

**Preliminary Site Assessment**  
**McCauley & McDonald Investments, Inc.**  
**Parcel #135**  
**Fayetteville, Cumberland County, NC**

**H&H Job No. ROW-203**  
**State Project U-2810C**  
**WBS Element # 34866.1.1**  
**January 8, 2009**



2923 South Tryon Street  
Suite 100  
Charlotte, NC 28203  
704-586-0007

3334 Hillsborough Street  
Raleigh, NC 27607  
919-847-4241

**Preliminary Site Assessment Report  
McCauley & McDonald Investments, Inc. Parcel #135  
Fayetteville, Cumberland County, North Carolina  
H&H Project ROW-203**

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**Preliminary Site Assessment Report  
McCauley & McDonald Investments Inc. Parcel #135  
Fayetteville, Cumberland County, North Carolina  
H&H Project ROW-203**

**1.0 Introduction**

Hart & Hickman, PC (H&H) has prepared this Preliminary Site Assessment (PSA) report documenting assessment activities performed at the McCauley & McDonald Investments, Inc. (McCauley & McDonald) property (Parcel #135) located at 3330 Camden Road in Fayetteville, Cumberland County, North Carolina. This assessment was conducted on behalf of the North Carolina Department of Transportation (NC DOT) in accordance with H&H's November 17, 2008 proposal.

The purpose of this assessment was to determine the presence or absence of impacted soil at the subject property in the proposed right of way construction areas related to the widening of Camden Road (State Project U-2810C). A Site Location Map is included as Figure 1 and a Site Map is presented as Figure 2. The NC DOT preliminary plan of the Camden Road widening area near the McCauley & McDonald property is attached as Appendix A.

The subject site currently operates as a BP gasoline station and Pantry convenience store. H&H reviewed underground storage tank (UST) incident files for the Pantry 3015 (Incident # 29200) at the North Carolina Department of Environment and Natural Resources (DENR) Fayetteville Regional Office to better target UST system areas and to find locations of previously reported petroleum impacts.

The Pantry currently operates three 12,000-gallon gasoline USTs and two associated pump islands. Based on the DENR file review, a petroleum release from a dispenser previously impacted soil and ground water at the site. The UST system location is shown on Figure 2. A comprehensive site assessment (CSA) was conducted at the site by MD Shaw & Associates, PC (MD Shaw). The CSA Report prepared by MD Shaw was submitted to DENR on July 31, 2008.

Based on the CSA report, concentrations of benzene in excess of the Soil-to-Groundwater Maximum Soil Contaminant Concentrations were detected in several soil samples collected within the NC DOT right-of-way easement area during assessment activities that were previously conducted at the site. Each of these impacted soil samples were collected 8 ft below ground surface with the exception of SB-4 (4 ft). During H&H field activities, ground water was measured at approximately 10 ft below ground surface. Based on the depth to ground water, soil samples collected at 8 ft were likely collected in the capillary fringe and were impacted by petroleum impacted ground water. No impacted soil has been removed from the site. A copy of the Benzene Concentration in Soil Map (Figure 5) from the MD Shaw CSA is included in Appendix B.

Assessment activities also revealed that ground water is impacted in excess of the 15A NCAC 2L.0202 Ground Water Quality Standards (2L standards) due to the petroleum release. As part of CSA assessment activities, fourteen Type II monitoring wells (MW-1 through MW-14) and one Type III monitoring well (DW-1) were installed at the site. Free product was also detected in monitoring wells MW-1, MW-3, and MW-4. Monitoring wells MW-3, MW-4, MW-7, MW-8, and MW-9 are located within the NC DOT right of way easement. Monitoring well locations are shown on Figure 2. Copies of the Benzene Isoconcentration Map (Figure 7) and Groundwater Concentrations Map (Figure 8) from the MD Shaw CSA are included in Appendix B.

On August 28, 2008, DENR issued a Notice of Regulatory Requirements (NORR) letter for the Pantry 3015 site. The DENR NORR letter stated that corrective action is necessary to remediate contamination at the site. The Corrective Action Plan was not available for H&H review. H&H field activities are discussed below.

## **2.0 Site Assessment**

### Soil Assessment Field Activities

H&H mobilized to the McCauley and McDonald property on December 9, 2008 to advance eleven soil borings (135-1 through 135-11) by direct push technology (DPT). Prior to advancing the soil borings, H&H reviewed a geophysical survey performed at the subject site by Schnabel Engineering (Schnabel) on November 18 and 25, 2008. Schnabel utilized ground penetrating radar (GPR) and time domain electromagnetic (TDEM) technology to identify potential geophysical anomalies and

potential USTs at the site. The TDEM results indicated the presence of an anomaly not attributed to known metallic features; however, follow up with GPR did not indicate the presence of a UST. Schnabel's report, including site maps depicting the results of the GPR and TDEM results, is provided in Appendix C.

