO) by EPA Method 8015C/3541.

4.2 Soil Sample Analytical Results

The laboratory results for soil samples 22-1(2-5), 22-2(5-7.5), 22-3(5-7.5), and 22-4(3-5) did not detect any TPH-DRO or TPH-GRO above laboratory detection limits. The soil sample laboratory results are summarized in **Table 2**. A copy of the laboratory report and chain-of-custody is included in **Appendix E**.

4.3 Temporary Monitoring Well Installation

On September 13, 2012, Pyramid converted soil boring 22-3 into a 1-inch diameter temporary monitoring well. Soil boring 22-3 was completed to a total depth of 38 feet bls. The temporary well was constructed with 28 feet of 1-inch diameter of schedule 80 PVC casing and 10 feet of 1-inch diameter of schedule 80 PVC slotted screen. The temporary well was set in the boring with 10 feet of slotted screen at the bottom of the well.

On September 13, 2012, temporary monitoring well 22-3 was gauged using a properly decontaminated electric water level probe. The depth-to-groundwater was gauged at 29.8 feet bls. The temporary monitoring well was sampled using a new 1-inch disposal bailer. After the well was gauged and sampled, the temporary monitoring well was properly abandoned by the drillers by removing all the casing, and filling the bore hole with bentonite chips and portland cement.

4.4 Groundwater Analytical Results

The groundwater sample 22-3(TW) was placed in laboratory prepared containers for analysis of volatile organic compounds (VOCs) by EPA Method 6200B, and the sample was shipped to SGS Laboratories in Wilmington, NC. The laboratory results detected compounds benzene (0.19 µg/l), chloroform (0.73 µg/l), and toluene (0.2 µg/l) above laboratory detection limits, but below the NCAC 2L Groundwater Standards for each compound. No other compounds were detected above laboratory limits. The groundwater results for sample 22-3(TW) are summarized in **Table 3**. A copy of the laboratory report and chain-of-custody is included in **Appendix E**.

5.0 Conclusions and Recommendations

As requested by NCDOT, Pyramid has completed a PSA at Parcel 022 located 2281 Ray Road, Harnett County, Spring Lake, NC. The following is a summary of the assessment activities and results.

5.1 Geophysical Investigation

GPR scans were performed to verify the buried debris and further investigate a possible metallic UST recorded during the EM survey. The anomaly in front of the Beauty Supply Store exhibited characteristics that were consistent with a possible metallic UST, however, the shape of the object appeared to be spherical rather than elongated like a typical UST, and thus this anomaly is classified as a Possible UST. The possible tank was observed to exhibit an average width of approximately 15 feet and was at a depth of approximately 7 feet bls.

The geophysical investigation suggests that the proposed ROW and easement areas at the property may contain one possible metallic UST.

5.2 Limited Soil Assessment

The laboratory results for soil samples 22-1(2-5), 22-2(5-7.5), 22-3(5-7.5), and 22-4(3-5) did not detect any TPH-DRO or TPH-GRO above laboratory detection limits.

5.3 Limited Groundwater Assessment

Soil boring 22-3 was converted into a 1-inch diameter temporary monitoring well to a depth total depth of 38 feet bls. The depth-to-groundwater was gauged at 29.8 feet bls. The laboratory results detected compounds benzene (0.19 µg/l), chloroform (0.73 µg/l), and toluene (0.2 µg/l) above laboratory detection limits, but below the NCAC 2L Groundwater Standards for benzene (1.0 µg/l), chloroform (70 µg/l), and toluene (600 µg/l). No other compounds were detected above laboratory limits.

5.4 Recommendations

During road construction activities and future utility construction, it is possible a UST is located east of the beauty center in the proposed utility easement. The NCDOT needs to be aware of disturbing the possible UST in future construction activities.

6.0 Limitations

The results of this preliminary investigation are limited to the boring locations completed during this limited assessment and presented in this report. The laboratory results only reflect the current conditions at the locations sampled on the date this Preliminary Site Assessment was performed.

7.0 Closure

This report was prepared for, and is available solely for use by NCDOT and their designees. The contents thereof may not be used or relied upon by any other person without the express written consent and authorization of Pyramid Environmental & Engineering, P.C. (Pyramid). The observations, conclusions, and recommendations documented in this report are based on site conditions and information reviewed at the time of Pyramid's investigation. Pyramid appreciates the opportunity to provide this environmental service.

FIGURES

USGS TOPOGRAPHIC MAP

SITE:

2281 RAY ROAD

LOCATION:

SPRING LAKE, NORTH CAROLINA



USGS IDENTIFICATION

SCALES

USGS 7.5
MINUTE MAP

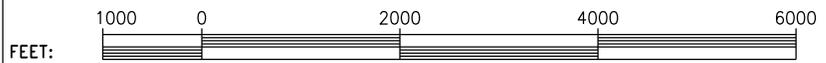
MANCHESTER, NC

ORIGINAL DATE:

1957

PHOTOREVISION
DATE:

1987



1" = 2000'

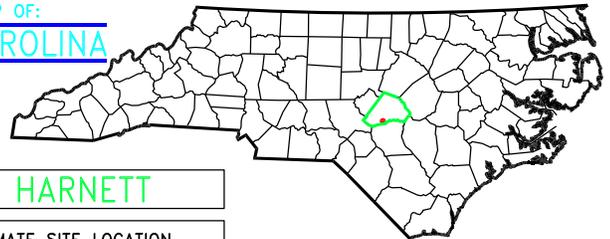
	PRIMARY HIGHWAY, HARD SURFACE
	SECONDARY HIGHWAY, HARD SURFACE
	LIGHT-DUTY ROAD HARD OR IMPROVED SURFACE
	UNIMPROVED ROAD
	STATE ROAD
	U.S. ROUTE
	INTERSTATE ROUTE

NOTES: TOPOGRAPHICAL CONTOUR INTERVAL = 10 FEET
 PHOTOREVISIONS DENOTED IN PURPLE

MAGNETIC
NORTH



COUNTY MAP OF:
NORTH CAROLINA



COUNTY: **HARNETT**

APPROXIMATE SITE LOCATION



CLIENT: NC DOT U-3465

PROPERTY NAME: 2281 RAY RD. PARCEL 022

CITY: SPRING LAKE

STATE: NORTH CAROLINA

TITLE: TOPOGRAPHIC MAP

SCALE:

1"=2000'

DATE:

9/21/12

DRAWING NAME:

USGSTOPO

DRAWN BY: KAM

CHECK BY: TDJ

JOB NO.: 2012-228

TYPE: PHASE II

FIGURE NUMBER:

1

NOTES

TOPOGRAPHIC MAP USED IN THIS GRAPHIC IS MAPPED, EDITED, AND PUBLISHED BY THE UNITED STATES GEOLOGIC SURVEY, DEPARTMENT OF THE INTERIOR, RESTON VIRGINIA.

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS.

STAFFORD LAND COMPANY INC
 DB 2353 PG 671
 PB 2008 PG 464
 PB 2008 PG 391

2.2

PI Sta 12+00.79
 $\Delta = 9^{\circ}58'10.8''$ (LT)
 $D = 10^{\circ}44'58.8''$
 $L = 92.74'$
 $T = 46.49'$
 $R = 533.00'$
 SE = SEE PLANS

STAFFORD LAND COMPANY INC
 DB 2353 PG 671
 PB 2008 PG 464
 PB 2008 PG 391

2.2

B 022-4(3-5')
 (<7.18)
 [<3.35]

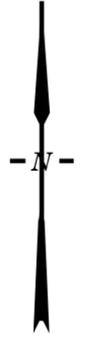
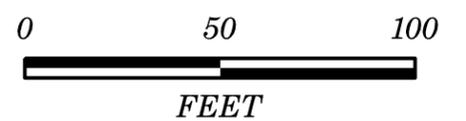
B 022-3(5-7.5')
 (<7.29)
 [<3.85]

B 022-2(5-7.5')
 (<7.25)
 [<3.38]

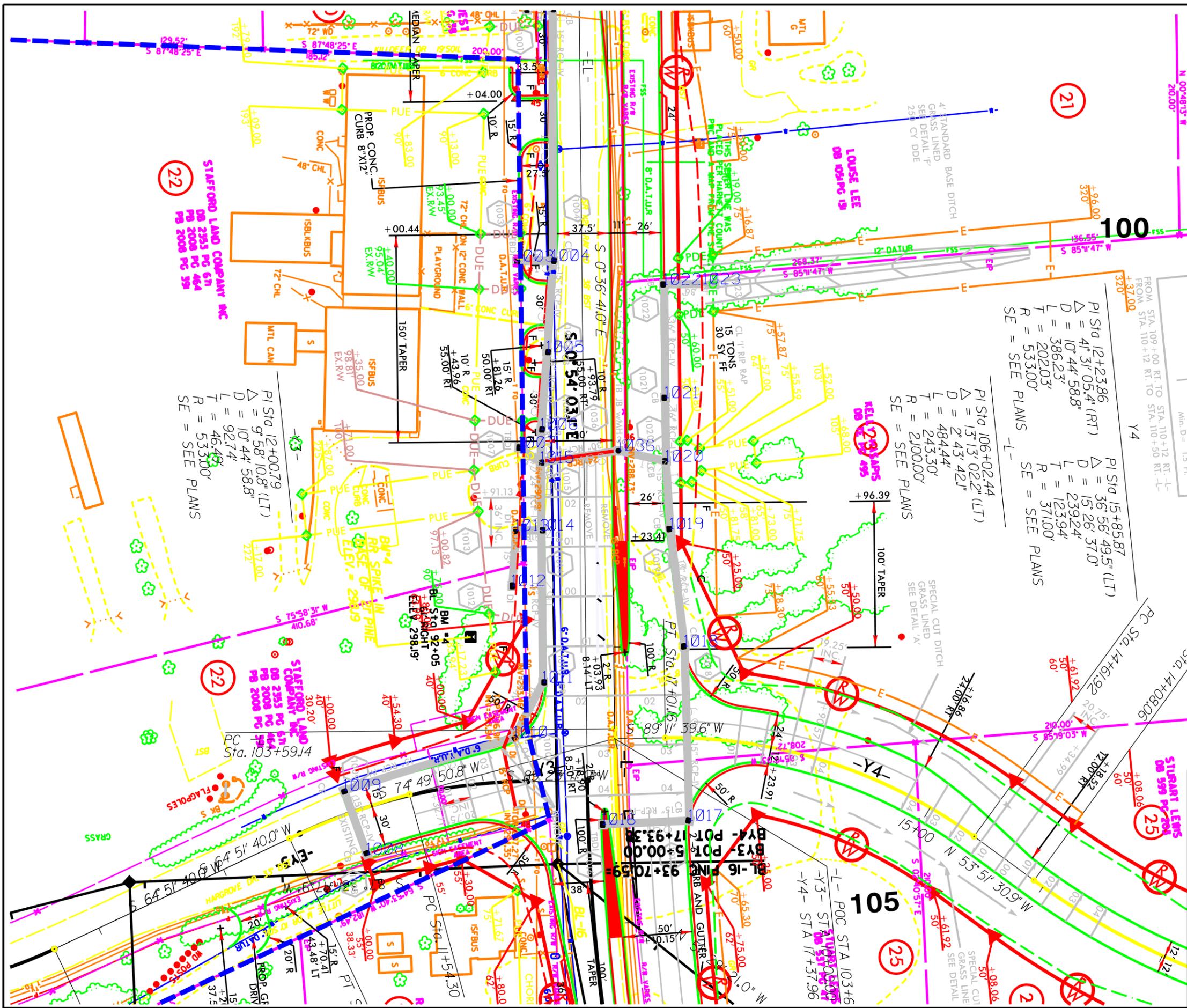
B 022-1(2-5')
 (<6.39)
 [<3.7]

LEGEND

- PUE PROPOSED UTILITY EASEMENT
- EXISTING ROW
- EXISTING PROPERTY BOUNDARY
- PROPOSED ROW
- PROPOSED CONST. EASEMENT
- PROP. DRAINAGE UTIL. EASEMENT
- PROPOSED SS CUT LINE
- PROPOSED SS FILL LINE
- PROPOSED SS TRANSITION LINE
- PROPOSED DRAINAGE PIPING
- PROPOSED DRAINAGE EASEMENT
- PROPOSED CATCH BASIN
- SOIL SAMPLE BORING LOCATION
- BORING CONVERTED TO MW
- AREA OF CONTAMINATION (>BDL, <10 PPM)
- AREA OF CONTAMINATION (>10 PPM)
- POSSIBLE UST
- PROBABLE UST
- (<6.1) TPH-DRO concentration (mg/kg)
- [<6.1] TPH-GRO concentration (mg/kg)

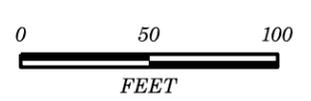


TITLE SOIL BORING LOCATIONS AND ESTIMATED AREA OF CONTAMINATION	
PROJECT NCDOT ROW PROJECT U-3465 (3907.1.1) STAFFORD LAND CO., INC. - PARCEL 022 RAY ROAD, HARNETT COUNTY, NORTH CAROLINA	
503 INDUSTRIAL AVENUE GREENSBORO, NC 27406 336.335.3174 (p) 336.691.0648 (f) License # C1251 Eng. / #C257 Geology	
DATE: 9-19-12	REVISION NO. 0
PYRAMID PROJECT NO. 2012-228	FIGURE NO. 2



- ### LEGEND
- PUE PROPOSED UTILITY EASEMENT
 - EXISTING ROW
 - EXISTING PROPERTY BOUNDARY
 - PROPOSED ROW
 - PROPOSED CONST. EASEMENT
 - DUE PROP. DRAINAGE UTIL. EASEMENT
 - PROPOSED SS CUT LINE
 - PROPOSED SS FILL LINE
 - PROPOSED SS TRANSITION LINE
 - PROPOSED DRAINAGE PIPING
 - PDE PROPOSED DRAINAGE EASEMENT
 - PROPOSED CATCH BASIN
 - SOIL SAMPLE BORING LOCATION
 - BORING CONVERTED TO MW
 - AREA OF CONTAMINATION (>BDL, <10 PPM)
 - AREA OF CONTAMINATION (>10 PPM)
 - UST POSSIBLE UST
 - UST PROBABLE UST
 - (<6.1) TPH-DRO concentration (mg/kg)
 - [<6.1] TPH-GRO concentration (mg/kg)
 - PARCEL 022 BOUNDARY

TITLE PROPERTY BOUNDARIES AND OWNER/STATION INFORMATION	
PROJECT NCDOT ROW PROJECT U-3465 (3907.1.1) STAFFORD LAND CO., INC. - PARCEL 022 RAY ROAD, HARNETT COUNTY, NORTH CAROLINA	
	503 INDUSTRIAL AVENUE GREENSBORO, NC 27406 336.335.3174 (p) 336.691.0648 (f) License # C1251 Eng. / #C257 Geology
DATE: 9-19-12	REVISION NO. 0
PYRAMID PROJECT NO. 2012-228	FIGURE NO. 3



STAFFORD LAND COMPANY INC
 DB 2353 PC 6TH
 DB 2008 PC 464
 DB 2008 PC 59

PI Sta 12+00.79
 $\Delta = 9^{\circ}58'10.8''$ (LT)
 $D = 10^{\circ}44'58.8''$
 $L = 92.74'$
 $T = 46.49'$
 $R = 533.00'$
 SE = SEE PLANS

PI Sta 106+02.44
 $\Delta = 13^{\circ}13'02.2''$ (LT)
 $D = 2^{\circ}43'42.1''$
 $L = 484.44'$
 $T = 243.30'$
 $R = 2,100.00'$
 SE = SEE PLANS

PI Sta 12+23.86
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 $D = 10^{\circ}44'58.8''$
 $L = 386.23'$
 $T = 202.03'$
 $R = 533.00'$
 SE = SEE PLANS

PI Sta 15+85.87
 $\Delta = 36^{\circ}56'49.5''$ (LT)
 $D = 15^{\circ}26'37.0''$
 $L = 239.24'$
 $T = 123.94'$
 $R = 371.00'$
 SE = SEE PLANS

STAFFORD LAND COMPANY INC
 DB 2353 PC 6TH
 DB 2008 PC 464
 DB 2008 PC 59

PI Sta 103+59.14
 $\Delta = 64^{\circ}51'40.0''$ (W)
 $D = 10^{\circ}44'58.8''$
 $L = 92.74'$
 $T = 46.49'$
 $R = 533.00'$
 SE = SEE PLANS

PI Sta 103+6
 $\Delta = 13^{\circ}13'02.2''$ (LT)
 $D = 2^{\circ}43'42.1''$
 $L = 484.44'$
 $T = 243.30'$
 $R = 2,100.00'$
 SE = SEE PLANS

PI Sta 15+85.87
 $\Delta = 36^{\circ}56'49.5''$ (LT)
 $D = 15^{\circ}26'37.0''$
 $L = 239.24'$
 $T = 123.94'$
 $R = 371.00'$
 SE = SEE PLANS

TABLES

TABLE 1
Summary of PID Screening Results
 NCDOT Project U-3465
 2281 Ray Road - Parcel 022
 Harnett County, Spring Lake, North Carolina

SOIL BORING	SAMPLE ID	DEPTH (feet bgs)	PID READINGS (PPM)
22-1	22-1(2-5)	2 to 5	65
	22-1(5-7.5)	5 to 7.5	0
	22-1(7.5-10)	7.5 to10	0
22-2	22-2(2.5-5)	2.5 to 5	0
	22-2(5-7.5)	5 to 7.5	0
	22-2(7.5-10)	7.5 to10	0
22-3	22-3(3-5)	3 to 5	30
	22-3(5-7.5)	5 to 7.5	55
	22-3(7.5-10)	7.5 to 10	15
	22-3(12-15)	12 to15	25
22-4	22-4(3-5)	3 to 5	20

bgs= below ground surface

PID= photo-ionization detector

PPM= parts-per-million

TABLE 2
Summary of Soil Sample Analytical Results
 NCDOT Project U-3465
 2281 Ray Road - Parcel 022
 Harnett County, Spring Lake, North Carolina

SAMPLE ID	DATE	DEPTH (feet)	PID (ppm)	EPA Method 3550 DRO (mg/kg)	EPA Method 5035 GRO (mg/kg)
22-1(2-5)	9/13/2012	2 to 5	65	<6.39	<3.7
22-2(5-7.5)	9/13/2012	5 to 7.5	0	<7.25	<3.38
22-3(5-7.5)	9/13/2012	5 to 7.5	55	<7.29	<3.85
22-4(3-5)	9/13/2012	3 to 5	20	<7.18	<3.35
NC Initial Cleanup Level - UST Section for 5035/5030-GRO; 3550-DRO				10	10

PID= photo-ionization detector
 PPM= parts-per-million

GRO= Gasoline Range Organics
 DRO= Diesel Range Organics
 mg/kg= micrograms-per-kilogram

TABLE 3
Summary of Groundwater Analytical Results
 NCDOT Project U-3465
 2281 Ray Road - Parcel 022
 Harnett County, Spring Lake, North Carolina

PARAMETER	UNITS	SAMPLE ID	NCAC 2L GROUNDWATER STANDARD
		22-3(TW)	
EPA Method 6200B; Sample Collection Date: 9/13/12			
Benzene	ug/L	0.19	1
Chloroform	ug/L	0.73	70
Diisopropyl Ether (IPE)	ug/L	ND	70
Ethyl Benzene	ug/L	ND	600
Isopropylbenzene (Cumene)	ug/L	ND	70
Naphthalene	ug/L	ND	6
Styrene	ug/L	ND	70
Toluene	ug/L	0.2	600
Total Xylenes	ug/L	ND	500
n-Propylbenzene	ug/L	ND	70
sec-Butylbenzene	ug/L	ND	70
tert-Butyl methyl ether (MTBE)	ug/L	ND	20
tert-Butylbenzene	ug/L	ND	70
1,2,4-Trimethylbenzene	ug/L	ND	400
1,2-Dichloroethane	ug/L	ND	0.4
1,3,5-Trimethylbenzene	ug/L	ND	400
4-Isopropyltoluene	ug/L	ND	25
All Other Parameters	ug/L	ND	NA

ug/L= micrograms-per-liter

ND= Not Detected

NA= Not Applicable

APPENDIX A



Parcel 022

Historical Aerial Photo
2010 - SECTION 1

**SR 1121 FROM NC 210 TO SR 1120
SPRING LAKE, NC 28390**

Target Site: 35.240729, -78.953625; Job Number: 2012-228

FIRSTSEARCH



1 inch equals 750 feet



Historical Aerial Photo
1999 - SECTION 1

**SR 1121 FROM NC 210 TO SR 1120
SPRING LAKE, NC 28390**

Target Site: 35.240729, -78.953625; Job Number: 2012-228

FIRSTSEARCH



1 inch equals 750 feet



Parcel 022

Historical Aerial Photo
1993 - SECTION 1

**SR 1121 FROM NC 210 TO SR 1120
SPRING LAKE, NC 28390**

Target Site: 35.240729, -78.953625; Job Number: 2012-228

FIRSTSEARCH



1 inch equals 750 feet



Historical Aerial Photo
1983 - SECTION 1

**SR 1121 FROM NC 210 TO SR 1120
SPRING LAKE, NC 28390**

Target Site: 35.240729, -78.953625; Job Number: 2012-228

FIRSTSEARCH



1 inch equals 750 feet



Parcel 022

Historical Aerial Photo
1971 - SECTION 1

**SR 1121 FROM NC 210 TO SR 1120
SPRING LAKE, NC 28390**

Target Site: 35.240729, -78.953625; Job Number: 2012-228



1 inch equals 750 feet



Parcel 022

Historical Aerial Photo
1964 - SECTION 1

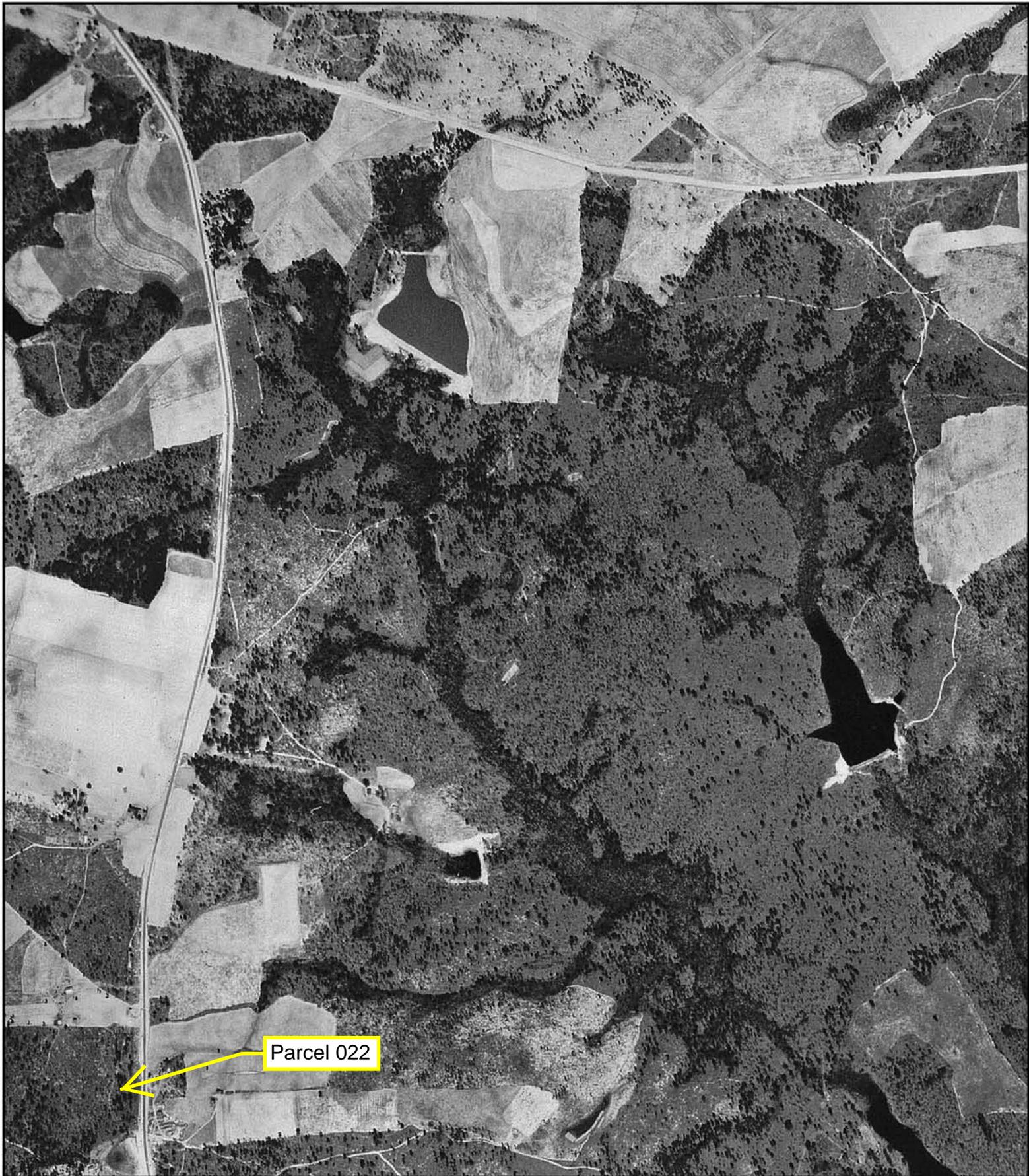
**SR 1121 FROM NC 210 TO SR 1120
SPRING LAKE, NC 28390**

Target Site: 35.240729, -78.953625; Job Number: 2012-228

FIRSTSEARCH



1 inch equals 750 feet



Historical Aerial Photo
1955 - SECTION 1

**SR 1121 FROM NC 210 TO SR 1120
SPRING LAKE, NC 28390**

Target Site: 35.240729, -78.953625; Job Number: 2012-228

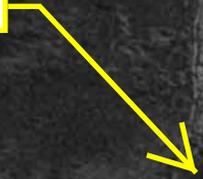
FIRSTSEARCH



1 inch equals 750 feet



Parcel 022



FIRSTSEARCH

Historical Aerial Photo
1938 - SECTION 1
SR 1121 FROM NC 210 TO SR 1120
SPRING LAKE, NC 28390



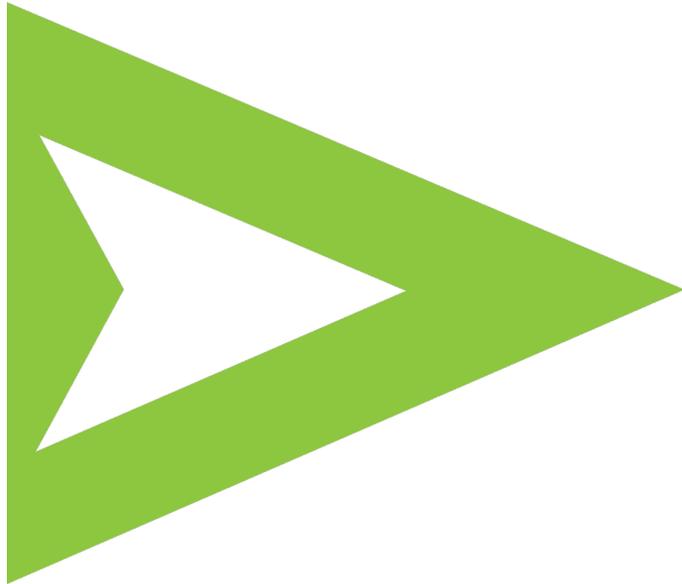
Target Site: 35.240729, -78.953625; Job Number: 2012-228

1 inch equals 750 feet

APPENDIX B



ENVIRONMENTAL FIRSTSEARCH REPORT



TARGET PROPERTY:

NCDOT PROJECT U-3465

SR 1121 - NC 210 - SR 1120

SPRING LAKE, NC 28390

JOB NUMBER: 2012-228

PREPARED FOR:

Pyramid Environmental & Engineering, PC

503 Industrial Ave.

Greensboro, NC 27406

September 6, 2012

Environmental FirstSearch Search Summary Report

Target Site: SR 1121 - NC 210 - SR 1120
SPRING LAKE, NC 28390

FirstSearch Summary

Database	Sel	Updated	Radius	Site	1/8	1/4	1/2	1/2>	ZIP	TOTALS
NPL	Y	07-09-12	1.00	0	0	0	0	0	0	0
NPL Delisted	Y	07-09-12	0.50	0	0	0	0	-	0	0
CERCLIS	Y	08-01-12	0.50	0	0	0	0	-	0	0
NFRAP	Y	08-01-12	0.50	0	0	0	0	-	0	0
RCRA COR ACT	Y	07-10-12	1.00	0	0	0	0	0	0	0
RCRA TSD	Y	07-10-12	0.50	0	0	0	0	-	0	0
RCRA GEN	Y	07-10-12	0.25	0	0	0	-	-	0	0
Federal Brownfield	Y	07-15-12	0.25	0	0	0	-	-	0	0
ERNS	Y	07-05-12	0.12	0	0	-	-	-	1	1
Tribal Lands	Y	12-15-08	1.00	0	0	0	0	0	1	1
State/Tribal Sites	Y	06-08-12	1.00	0	0	0	0	0	0	0
State Spills 90	Y	06-01-12	0.12	3	0	-	-	-	0	3
State/Tribal SWL	Y	05-26-11	0.50	0	0	0	0	-	0	0
State/Tribal LUST	Y	06-01-12	0.50	2	1	0	2	-	2	7
State/Tribal UST/AST	Y	06-01-12	0.25	5	0	0	-	-	1	6
State/Tribal EC	Y	NA	0.25	0	0	0	-	-	0	0
State/Tribal IC	Y	06-08-12	0.25	0	0	0	-	-	0	0
State/Tribal VCP	Y	07-30-07	0.50	0	0	0	0	-	0	0
State/Tribal Brownfields	Y	08-10-12	0.50	0	0	0	0	-	0	0
Federal IC/EC	Y	06-13-12	0.50	0	0	0	0	-	0	0
-TOTALS-				10	1	0	2	0	5	18

Notice of Disclaimer

Due to the limitations, constraints, and inaccuracies and incompleteness of government information and computer mapping data currently available to FirstSearch Technology Corp., certain conventions have been utilized in preparing the locations of all federal, state and local agency sites residing in FirstSearch Technology Corp.'s databases. All EPA NPL and state landfill sites are depicted by a rectangle approximating their location and size. The boundaries of the rectangles represent the eastern and western most longitudes; the northern and southern most latitudes. As such, the mapped areas may exceed the actual areas and do not represent the actual boundaries of these properties. All other sites are depicted by a point representing their approximate address location and make no attempt to represent the actual areas of the associated property. Actual boundaries and locations of individual properties can be found in the files residing at the agency responsible for such information.

Waiver of Liability

Although FirstSearch Technology Corp. uses its best efforts to research the actual location of each site, FirstSearch Technology Corp. does not and can not warrant the accuracy of these sites with regard to exact location and size. All authorized users of FirstSearch Technology Corp.'s services proceeding are signifying an understanding of FirstSearch Technology Corp.'s searching and mapping conventions, and agree to waive any and all liability claims associated with search and map results showing incomplete and or inaccurate site locations.

Environmental FirstSearch Site Information Report

Request Date: 09-06-12
 Requestor Name: Brett Higgins
 Standard: ASTM-05

Search Type: LINEAR
 3.499 mile(s)
 Job Number: 2012-228
Filtered Report

Target Site: SR 1121 - NC 210 - SR 1120
 SPRING LAKE, NC 28390

Demographics

Sites: 18	Non-Geocoded: 5	Population: NA
Radon: 0 PCI/L		
Fire Insurance Map Coverage:	No (>350 Ft. From Coverage)	

Site Location

	<u>Degrees (Decimal)</u>	<u>Degrees (Min/Sec)</u>		<u>UTMs</u>
Longitude:	-78.953625	-78:57:13	Easting:	686206.771
Latitude:	35.240729	35:14:27	Northing:	3901460.421
Elevation:	213		Zone:	17

Comment

Comment:

Additional Requests/Services

Adjacent ZIP Codes:	Services:																																								
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">ZIP Code</th> <th style="text-align: left;">City Name</th> <th style="text-align: left;">ST</th> <th style="text-align: left;">Dist/Dir</th> <th style="text-align: left;">Sel</th> </tr> </thead> <tbody> <tr> <td colspan="5" style="height: 150px;"> </td> </tr> </tbody> </table>	ZIP Code	City Name	ST	Dist/Dir	Sel						<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">Requested?</th> <th style="text-align: center;">Date</th> </tr> </thead> <tbody> <tr> <td>Fire Insurance Maps</td> <td style="text-align: center;">No</td> <td></td> </tr> <tr> <td>Aerial Photographs</td> <td style="text-align: center;">Yes</td> <td style="text-align: center;">09-06-12</td> </tr> <tr> <td>Historical Topos</td> <td style="text-align: center;">No</td> <td></td> </tr> <tr> <td>City Directories</td> <td style="text-align: center;">No</td> <td></td> </tr> <tr> <td>Title Search</td> <td style="text-align: center;">No</td> <td></td> </tr> <tr> <td>Municipal Reports</td> <td style="text-align: center;">No</td> <td></td> </tr> <tr> <td>Liens</td> <td style="text-align: center;">No</td> <td></td> </tr> <tr> <td>Historic Map Works</td> <td style="text-align: center;">No</td> <td></td> </tr> <tr> <td>Online Topos</td> <td style="text-align: center;">No</td> <td></td> </tr> </tbody> </table>		Requested?	Date	Fire Insurance Maps	No		Aerial Photographs	Yes	09-06-12	Historical Topos	No		City Directories	No		Title Search	No		Municipal Reports	No		Liens	No		Historic Map Works	No		Online Topos	No	
ZIP Code	City Name	ST	Dist/Dir	Sel																																					
	Requested?	Date																																							
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Title Search	No																																								
Municipal Reports	No																																								
Liens	No																																								
Historic Map Works	No																																								
Online Topos	No																																								

Environmental FirstSearch Target Site Summary Report

Target Property: SR 1121 - NC 210 - SR 1120
SPRING LAKE, NC 28390

JOB: 2012-228

TOTAL: 18 **GEOCODED:** 13 **NON GEOCODED:** 5 **SELECTED:** 0

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	ElevDiff	Page No.
1	SPILLS	RYAN S GROCERY 12015/CURRENT RECORD	7939 RAY RD SPRING LAKE NC 28390	0.00 --	+ 106	1
1	UST	RYAN S GROCERY 0-026491/TEMPORARILY CLOSED	7939 RAY RD SPRINGLAKE NC 28390	0.00 --	+ 106	2
1	UST	RYAN S GROCERY FA-675/UNKNOWN	7939 RAY RD SPRING LAKE NC 28390	0.00 --	+ 106	5
1	LUST	RYAN S GROCERY NCI-012015/RESPONSE	7939 RAY RD SPRING LAKE NC 28390	0.00 --	+ 106	7
2	SPILLS	DALTON HOLDER STORE 17793/CURRENT RECORD	6701 RAY RD SPRING LAKE NC 28390	0.00 --	+ 81	8
2	UST	DATON HOLDER 0-017886/PERM CLOSED REMOVED	6701 RAY RD SPRING LAKE NC 28390	0.00 --	+ 81	9
2	LUST	DALTON HOLDER STORE NCI-017793/RESPONSE	6701 RAY RD SPRING LAKE NC 28390	0.00 --	+ 81	12
3	SPILLS	HOLDERS GROCERY 85611/CURRENT RECORD	UNKNOWN SPRING LAKE NC 28390	0.00 --	+ 13	13
4	UST	MATTHEWS GENERAL STORE 0-002736/CURRENTLY OPERATIONAL	7100 RAY RD SPRING LAKE NC 28390	0.00 --	+ 64	14
5	UST	SHORT STOP FOOD MARTS 8 0-021508/CURRENTLY OPERATIONAL	7925 RAY RD SPRING LAKE NC 28390	0.00 --	+ 105	17

Environmental FirstSearch Sites Summary Report

Target Property: SR 1121 - NC 210 - SR 1120
SPRING LAKE, NC 28390

JOB: 2012-228

TOTAL: 18 **GEOCODED:** 13 **NON GEOCODED:** 5 **SELECTED:** 0

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	ElevDiff	Page No.
1	SPILLS	RYAN S GROCERY 12015/CURRENT RECORD	7939 RAY RD SPRING LAKE NC 28390	0.00 --	+ 106	1
1	UST	RYAN S GROCERY 0-026491/TEMPORARILY CLOSED	7939 RAY RD SPRINGLAKE NC 28390	0.00 --	+ 106	2
1	UST	RYAN S GROCERY FA-675/UNKNOWN	7939 RAY RD SPRING LAKE NC 28390	0.00 --	+ 106	5
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2	SPILLS	DALTON HOLDER STORE 17793/CURRENT RECORD	6701 RAY RD SPRING LAKE NC 28390	0.00 --	+ 81	8
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2	LUST	DALTON HOLDER STORE NCI-017793/RESPONSE	6701 RAY RD SPRING LAKE NC 28390	0.00 --	+ 81	12
3	SPILLS	HOLDERS GROCERY 85611/CURRENT RECORD	UNKNOWN SPRING LAKE NC 28390	0.00 --	+ 13	13
4	UST	MATTHEWS GENERAL STORE 0-002736/CURRENTLY OPERATIONAL	7100 RAY RD SPRING LAKE NC 28390	0.00 --	+ 64	14
5	UST	SHORT STOP FOOD MARTS 8 0-021508/CURRENTLY OPERATIONAL	7925 RAY RD SPRING LAKE NC 28390	0.00 --	+ 105	17
6	LUST	HOLDERS GROCERY NCI-085611/ASSESSMENT	1899 RAY RD SPRING LAKE NC	0.11 SW	+ 53	20
7	LUST	LEWIS OIL CO. NCI-005466/	0 HIGHWAY 210 MANCHESTER NC	0.27 SE	+ 4	21
8	LUST	LEWIS OIL GROCERY STORE NCI-014732/RESPONSE	0 NC 210 & SR 1600 SPRING LAKE NC 28390	0.38 SE	- 53	22

Environmental FirstSearch Sites Summary Report

Target Property: SR 1121 - NC 210 - SR 1120
SPRING LAKE, NC 28390

JOB: 2012-228

TOTAL: 18 **GEOCODED:** 13 **NON GEOCODED:** 5 **SELECTED:** 0

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	ElevDiff	Page No.
	ERNS	BETWEEN THE TOWNS SPRING LAKE NRC-554942/FIXED	AND SANFORD ON HWY SPRING LAKE NC	NON GC	N/A	N/A
	UST	STEWARTS OF SPRING LAKE 0-036564/PERM CLOSED REMOVED	SR 2045 AND SR 2048 SPRING LAKE NC	NON GC	N/A	N/A
	LUST	DEVON S GROCERY NCI-015437/RESPONSE	ROUTE 1, BOX 425, SR2048 SPRING LAKE NC 28390	NON GC	N/A	N/A
	LUST	LONG VALLEY FARM NCI-012016/CLOSED OUT	MANCHESTER ROAD SPRING LAKE NC 28390	NON GC	N/A	N/A
	TRIBALLA	BUREAU OF INDIAN AFFAIRS CONTACT I BIA-28390/	UNKNOWN NC 28390	NON GC	N/A	N/A

Environmental FirstSearch Site Detail Report

Target Property: SR 1121 - NC 210 - SR 1120
SPRING LAKE, NC 28390

JOB: 2012-228

SPILLS

SEARCH ID: 18 **DIST/DIR:** 0.00 -- **ELEVATION:** 319 **MAP ID:** 1

NAME: RYAN S GROCERY **REV:** 9/23/11
ADDRESS: 7939 RAY RD **ID1:** 12015
SPRING LAKE NC 28390 **ID2:** FA-675
HARNETT **STATUS:** CURRENT RECORD
CONTACT: **PHONE:**
SOURCE: NCDENR

SITE INFORMATION

OWNER/OPERATOR: CHRISTINE RYAN

RT. 3, BOX 599-A
SPRING LAKE NC 28390

DATE OF RELEASE: 12/21/1993
DATE SUBMITTED: 4/11/1994
DESCRIPTION OF INCIDENT: A LEAK WAS DISCOVERED WHEN USTS WERE RMEOVED

CONTAMINATION INFORMATION
GROUNDWATER CONTAMINATED?: Y
MAJOR SOIL CONTAMINATION?: N

MATERIAL INVOLVED (1): GASOLINE
AMOUNT LOST (1):
AMOUNT RECOVERED (1):

MATERIAL INVOLVED (2):
AMOUNT LOST (2):
AMOUNT RECOVERED (2):

MATERIAL INVOLVED (3):
AMOUNT LOST (3):
AMOUNT RECOVERED (3):

NUMBER OF WELLS AFFECTED: 0
NAME(S) OF CONTAMINATED WELLS:

PRIORITY INFORMATION:
RISK SITE?: H
SITE PRIORITY: 085B
PRIORITY CODE: H
PRIORITY UPDATE: 4/15/1998

STATUS INFORMATION:
LAST MODIFIED:
INCIDENT PHASE: RESPONSE
NOV ISSUED:
NORR ISSUED:
45 DAY REPORT:
CORRECTIVE ACTION PLAN:
CLOSURE REQ DATE:
CLOSE-OUT REPORT:

**Environmental FirstSearch
Site Detail Report**

Target Property: SR 1121 - NC 210 - SR 1120
SPRING LAKE, NC 28390

JOB: 2012-228

UST

SEARCH ID: 4 **DIST/DIR:** 0.00 -- **ELEVATION:** 319 **MAP ID:** 1

NAME:	RYAN S GROCERY	REV:	6/1/12
ADDRESS:	7939 RAY RD	ID1:	0-026491
	SPRINGLAKE NC 28390	ID2:	00-0-0000026491
	HARNETT	STATUS:	TEMPORARILY CLOSED
CONTACT:	CHRISTINE RYAN	PHONE:	
SOURCE:	NCDENR		

SITE INFORMATION

TOTAL NUMBER OF TANKS: 5

CONTACT INFORMATION: CHRISTINE RYAN
7939 RAY ROAD
SPRINGLAKE NC 28390

TANK NUMBER: 1
ROOT TANK ID:
TANK STATUS:
INSTALLATION DATE:
PERM CLOSED:
CONTENTS: Gasoline, Gas Mix
CAPACITY IN GALLONS: 6000
TANK CONSTRUCTION:3
PIPE CONSTRUCTION:4
MAIN TANK:NO
COMPARTMENT TANK:NO
MANIFOLD TANK:
COMMERCIAL TANK:YES
REGULATED TANK:YES

TANK NUMBER: 2
ROOT TANK ID:
TANK STATUS:
INSTALLATION DATE:
PERM CLOSED:
CONTENTS: Gasoline, Gas Mix
CAPACITY IN GALLONS: 6000
TANK CONSTRUCTION:3
PIPE CONSTRUCTION:4
MAIN TANK:NO
COMPARTMENT TANK:NO
MANIFOLD TANK:
COMMERCIAL TANK:YES
REGULATED TANK:YES

TANK NUMBER: 3
ROOT TANK ID:
TANK STATUS:
INSTALLATION DATE:
PERM CLOSED:
CONTENTS: Gasoline, Gas Mix
CAPACITY IN GALLONS: 1000
TANK CONSTRUCTION:3

- Continued on next page -

Environmental FirstSearch
Site Detail Report

Target Property: SR 1121 - NC 210 - SR 1120
SPRING LAKE, NC 28390

JOB: 2012-228

UST

SEARCH ID: 4 DIST/DIR: 0.00 -- ELEVATION: 319 MAP ID: 1

NAME: RYAN S GROCERY
ADDRESS: 7939 RAY RD
SPRINGLAKE NC 28390
HARNETT
CONTACT: CHRISTINE RYAN
SOURCE: NCDENR

REV: 6/1/12
ID1: 0-026491
ID2: 00-0-0000026491
STATUS: TEMPORARILY CLOSED
PHONE:

PIPE CONSTRUCTION:4
MAIN TANK:NO
COMPARTMENT TANK:NO
MANIFOLD TANK:
COMMERCIAL TANK:NO
REGULATED TANK:YES

TANK NUMBER: 4
ROOT TANK ID:
TANK STATUS:
INSTALLATION DATE:
PERM CLOSED:
CONTENTS: Gasoline, Gas Mix
CAPACITY IN GALLONS: 1000
TANK CONSTRUCTION:3
PIPE CONSTRUCTION:4
MAIN TANK:NO
COMPARTMENT TANK:NO
MANIFOLD TANK:
COMMERCIAL TANK:NO
REGULATED TANK:YES

TANK NUMBER: 5
ROOT TANK ID:
TANK STATUS:
INSTALLATION DATE:
PERM CLOSED:
CONTENTS: Gasoline, Gas Mix
CAPACITY IN GALLONS: 500
TANK CONSTRUCTION:3
PIPE CONSTRUCTION:4
MAIN TANK:NO
COMPARTMENT TANK:NO
MANIFOLD TANK:
COMMERCIAL TANK:NO
REGULATED TANK:YES

ARCHIVED INFORMATION AS OF 2011

TANK NUMBER: 1
INSTALLATION DATE: 19841231
CLOSED DATE: 19931221
STATUS: PERMANENTLY CLOSED
CONTENTS: GASOLINE, GASOLINE MIXTURE
CAPACITY IN GALLONS: 6000
COMMENTS:
CONSTRUCTION MATERIAL: STEEL

- Continued on next page -

Environmental FirstSearch
Site Detail Report

Target Property: SR 1121 - NC 210 - SR 1120
SPRING LAKE, NC 28390

JOB: 2012-228

UST

SEARCH ID: 4 DIST/DIR: 0.00 -- ELEVATION: 319 MAP ID: 1

NAME: RYAN S GROCERY REV: 6/1/12
ADDRESS: 7939 RAY RD ID1: 0-026491
 SPRINGLAKE NC 28390 ID2: 00-0-0000026491
 HARNETT STATUS: TEMPORARILY CLOSED
CONTACT: CHRISTINE RYAN PHONE:
SOURCE: NCDENR

INTERIOR: UNKNOWN
EXTERIOR: UNKNOWN
CORROSION PROTECTION:
LEAK DETECTION:
PIPING MATERIAL: STEEL
PIPE CORROSION PROTECTION:
PIPE LEAK DETECTION:
OVERFLOW PROTECTION:
FINANCIAL RESPONSIBILITY:
CERTIFICATION TYPE:
GPS SITING CONFIRMED:N
PERSON CONFIRMING:

TANK NUMBER: 2
INSTALLATION DATE: 19841231
CLOSED DATE: 19931221
STATUS: PERMANENTLY CLOSED
CONTENTS: GASOLINE, GASOLINE MIXTURE
CAPACITY IN GALLONS: 6000
COMMENTS:
CONSTRUCTION MATERIAL: STEEL
INTERIOR: UNKNOWN
EXTERIOR: UNKNOWN
CORROSION PROTECTION:
LEAK DETECTION:
PIPING MATERIAL: STEEL
PIPE CORROSION PROTECTION:
PIPE LEAK DETECTION:
OVERFLOW PROTECTION:
FINANCIAL RESPONSIBILITY:
CERTIFICATION TYPE:
GPS SITING CONFIRMED:N
PERSON CONFIRMING:

TANK NUMBER: 3
INSTALLATION DATE: 19701231
CLOSED DATE: 19931221
STATUS: PERMANENTLY CLOSED
CONTENTS: GASOLINE, GASOLINE MIXTURE
CAPACITY IN GALLONS: 1000
COMMENTS:
CONSTRUCTION MATERIAL: STEEL
INTERIOR: UNKNOWN
EXTERIOR: UNKNOWN
CORROSION PROTECTION:
LEAK DETECTION:
PIPING MATERIAL: STEEL

- More Details Exist For This Site; Max Page Limit Reached -

Environmental FirstSearch
Site Detail Report

Target Property: SR 1121 - NC 210 - SR 1120
SPRING LAKE, NC 28390

JOB: 2012-228

UST

SEARCH ID: 5 DIST/DIR: 0.00 -- ELEVATION: 319 MAP ID: 1

NAME: RYAN S GROCERY REV: 6/1/12
ADDRESS: 7939 RAY RD ID1: FA-675
 SPRING LAKE NC 28390 ID2:
 HARNETT STATUS: UNKNOWN
CONTACT: CHRISTINE RYAN PHONE:
SOURCE: NCDENR

SITE INFORMATION

REGIONAL UST DATA

UST NUMBER:FA-675
INCIDENT NUMBER:12015
CD NUMBER:0
REEL NUMBER:0
REGIONAL CONTACT:JWB
REGIONAL OFFICE:FAY
DATE OCCURRED:12/21/1993

RESPONSIBLE COMPANY:

790 JOHN RYAN LANE
SPRING LAKE , NC , 28390

SOURCE:LEAK, UST
PETROLEUM TYPE:PETROLEUM
COMMERCIAL/NONCOMMERCIAL:COMMERCIAL
REGULATED:REGULATED
REGULATORY REQUIREMENT:9/28/2001
VIOLATION:

PHASE REQUIRED:
SITE PRIORITY:085B
RISK:H
RISK OF INCIDENT:L
INTERMEDIATE CONDITION:
LAND USE:

CORRECTIVE ACTION PLAN:

RBCA:
CLOSED REVIEW REQUESTED:
CASE CLOSED:
CONTAMINATION:GROUNDWATER/BOTH
SUPPLY WELLS:
MTBE IN WELL:
MTBE IN GROUNDWATER:UNKNOWN

LEAK DISCOVERED:0
LAND USE RESTRICTION FILED:
CLEAN UP:12/21/1993
CURRENT STATUS:CURRENT RECORD

RBCA GROUNDWATER:
POLLUTANT TYPE:GASOLINE/DIESEL/KEROSENE
CD NUMBER:0
RESPONSIBLE OWNER:0

- Continued on next page -

Environmental FirstSearch Site Detail Report

Target Property: SR 1121 - NC 210 - SR 1120
SPRING LAKE, NC 28390

JOB: 2012-228

UST

SEARCH ID: 5 **DIST/DIR:** 0.00 -- **ELEVATION:** 319 **MAP ID:** 1

NAME: RYAN S GROCERY
ADDRESS: 7939 RAY RD
SPRING LAKE NC 28390
HARNETT
CONTACT: CHRISTINE RYAN
SOURCE: NCDENR

REV: 6/1/12
ID1: FA-675
ID2:
STATUS: UNKNOWN
PHONE:

RESPONSIBLE OPERATOR:0
RESPONSIBLE LANDOWNER:0
COMMENTS:

Environmental FirstSearch
Site Detail Report

Target Property: SR 1121 - NC 210 - SR 1120
SPRING LAKE, NC 28390

JOB: 2012-228

LUST

SEARCH ID: 9 DIST/DIR: 0.00 -- ELEVATION: 319 MAP ID: 1

NAME: RYAN S GROCERY REV: 6/1/12
ADDRESS: 7939 RAY RD ID1: NCI-012015
SPRING LAKE NC 28390 ID2: 12015
HARNETT STATUS: RESPONSE
CONTACT: CHRISTINE RYAN PHONE:
SOURCE: NCDENR

REGIONAL UST DATA

UST NUMBER:FA-675
INCIDENT NUMBER:12015
CD NUMBER:0
REEL NUMBER:0
REGIONAL CONTACT:JWB
REGIONAL OFFICE:FAY
DATE OCCURRED:12/21/1993

RESPONSIBLE COMPANY:

790 JOHN RYAN LANE
SPRING LAKE ,NC , 28390

SOURCE:LEAK, UST
PETROLEUM TYPE:PETROLEUM
COMMERCIAL/NONCOMMERCIAL:COMMERCIAL
REGULATED:REGULATED
REGULATORY REQUIREMENT:9/28/2001
VIOLATION:

PHASE REQUIRED:
SITE PRIORITY:085B
RISK:H
RISK OF INCIDENT:L
INTERMEDIATE CONDITION:
LAND USE:

CORRECTIVE ACTION PLAN:
RBCA:
CLOSED REVIEW REQUESTED:
CASE CLOSED:
CONTAMINATION:GROUNDWATER/BOTH
SUPPLY WELLS:
MTBE IN WELL:
MTBE IN GROUNDWATER:UNKNOWN

LEAK DISCOVERED:0
LAND USE RESTRICTION FILED:
CLEAN UP:12/21/1993
CURRENT STATUS:CURRENT RECORD

RBCA GROUNDWATER:
POLLUTANT TYPE:GASOLINE/DIESEL/KEROSENE
CD NUMBER:0
RESPONSIBLE OWNER:0
RESPONSIBLE OPERATOR:0
RESPONSIBLE LANDOWNER:0

Environmental FirstSearch

Site Detail Report

Target Property: SR 1121 - NC 210 - SR 1120
SPRING LAKE, NC 28390

JOB: 2012-228

SPILLS

SEARCH ID: 1 **DIST/DIR:** 0.00 -- **ELEVATION:** 294 **MAP ID:** 2

NAME: DALTON HOLDER STORE
ADDRESS: 6701 RAY RD
SPRING LAKE NC 28390
HARNETT

REV: 9/23/11
ID1: 17793
ID2: FA-934
STATUS: CURRENT RECORD
PHONE:

CONTACT:
SOURCE: NCDENR

SITE INFORMATION

OWNER/OPERATOR: GORDON MASON

6701 RAY ROAD
SPRING LAKE NC 28390

DATE OF RELEASE: 8/28/1997

DATE SUBMITTED: 9/16/1997

DESCRIPTION OF INCIDENT: RECEIVED CLOSURE REPORT; SOIL ANALYTICAL RESULTS SHOWED TPH>10PPM FOR ALL SAMPLES COLLECTED AROUND TANKS; GROUNDWATER WAS NOT ENCOUNTERED DURING TK REMOVAL

CONTAMINATION INFORMATION

GROUNDWATER CONTAMINATED?: Y
MAJOR SOIL CONTAMINATION?: N

MATERIAL INVOLVED (1): GASOLINE
AMOUNT LOST (1):
AMOUNT RECOVERED (1): UNKNOWN

MATERIAL INVOLVED (2):
AMOUNT LOST (2):
AMOUNT RECOVERED (2):

MATERIAL INVOLVED (3):
AMOUNT LOST (3):
AMOUNT RECOVERED (3):

NUMBER OF WELLS AFFECTED: 0
NAME(S) OF CONTAMINATED WELLS:

PRIORITY INFORMATION:

RISK SITE?: U
SITE PRIORITY: 10E
PRIORITY CODE: E
PRIORITY UPDATE:

STATUS INFORMATION:

LAST MODIFIED:
INCIDENT PHASE: RESPONSE
NOV ISSUED:
NORR ISSUED:
45 DAY REPORT:
CORRECTIVE ACTION PLAN:
CLOSURE REQ DATE:
CLOSE-OUT REPORT:

Environmental FirstSearch
Site Detail Report

Target Property: SR 1121 - NC 210 - SR 1120
SPRING LAKE, NC 28390

JOB: 2012-228

UST

SEARCH ID: 7 DIST/DIR: 0.00 -- ELEVATION: 294 MAP ID: 2

NAME:	DATON HOLDER	REV:	6/1/12
ADDRESS:	6701 RAY RD SPRING LAKE NC 28390 HARNETT	ID1:	0-017886
CONTACT:	GORDON A MASON	ID2:	00-0-0000017886
SOURCE:	NCDENR	STATUS:	PERM CLOSED REMOVED
		PHONE:	

SITE INFORMATION

TOTAL NUMBER OF TANKS: 3

CONTACT INFORMATION: GORDON A MASON
6701 B RAY RD
SPRING LAKE NC 28390

TANK NUMBER: 1
ROOT TANK ID:
TANK STATUS:
INSTALLATION DATE:
PERM CLOSED:
CONTENTS: Gasoline, Gas Mix
CAPACITY IN GALLONS: 3000
TANK CONSTRUCTION:3
PIPE CONSTRUCTION:4
MAIN TANK:NO
COMPARTMENT TANK:NO
MANIFOLD TANK:
COMMERCIAL TANK:YES
REGULATED TANK:YES

TANK NUMBER: 2
ROOT TANK ID:
TANK STATUS:
INSTALLATION DATE:
PERM CLOSED:
CONTENTS: Gasoline, Gas Mix
CAPACITY IN GALLONS: 3000
TANK CONSTRUCTION:3
PIPE CONSTRUCTION:4
MAIN TANK:NO
COMPARTMENT TANK:NO
MANIFOLD TANK:
COMMERCIAL TANK:YES
REGULATED TANK:YES

TANK NUMBER: 3
ROOT TANK ID:
TANK STATUS:
INSTALLATION DATE:
PERM CLOSED:
CONTENTS: Gasoline, Gas Mix
CAPACITY IN GALLONS: 3000
TANK CONSTRUCTION:3

- Continued on next page -

**Environmental FirstSearch
Site Detail Report**

Target Property: SR 1121 - NC 210 - SR 1120
SPRING LAKE, NC 28390

JOB: 2012-228

UST

SEARCH ID: 7 **DIST/DIR:** 0.00 -- **ELEVATION:** 294 **MAP ID:** 2

NAME:	DATON HOLDER	REV:	6/1/12
ADDRESS:	6701 RAY RD SPRING LAKE NC 28390 HARNETT	ID1:	0-017886
CONTACT:	GORDON A MASON	ID2:	00-0-0000017886
SOURCE:	NCDENR	STATUS:	PERM CLOSED REMOVED
		PHONE:	

PIPE CONSTRUCTION:4
MAIN TANK:NO
COMPARTMENT TANK:NO
MANIFOLD TANK:
COMMERCIAL TANK:YES
REGULATED TANK:YES

REGIONAL UST DATA

UST NUMBER:FA-934
INCIDENT NUMBER:17793
CD NUMBER:0
REEL NUMBER:0
REGIONAL CONTACT:JWB
REGIONAL OFFICE:FAY
DATE OCCURRED:8/28/1997

RESPONSIBLE COMPANY:

6701 RAY ROAD
SPRING LAKE , NC , 28390

SOURCE:LEAK, UST
PETROLEUM TYPE:PETROLEUM
COMMERCIAL/NONCOMMERCIAL:COMMERCIAL
REGULATED:REGULATED
REGULATORY REQUIREMENT:
VIOLATION:

PHASE REQUIRED:
SITE PRIORITY:
RISK:L
RISK OF INCIDENT:L
INTERMEDIATE CONDITION:
LAND USE:RES

CORRECTIVE ACTION PLAN:
RBCA:
CLOSED REVIEW REQUESTED:
CASE CLOSED:
CONTAMINATION:GROUNDWATER/BOTH
SUPPLY WELLS:0
MTBE IN WELL:0
MTBE IN GROUNDWATER:UNKNOWN

LEAK DISCOVERED:0
LAND USE RESTRICTION FILED:
CLEAN UP:8/27/1997
CURRENT STATUS:CURRENT RECORD

- Continued on next page -

Environmental FirstSearch
Site Detail Report

Target Property: SR 1121 - NC 210 - SR 1120
SPRING LAKE, NC 28390

JOB: 2012-228

UST

SEARCH ID: 7 DIST/DIR: 0.00 -- ELEVATION: 294 MAP ID: 2

NAME:	DATON HOLDER	REV:	6/1/12
ADDRESS:	6701 RAY RD SPRING LAKE NC 28390 HARNETT	ID1:	0-017886
CONTACT:	GORDON A MASON	ID2:	00-0-0000017886
SOURCE:	NCDENR	STATUS:	PERM CLOSED REMOVED
		PHONE:	

RBCA GROUNDWATER:
POLLUTANT TYPE:GASOLINE/DIESEL/KEROSENE
CD NUMBER:0
RESPONSIBLE OWNER:0
RESPONSIBLE OPERATOR:0
RESPONSIBLE LANDOWNER:0
COMMENTS:

ARCHIVED INFORMATION AS OF 2011

TANK NUMBER: 1
INSTALLATION DATE: 19740420
CLOSED DATE: 19970728
STATUS: PERMANENTLY CLOSED
CONTENTS: GASOLINE, GASOLINE MIXTURE
CAPACITY IN GALLONS: 3000
COMMENTS:
CONSTRUCTION MATERIAL: STEEL
INTERIOR: NONE
EXTERIOR: PAINT
CORROSION PROTECTION:
LEAK DETECTION:
PIPING MATERIAL: STEEL
PIPE CORROSION PROTECTION:
PIPE LEAK DETECTION:
OVERFLOW PROTECTION:
FINANCIAL RESPONSIBILITY:
CERTIFICATION TYPE:
GPS SITING CONFIRMED:N
PERSON CONFIRMING:

TANK NUMBER: 2
INSTALLATION DATE: 19740420
CLOSED DATE: 19970728
STATUS: PERMANENTLY CLOSED
CONTENTS: GASOLINE, GASOLINE MIXTURE
CAPACITY IN GALLONS: 3000
COMMENTS:
CONSTRUCTION MATERIAL: STEEL
INTERIOR: NONE
EXTERIOR: PAINT
CORROSION PROTECTION:
LEAK DETECTION:
PIPING MATERIAL: STEEL
PIPE CORROSION PROTECTION:
PIPE LEAK DETECTION:

- More Details Exist For This Site; Max Page Limit Reached -

Environmental FirstSearch
Site Detail Report

Target Property: SR 1121 - NC 210 - SR 1120
SPRING LAKE, NC 28390

JOB: 2012-228

LUST

SEARCH ID: 8 DIST/DIR: 0.00 -- ELEVATION: 294 MAP ID: 2

NAME: DALTON HOLDER STORE
ADDRESS: 6701 RAY RD
SPRING LAKE NC 28390
HARNETT
CONTACT: GORDON MASON
SOURCE: NCDENR

REV: 6/1/12
ID1: NCI-017793
ID2: 17793
STATUS: RESPONSE
PHONE: 9104978229

REGIONAL UST DATA

UST NUMBER:FA-934
INCIDENT NUMBER:17793
CD NUMBER:0
REEL NUMBER:0
REGIONAL CONTACT:JWB
REGIONAL OFFICE:FAY
DATE OCCURRED:8/28/1997

RESPONSIBLE COMPANY:

6701 RAY ROAD
SPRING LAKE ,NC , 28390

SOURCE:LEAK, UST
PETROLEUM TYPE:PETROLEUM
COMMERCIAL/NONCOMMERCIAL:COMMERCIAL
REGULATED:REGULATED
REGULATORY REQUIREMENT:
VIOLATION:

PHASE REQUIRED:
SITE PRIORITY:
RISK:L
RISK OF INCIDENT:L
INTERMEDIATE CONDITION:
LAND USE:RES

CORRECTIVE ACTION PLAN:
RBCA:
CLOSED REVIEW REQUESTED:
CASE CLOSED:
CONTAMINATION:GROUNDWATER/BOTH
SUPPLY WELLS:0
MTBE IN WELL:0
MTBE IN GROUNDWATER:UNKNOWN

LEAK DISCOVERED:0
LAND USE RESTRICTION FILED:
CLEAN UP:8/27/1997
CURRENT STATUS:CURRENT RECORD

RBCA GROUNDWATER:
POLLUTANT TYPE:GASOLINE/DIESEL/KEROSENE
CD NUMBER:0
RESPONSIBLE OWNER:0
RESPONSIBLE OPERATOR:0
RESPONSIBLE LANDOWNER:0

**Environmental FirstSearch
Site Detail Report**

Target Property: SR 1121 - NC 210 - SR 1120
SPRING LAKE, NC 28390

JOB: 2012-228

SPILLS

SEARCH ID: 2 **DIST/DIR:** 0.00 -- **ELEVATION:** 226 **MAP ID:** 3

NAME:	HOLDERS GROCERY	REV:	6/1/12
ADDRESS:	UNKNOWN	ID1:	85611
	SPRING LAKE NC 28390	ID2:	FA-85611
	HARNETT	STATUS:	CURRENT RECORD
CONTACT:		PHONE:	
SOURCE:	NCDENR		

SITE INFORMATION

OWNER/OPERATOR: HOPPER-PRESIDENT, RICK
H&H CABLE CONTRACTORS, INC.
1092 PONDEROSA ROAD
CAMERON 9194991130

DATE OF RELEASE: 6/4/2000
DATE SUBMITTED: 4/12/2001
DESCRIPTION OF INCIDENT:

CONTAMINATION INFORMATION
GROUNDWATER CONTAMINATED?: Y
MAJOR SOIL CONTAMINATION?:

MATERIAL INVOLVED (1):
AMOUNT LOST (1):
AMOUNT RECOVERED (1):

MATERIAL INVOLVED (2):
AMOUNT LOST (2):
AMOUNT RECOVERED (2):

MATERIAL INVOLVED (3):
AMOUNT LOST (3):
AMOUNT RECOVERED (3):

NUMBER OF WELLS AFFECTED: 0
NAME(S) OF CONTAMINATED WELLS:

PRIORITY INFORMATION:
RISK SITE?:
SITE PRIORITY:
PRIORITY CODE: B
PRIORITY UPDATE:

STATUS INFORMATION:
LAST MODIFIED: 5/9/2002
INCIDENT PHASE: ASSESSMENT
NOV ISSUED:
NORR ISSUED:
45 DAY REPORT:
CORRECTIVE ACTION PLAN: 5/9/2002
CLOSURE REQ DATE:
CLOSE-OUT REPORT:

Environmental FirstSearch
Site Detail Report

Target Property: SR 1121 - NC 210 - SR 1120
SPRING LAKE, NC 28390

JOB: 2012-228

UST

SEARCH ID: 3 DIST/DIR: 0.00 -- ELEVATION: 277 MAP ID: 4

NAME: MATTHEWS GENERAL STORE
ADDRESS: 7100 RAY RD
SPRING LAKE NC 28390
HARNETT
CONTACT: FOSTER . MATTHEWS
SOURCE: NCDENR

REV: 6/1/12
ID1: 0-002736
ID2: 00-0-0000002736
STATUS: CURRENTLY OPERATIONAL
PHONE:

SITE INFORMATION

TOTAL NUMBER OF TANKS: 3

CONTACT INFORMATION: FOSTER . MATTHEWS
1863 WILL LUCAS RD
LINDEN NC 28356-8523

TANK NUMBER: 001
ROOT TANK ID:
TANK STATUS:
INSTALLATION DATE:
PERM CLOSED:
CONTENTS: Gasoline, Gas Mix
CAPACITY IN GALLONS: 6000
TANK CONSTRUCTION:3
PIPE CONSTRUCTION:1
MAIN TANK:NO
COMPARTMENT TANK:NO
MANIFOLD TANK:NO
COMMERCIAL TANK:YES
REGULATED TANK:YES

TANK NUMBER: 002
ROOT TANK ID:
TANK STATUS:
INSTALLATION DATE:
PERM CLOSED:
CONTENTS: Gasoline, Gas Mix
CAPACITY IN GALLONS: 6000
TANK CONSTRUCTION:3
PIPE CONSTRUCTION:1
MAIN TANK:NO
COMPARTMENT TANK:NO
MANIFOLD TANK:NO
COMMERCIAL TANK:YES
REGULATED TANK:YES

TANK NUMBER: 003
ROOT TANK ID:
TANK STATUS:
INSTALLATION DATE:
PERM CLOSED:
CONTENTS: Gasoline, Gas Mix
CAPACITY IN GALLONS: 6000
TANK CONSTRUCTION:3

- Continued on next page -

Environmental FirstSearch Site Detail Report

Target Property: SR 1121 - NC 210 - SR 1120
SPRING LAKE, NC 28390

JOB: 2012-228

UST

SEARCH ID: 3 **DIST/DIR:** 0.00 -- **ELEVATION:** 277 **MAP ID:** 4

NAME: MATTHEWS GENERAL STORE
ADDRESS: 7100 RAY RD
SPRING LAKE NC 28390
HARNETT
CONTACT: FOSTER . MATTHEWS
SOURCE: NCDENR

REV: 6/1/12
ID1: 0-002736
ID2: 00-0-0000002736
STATUS: CURRENTLY OPERATIONAL
PHONE:

PIPE CONSTRUCTION:1
MAIN TANK:NO
COMPARTMENT TANK:NO
MANIFOLD TANK:NO
COMMERCIAL TANK:YES
REGULATED TANK:YES

ARCHIVED INFORMATION AS OF 2011

TANK NUMBER: 001
INSTALLATION DATE: 19940504
CLOSED DATE:
STATUS: CURRENTLY OPERATIONAL
CONTENTS: GASOLINE, GASOLINE MIXTURE
CAPACITY IN GALLONS: 6000
COMMENTS:
CONSTRUCTION MATERIAL: STEEL
INTERIOR: UNKNOWN
EXTERIOR: UNKNOWN
CORROSION PROTECTION: IMPRESSED CURRENT
LEAK DETECTION:
PIPING MATERIAL: UNKNOWN
PIPE CORROSION PROTECTION: IMPRESSED CURRENT
PIPE LEAK DETECTION:
OVERFLOW PROTECTION: CATCHMENT BASIN
FINANCIAL RESPONSIBILITY:
CERTIFICATION TYPE:
GPS SITING CONFIRMED:Y
PERSON CONFIRMING:KCC

TANK NUMBER: 002
INSTALLATION DATE: 19940504
CLOSED DATE:
STATUS: CURRENTLY OPERATIONAL
CONTENTS: GASOLINE, GASOLINE MIXTURE
CAPACITY IN GALLONS: 6000
COMMENTS:
CONSTRUCTION MATERIAL: STEEL
INTERIOR: UNKNOWN
EXTERIOR: UNKNOWN
CORROSION PROTECTION: IMPRESSED CURRENT
LEAK DETECTION:
PIPING MATERIAL: UNKNOWN
PIPE CORROSION PROTECTION: IMPRESSED CURRENT
PIPE LEAK DETECTION:
OVERFLOW PROTECTION: CATCHMENT BASIN
FINANCIAL RESPONSIBILITY:

- Continued on next page -

Environmental FirstSearch
Site Detail Report

Target Property: SR 1121 - NC 210 - SR 1120
SPRING LAKE, NC 28390

JOB: 2012-228

UST

SEARCH ID: 3 DIST/DIR: 0.00 -- ELEVATION: 277 MAP ID: 4

NAME: MATTHEWS GENERAL STORE
ADDRESS: 7100 RAY RD
SPRING LAKE NC 28390
HARNETT
CONTACT: FOSTER . MATTHEWS
SOURCE: NCDENR

REV: 6/1/12
ID1: 0-002736
ID2: 00-0-0000002736
STATUS: CURRENTLY OPERATIONAL
PHONE:

CERTIFICATION TYPE:
GPS SITING CONFIRMED:Y
PERSON CONFIRMING:KCC

TANK NUMBER: 003
INSTALLATION DATE: 19940504
CLOSED DATE:
STATUS: CURRENTLY OPERATIONAL
CONTENTS: GASOLINE, GASOLINE MIXTURE
CAPACITY IN GALLONS: 6000
COMMENTS:
CONSTRUCTION MATERIAL: STEEL
INTERIOR: UNKNOWN
EXTERIOR: UNKNOWN
CORROSION PROTECTION: IMPRESSED CURRENT
LEAK DETECTION:
PIPING MATERIAL: UNKNOWN
PIPE CORROSION PROTECTION: IMPRESSED CURRENT
PIPE LEAK DETECTION:
OVERFLOW PROTECTION: CATCHMENT BASIN
FINANCIAL RESPONSIBILITY:
CERTIFICATION TYPE:
GPS SITING CONFIRMED:Y
PERSON CONFIRMING:KCC

Environmental FirstSearch
Site Detail Report

Target Property: SR 1121 - NC 210 - SR 1120
SPRING LAKE, NC 28390

JOB: 2012-228

UST

SEARCH ID: 6 DIST/DIR: 0.00 -- ELEVATION: 318 MAP ID: 5

NAME: SHORT STOP FOOD MARTS 8
ADDRESS: 7925 RAY RD
SPRING LAKE NC 28390
HARNETT
CONTACT: LI L THRIFT FOOD MARTS, INC.
SOURCE: NCDENR

REV: 6/1/12
ID1: 0-021508
ID2: 00-0-0000021508
STATUS: CURRENTLY OPERATIONAL
PHONE:

SITE INFORMATION

TOTAL NUMBER OF TANKS: 3

CONTACT INFORMATION: LI L THRIFT FOOD MARTS, INC.
1007 ARSENAL AVENUE
FAYETTEVILLE NC 28305-5329

TANK NUMBER: 1
ROOT TANK ID:
TANK STATUS:
INSTALLATION DATE:
PERM CLOSED:
CONTENTS: Gasoline, Gas Mix
CAPACITY IN GALLONS: 6000
TANK CONSTRUCTION:3
PIPE CONSTRUCTION:3
MAIN TANK:NO
COMPARTMENT TANK:NO
MANIFOLD TANK:NO
COMMERCIAL TANK:YES
REGULATED TANK:YES

TANK NUMBER: 2
ROOT TANK ID:
TANK STATUS:
INSTALLATION DATE:
PERM CLOSED:
CONTENTS: Gasoline, Gas Mix
CAPACITY IN GALLONS: 6000
TANK CONSTRUCTION:3
PIPE CONSTRUCTION:3
MAIN TANK:NO
COMPARTMENT TANK:NO
MANIFOLD TANK:NO
COMMERCIAL TANK:YES
REGULATED TANK:YES

TANK NUMBER: 3
ROOT TANK ID:
TANK STATUS:
INSTALLATION DATE:
PERM CLOSED:
CONTENTS: Gasoline, Gas Mix
CAPACITY IN GALLONS: 4000
TANK CONSTRUCTION:3

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Environmental FirstSearch
Site Detail Report

Target Property: SR 1121 - NC 210 - SR 1120
SPRING LAKE, NC 28390

JOB: 2012-228

UST

SEARCH ID: 6 **DIST/DIR:** 0.00 -- **ELEVATION:** 318 **MAP ID:** 5

NAME:	SHORT STOP FOOD MARTS 8	REV:	6/1/12
ADDRESS:	7925 RAY RD	ID1:	0-021508
	SPRING LAKE NC 28390	ID2:	00-0-0000021508
	HARNETT	STATUS:	CURRENTLY OPERATIONAL
CONTACT:	LI L THRIFT FOOD MARTS, INC.	PHONE:	
SOURCE:	NCDENR		

PIPE CONSTRUCTION:3
MAIN TANK:NO
COMPARTMENT TANK:NO
MANIFOLD TANK:NO
COMMERCIAL TANK:YES
REGULATED TANK:YES

ARCHIVED INFORMATION AS OF 2011

TANK NUMBER: 1
INSTALLATION DATE: 19731003
CLOSED DATE:
STATUS: CURRENTLY OPERATIONAL
CONTENTS: GASOLINE, GASOLINE MIXTURE
CAPACITY IN GALLONS: 6000
COMMENTS:
CONSTRUCTION MATERIAL: STEEL
INTERIOR: INTERNAL LINING
EXTERIOR: CATHODIC PROTECTION
CORROSION PROTECTION: INTERNAL LINING
LEAK DETECTION: PERIODIC TANK TIGHTNESS TESTING
PIPING MATERIAL: FRP
PIPE CORROSION PROTECTION: FRP TANK/PIPING
PIPE LEAK DETECTION: AUTOMATIC LINE LEAK DETECTORS
OVERFLOW PROTECTION: CATCHMENT BASIN
FINANCIAL RESPONSIBILITY:
CERTIFICATION TYPE:
GPS SITING CONFIRMED:Y
PERSON CONFIRMING:KCC

TANK NUMBER: 2
INSTALLATION DATE: 19731003
CLOSED DATE:
STATUS: CURRENTLY OPERATIONAL
CONTENTS: GASOLINE, GASOLINE MIXTURE
CAPACITY IN GALLONS: 6000
COMMENTS:
CONSTRUCTION MATERIAL: STEEL
INTERIOR: INTERNAL LINING
EXTERIOR: CATHODIC PROTECTION
CORROSION PROTECTION: INTERNAL LINING
LEAK DETECTION: PERIODIC TANK TIGHTNESS TESTING
PIPING MATERIAL: FRP
PIPE CORROSION PROTECTION: FRP TANK/PIPING
PIPE LEAK DETECTION: AUTOMATIC LINE LEAK DETECTORS
OVERFLOW PROTECTION: CATCHMENT BASIN
FINANCIAL RESPONSIBILITY:

- Continued on next page -

Environmental FirstSearch
Site Detail Report

Target Property: SR 1121 - NC 210 - SR 1120
SPRING LAKE, NC 28390

JOB: 2012-228

UST

SEARCH ID: 6 DIST/DIR: 0.00 -- ELEVATION: 318 MAP ID: 5

NAME: SHORT STOP FOOD MARTS 8
ADDRESS: 7925 RAY RD
SPRING LAKE NC 28390
HARNETT
CONTACT: LI L THRIFT FOOD MARTS, INC.
SOURCE: NCDENR
REV: 6/1/12
ID1: 0-021508
ID2: 00-0-0000021508
STATUS: CURRENTLY OPERATIONAL
PHONE:

CERTIFICATION TYPE:
GPS SITING CONFIRMED:Y
PERSON CONFIRMING:KCC

TANK NUMBER: 3
INSTALLATION DATE: 19861001
CLOSED DATE:
STATUS: CURRENTLY OPERATIONAL
CONTENTS: GASOLINE, GASOLINE MIXTURE
CAPACITY IN GALLONS: 4000
COMMENTS:
CONSTRUCTION MATERIAL: STEEL
INTERIOR: INTERNAL LINING
EXTERIOR: CATHODIC PROTECTION
CORROSION PROTECTION: INTERNAL LINING
LEAK DETECTION: PERIODIC TANK TIGHTNESS TESTING
PIPING MATERIAL: FRP
PIPE CORROSION PROTECTION: FRP TANK/PIPING
PIPE LEAK DETECTION: AUTOMATIC LINE LEAK DETECTORS
OVERFLOW PROTECTION: CATCHMENT BASIN
FINANCIAL RESPONSIBILITY:
CERTIFICATION TYPE:
GPS SITING CONFIRMED:Y
PERSON CONFIRMING:KCC

**Environmental FirstSearch
Site Detail Report**

Target Property: SR 1121 - NC 210 - SR 1120
SPRING LAKE, NC 28390

JOB: 2012-228

LUST

SEARCH ID: 10 **DIST/DIR:** 0.11 SW **ELEVATION:** 266 **MAP ID:** 6

NAME:	HOLDERS GROCERY	REV:	10/1/01
ADDRESS:	1899 RAY RD	ID1:	NCI-085611
	SPRING LAKE NC	ID2:	
	HARNETT	STATUS:	ASSESSMENT
CONTACT:	RICK HOPPER-PRESIDENT	PHONE:	9194991130
SOURCE:			

OWNER/OPERATOR: RICK HOPPER-PRESIDENT
H&H CABLE CONTRACTORS, INC.
1092 PONDEROSA ROAD
CAMERON NORT 28326

DATE OF RELEASE: 6/4/2000
DATE SUBMITTED: 4/12/2001
DESCRIPTION OF INCIDENT:

CONTAMINATION INFORMATION
GROUNDWATER CONTAMINATED?: Y
MAJOR SOIL CONTAMINATION?:

MATERIAL INVOLVED (1):
AMOUNT LOST (1):
AMOUNT RECOVERED (1):

MATERIAL INVOLVED (2):
AMOUNT LOST (2):
AMOUNT RECOVERED (2):

MATERIAL INVOLVED (3):
AMOUNT LOST (3):
AMOUNT RECOVERED (3):

NUMBER OF WELLS AFFECTED: 0
NAME(S) OF CONTAMINATED WELLS:

PRIORITY INFORMATION:
RISK SITE?:
SITE PRIORITY: 160
PRIORITY CODE: B
PRIORITY UPDATE:

STATUS INFORMATION:
LAST MODIFIED:
INCIDENT PHASE: ASSESSMENT
NOV ISSUED:
NORR ISSUED:
45 DAY REPORT:
CORRECTIVE ACTION PLAN: 5/9/2002
CLOSURE REQ DATE:
CLOSE-OUT REPORT:

Environmental FirstSearch
Site Detail Report

Target Property: SR 1121 - NC 210 - SR 1120
SPRING LAKE, NC 28390

JOB: 2012-228

LUST

SEARCH ID: 11 DIST/DIR: 0.27 SE ELEVATION: 217 MAP ID: 7

NAME: LEWIS OIL CO.
ADDRESS: 0 HIGHWAY 210
MANCHESTER NC
HARNETT

REV: 10/1/01
ID1: NCI-005466
ID2:
STATUS:
PHONE:

CONTACT:
SOURCE:

OWNER/OPERATOR:

DATE OF RELEASE:
DATE SUBMITTED: 3/12/1990
DESCRIPTION OF INCIDENT:

CONTAMINATION INFORMATION
GROUNDWATER CONTAMINATED?: NOD
MAJOR SOIL CONTAMINATION?:

MATERIAL INVOLVED (1):
AMOUNT LOST (1):
AMOUNT RECOVERED (1):

MATERIAL INVOLVED (2):
AMOUNT LOST (2):
AMOUNT RECOVERED (2):

MATERIAL INVOLVED (3):
AMOUNT LOST (3):
AMOUNT RECOVERED (3):

NUMBER OF WELLS AFFECTED: 0
NAME(S) OF CONTAMINATED WELLS:

PRIORITY INFORMATION:
RISK SITE?:
SITE PRIORITY: 0
PRIORITY CODE: E
PRIORITY UPDATE:

STATUS INFORMATION:
LAST MODIFIED:
INCIDENT PHASE:
NOV ISSUED:
NORR ISSUED:
45 DAY REPORT:
CORRECTIVE ACTION PLAN:
CLOSURE REQ DATE:
CLOSE-OUT REPORT:

Environmental FirstSearch
Site Detail Report

Target Property: SR 1121 - NC 210 - SR 1120
SPRING LAKE, NC 28390

JOB: 2012-228

LUST

SEARCH ID: 12 DIST/DIR: 0.38 SE ELEVATION: 160 MAP ID: 8

NAME: LEWIS OIL GROCERY STORE
ADDRESS: 0 NC 210 & SR 1600
SPRING LAKE NC 28390
CUMBERLAND
CONTACT: STEWART LEWIS
SOURCE: NCDENR

REV: 6/1/12
ID1: NCI-014732
ID2: 14732
STATUS: RESPONSE
PHONE:

REGIONAL UST DATA

UST NUMBER:FA-797
INCIDENT NUMBER:14732
CD NUMBER:0
REEL NUMBER:0
REGIONAL CONTACT:JWB
REGIONAL OFFICE:FAY
DATE OCCURRED:10/18/1995

RESPONSIBLE COMPANY:

STUART LEWIS OIL CO.
HWY 210 N.
SPRING LAKE ,NC , 28390

SOURCE:LEAK, UST
PETROLEUM TYPE:PETROLEUM
COMMERCIAL/NONCOMMERCIAL:COMMERCIAL
REGULATED:REGULATED
REGULATORY REQUIREMENT:
VIOLATION:

PHASE REQUIRED:
SITE PRIORITY:090B
RISK:H
RISK OF INCIDENT:L
INTERMEDIATE CONDITION:
LAND USE:

CORRECTIVE ACTION PLAN:
RBCA:
CLOSED REVIEW REQUESTED:
CASE CLOSED:
CONTAMINATION:GROUNDWATER/BOTH
SUPPLY WELLS:
MTBE IN WELL:
MTBE IN GROUNDWATER:UNKNOWN

LEAK DISCOVERED:0
LAND USE RESTRICTION FILED:
CLEAN UP:10/18/1995
CURRENT STATUS:CURRENT RECORD

RBCA GROUNDWATER:
POLLUTANT TYPE:GASOLINE/DIESEL/KEROSENE
CD NUMBER:0
RESPONSIBLE OWNER:0
RESPONSIBLE OPERATOR:0
RESPONSIBLE LANDOWNER:0

Environmental FirstSearch Descriptions

NPL: EPA NATIONAL PRIORITY LIST - The National Priorities List is a list of the worst hazardous waste sites that have been identified by Superfund. Sites are only put on the list after they have been scored using the Hazard Ranking System (HRS), and have been subjected to public comment. Any site on the NPL is eligible for cleanup using Superfund Trust money. A Superfund site is any land in the United States that has been contaminated by hazardous waste and identified by the Environmental Protection Agency (EPA) as a candidate for cleanup because it poses a risk to human health and/or the environment. FINAL - Currently on the Final NPL PROPOSED - Proposed for NPL

NPL DELISTED: EPA NATIONAL PRIORITY LIST Subset - Database of delisted NPL sites. 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. DELISTED - Deleted from the Final NPL

CERCLIS: EPA COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY INFORMATION SYSTEM (CERCLIS)- CERCLIS is a database of potential and confirmed hazardous waste sites at which the EPA Superfund program has some involvement. It contains sites that are either proposed to be or are on the National Priorities List (NPL) as well as sites that are in the screening and assessment phase for possible inclusion on the NPL. PART OF NPL- Site is part of NPL site DELETED - Deleted from the Final NPL FINAL - Currently on the Final NPL NOT PROPOSED - Not on the NPL NOT VALID - Not Valid Site or Incident PROPOSED - Proposed for NPL REMOVED - Removed from Proposed NPL SCAN PLAN - Pre-proposal Site WITHDRAWN - Withdrawn

NFRAP: EPA COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY INFORMATION SYSTEM ARCHIVED SITES - database of Archive designated CERCLA sites that, to the best of EPA's knowledge, assessment has been completed and has determined no further steps will be taken to list this site on the National Priorities List (NPL). This 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 a potential NPL site. NFRAP - No Further Remedial Action Plan P - Site is part of NPL site D - Deleted from the Final NPL F - Currently on the Final NPL N - Not on the NPL O - Not Valid Site or Incident P - Proposed for NPL R - Removed from Proposed NPL S - Pre-proposal Site W - Withdrawn

RCRA COR ACT: EPA RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM SITES - Database of hazardous waste information contained in the Resource Conservation and Recovery Act Information (RCRAInfo), a national program management and inventory system about hazardous waste handlers. In general, all generators, transporters, treaters, storers, and disposers of hazardous waste are required to provide information about their activities to state environmental agencies. These agencies, in turn pass on the information to regional and national EPA offices. This regulation is governed by the Resource Conservation and Recovery Act (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984. RCRAInfo facilities that have reported violations and subject to corrective actions.

RCRA TSD: EPA RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM TREATMENT, STORAGE, and DISPOSAL FACILITIES. - Database of hazardous waste information contained in the Resource Conservation and Recovery Act Information (RCRAInfo), a national program management and inventory system about hazardous waste handlers. In general, all generators, transporters, treaters, storers, and disposers of hazardous waste are required to provide information about their activities to state environmental agencies. These agencies, in turn pass on the information to regional and national EPA offices. This regulation is governed by the Resource Conservation and Recovery Act (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984. Facilities that treat, store, dispose, or incinerate hazardous waste.

RCRA GEN: EPA/MA DEP/CT DEP RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM GENERATORS - Database of hazardous waste information contained in the Resource Conservation and Recovery Act Information (RCRAInfo), a national program management and inventory system about hazardous waste handlers. In general, all generators, transporters, treaters, storers, and disposers of hazardous waste are required to provide information about their activities to state environmental agencies. These agencies, in turn pass on the information to regional and national EPA offices. This regulation is governed by the Resource Conservation and Recovery Act (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984. Facilities that generate or transport hazardous waste or meet other RCRA requirements. LGN - Large Quantity Generators SGN - Small Quantity Generators VGN - Conditionally Exempt Generator. Included are RAATS (RCRA Administrative Action Tracking System) and CMEL (Compliance Monitoring & Enforcement List) facilities. CONNECTICUT HAZARDOUS WASTE MANIFEST - Database of all shipments of hazardous waste within, into or from Connecticut. The data includes date of shipment, transporter and TSD info, and material shipped and quantity. This data is appended to the details of existing generator records. MASSACHUSETTES HAZARDOUS WASTE GENERATOR - database of generators that are regulated under the MA DEP. VQN-MA = generates less than 220 pounds or 27 gallons per month of hazardous waste or waste oil. SQN-MA = generates 220 to 2,200 pounds or 27 to 270 gallons per month of waste oil. LQG-MA = generates greater than 2,200 lbs of hazardous waste or waste oil per month.

Fed Brownfield: EPA BROWNFIELD MANAGEMENT SYSTEM (BMS) - database designed to assist EPA in collecting, tracking, and updating information, as well as reporting on the major activities and accomplishments of the various Brownfield grant Programs. CLEANUPS IN MY COMMUNITY (subset) - Sites, facilities and properties that have been contaminated by hazardous materials and are being, or have been, cleaned up under EPA's brownfield's program.

ERNS: EPA/NRC EMERGENCY RESPONSE NOTIFICATION SYSTEM (ERNS) - Database of incidents reported to the National Response Center. These incidents include chemical spills, accidents involving chemicals (such as fires or explosions), oil spills, transportation accidents that involve oil or chemicals, releases of radioactive materials, sightings of oil sheens on bodies of water, terrorist incidents involving chemicals, incidents where illegally dumped chemicals have been found, and drills intended to prepare responders to handle these kinds of incidents. Data since January 2001 has been received from the National Response System database as the EPA no longer maintains this data.

Tribal Lands: DOI/BIA INDIAN LANDS OF THE UNITED STATES - Database of areas with boundaries established by treaty, statute, and (or) executive or court order, recognized by the Federal Government as territory in which American Indian tribes have primary governmental authority. The Indian Lands of the United States map layer shows areas of 640 acres or more, administered by the Bureau of Indian Affairs. Included are Federally-administered lands within a reservation which may or may not be considered part of the reservation. BUREAU OF INDIAN AFFIARS CONTACT - Regional contact information for the Bureau of Indian Affairs offices.

State/Tribal Sites: NCDENR STATE INACTIVE HAZARDOUS SITES LIST - database of sites and Facilities that are being investigated due to reported releases of Hazardous substances. Included within this Inactive Hazardous Waste Sites Inventory database are the following classifications: Inactive Hazardous Waste Sites (IHS), No Further Action Sites (NFA), Duplicate Sites (DS), Inactive Hazardous Waste Sites Priority List Sites (SPL)

State Spills 90: NCDENR INCIDENT MANAGEMENT DATA (UST and Groundwater) - database of possible releases/spills of contaminants. The data includes media effected, material released, source and site priority.

State/Tribal SWL: NCDENR ALL PERMITTED SOLID WASTE FACILITIES - database of C&D Landfill, Compost, House Hold Hazardous Waste landfill, Incinerator (Industrial) Landfill, Incinerator (Medical) Landfill, Industrial Landfill, Land Clearing and Inert Debris Landfill, Mixed Waste Processing Landfill, Municipal Solid Waste Landfill, Tire Treatment and Processing Landfill, and Transfer and Processing Stations.

State/Tribal LUST: NCDENR INCIDENT MANAGEMENT DATA (UST and Groundwater) - database of leaking underground storage tanks. This database is a subset of the Incident Management Data (UST and Groundwater) where the source is a leaking ust. This data is concerned with petroleum storage systems and includes facilities and/or locations that have reported the possible release of contaminants. This database also includes State Spill Sites. REGIONAL UST DATABASE (SUBSET) - database of information obtained from the Regional Offices in which an incident has occurred. 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.

State/Tribal UST/AST: NCDENR/EPA REGISTERED TANKS and FACILITY DATABASE - database of underground storage tanks registered with the North Carolina Department of Environment and Natural Resources. Inclusion on this list indicates the presence of underground petroleum storage tanks and therefore the potential for environmental problems. It does not necessarily indicate existing problems. TRIBAL LAND UNDERGROUND STORAGE TANKS - database of underground storage tanks that are reported to be on Native American lands. REGIONAL UST DATABASE - database of 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.

State/Tribal IC: NCDENR STATE INACTIVE HAZARDOUS SITES LIST SUBSET - database of sites and Facilities that have land use restrictions and are being investigated due to reported releases of Hazardous substances. Included within this Inactive Hazardous Waste Sites Inventory database are the following classifications: Inactive Hazardous Waste Sites (IHS), No Further Action Sites (NFA), Duplicate Sites (DS), Inactive Hazardous Waste Sites Priority List Sites (SPL)

State/Tribal VCP: NCDENR STATE INACTIVE HAZARDOUS SITES LIST SUBSET- database of sites and Facilities that are being investigated due to reported releases of Hazardous substances and have a voluntary cleanup agreement. Included within this Inactive Hazardous Waste Sites Inventory database are the following classifications: Inactive Hazardous Waste Sites (IHS), No Further Action Sites (NFA), Duplicate Sites (DS), Inactive Hazardous Waste Sites Priority List Sites (SPL)

State/Tribal Brownfields: NCDENR BROWNFIELD PROJECTS INVENTORY - database of Active Eligible Sites, Projects Pending Eligibility, and Finalized Brownfields Agreements.

Federal IC / EC: EPA FEDERAL ENGINEERING AND INSTITUTIONAL CONTROLS- Superfund sites that have either an engineering or an institutional control. The data includes the control and the media contaminated. RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM SITES (RCRA) – RCRA site the have institutional controls.

Environmental FirstSearch Database Sources

NPL: EPA Environmental Protection Agency

Updated quarterly

NPL DELISTED: EPA Environmental Protection Agency

Updated quarterly

CERCLIS: EPA Environmental Protection Agency

Updated quarterly

NFRAP: EPA Environmental Protection Agency.

Updated quarterly

RCRA COR ACT: EPA Environmental Protection Agency.

Updated quarterly

RCRA TSD: EPA Environmental Protection Agency.

Updated quarterly

RCRA GEN: EPA/MA DEP/CT DEP Environmental Protection Agency, Massachusetts Department of Environmental Protection, Connecticut Department of Environmental Protection

Updated quarterly

Fed Brownfield: EPA Environmental Protection Agency

Updated quarterly

ERNS: EPA/NRC Environmental Protection Agency National Response Center.

Updated annually

Tribal Lands: DOI/BIA United States Department of the Interior Bureau of Indian Affairs

Updated annually

State/Tribal Sites: NCDENR North Carolina Department of Environment and Natural Resources, Division of Waste Management

Updated quarterly

State Spills 90: NCDENR North Carolina Department of Environment and Natural Resources, Division of Water Quality/Groundwater Section

Updated quarterly

State/Tribal SWL: NCDENR North Carolina Department of Environment and Natural Resources, Division of Waste Management

Updated annually

State/Tribal LUST: NCDENR North Carolina Department of Environment and Natural Resources, Division of Water Quality/Groundwater Section

Updated quarterly

State/Tribal UST/AST: NCDENR/EPA North Carolina Department of Environment and Natural Resources, Division of Waste Management Environmental Protection Agency

Updated quarterly

State/Tribal IC: NCDENR North Carolina Department of Environment and Natural Resources, Division of Waste Management

Updated quarterly

State/Tribal VCP: NCDENR North Carolina Department of Environment and Natural Resources, Division of Waste Management

Updated quarterly

State/Tribal Brownfields: NCDENR North Carolina Department of Environment and Natural Resources

Updated quarterly

Federal IC / EC: EPA Environmental Protection Agency

Updated quarterly

Environmental FirstSearch

Street Name Report for Streets within .25 Mile(s) of Target Property

Target Property: SR 1121 - NC 210 - SR 1120
 SPRING LAKE, NC 28390

JOB: 2012-228

Street Name	Dist/Dir	Street Name	Dist/Dir
Alan Parker Cir	0.19 NE	Leeks Ln	0.25 SE
Andrew Cox Ln	0.00--	Leopard Ln	0.01 NW
Appaloosa Dr	0.25 SE	Little M Dr	0.00--
Aspen Ave	0.04 NW	Loblolly	0.19 NW
Astor Pl	0.05 NW	Lous Chapel Rd	0.00--
Austin Ave	0.24 SE	Lynx Ln	0.08 NW
Azalea Dr	0.00--	Mckay Dr	0.00--
Balsom Pl	0.09 NW	Mcneil Cemetery Rd	0.00--
Bluegill Ln	0.00--	Misty Cove Ln	0.00--
Burro Ln	0.03 SE	Narcissus Pl	0.03 NW
Burro Rd	0.03 SE	Narcissys	0.02 NW
Camellia Ln	0.00--	Nc Highway 210 S	0.00--
Canopy Ln	0.07 SW	Northpoint Cir	0.05 NE
Capital Dr	0.25 SE	Oakdale Dr	0.02 NW
Capitol Dr	0.22 SE	Old Farms Maple St	0.14 NW
Carnation Cir	0.25 NE	Orchid	0.13 NE
Cedar Dr	0.25 NE	Orchid Dr	0.13 NE
Chestnutt	0.21 NW	Pansey Cir	0.08 NE
Citron Pl	0.08 NW	Pansy Cir	0.08 NE
Clove Ln	0.09 NW	Panther Ln	0.05 NW
Connie Ct	0.14 NE	Peonie Pl	0.21 NW
Cooper Ave	0.00--	Pete Mason Dr	0.14 NW
Creeksville Church Rd	0.09 SE	Pinecrest Dr	0.06 NE
Daffodil Pl	0.09 NW	Primrose	0.21 NW
Daisy Cir	0.1 NE	Primrose St	0.14 NW
Dandelion Pl	0.13 NW	Pvt Rd	0.00--
Dogwood Dr	0.16 NW	Rachel Rd	0.03 SE
Dove Ridge Ln	0.18 NE	Ray Rd	0.00--
E Northpoint St	0.00--	Rolling Springs Dr	0.00--
Elm St	0.22 NW	Rosebud St	0.1 NE
Elma Black Ln	0.09 NW	Ruby Clara Ln	0.00--
Erica Ln	0.18 SE	S and S Ln	0.00--
Eugene Ln	0.03 NE	Sandclay Rd	0.00--
FROM NC 210 TO SR 1120	0.00--	Secondary Road 1121	0.00--
Gardenia Cir	0.16 NE	Secondary Road 1122	0.00--
Gena Ln	0.17 NW	Secondary Road 1123	0.09 SE
Gerber Ln	0.00--	Secondary Road 1142 Rd	0.00--
Gordon Ln	0.01 NW	Secondary Road 1151	0.22 SE
Helen Matthews Dr	0.00--	Secondary Road 1160	0.00--
Holly St	0.18 NW	Secondary Road 1161	0.1 NE
Honey Dr	0.14 NW	Secondary Road 1162	0.00--
Jde St	0.00--	Secondary Road 1163	0.08 NE
Jeff St	0.13 NE	Secondary Road 1165	0.25 NE
John Ryan Ln	0.00--	Secondary Road 1166	0.25 NE
Killdeer Dr	0.16 NW	Secondary Road 2051	0.03 SE
Killdeer Ln	0.00--	Shady Dr	0.04 NE
Lake Ave	0.00--	Slate Dr	0.15 NW
Lakeview Dr	0.22 SE	Sring Valley Dr	0.15 NW

Environmental FirstSearch
Street Name Report for Streets within .25 Mile(s) of Target Property

Target Property: SR 1121 - NC 210 - SR 1120
SPRING LAKE, NC 28390

JOB: 2012-228

Street Name	Dist/Dir	Street Name	Dist/Dir
Stallion Ln	0.00--		
State Hwy 210	0.00--		
Stone Cross Dr	0.07 NE		
Sweet Ln	0.11 NW		
Tommy Dr	0.00--		
Tommys Dr	0.00--		
Twin Lake Rd	0.00--		
W Northpoint Rd	0.00--		
Ward Ln	0.15 NE		
Wedgewood Dr	0.01 NE		
White Pine Pl	0.02 NW		
Woodbridge Dr	0.25 NE		
Zena Ln	0.1 NW		



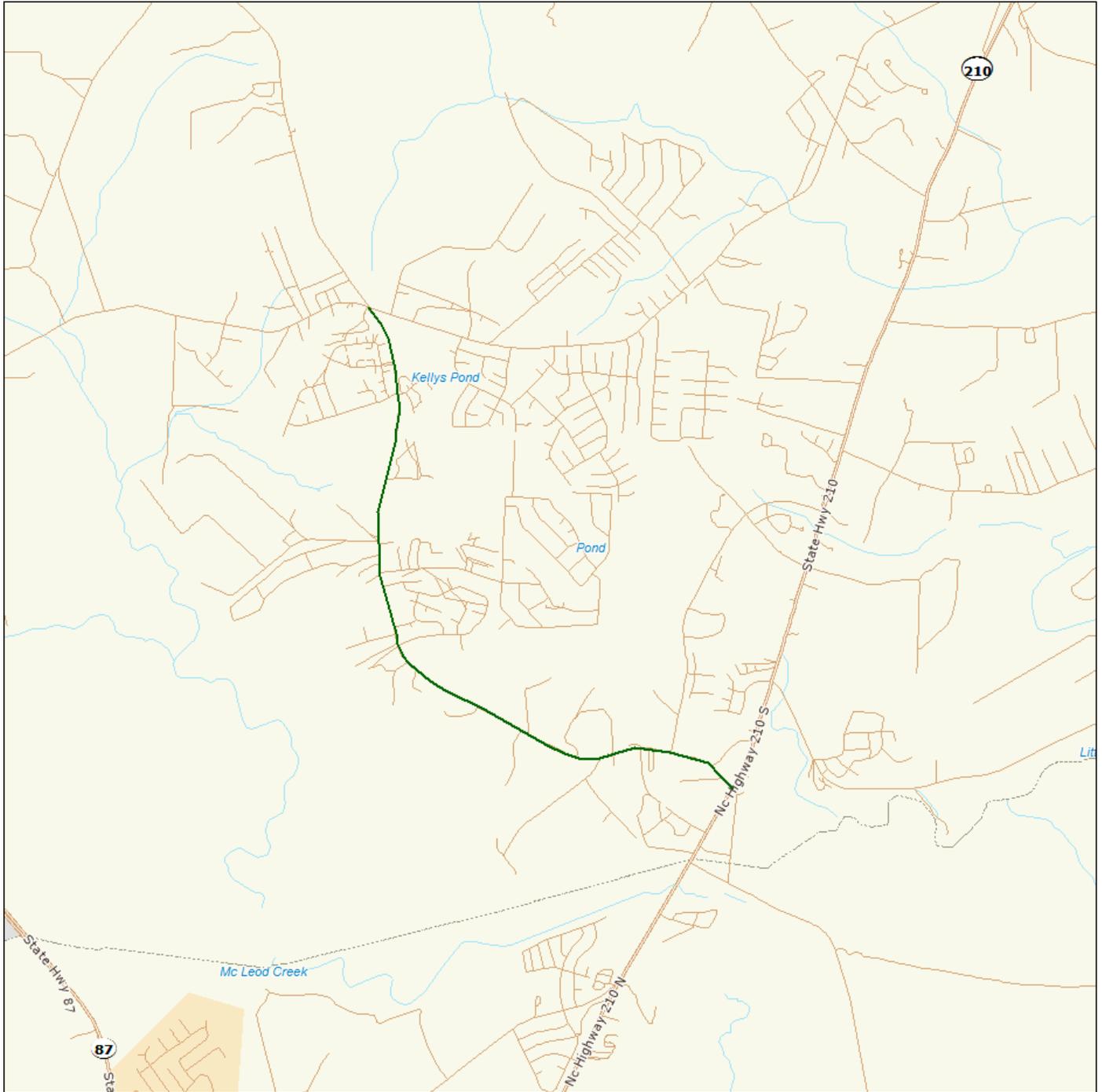
Environmental FirstSearch

1 Mile Radius from Line

ASTM Map: NPL, RCACOR, STATE Sites



SR 1121 - NC 210 - SR 1120 , SPRING LAKE, NC 28390



Source: Tele Atlas

- Linear Search Line 
- Identified Site, Multiple Sites, Receptor   
- NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste 
- Triballand 
- Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius



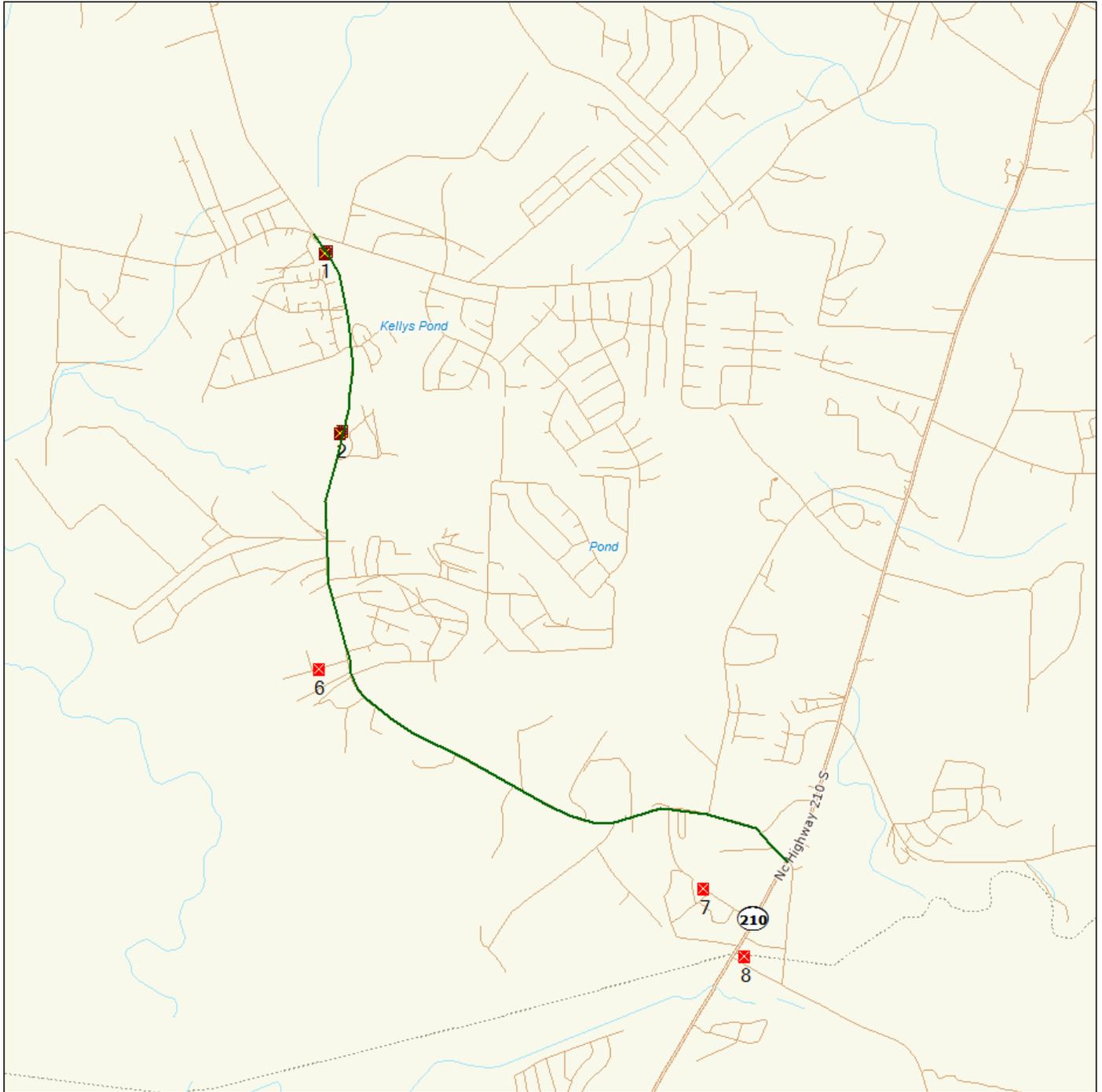
Environmental FirstSearch

.5 Mile Radius from Line

ASTM Map: CERCLIS, RCRATSD, LUST, SWL



SR 1121 - NC 210 - SR 1120 , SPRING LAKE, NC 28390



Source: Tele Atlas

- Linear Search Line 
- Identified Site, Multiple Sites, Receptor   
- NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste 
- Triballand 
- Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius



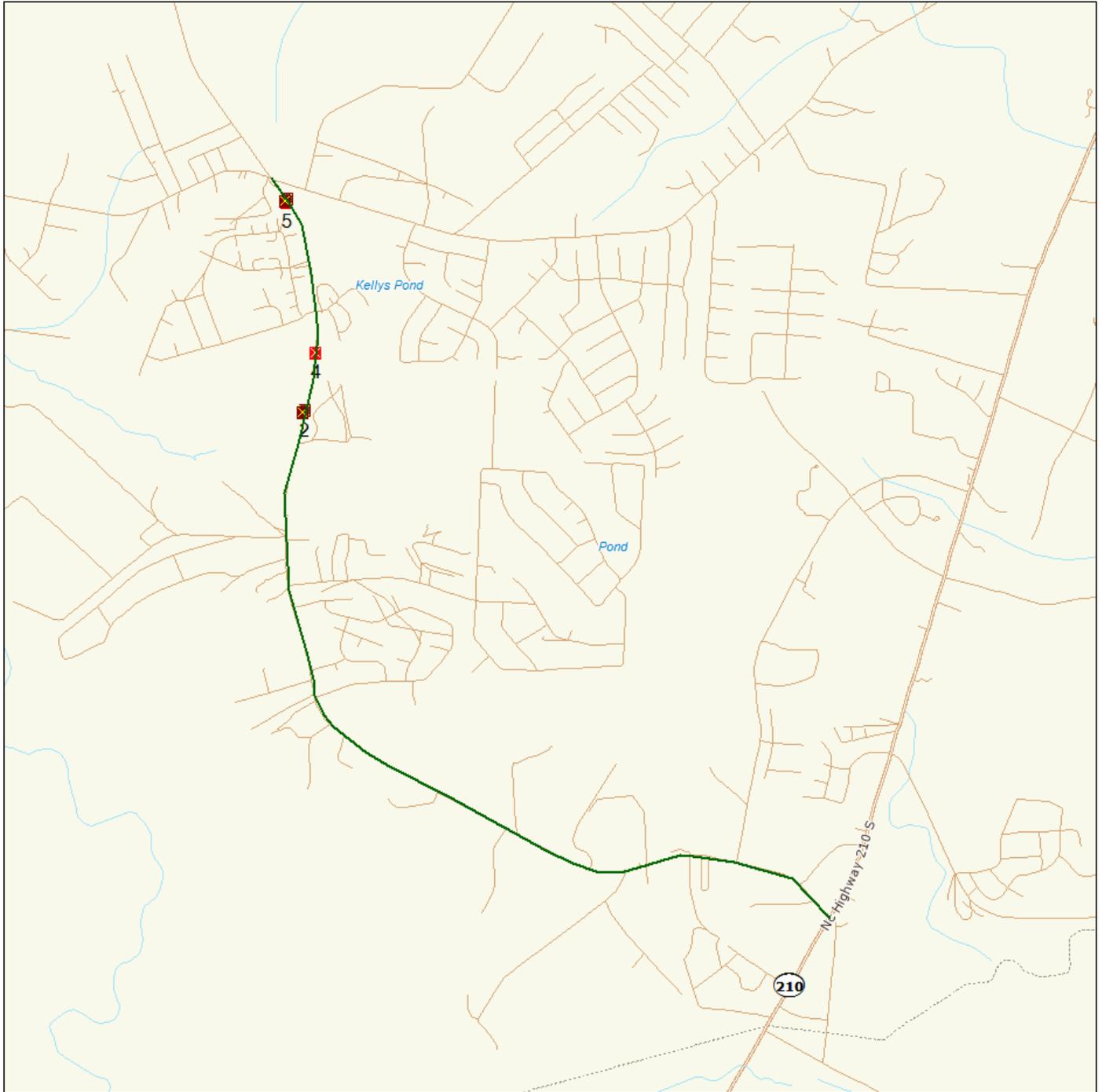
Environmental FirstSearch

.25 Mile Radius from Line

ASTM Map: RCRAGEN, ERNS, UST, FED IC/EC, METH LABS



SR 1121 - NC 210 - SR 1120 , SPRING LAKE, NC 28390



Source: Tele Atlas

- Linear Search Line 
 - Identified Site, Multiple Sites, Receptor   
 - NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste 
 - Triballand 
- Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius



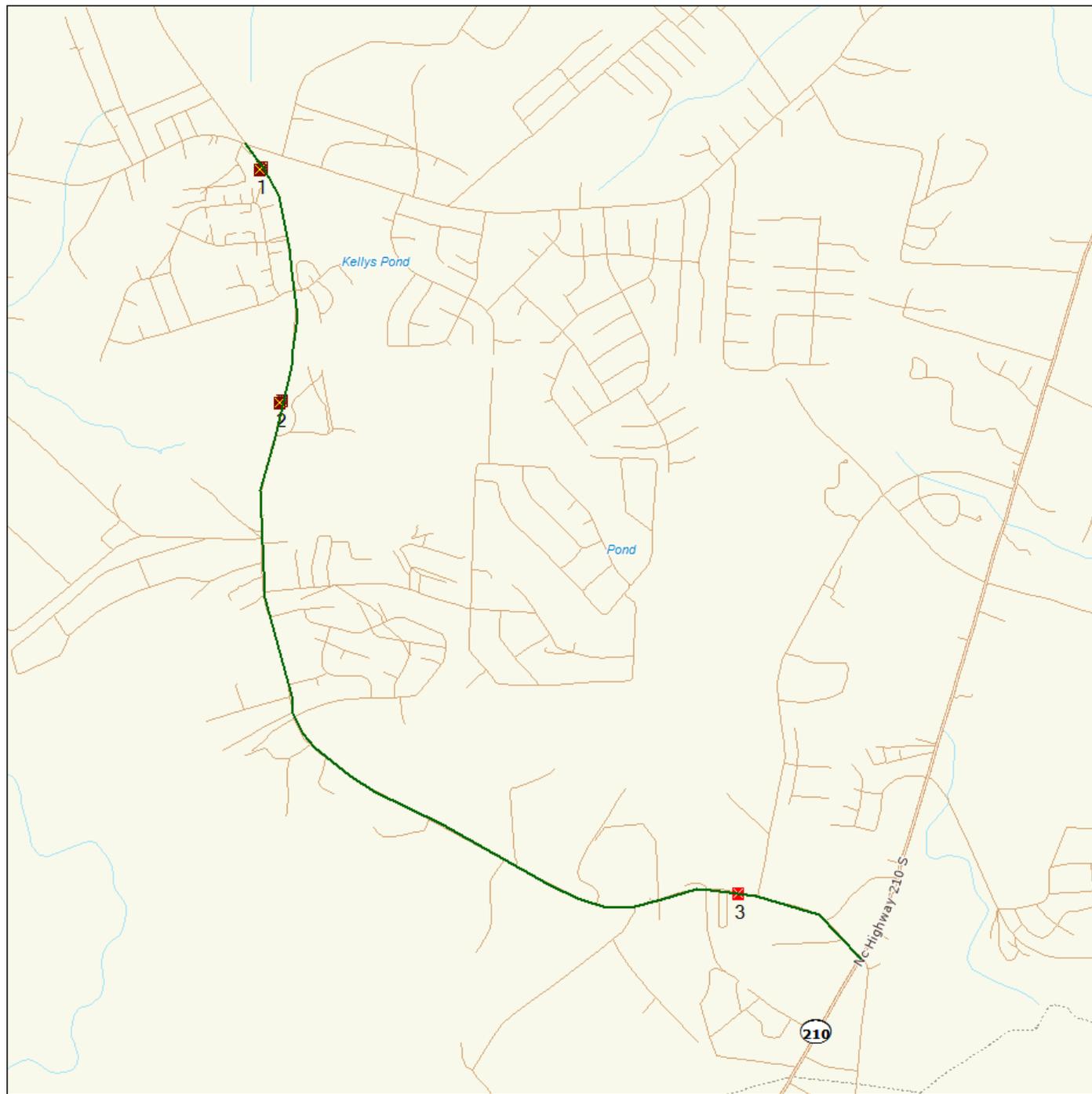
Environmental FirstSearch

.12 Mile Radius from Line

Non-ASTM Map: Spills 90



SR 1121 - NC 210 - SR 1120 , SPRING LAKE, NC 28390



Source: Tele Atlas

- Linear Search Line 
 - Identified Site, Multiple Sites, Receptor   
 - NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste 
 - Triballand 
 - National Historic Sites and Landmark Sites  
- Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius

APPENDIX C

GEOPHYSICAL INVESTIGATION REPORT

EM61 & GPR SURVEYS

**NCDOT ROW PROJECT
2281 RAY ROAD, SPRING LAKE, NC (PARCEL 022)
NCDOT Project U-3465 (39017.1.1)
Harnett County, North Carolina**

October 11, 2012

**Report prepared for: Mr. Gordon Box
North Carolina Department of Transportation
GeoEnvironmental Project Manager
Geotechnical Engineering Unit
GeoEnvironmental Section
1589 Mail Service Center
Raleigh, North Carolina 27699-1589**

Prepared by: 
Eric C. Cross, P.G.
NC License #2181

Reviewed by: 
Douglas A. Canavello, P.G.
NC License #1066

**PYRAMID ENVIRONMENTAL & ENGINEERING, P.C.
P.O. Box 16265
GREENSBORO, NC 27416-0265
(336) 335-3174**

NCDOT Contract 700012300
PO# 6300031797

NC Board for Licensing of Geologists C-257
NC Board of Examiners for Engineers & Surveyors C-1251

**NCDOT – Geotechnical Engineering Unit
NCDOT ROW PROJECT
2281 RAY ROAD, SPRING LAKE, NC (PARCEL 022)
NCDOT Project U-3465 (39017.1.1)
Harnett County, North Carolina**

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3.0 DISCUSSION OF RESULTS.....	2
4.0 SUMMARY & CONCLUSIONS.....	4
5.0 LIMITATIONS.....	5

FIGURES

Figure 1	Site Photographs
Figure 2	EM61 Bottom Coil Metal Detection Results
Figure 3	EM61 Differential Metal Detection Results
Figure 4	GPR Transect Location, Image, and Possible UST Location

1.0 INTRODUCTION

Pyramid Environmental & Engineering, PC (Pyramid) conducted a geophysical investigation for the North Carolina Department of Transportation (NCDOT) across the proposed right-of way (ROW) and easement areas of the property located at 2281 Ray Road, Spring Lake, NC (Parcel 022). The survey area, as directed by the NCDOT, spanned across the proposed ROW/easement area north of Highgrove Drive and west of Ray Road in Parcel 022. Conducted on September 6 and 7, 2012, the geophysical investigation was performed as part of the North Carolina Department of Transportation (NCDOT) ROW expansion project to determine if unknown, metallic underground storage tanks (USTs) were present beneath the proposed ROW and easements areas of the site.

The northern half of the site surveyed was predominantly a concrete and asphalt parking lot, and the southern half was predominantly an open grassy area. The NCDOT boundary set for the geophysical survey area had a maximum width (east/west) of approximately 150 feet and a maximum length (north/south) of approximately 500 feet. Photographs of the site are shown in **Figure 1**.

2.0 FIELD METHODOLOGY

Prior to conducting the geophysical investigation, a 10-foot by 10-foot survey grid was established across the geophysical survey area using measuring tapes and water-based marking paint. These grid marks were used as X-Y coordinates for location control when collecting the geophysical data and establishing base maps for the geophysical results.

The geophysical investigation consisted of electromagnetic (EM) induction-metal detection surveys and ground penetrating radar (GPR) surveys. The EM survey was performed on September 6 and 7, 2012, using a Geonics EM61-MK2 metal detection instrument. 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. All of the EM61 data were digitally collected at approximately 0.8 foot intervals along north-south trending, parallel survey lines spaced five feet apart. All of the data were downloaded to a computer

and reviewed in the field and office using the Geonics DAT61MK2 and Surfer for Windows Version 7.0 software programs.

GPR data were acquired on September 9, 2012, across selected EM61 differential anomalies using a GSSI SIR-3000 unit equipped with a 400 MHz antenna. Data were collected generally from east to west and north to south across specific EM61 anomalies. All of 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 an estimated two-way travel time of 8 nanoseconds per foot. Specific GPR transects across probable or confirmed USTs were saved to the hard drive and analyzed further upon completion of the field work.

Preliminary geophysical results were emailed to Gordon Box on September 28, 2012.

3.0 DISCUSSION OF RESULTS

Contour plots of the EM61 bottom coil and differential results obtained across the proposed ROW and easement areas at the property are presented in **Figures 2 and 3**, respectively. The bottom coil results represent the most sensitive component of the EM61 instrument and detect metal objects regardless of size. The bottom coil response can be used to delineate metal conduits or utility lines, small, isolated metal objects, and areas containing insignificant metal debris. The differential results are obtained from the difference between the top and bottom coils of the EM61 instrument. The differential results focus on the larger metal objects such as drum and UST-size objects and ignore the smaller insignificant metal objects.

The bottom coil EM61 response between coordinates X=20 and X=140 at Y=80 is interpreted to be the result of a buried utility line across this area of the property. The feature at X=75, Y=45 is the result of a metal street sign. The EM responses centered at X=150, Y=65 are due to a combination of the presence of a metal street sign and a storm drain at this location. The EM responses at coordinates X=145, Y=135 and at X=160, Y=165 are due to metal signs at these locations. The features recorded near Ray Road between Y=130 and Y=150 are likely the result of isolated buried

metallic debris. The feature mapped at X=160, Y=400 is the result of a metal sign at this location. The anomaly mapped at X=170, Y=475 is due to a fire hydrant. Lastly, the feature mapped in front of the Beauty Supply Store at coordinates X=120, Y=280 was suspected to be a possible metallic UST. GPR scans were performed across all anomalies that were not readily attributable to visible objects at the ground surface or utilities.

As stated above, GPR scans were performed and data viewed in real time across the high amplitude EM61 anomalies that could not be attributed to visible objects at the ground surface. The GPR scans confirmed that the anomalies near Ray Road between Y=230 and Y=250 were not metallic USTs, and were likely due to buried debris. The anomaly in front of the Beauty Supply Store exhibited characteristics that were consistent with a possible metallic UST, however, the shape of the object appeared to be spherical rather than elongated like a typical UST, and thus this anomaly is classified as a Possible UST. The possible tank was observed to exhibit an average width of approximately 15 feet and was at a depth of approximately 7 feet below land surface (bls). Multiple reconnaissance GPR transects were performed across the area and data observed in real time, and a single GPR transect was saved to the hard drive. Figure 4 presents the location of the transect, the GPR transect image, and an approximate outline on the ground surface of the location of the possible UST.

The geophysical investigation provides evidence that the area containing the proposed ROW and easement at Parcel 022 contains a possible metallic UST to the east of the Beauty Supply Store building.

In accordance with the scope of work provided to Pyramid by the NCDOT, we also searched the property for any signs of monitor wells or groundwater wells within the proposed ROW or easement areas. No wells were observed at the time of our inspection.

4.0 SUMMARY & CONCLUSIONS

Our evaluation of the EM61 and GPR data collected across the proposed ROW and easement area at 2281 Ray Road, Spring Lake, North Carolina, (Parcel 022) provides the following summary and conclusions:

- The EM61 and GPR surveys provided reliable results for the detection of metallic USTs within the geophysical survey area.
- The majority of the EM61 anomalies were the result of visible objects at the ground surface including metal street signs, storm drains, and a fire hydrant. An east/west oriented anomaly at the south end of the survey area was interpreted to be the result of a buried utility line. EM61 anomalies near Ray Road between Y=230 and Y=250 are likely the result of buried metallic debris. A single anomaly to the east of the Beauty Supply Store was interpreted to be the result of a possible metallic UST. GPR scans were performed to verify the buried debris and further investigate the possible metallic UST.
- The GPR scans provided evidence of a possible metallic UST at the site. The anomaly in front of the Beauty Supply Store exhibited characteristics that were consistent with a possible metallic UST, however, the shape of the object appeared to be spherical rather than elongated like a typical UST, and thus this anomaly is classified as a Possible UST. The possible tank was observed to exhibit an average width of approximately 15 feet and was at a depth of approximately 7 feet below land surface (bls).
- The geophysical investigation suggests that the proposed ROW and easement areas at the property may contain one possible metallic UST.
- Site observations did not indicate the presence of any monitor wells or groundwater wells at the time of our inspection.

5.0 LIMITATIONS

EM61 and GPR surveys have been performed and this report prepared for the NCDOT 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 that metallic USTs do not lie within the proposed ROW and easement area of the Harnett County property, but that none were detected.

FIGURES



Photograph of portion of survey area, facing approximately south



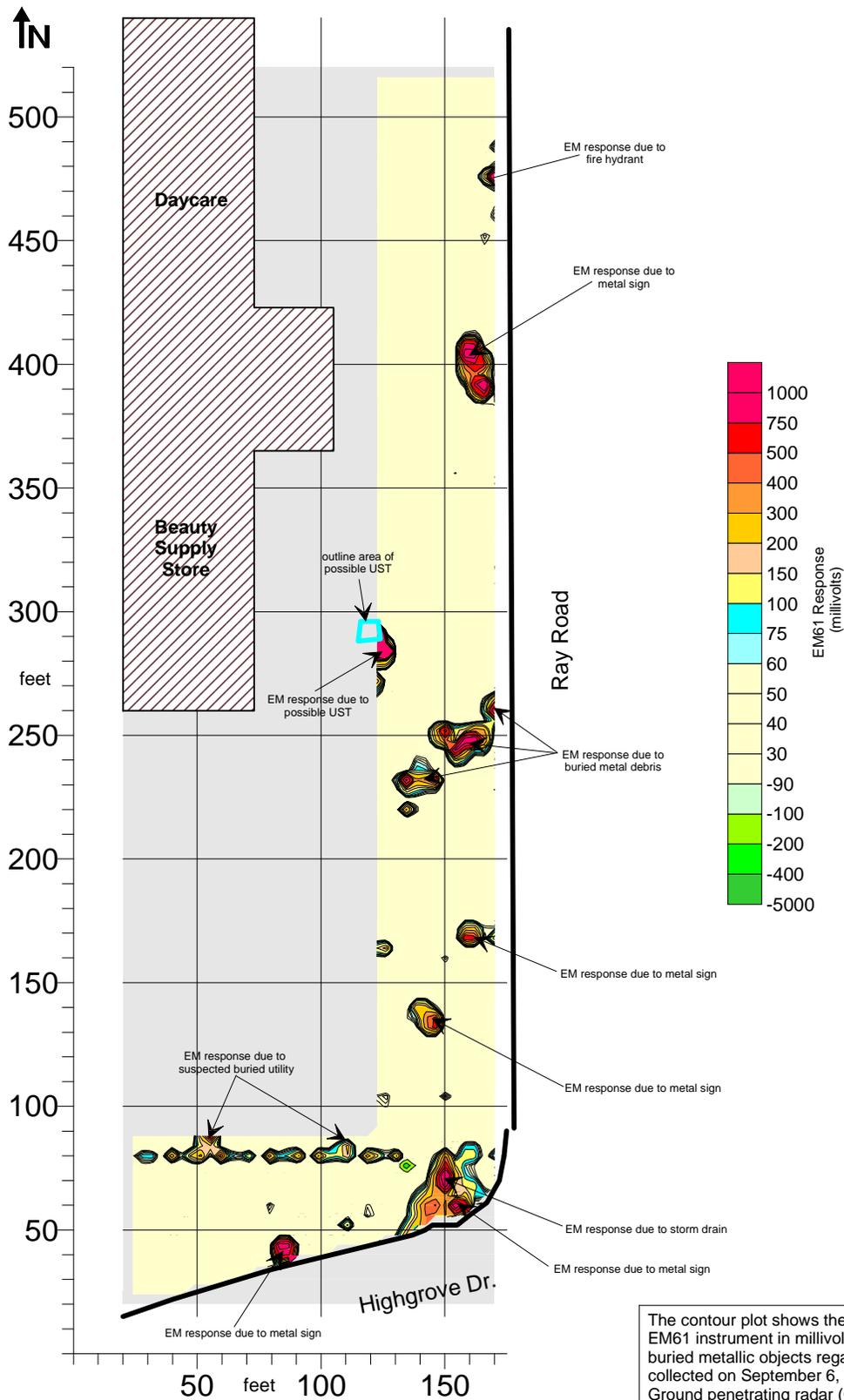
Photograph of portion of portion of survey area, facing approximately north



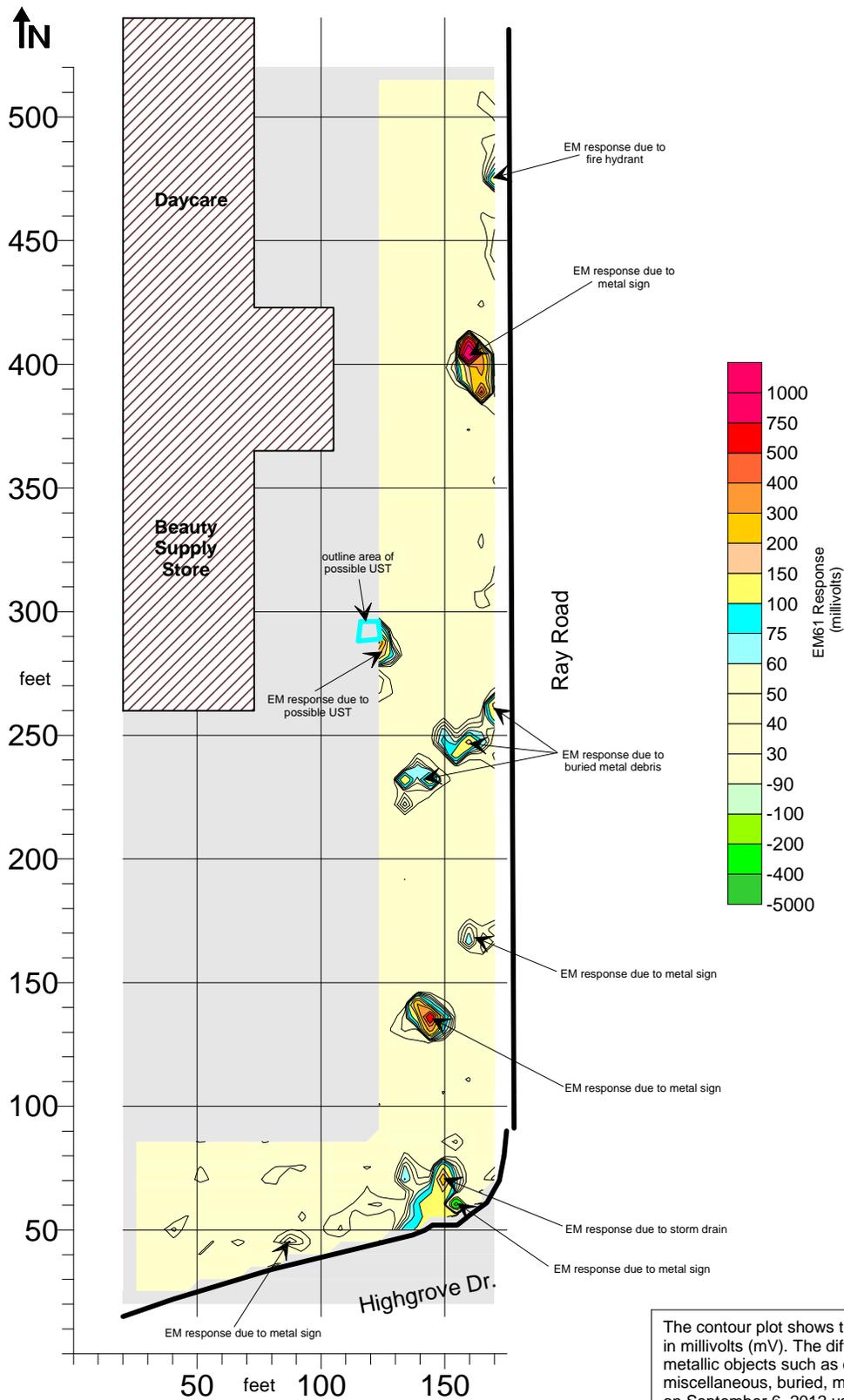
CLIENT	NORTH CAROLINA DEPARTMENT OF TRANSPORTATION		DATE	09/06/12	DRAWN	ECC
PROJECT	NCDOT PROJECT U-3465 (39017.1.1) - PARCEL 022		LAY		CRIND	
CITY	SPRING LAKE	STATE	NORTH CAROLINA	ENGR		
TITLE	GEOPHYSICAL RESULTS		J-NO.	2012-228	FOUNDER	

SITE PHOTOGRAPHS

FIGURE 1



The contour plot shows the bottom coil (most sensitive) results of the EM61 instrument in millivolts (mV). The bottom coil response shows buried metallic objects regardless of size. The EM61 data were collected on September 6, 2012 using a Geonics EM61 instrument. Ground penetrating radar (GPR) data were acquired across selected EM61 anomalies on September 7, 2012, using a Geophysical Survey Systems SIR 3000 instrument with a 400 MHz antenna.

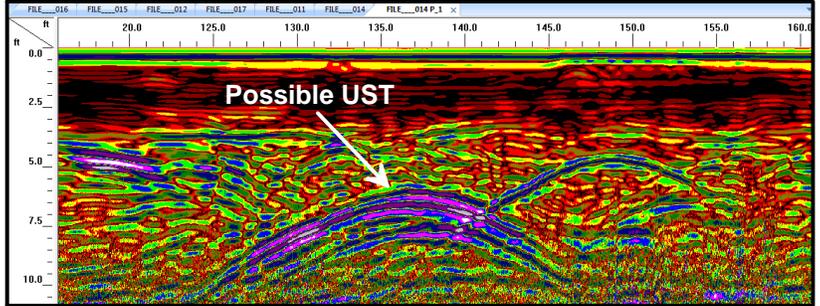
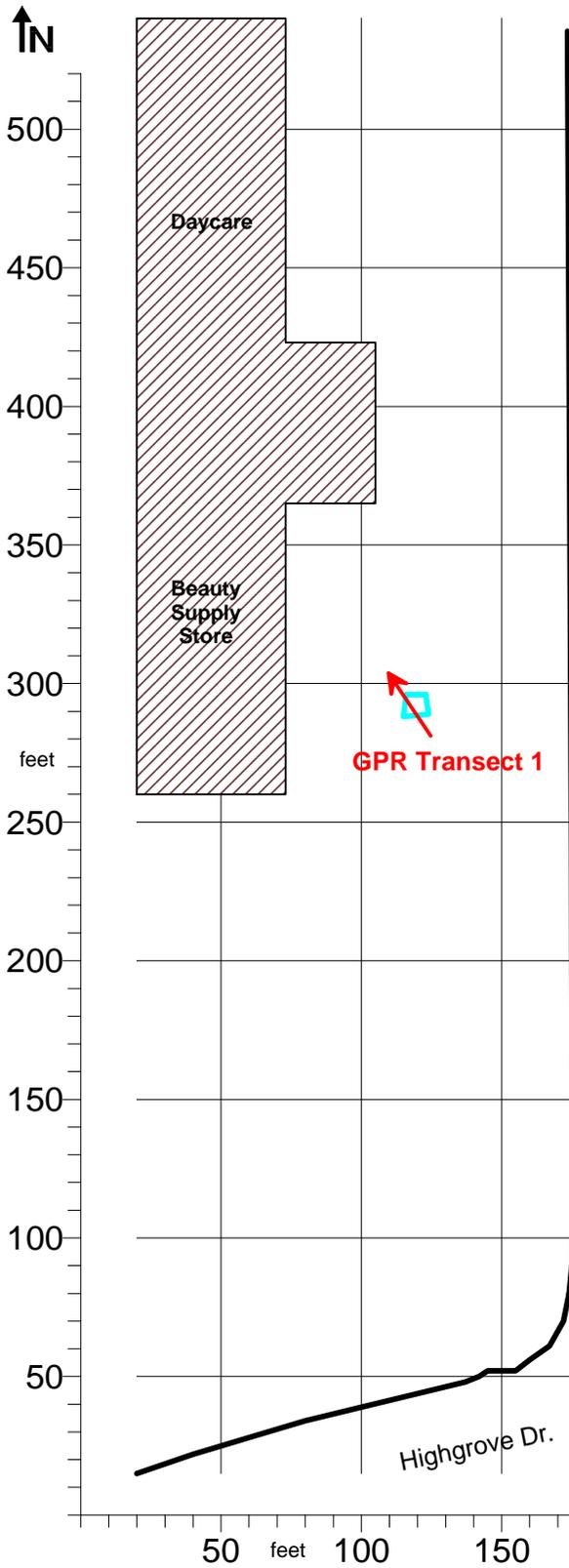


The contour plot shows the differential results of the EM61 instrument in millivolts (mV). The differential response focuses on larger, buried metallic objects such as drums and USTs and ignores smaller miscellaneous, buried, metal debris. The EM61 data were collected on September 6, 2012 using a Geonics EM61 instrument. Ground penetrating radar (GPR) data were acquired across selected EM61 Anomalies on September 7, 2012 using a Geophysical Survey Systems SIR 3000 instrument with a 400 MHz antenna.



CLIENT	NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	DATE	09/06/12	DRAWN	ECC
SITE	NCDOT PROJECT U-3465 (39017.1.1) - PARCEL 022	LAY		EDITED	
CITY	SPRING LAKE	STATE	NORTH CAROLINA	DATE	
TITLE	GEOPHYSICAL RESULTS		NO.	2012-228	FIGURE

EM61 DIFFERENTIAL RESPONSE CONTOURS



GPR Transect Image Across Possible Metallic UST

Ray Road



Approximate Location of Possible Metallic UST

APPENDIX D

APPENDIX E

Laboratory Report of Analysis

To: Tim Leatherman
 Pyramid
 PO Box 16265
 Greensboro, NC 27416

Report Number: **31202946**

Client Project: **Ray Rd., Parcel 1022**

Dear Tim Leatherman,

Enclosed are the results of the analytical services performed under the referenced project for the received samples and associated QC as applicable. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of five years in the event they are required for future reference. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. Any samples submitted to our laboratory will be retained for a maximum of thirty (30) days from the date of this report unless other arrangements are requested.

If there are any questions about the report or services performed during this project, please call Barbara A. Hager at (910) 350-1903. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS North America Inc. for your analytical services. We look forward to working with you again on any additional analytical needs.

Sincerely,
 SGS North America Inc.

Barbara A. Hager
 2012.09.25 08:54:32 -05'00'

Barbara A. Hager
 Project Manager
 barbara.hager@sgs.com

Date

ANALYTICAL PERSPECTIVES IS NOW PART OF SGS, THE WORLD'S LEADING INSPECTION, VERIFICATION, TESTING AND CERTIFICATION COMPANY.

Laboratory Qualifiers

Report Definitions

DL	Method, Instrument, or Estimated Detection Limit per Analytical Method
CL	Control Limits for the recovery result of a parameter
LOQ	Reporting Limit
DF	Dilution Factor
RPD	Relative Percent Difference
LCS(D)	Laboratory Control Spike (Duplicate)
MS(D)	Matrix Spike (Duplicate)
MB	Method Blank

Qualifier Definitions

*	Recovery or RPD outside of control limits
B	Analyte was detected in the Lab Method Blank at a level above the LOQ
U	Undetected (Reported as ND or < DL)
V	Recovery is below quality control limit. The data has been validated based on a favorable signal-to-noise and detection limit
A	Amount detected is less than the Lower Method Calibration Limit
J	Estimated Concentration.
O	The recovery of this analyte in the OPR is above the Method QC Limits and the reported concentration in the sample may be biased high
E	Amount detected is greater than the Upper Calibration Limit
S	The amount of analyte present has saturated the detector. This situation results in an underestimation of the affected analyte(s)
Q	Indicates the presence of a quantitative interference. This situation may result in an underestimation of the affected analyte(s)
I	Indicates the presence of a qualitative interference that could cause a false positive or an overestimation of the affected analyte(s)
DPE	Indicates the presence of a peak in the polychlorinated diphenylether channel that could cause a false positive or an overestimation of the affected analyte(s)
TIC	Tentatively Identified Compound
EMPC	Estimated Maximum possible Concentration due to ion ratio failure
ND	Not Detected
K	Result is estimated due to ion ratio failure in High Resolution PCB Analysis
P	RPD > 40% between results of dual columns
D	Spike or surrogate was diluted out in order to achieve a parameter result within instrument calibration range

Samples requiring manual integrations for various congeners and/or standards are marked and dated by the analyst. A code definition is provided below:

M1 Mis-identified peak

Note Results pages that include a value for "Solids (%)" have been adjusted for moisture content.

Sample Summary

<u>Client Sample ID</u>	<u>Lab Sample ID</u>	<u>Collected</u>	<u>Received</u>	<u>Matrix</u>
22-1 (2-5)	31202946001	09/13/2012 08:50	09/17/2012 08:40	Soil-Solid as dry weight
22-2 (5-7.5)	31202946002	09/13/2012 09:15	09/17/2012 08:40	Soil-Solid as dry weight
22-3 (5-7.5)	31202946003	09/13/2012 09:30	09/17/2012 08:40	Soil-Solid as dry weight
22-3 (TW)	31202946004	09/13/2012 10:45	09/17/2012 08:40	Water
22-4 (3-5)	31202946005	09/13/2012 11:00	09/17/2012 08:40	Soil-Solid as dry weight

Case Narrative**22-2 (5-7.5)**

8015 GRO- A batch MS/MSD is not reported with batch VGC2149 as the parent sample required additional dilutions.

22-3 (5-7.5)

8015 GRO- A batch MS/MSD is not reported with batch VGC2149 as the parent sample required additional dilutions.

22-4 (3-5)

8015 GRO- A batch MS/MSD is not reported with batch VGC2149 as the parent sample required additional dilutions.

LCS for HBN 29077 [VXX/4027]

8015 GRO- A batch MS/MSD is not reported with batch VGC2149 as the parent sample required additional dilutions.

LCSD for HBN 29077 [VXX/4027]

8015 GRO- A batch MS/MSD is not reported with batch VGC2149 as the parent sample required additional dilutions.

MB for HBN 29077 [VXX/4027]

8015 GRO- A batch MS/MSD is not reported with batch VGC2149 as the parent sample required additional dilutions.

Detectable Results Summary

Client Sample ID: **22-3 (TW)**
 Lab Sample ID: 31202946004-B
SM 6200-B

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	
Benzene	0.190	ug/L	J
Chloroform	0.730	ug/L	
Toluene	0.200	ug/L	J

Results of 22-1 (2-5)

Client Sample ID: **22-1 (2-5)**
 Client Project ID: **Ray Rd., Parcel 1022**
 Lab Sample ID: 31202946001-A
 Lab Project ID: 31202946

Collection Date: 09/13/2012 08:50
 Received Date: 09/17/2012 08:40
 Matrix: Soil-Solid as dry weight
 Solids (%): 86.90

Results by SW-846 8015C GRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>DL</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Gasoline Range Organics (GRO)	ND	U	3.70	3.70	mg/kg	1	09/20/2012 5:48
Surrogates							
4-Bromofluorobenzene	103			70.0-130	%	1	09/20/2012 5:48

Batch Information

Analytical Batch: **VG2148**
 Analytical Method: **SW-846 8015C GRO**
 Instrument: **GC7**
 Analyst: **MDY**

Prep Batch: **VXX4026**
 Prep Method: **SW-846 5035**
 Prep Date/Time: **09/18/2012 09:01**
 Prep Initial Wt./Vol.: **6.22 g**
 Prep Extract Vol: **5 mL**

Results of 22-1 (2-5)

Client Sample ID: **22-1 (2-5)**
 Client Project ID: **Ray Rd., Parcel 1022**
 Lab Sample ID: 31202946001-C
 Lab Project ID: 31202946

Collection Date: 09/13/2012 08:50
 Received Date: 09/17/2012 08:40
 Matrix: Soil-Solid as dry weight
 Solids (%): 86.90

Results by SW-846 8015C DRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>DL</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Diesel Range Organics (DRO)	ND	U	6.39	6.39	mg/kg	1	09/20/2012 5:42
Surrogates							
o-Terphenyl	87.7			40.0-140	%	1	09/20/2012 5:42

Batch Information

Analytical Batch: **XGC2541**
 Analytical Method: **SW-846 8015C DRO**
 Instrument: **GC6**
 Analyst: **DTF**

Prep Batch: **XXX3061**
 Prep Method: **SW-846 3541**
 Prep Date/Time: **09/18/2012 12:55**
 Prep Initial Wt./Vol.: **36.06 g**
 Prep Extract Vol: **10 mL**

5 results of 22-21 (-5) (R)

Client Sample ID: 22-21 (-5) (R)
 Client Project ID: a y d f a .) , P y r c e l 1 0 S 2 2
 Lab Sample ID: 31202946002-A
 Lab Project ID: 31202946

Collection Date: 09/13/2012 09:18
 5 e c e i R e v Date: 09/1d/2012 07:40
 Matrix: Soil-Soliv as vry weight
 Solivs (%): dd.80

5 results by W8 -46C4S0(G1Da u

Parameter	5 result	Qual	DL	LOQ/CL	Units	DF	Date Analyzev
Gasoline 5 ange Organics (G5 O)	ND	U	3.37	3.37	mg/kg	1	09/20/2012 14:19
W8rrgt y8B							
4-Bromofluorobenzene	104			d0.0-130	%	1	09/20/2012 14:19

h y s c l 1 f r g r i y 8 g f

Analytical Batch: XOG206/
 Analytical Methov: W8 -46C4S0(G1Da u
 Instrument: OG5
 Analyst: MDY

Prep Batch: X336S25
 Prep Methov: W8 -46C(S9(
 Prep Date/Time: S/ :04:2S021S/ LS2
 Prep Initial Wt./Vol.: 5)C6t
 Prep Extract Vol: (1 7

5 results of 22-2 (5-7.5)

Client Sample ID: 22-2 (5-7.5)
 Client Project ID: Ray Rd., Parcel 1022
 Lab Sample ID: 31202946002-C
 Lab Project ID: 31202946

Collection Date: 09/13/2012 09:18
 5 ecei Rev Date: 09/1d/2012 07:40
 Matrix: Soil-Soliv as vry weight
 Solivs (%): dd.80

5 results by SW-846 8015C DRO

Parameter	5 result	Qual	DL	LOQ/CL	Units	DF	Date Analyzev
Diesel 5 ange Organics (D5 O)	ND	U	d.28	d.28	mg/kg	1	09/20/2012 6:11
Surrogates							
o-Terphenyl	76.4			40.0-140	%	1	09/20/2012 6:11

Batch Information

Analytical Batch: XGC2541
 Analytical Methov: SW-846 8015C DRO
 Instrument: GC6
 Analyst: DTF

Prep Batch: XXX3061
 Prep Methov: SW-846 3541
 Prep Date/Time: 09/18/2012 12:55
 Prep Initial Wt./Vol.: 35.59 g
 Prep Extract Vol: 10 mL

8 exQtX of 22-1 (5-) F5a

Client Sample ID: **22-1 (5-) F5a**
 Client Project ID: **y d. y, RPr dcel 0SV22**
 Lab Sample ID: 31202946003-A
 Lab Project ID: 31202946

Collection Date: 09/13/2012 09:30
 8 ecei5eR Date: 09/1v/2012 0d:40
 7 atriM Soil-SoliRax Rrs y eiwgt
 SoliRax h (% d1)60

8 exQtX bs 84 -6CG6V650 u y o

Parameter	8 exQt	OCal	DL	L. O/CL	unitx	DU	Date Analsf eR
z axoline 8 anwe . rwanicx lz 8. %	GD	u	3)dk	3)dk	mwNw	1	09/20/2012 14:4k
8 gcat sdB h							
4-BromoFQrobenf ene	104			v0)0-130	(1	09/20/2012 14:4k

I dEn frnt cV dBf m

Analtical Batcg: **3 u O2SC/**
 Analtical 7 etgoR **84 -6CG6V650 u y o**
 InxtrQment: u O)
 Analsxt: **MDY**

Prep Batcg: **399 CV2)**
 Prep 7 etgoR **84 -6CG5V15**
 Prep Date/Time: **W :S6:2V62 W LV2**
 Prep Initial Wt)/Vol): **CRGs**
 Prep EMract Vol: **5 V 7**

Results of 22- (57-.)7R

Client Sample ID: 22- (57-.)7R
 Client Project ID: a yd(a,)Rr yœl 10S22
 Lab Sample ID: 31202946003-C
 Lab Project ID: 31202946

Collection Date: 09/13/2012 09:30
 Received Date: 09/17/2012 08:40
 Matrix: Soil-Solid as dry weight
 Solids (%): 81.60

Results by W8 -46C(4S07D(Oa u

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>DL</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Diesel Range Organics (DRO)	ND	U	7.29	7.29	mg/kg	1	09/20/2012 6:39
Wbœgt ysl B							
o-Terphenyl	102			40.0-140	%	1	09/20/2012 6:39

hysœl (rf rœd yœgf

Analytical Batch: 3GD2760
 Analytical Method: W8 -46C(4S07D(Oa u
 Instrument: GDC
 Analyst: OTF

Prep Batch: 333 SC0
 Prep Method: W8 -46C(760
 Prep Date/Time: S9/04/2S02((02:77
 Prep Initial Wt./Vol.:)C6(t
 Prep Extract Vol: 0S(i L

Results of **22-3 (TW)**

Client Sample ID: **22-3 (TW)**
 Client Project ID: **Ray Rd., Parcel 1022**
 Lab Sample ID: 31202946004-B
 Lab Project ID: 31202946

Collection Date: 09/13/2012 10:45
 Received Date: 09/17/2012 08:40
 Matrix: Water

Results by **SM 6200-B**

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	U	0.104	0.500	ug/L	1	09/21/2012 12:45
1,1,1-Trichloroethane	ND	U	0.123	0.500	ug/L	1	09/21/2012 12:45
1,1,2,2-Tetrachloroethane	ND	U	0.156	0.500	ug/L	1	09/21/2012 12:45
1,1,2-Trichloroethane	ND	U	0.126	0.500	ug/L	1	09/21/2012 12:45
1,1-Dichloroethane	ND	U	0.165	0.500	ug/L	1	09/21/2012 12:45
1,1-Dichloroethene	ND	U	0.212	0.500	ug/L	1	09/21/2012 12:45
1,1-Dichloropropene	ND	U	0.112	0.500	ug/L	1	09/21/2012 12:45
1,2,3-Trichlorobenzene	ND	U	0.110	0.500	ug/L	1	09/21/2012 12:45
1,2,3-Trichloropropane	ND	U	0.212	0.500	ug/L	1	09/21/2012 12:45
1,2,4-Trichlorobenzene	ND	U	0.0913	0.500	ug/L	1	09/21/2012 12:45
1,2,4-Trimethylbenzene	ND	U	0.0961	0.500	ug/L	1	09/21/2012 12:45
1,2-Dibromo-3-chloropropane	ND	U	0.748	5.00	ug/L	1	09/21/2012 12:45
1,2-Dibromoethane	ND	U	0.120	0.500	ug/L	1	09/21/2012 12:45
1,2-Dichlorobenzene	ND	U	0.137	0.500	ug/L	1	09/21/2012 12:45
1,2-Dichloroethane	ND	U	0.167	0.500	ug/L	1	09/21/2012 12:45
1,2-Dichloropropane	ND	U	0.163	0.500	ug/L	1	09/21/2012 12:45
1,3,5-Trimethylbenzene	ND	U	0.113	0.500	ug/L	1	09/21/2012 12:45
1,3-Dichlorobenzene	ND	U	0.103	0.500	ug/L	1	09/21/2012 12:45
1,3-Dichloropropane	ND	U	0.189	0.500	ug/L	1	09/21/2012 12:45
1,4-Dichlorobenzene	ND	U	0.130	0.500	ug/L	1	09/21/2012 12:45
2,2-Dichloropropane	ND	U	0.393	0.500	ug/L	1	09/21/2012 12:45
2-Chlorotoluene	ND	U	0.113	0.500	ug/L	1	09/21/2012 12:45
4-Chlorotoluene	ND	U	0.125	0.500	ug/L	1	09/21/2012 12:45
4-Isopropyltoluene	ND	U	0.0769	0.500	ug/L	1	09/21/2012 12:45
Benzene	0.190	J	0.113	0.500	ug/L	1	09/21/2012 12:45
Bromobenzene	ND	U	0.110	0.500	ug/L	1	09/21/2012 12:45
Bromochloromethane	ND	U	0.211	0.500	ug/L	1	09/21/2012 12:45
Bromodichloromethane	ND	U	0.110	0.500	ug/L	1	09/21/2012 12:45
Bromoform	ND	U	0.0974	0.500	ug/L	1	09/21/2012 12:45
Bromomethane	ND	U	0.237	0.500	ug/L	1	09/21/2012 12:45
n-Butylbenzene	ND	U	0.0769	0.500	ug/L	1	09/21/2012 12:45
Carbon tetrachloride	ND	U	0.101	0.500	ug/L	1	09/21/2012 12:45
Chlorobenzene	ND	U	0.116	0.500	ug/L	1	09/21/2012 12:45
Chloroethane	ND	U	0.311	0.500	ug/L	1	09/21/2012 12:45
Chloroform	0.730		0.139	0.500	ug/L	1	09/21/2012 12:45
Chloromethane	ND	U	0.448	0.500	ug/L	1	09/21/2012 12:45
Dibromochloromethane	ND	U	0.134	0.500	ug/L	1	09/21/2012 12:45
Dibromomethane	ND	U	0.168	0.500	ug/L	1	09/21/2012 12:45
Dichlorodifluoromethane	ND	U	0.171	5.00	ug/L	1	09/21/2012 12:45
cis-1,3-Dichloropropene	ND	U	0.0767	0.500	ug/L	1	09/21/2012 12:45
trans-1,3-Dichloropropene	ND	U	0.0862	0.500	ug/L	1	09/21/2012 12:45
Diisopropyl Ether	ND	U	0.155	0.500	ug/L	1	09/21/2012 12:45
Ethyl Benzene	ND	U	0.0877	0.500	ug/L	1	09/21/2012 12:45

Results of 22-3 (TW)

Client Sample ID: **22-3 (TW)**
 Client Project ID: **Ray Rd., Parcel 1022**
 Lab Sample ID: 31202946004-B
 Lab Project ID: 31202946

Collection Date: 09/13/2012 10:45
 Received Date: 09/17/2012 08:40
 Matrix: Water

Results by SM 6200-B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
Hexachlorobutadiene	ND	U	0.0792	0.500	ug/L	1	09/21/2012 12:45
Isopropylbenzene (Cumene)	ND	U	0.0869	0.500	ug/L	1	09/21/2012 12:45
Methylene chloride	ND	U	0.152	5.00	ug/L	1	09/21/2012 12:45
Naphthalene	ND	U	0.0855	0.500	ug/L	1	09/21/2012 12:45
Styrene	ND	U	0.102	0.500	ug/L	1	09/21/2012 12:45
Tetrachloroethene	ND	U	0.155	0.500	ug/L	1	09/21/2012 12:45
Toluene	0.200	J	0.133	0.500	ug/L	1	09/21/2012 12:45
Trichloroethene	ND	U	0.125	0.500	ug/L	1	09/21/2012 12:45
Trichlorofluoromethane	ND	U	0.137	0.500	ug/L	1	09/21/2012 12:45
Vinyl chloride	ND	U	0.124	0.500	ug/L	1	09/21/2012 12:45
Xylene (total)	ND	U	0.269	1.50	ug/L	1	09/21/2012 12:45
cis-1,2-Dichloroethene	ND	U	0.136	0.500	ug/L	1	09/21/2012 12:45
m,p-Xylene	ND	U	0.182	1.00	ug/L	1	09/21/2012 12:45
n-Propylbenzene	ND	U	0.113	0.500	ug/L	1	09/21/2012 12:45
o-Xylene	ND	U	0.0874	0.500	ug/L	1	09/21/2012 12:45
sec-Butylbenzene	ND	U	0.112	0.500	ug/L	1	09/21/2012 12:45
tert-Butyl methyl ether (MTBE)	ND	U	0.144	0.500	ug/L	1	09/21/2012 12:45
tert-Butylbenzene	ND	U	0.0855	0.500	ug/L	1	09/21/2012 12:45
trans-1,2-Dichloroethene	ND	U	0.223	0.500	ug/L	1	09/21/2012 12:45

Surrogates

1,2-Dichloroethane-d4	94.8			64.0-140	%	1	09/21/2012 12:45
4-Bromofluorobenzene	97.7			85.0-115	%	1	09/21/2012 12:45
Toluene d8	101			82.0-117	%	1	09/21/2012 12:45

Batch Information

Analytical Batch: **VMS2566**
 Analytical Method: **SM 6200-B**
 Instrument: **MSD8**
 Analyst: **BWS**

Prep Batch: **VXX4032**
 Prep Method: **SM 6200-B Prep**
 Prep Date/Time: **09/21/2012 08:35**
 Prep Initial Wt./Vol.: **40 mL**
 Prep Extract Vol: **40 mL**

5 results of 22-1 (5-) R

Client Sample ID: 22-1 (5-) R
 Client Project ID: a y d a . , P r y c e l 0 S V 2 2
 Lab Sample ID: 3120294600- A
 Lab Project ID: 31202946

Collection Date: 09/13/2012 11:00
 Receive Date: 09/14/2012 07:40
 Matrix: Soil/Solids as dry weight
 Solids (%): 89.20

5 results by 84 -61C 6V6) G O a u

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date / analyzed
Gasoline 5 range Organics (G5 O)	ND	U	3.3-	3.3-	mg/kg	1	09/20/2012 1- :10
8000gt ysl B							
4-Bromofluorobenzene	10-			0.04/30	%	1	09/20/2012 1- :10

Method of analysis

/ analytical Batch: XOG2S1/
 / analytical Method: 84 -61C 6V6) G O a u
 Instrument: O99
 / analyst: MDY

Prep Batch: X331V29
 Prep Method: 84 -61C 6V6)
 Prep Date/Time: W :S6:2V62 W L M
 Prep Initial Wt./vol.: 9.)) t
 Prep Extract Vol:) i 7

5 results of 22-1 (5-) R

Client Sample ID: 22-1 (5-) R
 Client Project ID: a y d a . , P r y c e l 0 S V 2 2
 Lab Sample ID: 3120294600-/C
 Lab Project ID: 31202946

Collection Date: 09/13/2012 11:00
 Receive Date: 09/14/2012 07:40
 Matrix: Soil/Soliv as vry weight
 Solivs (%): d9.20

5 results by 84 -61C6V6) D O a u

Parameter	Result	Qual	DL	LOQ&CL	Units	DF	Date Analyzed
Diesel 5 range Organics (D5 O)	ND	U	d.17	d.17	mg/kg	1	09/20/2012 d:d
8000gt ysl B							
o/Terphenyl	99.4			40.0/140	%	1	09/20/2012 d:d

h y s e l r f r g d y s g f

Analytical Batch: 3GD2) 1S
 Analytical Method: 84 -61C6V6) D O a u
 Instrument: GDC
 Analyst: OTF

Prep Batch: 3335VCS
 Prep Method: 84 -61C5) 1S
 Prep Date&Time: V0/S6/2V62 S2:))
 Prep Initial Wt.&vol.: 5) ,2 t
 Prep Extract Vol: SWI L

Batch Summary

Analytical Method: SM 6200-B

Prep Method: SW-846 5030B

Prep Batch: VXX4032

Prep Date: 09/21/2012 08:37

<u>Client Sample ID</u>	<u>Lab Sample ID</u>	<u>Analysis Date</u>	<u>Analytical Batch</u>	<u>Instrument</u>	<u>Analyst</u>
LCS for HBN 29118 [VXX/4032]	90647	09/21/2012 10:42	VMS2566	MSD8	BWS
LCSD for HBN 29118 [VXX/4032]	90648	09/21/2012 11:07	VMS2566	MSD8	BWS
MB for HBN 29118 [VXX/4032]	90649	09/21/2012 12:21	VMS2566	MSD8	BWS
22-3 (TW)	31202946004	09/21/2012 12:45	VMS2566	MSD8	BWS
5019 MS	31202980006	09/21/2012 20:56	VMS2566	MSD8	BWS
5019 MSD	31202980007	09/21/2012 21:21	VMS2566	MSD8	BWS

Method Blank

Blank ID: MB for HBN 29118 [VXX/4032]

Matrix: Water

Blank Lab ID: 90649

QC for Samples:

31202946004

Results by SM 6200-B

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>DL</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>
Dichlorodifluoromethane	ND	U	0.171	5.00	ug/L	1
Chloromethane	ND	U	0.448	0.500	ug/L	1
Vinyl chloride	ND	U	0.124	0.500	ug/L	1
Bromomethane	ND	U	0.237	0.500	ug/L	1
Chloroethane	ND	U	0.311	0.500	ug/L	1
Trichlorofluoromethane	ND	U	0.137	0.500	ug/L	1
1,1-Dichloroethene	ND	U	0.212	0.500	ug/L	1
Methylene chloride	ND	U	0.152	5.00	ug/L	1
trans-1,2-Dichloroethene	ND	U	0.223	0.500	ug/L	1
tert-Butyl methyl ether (MTBE)	ND	U	0.144	0.500	ug/L	1
1,1-Dichloroethane	ND	U	0.165	0.500	ug/L	1
Diisopropyl Ether	ND	U	0.155	0.500	ug/L	1
2,2-Dichloropropane	ND	U	0.393	0.500	ug/L	1
cis-1,2-Dichloroethene	ND	U	0.136	0.500	ug/L	1
Bromochloromethane	ND	U	0.211	0.500	ug/L	1
Chloroform	ND	U	0.139	0.500	ug/L	1
1,1,1-Trichloroethane	ND	U	0.123	0.500	ug/L	1
Carbon tetrachloride	ND	U	0.101	0.500	ug/L	1
1,1-Dichloropropene	ND	U	0.112	0.500	ug/L	1
Benzene	ND	U	0.113	0.500	ug/L	1
1,2-Dichloroethane	ND	U	0.167	0.500	ug/L	1
Trichloroethene	ND	U	0.125	0.500	ug/L	1
1,2-Dichloropropane	ND	U	0.163	0.500	ug/L	1
Dibromomethane	ND	U	0.168	0.500	ug/L	1
Bromodichloromethane	ND	U	0.110	0.500	ug/L	1
cis-1,3-Dichloropropene	ND	U	0.0767	0.500	ug/L	1
Toluene	ND	U	0.133	0.500	ug/L	1
trans-1,3-Dichloropropene	ND	U	0.0862	0.500	ug/L	1
1,1,2-Trichloroethane	ND	U	0.126	0.500	ug/L	1
Tetrachloroethene	ND	U	0.155	0.500	ug/L	1
1,3-Dichloropropane	ND	U	0.189	0.500	ug/L	1
Dibromochloromethane	ND	U	0.134	0.500	ug/L	1
1,2-Dibromoethane	ND	U	0.120	0.500	ug/L	1
Chlorobenzene	ND	U	0.116	0.500	ug/L	1
1,1,1,2-Tetrachloroethane	ND	U	0.104	0.500	ug/L	1
Bromoform	ND	U	0.0974	0.500	ug/L	1
Bromobenzene	ND	U	0.110	0.500	ug/L	1
1,1,2,2-Tetrachloroethane	ND	U	0.156	0.500	ug/L	1
1,2,3-Trichloropropane	ND	U	0.212	0.500	ug/L	1
Ethyl Benzene	ND	U	0.0877	0.500	ug/L	1
m,p-Xylene	ND	U	0.182	1.00	ug/L	1

Method Blank

Blank ID: MB for HBN 29118 [VXX/4032]
 Blank Lab ID: 90649
 QC for Samples:
 31202946004

Matrix: Water

Results by SM 6200-B

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>DL</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>
Styrene	ND	U	0.102	0.500	ug/L	1
o-Xylene	ND	U	0.0874	0.500	ug/L	1
Xylene (total)	ND	U	0.269	1.50	ug/L	1
Isopropylbenzene (Cumene)	ND	U	0.0869	0.500	ug/L	1
n-Propylbenzene	ND	U	0.113	0.500	ug/L	1
2-Chlorotoluene	ND	U	0.113	0.500	ug/L	1
4-Chlorotoluene	ND	U	0.125	0.500	ug/L	1
1,3,5-Trimethylbenzene	ND	U	0.113	0.500	ug/L	1
tert-Butylbenzene	ND	U	0.0855	0.500	ug/L	1
1,2,4-Trimethylbenzene	ND	U	0.0961	0.500	ug/L	1
sec-Butylbenzene	ND	U	0.112	0.500	ug/L	1
1,3-Dichlorobenzene	ND	U	0.103	0.500	ug/L	1
4-Isopropyltoluene	ND	U	0.0769	0.500	ug/L	1
1,4-Dichlorobenzene	ND	U	0.130	0.500	ug/L	1
1,2-Dichlorobenzene	ND	U	0.137	0.500	ug/L	1
n-Butylbenzene	ND	U	0.0769	0.500	ug/L	1
1,2-Dibromo-3-chloropropane	ND	U	0.748	5.00	ug/L	1
1,2,4-Trichlorobenzene	ND	U	0.0913	0.500	ug/L	1
Hexachlorobutadiene	ND	U	0.0792	0.500	ug/L	1
Naphthalene	ND	U	0.0855	0.500	ug/L	1
1,2,3-Trichlorobenzene	ND	U	0.110	0.500	ug/L	1
Surrogates						
1,2-Dichloroethane-d4	91.9			64.0-140	%	1
Toluene d8	96.6			82.0-117	%	1
4-Bromofluorobenzene	96.3			85.0-115	%	1

Batch Information

Analytical Batch: VMS2566
 Analytical Method: SM 6200-B
 Instrument: MSD8
 Analyst: BWS

Prep Batch: VXX4032
 Prep Method: SW-846 5030B
 Prep Date/Time: 9/21/2012 8:37:18AM
 Prep Initial Wt./Vol.: 40 mL
 Prep Extract Vol: 40 mL

Blank Spike Summary

Blank Spike ID: LCS for HBN 29118 [VXX/4032]
 Blank Spike Lab ID: 90647
 Date Analyzed: 09/21/2012 10:42

Spike Duplicate ID: LCSD for HBN 29118 [VXX/4032]
 Spike Duplicate Lab ID: 90648
 Date Analyzed: 09/21/2012 11:07
 Matrix: Water

QC for Samples: 31202946004

Results by SM 6200-B

Parameter	Blank Spike (ug/L)			Spike Duplicate (ug/L)			CL	RPD (%)	RPD CL
	Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Dichlorodifluoromethane	5.00	4.43	89	5.00	4.79	96	33.0-170	7.8	30.00
Chloromethane	5.00	4.76	95	5.00	4.65	93	57.0-132	2.3	30.00
Vinyl chloride	5.00	4.62	92	5.00	4.91	98	59.0-138	6.1	30.00
Bromomethane	5.00	5.82	116	5.00	5.00	100	51.0-134	15	30.00
Chloroethane	5.00	4.54	91	5.00	4.68	94	64.0-145	3.0	30.00
Trichlorofluoromethane	5.00	4.54	91	5.00	4.83	97	64.0-133	6.2	30.00
1,1-Dichloroethene	5.00	4.41	88	5.00	4.74	95	71.0-128	7.2	30.00
Methylene chloride	5.00	4.74	95	5.00	5.16	103	70.0-113	8.5	30.00
trans-1,2-Dichloroethene	5.00	4.68	94	5.00	4.70	94	57.0-138	0.43	30.00
tert-Butyl methyl ether (MTBE)	5.00	4.65	93	5.00	4.81	96	47.0-142	3.4	30.00
1,1-Dichloroethane	5.00	4.47	89	5.00	4.45	89	68.0-133	0.45	30.00
Diisopropyl Ether	5.00	6.33	127	5.00	6.16	123	66.0-132	2.7	30.00
2,2-Dichloropropane	5.00	5.33	107	5.00	5.49	110	74.0-125	3.0	30.00
cis-1,2-Dichloroethene	5.00	4.91	98	5.00	4.85	97	73.0-128	1.2	30.00
Bromochloromethane	5.00	4.95	99	5.00	5.35	107	73.0-128	7.8	30.00
Chloroform	5.00	4.96	99	5.00	5.27	105	74.0-124	6.1	30.00
1,1,1-Trichloroethane	5.00	5.24	105	5.00	5.35	107	76.0-119	2.1	30.00
Carbon tetrachloride	5.00	5.00	100	5.00	5.11	102	75.0-120	2.2	30.00
1,1-Dichloropropene	5.00	5.17	103	5.00	5.21	104	76.0-124	0.77	30.00
Benzene	5.00	5.11	102	5.00	5.26	105	76.0-124	2.9	30.00
1,2-Dichloroethane	5.00	5.13	103	5.00	5.20	104	76.0-119	1.4	30.00
Trichloroethene	5.00	4.89	98	5.00	5.18	104	74.0-121	5.8	30.00
1,2-Dichloropropane	5.00	5.17	103	5.00	5.16	103	74.0-124	0.19	30.00
Dibromomethane	5.00	4.71	94	5.00	5.00	100	71.0-128	6.0	30.00
Bromodichloromethane	5.00	4.90	98	5.00	5.15	103	72.0-120	5.0	30.00
cis-1,3-Dichloropropene	5.00	4.95	99	5.00	4.93	99	73.0-122	0.40	30.00
Toluene	5.00	4.88	98	5.00	5.12	102	75.0-123	4.8	30.00
trans-1,3-Dichloropropene	5.00	4.84	97	5.00	4.93	99	70.0-125	1.8	30.00
1,1,2-Trichloroethane	5.00	5.09	102	5.00	4.74	95	76.0-121	7.1	30.00
Tetrachloroethene	5.00	5.10	102	5.00	4.98	100	59.0-112	2.4	30.00
1,3-Dichloropropane	5.00	5.17	103	5.00	5.06	101	74.0-120	2.2	30.00
Dibromochloromethane	5.00	5.20	104	5.00	4.75	95	67.0-122	9.0	30.00
1,2-Dibromoethane	5.00	5.53	111	5.00	5.02	100	74.0-119	9.7	30.00
Chlorobenzene	5.00	5.17	103	5.00	4.88	98	74.0-120	5.8	30.00

Blank Spike Summary

Blank Spike ID: LCS for HBN 29118 [VXX/4032]
 Blank Spike Lab ID: 90647
 Date Analyzed: 09/21/2012 10:42

Spike Duplicate ID: LCSD for HBN 29118 [VXX/4032]
 Spike Duplicate Lab ID: 90648
 Date Analyzed: 09/21/2012 11:07
 Matrix: Water

QC for Samples: 31202946004

Results by SM 6200-B

Parameter	Blank Spike (ug/L)			Spike Duplicate (ug/L)			CL	RPD (%)	RPD CL
	Spike	Result	Rec (%)	Spike	Result	Rec (%)			
1,1,1,2-Tetrachloroethane	5.00	4.98	100	5.00	5.29	106	73.0-119	6.0	30.00
Bromoform	5.00	5.34	107	5.00	5.53	111	62.0-127	3.5	30.00
Bromobenzene	5.00	5.26	105	5.00	4.95	99	75.0-120	6.1	30.00
1,1,2,2-Tetrachloroethane	5.00	5.23	105	5.00	5.18	104	68.0-129	0.96	30.00
1,2,3-Trichloropropane	5.00	5.43	109	5.00	4.43	89	67.0-126	20	30.00
Ethyl Benzene	5.00	5.31	106	5.00	5.21	104	76.0-123	1.9	30.00
m,p-Xylene	10.0	9.70	97	10.0	10.0	100	76.0-124	3.0	30.00
Styrene	5.00	5.20	104	5.00	5.15	103	76.0-121	0.97	30.00
o-Xylene	5.00	5.06	101	5.00	4.94	99	75.0-124	2.4	30.00
Isopropylbenzene (Cumene)	5.00	4.87	97	5.00	4.96	99	77.0-120	1.8	30.00
n-Propylbenzene	5.00	5.24	105	5.00	5.17	103	77.0-123	1.3	30.00
2-Chlorotoluene	5.00	5.00	100	5.00	5.12	102	74.0-127	2.4	30.00
4-Chlorotoluene	5.00	4.68	94	5.00	4.79	96	77.0-123	2.3	30.00
1,3,5-Trimethylbenzene	5.00	5.44	109	5.00	5.33	107	76.0-122	2.0	30.00
tert-Butylbenzene	5.00	5.24	105	5.00	4.91	98	67.0-122	6.5	30.00
1,2,4-Trimethylbenzene	5.00	5.35	107	5.00	5.28	106	76.0-124	1.3	30.00
sec-Butylbenzene	5.00	5.32	106	5.00	5.25	105	78.0-121	1.3	30.00
1,3-Dichlorobenzene	5.00	5.18	104	5.00	5.16	103	75.0-120	0.39	30.00
4-Isopropyltoluene	5.00	5.28	106	5.00	5.10	102	77.0-120	3.5	30.00
1,4-Dichlorobenzene	5.00	5.26	105	5.00	5.44	109	70.0-125	3.4	30.00
1,2-Dichlorobenzene	5.00	5.42	108	5.00	5.48	110	76.0-118	1.1	30.00
n-Butylbenzene	5.00	5.56	111	5.00	5.20	104	78.0-118	6.7	30.00
1,2-Dibromo-3-chloropropane	30.0	33.2	111	30.0	33.3	111	62.0-130	0.30	30.00
1,2,4-Trichlorobenzene	5.00	5.74	115	5.00	6.74	135*	72.0-119	16	30.00
Hexachlorobutadiene	5.00	5.08	102	5.00	5.96	119	69.0-121	16	30.00
Naphthalene	5.00	5.18	104	5.00	6.33	127*	67.0-122	20	30.00
1,2,3-Trichlorobenzene	5.00	5.42	108	5.00	5.72	114	21.0-193	5.4	30.00

Surrogates

1,2-Dichloroethane-d4	97.8	106	64.0-140
Toluene d8	96	99.5	82.0-117
4-Bromofluorobenzene	100	99.4	85.0-115

Blank Spike Summary

Blank Spike ID: LCS for HBN 29118 [VXX/4032]
 Blank Spike Lab ID: 90647
 Date Analyzed: 09/21/2012 10:42

Spike Duplicate ID: LCSD for HBN 29118 [VXX/4032]
 Spike Duplicate Lab ID: 90648
 Date Analyzed: 09/21/2012 11:07
 Matrix: Water

QC for Samples: 31202946004

Results by SM 6200-B

Parameter	Blank Spike (%)			Spike Duplicate (%)			CL	RPD (%)	RPD CL
	Spike	Result	Rec (%)	Spike	Result	Rec (%)			

Batch Information

Analytical Batch: **VMS2566**
 Analytical Method: **SM 6200-B**
 Instrument: **MSD8**
 Analyst: **BWS**

Prep Batch: **VXX4032**
 Prep Method: **SW-846 5030B**
 Prep Date/Time: **09/21/2012 08:37**
 Spike Init Wt./Vol.: **40 mL** Extract Vol: **40 mL**
 Dupe Init Wt./Vol.: **40 mL** Extract Vol: **40 mL**

Batch Summary

Analytical Method: SW-846 8015C GRO

Prep Method: SW-846 5035

Prep Batch: VXX4026

Prep Date: 09/19/2012 16:34

<u>Client Sample ID</u>	<u>Lab Sample ID</u>	<u>Analysis Date</u>	<u>Analytical Batch</u>	<u>Instrument</u>	<u>Analyst</u>
LCS for HBN 29064 [VXX/4026]	90225	09/19/2012 23:55	VGC2148	GC7	MDY
LCSD for HBN 29064 [VXX/4026]	90226	09/20/2012 00:20	VGC2148	GC7	MDY
MB for HBN 29064 [VXX/4026]	90227	09/20/2012 00:45	VGC2148	GC7	MDY
2DPT-05 (3.5-4ft)(89536MS)	90401	09/20/2012 04:57	VGC2148	GC7	MDY
2DPT-05 (3.5-4ft)(89536MSD)	90402	09/20/2012 05:22	VGC2148	GC7	MDY
22-1 (2-5)	31202946001	09/20/2012 05:48	VGC2148	GC7	MDY

Method Blank

Blank ID: MB for HBN 29064 [VXX/4026]
 Blank Lab ID: 90227
 QC for Samples:
 31202946001

Matrix: Soil-Solid as dry weight

Results by SW-846 8015C GRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>DL</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>
Gasoline Range Organics (GRO)	ND	U	4.00	4.00	mg/kg	1
Surrogates						
4-Bromofluorobenzene	99.4			70.0-130	%	1

Batch Information

Analytical Batch: VGC2148
 Analytical Method: SW-846 8015C GRO
 Instrument: GC7
 Analyst: MDY

Prep Batch: VXX4026
 Prep Method: SW-846 5035
 Prep Date/Time: 9/19/2012 4:34:50PM
 Prep Initial Wt./Vol.: 5 g
 Prep Extract Vol: 5 mL

Blank Spike Summary

Blank Spike ID: LCS for HBN 29064 [VXX/4026]
 Blank Spike Lab ID: 90225
 Date Analyzed: 09/19/2012 23:55

Spike Duplicate ID: LCSD for HBN 29064 [VXX/4026]
 Spike Duplicate Lab ID: 90226
 Date Analyzed: 09/20/2012 00:20
 Matrix: Soil-Solid as dry weight

QC for Samples: 31202946001

Results by SW-846 8015C GRO

Parameter	Blank Spike (mg/kg)			Spike Duplicate (mg/kg)			CL	RPD (%)	RPD CL
	Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Gasoline Range Organics (GRO)	16.0	15.9	99	16.0	16.3	102	70.0-130	2.5	30.00

Surrogates

4-Bromofluorobenzene	99.3	97.6	70.0-130
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Batch Information

Analytical Batch: **VGC2148**
 Analytical Method: **SW-846 8015C GRO**
 Instrument: **GC7**
 Analyst: **MDY**

Prep Batch: **VXX4026**
 Prep Method: **SW-846 5035**
 Prep Date/Time: **09/19/2012 16:34**
 Spike Init Wt./Vol.: **5 g** Extract Vol: **5 mL**
 Dupe Init Wt./Vol.: **5 g** Extract Vol: **5 mL**

Batch Summary

Analytical Method: SW-846 8015C GRO

Prep Method: SW-846 5035

Prep Batch: VXX4027

Prep Date: 09/20/2012 08:58

<u>Client Sample ID</u>	<u>Lab Sample ID</u>	<u>Analysis Date</u>	<u>Analytical Batch</u>	<u>Instrument</u>	<u>Analyst</u>
LCS for HBN 29077 [VXX/4027]	90312	09/20/2012 11:21	VGC2149	GC7	MDY
LCSD for HBN 29077 [VXX/4027]	90313	09/20/2012 11:47	VGC2149	GC7	MDY
MB for HBN 29077 [VXX/4027]	90314	09/20/2012 12:12	VGC2149	GC7	MDY
22-2 (5-7.5)	31202946002	09/20/2012 14:19	VGC2149	GC7	MDY
22-3 (5-7.5)	31202946003	09/20/2012 14:45	VGC2149	GC7	MDY
22-4 (3-5)	31202946005	09/20/2012 15:10	VGC2149	GC7	MDY

Method Blank

Blank ID: MB for HBN 29077 [VXX/4027]
 Blank Lab ID: 90314
 QC for Samples:
 31202946002, 31202946003, 31202946005

Matrix: Soil-Solid as dry weight

Results by SW-846 8015C GRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>DL</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>
Gasoline Range Organics (GRO)	ND	U	4.00	4.00	mg/kg	1
Surrogates						
4-Bromofluorobenzene	98.7			70.0-130	%	1

Batch Information

Analytical Batch: VGC2149
 Analytical Method: SW-846 8015C GRO
 Instrument: GC7
 Analyst: MDY

Prep Batch: VXX4027
 Prep Method: SW-846 5035
 Prep Date/Time: 9/20/2012 8:58:02AM
 Prep Initial Wt./Vol.: 5 g
 Prep Extract Vol: 5 mL

Blank Spike Summary

Blank Spike ID: LCS for HBN 29077 [VXX/4027]
 Blank Spike Lab ID: 90312
 Date Analyzed: 09/20/2012 11:21

Spike Duplicate ID: LCSD for HBN 29077 [VXX/4027]
 Spike Duplicate Lab ID: 90313
 Date Analyzed: 09/20/2012 11:47
 Matrix: Soil-Solid as dry weight

QC for Samples: 31202946002, 31202946003, 31202946005

Results by SW-846 8015C GRO

Parameter	Blank Spike (mg/kg)			Spike Duplicate (mg/kg)			CL	RPD (%)	RPD CL
	Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Gasoline Range Organics (GRO)	16.0	15.7	98	16.0	16.7	104	70.0-130	6.2	30.00

Surrogates

4-Bromofluorobenzene	92.5	97.6	70.0-130
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Batch Information

Analytical Batch: **VGC2147**
 Analytical Method: **SW-846 8015C GRO**
 Instrument: **GCM**
 Analyst: **DYX**

Prep Batch: **V33402M**
 Prep Method: **SW-846 5095**
 Prep Date/Time: **07/20/2012 08:58**
 Spike Init Wt./Vol.: **5 g** Extract Vol: **5 mL**
 Dupe Init Wt./Vol.: **5 g** Extract Vol: **5 mL**

Batch Summary

Analytical Method: SW-846 8015C DRO

Prep Method: SW-846 3541

Prep Batch: XXX3061

Prep Date: 09/18/2012 12:55

<u>Client Sample ID</u>	<u>Lab Sample ID</u>	<u>Analysis Date</u>	<u>Analytical Batch</u>	<u>Instrument</u>	<u>Analyst</u>
MB for HBN 29008 [XXX/3061]	89924	09/19/2012 16:32	XGC2541	GC6	DTF
LCS for HBN 29008 [XXX/3061]	89925	09/19/2012 17:00	XGC2541	GC6	DTF
2DPT-01 (3.5-4ft)(89532MS)	89926	09/19/2012 19:22	XGC2541	GC6	DTF
2DPT-01 (3.5-4ft)(89532MSD)	89927	09/19/2012 19:50	XGC2541	GC6	DTF
22-1 (2-5)	31202946001	09/20/2012 05:42	XGC2541	GC6	DTF
22-2 (5-7.5)	31202946002	09/20/2012 06:11	XGC2541	GC6	DTF
22-3 (5-7.5)	31202946003	09/20/2012 06:39	XGC2541	GC6	DTF
22-4 (3-5)	31202946005	09/20/2012 07:07	XGC2541	GC6	DTF

Method Blank

Blank ID: MB for HBN 29008 [XXX/3061]
 Blank Lab ID: 89924
 QC for Samples:
 31202946001, 31202946002, 31202946003, 31202946005

Matrix: Soil-Solid as dry weight

Results by SW-846 8015C DRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>DL</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>
Diesel Range Organics (DRO)	ND	U	6.25	6.25	mg/kg	1
Surrogates						
o-Terphenyl	104			40.0-140	%	1

Batch Information

Analytical Batch: XGC2541
 Analytical Method: SW-846 8015C DRO
 Instrument: GC6
 Analyst: DTF

Prep Batch: XXX3061
 Prep Method: SW-846 3541
 Prep Date/Time: 9/18/2012 12:55:13PM
 Prep Initial Wt./Vol.: 32 g
 Prep Extract Vol: 10 mL

Blank Spike Summary

Blank Spike ID: LCS for HBN 29008 [XXX/3061]
 Blank Spike Lab ID: 89925
 Date Analyzed: 09/19/2012 17:00

Matrix: Soil-Solid as dry weight

QC for Samples: 31202946001, 31202946002, 31202946003, 31202946005

Results by SW-846 8015C DRO

Parameter	Blank Spike (mg/kg)			CL
	Spike	Result	Rec (%)	
Diesel Range Organics (DRO)	62.5	62.4	100	55.0-137
Surrogates				
o-Terphenyl		112		40.0-140

Batch Information

Analytical Batch: **XGC2541**
 Analytical Method: **SW-846 8015C DRO**
 Instrument: **GC6**
 Analyst: **DTF**

Prep Batch: **XXX3061**
 Prep Method: **SW-846 3541**
 Prep Date/Time: **09/18/2012 12:55**
 Spike Init Wt./Vol.: **32 g** Extract Vol: **10 mL**
 Dupe Init Wt./Vol.: Extract Vol:

SGS North America Inc.

Sample Receipt Checklist (SRC)

Client: NCDOT-Pyramid Work Order No.: 31202946

- | | | |
|-----|--|-------------------------|
| 1. | <input type="checkbox"/> Shipped
<input checked="" type="checkbox"/> Hand Delivered | Notes: _____
_____ |
| 2. | <input checked="" type="checkbox"/> COC Present on Receipt
<input type="checkbox"/> No COC
<input type="checkbox"/> Additional Transmittal Forms | _____
_____ |
| 3. | <input type="checkbox"/> Custody Tape on Container
<input checked="" type="checkbox"/> No Custody Tape | _____
_____ |
| 4. | <input checked="" type="checkbox"/> Samples Intact
<input type="checkbox"/> Samples Broken / Leaking | _____
_____ |
| 5. | <input checked="" type="checkbox"/> Chilled on Receipt Actual Temp.(s) in °C: <u>0.1</u>
<input type="checkbox"/> Ambient on Receipt
<input type="checkbox"/> Walk-in on Ice; Coming down to temp.
<input type="checkbox"/> Received Outside of Temperature Specifications | _____

_____ |
| 6. | <input checked="" type="checkbox"/> Sufficient Sample Submitted
<input type="checkbox"/> Insufficient Sample Submitted | _____
_____ |
| 7. | <input type="checkbox"/> Chlorine absent
<input type="checkbox"/> HNO3 < 2
<input type="checkbox"/> HCL < 2
<input type="checkbox"/> Additional Preservatives verified (see notes) | _____

_____ |
| 8. | <input checked="" type="checkbox"/> Received Within Holding Time
<input type="checkbox"/> Not Received Within Holding Time | _____
_____ |
| 9. | <input checked="" type="checkbox"/> No Discrepancies Noted
<input type="checkbox"/> Discrepancies Noted
<input type="checkbox"/> NCDENR notified of Discrepancies* | _____

_____ |
| 10. | <input checked="" type="checkbox"/> No Headspace present in VOC vials
<input type="checkbox"/> Headspace present in VOC vials >6mm | _____
_____ |

Comments: _____

Inspected and Logged in by: JJ
Date: Mon-9/17/12 00:00



CHAIN OF CUSTODY RECORD
SGS North America Inc.

Locations Nationwide
 • Alaska
 • New Jersey
 • North Carolina
 • Maryland
 • New York
 • Ohio

www.us.sgs.com

104684

1 CLIENT: **NCDDT - 39017.1.1**
 CONTACT: **Pyramid Fine Leatherman** PHONE NO: **336 335-3174**
 PROJECT: **Ray Rd. Parcel 022** SITE/PWSID#:
 REPORTS TO: **Jim Leatherman**
Pyramid Environmental FAX NO.:()
 INVOICE TO: **NCDDT Gordon Box QUOTE # NCDDT W-3465**
 W-3465 WBS 39017.1 P.O. NUMBER: **WBS 39017.1**

SGS Reference: **31202946** PAGE **1** OF **1**

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	No CONTAINERS	SAMPLE TYPE	Preservatives Used	Analysis Required	Remarks
	22-1(2-5)	9-13-12	8:50	Soil	3	G			
	22-2(5-7.5)	9-13-12	9:15	Soil	3	G			
	22-3(5-7.5)	9-13-12	9:30	Soil	3	G			
	22-3(TW)	9-13-12	10:45	Soil	3 of 3	G			
	22-4(3-5)	9-13-12	11:00	Soil	3	G			

Shipping Carrier: **3550-DRO**
 Shipping Ticket No: **6200B**
 Samples Received Cold? (Circle) **YES** NO
 Temperature °C: **2.1°C**
 Chain of Custody Seal: (Circle) **INTACT** BROKEN
 Special Instructions: **ABSENT**

2

Collected/Relinquished By: (1)	Date	Time	Received By:
<i>[Signature]</i>	9-13-12	17:30	<i>[Signature]</i>
Relinquished By: (2)	Date	Time	Received By:
<i>[Signature]</i>	9/14/12	1530	<i>[Signature]</i>
Relinquished By: (3)	Date	Time	Received By:
<i>[Signature]</i>	9/17/12	0840	<i>[Signature]</i>
Relinquished By: (4)	Date	Time	Received By:
<i>[Signature]</i>			

Requested Turnaround Time: RUSH **STD** Date Needed

SGS North America Inc.

Sample Receipt Checklist (SRC)

Client: NCDOT-Pyramid

Work Order No.: 31202946

- | | | |
|-----|--|-------------------------|
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_____ |
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<input type="checkbox"/> Additional Transmittal Forms | _____
_____ |
| 3. | <input type="checkbox"/> Custody Tape on Container
<input checked="" type="checkbox"/> No Custody Tape | _____
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<input type="checkbox"/> Samples Broken / Leaking | _____
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<input type="checkbox"/> Discrepancies Noted
<input type="checkbox"/> NCDENR notified of Discrepancies* | _____

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| 10. | <input checked="" type="checkbox"/> No Headspace present in VOC vials
<input type="checkbox"/> Headspace present in VOC vials >6mm | _____
_____ |

Comments: _____

Inspected and Logged in by: JJ
Date: Mon-9/17/12 00:00

APPENDIX F