Prior to conducting soil borings, utilities were marked by NC One Call. Borings were also cleared to a depth of five ft by hand auger. H&H utilized Subsurface Environmental Investigations, LLC of Statesville, North Carolina to advance soil borings 135-1 through 135-11 by DPT (see Figure 2). To facilitate the selection of soil samples for laboratory analysis, soil from each boring was screened continuously for the presence of volatile organic compounds (VOCs) with an organic vapor analyzer (OVA). Additionally, H&H observed the soil for visual and olfactory indications of petroleum impacts. In general, a soil sample from each boring that exhibited the highest reading on the OVA was selected for laboratory analysis. The samples exhibiting OVA readings were collected from depths ranging from 0 to 12 ft in borings 135-4 through 135-11. The highest OVA readings in each of these borings were between 8 and 12 ft and these deeper samples were likely influenced by petroleum impacted ground water. Ground water was measured approximately 10 ft below ground surface. The samples for laboratory analysis were collected from a depth of 0 to 2 ft in boring 135-8, 2 to 4 ft in boring 135-9, and 4 to 6 ft in boring 135-11; otherwise, samples were collected from a depth 6 to 8 ft. Soil boring logs are included in Appendix D.

H&H submitted eleven soil samples (135-1 through 135-11) for laboratory analysis. Soil samples are identified by the NC DOT Parcel number, soil boring, and the depth interval in ft. Samples were sent to SGS Environmental Services, Inc. of Wilmington, North Carolina using standard chain-of-custody protocol for analysis of total petroleum hydrocarbons (TPH) for gasoline-range organics (GRO) and diesel-range organics (DRO) by EPA Method 8015B. The GRO samples were prepared using EPA Method 5035. Sample depths and analytical results are summarized in Table 1. Laboratory analytical data sheets for Parcel 135 soil samples and chain-of-custody documentation for this site are provided in Appendix E. The analytical results are discussed below.

### **3.0 Analytical Results**

Target analytes were detected in soil samples collected from Parcel 135. The low concentrations of TPH DRO were detected in soil samples 135-8 and 135-9 above the DENR Action Level of 10 mg/kg, if related to UST systems. Concentrations of TPH DRO and GRO were also detected in soil samples 135-6 and 135-8, respectively, but did not exceed the DENR Action Levels. Concentrations of TPH DRO and GRO were not detected above the laboratory reporting limit in the remaining soil samples analyzed.

Based on laboratory analytical results and OVA readings, petroleum impacted soils are present near the existing right-of-way easement boundary in the northeast portion of the property. H&H estimates that there are roughly 400 cubic yards (600 tons) of impacted soil between the surface and 10 ft at Parcel 135.

### **4.0 Summary and Regulatory Considerations**

H&H has reviewed Geophysical survey results and collected soil samples at Parcel 135. No USTs appear to be present within the right of way and easement areas. Analytical results indicate low level concentrations of TPH DRO above DENR Action Levels. H&H estimates that there are roughly 400 cubic yards (600 tons) of impacted soil between the surface and 10 ft at Parcel 135. The impacted soil is located adjacent to the existing right-of-way easement boundary in the northeast portion of the property. Impacted soil will be generated by any soil grading work below the existing grade, and during any utility line or drainage installations. Impacted soil that is removed should be properly managed and disposed at a permitted facility.

Ground water impacts above 2L Standards and free product were confirmed on the northeast portion of the property during previous site assessment activities. The depth to ground water is estimated to be approximately 10 ft in this area. If dewatering of ground water is required during site work or drainage pipe installations, the removed water should be managed as impacted and recycled/disposed at a permitted facility.

## Signature Page

This report was prepared by:



David Graham  
Project Geologist for  
Hart and Hickman, PC

This report was reviewed by:



Matt Bramblett, PE  
Principal and Project Manager for  
Hart and Hickman, PC

**Table 1**  
**Soil Analytical Results**  
**McCauley & McDonald Investments, Inc., Parcel #135**  
**Fayetteville, North Carolina**  
**H&H Job No. ROW-203**

Sample ID	135-1	135-2	135-3	135-4	135-5	135-6	135-7	135-8	135-9	135-10	135-11	NCDENR Action Level (mg/kg)
Sample Depth (ft)	6-8	6-8	6-8	6-8	6-8	6-8	6-8	0-2	2-4	6-8	4-6	
Sample Date	12/9/2008	12/9/2008	12/9/2008	12/9/2008	12/9/2008	12/9/2008	12/9/2008	12/9/2008	12/9/2008	12/9/2008	12/9/2008	
Units	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
<b><u>TPH-DRO/GRO (8015B)</u></b>												
Diesel-Range Organics (DRO)	<6.91	<6.73	<7.27	<6.93	<6.82	7.63	<7.40	<b>22.7</b>	<b>20.7</b>	<6.64	<7.29	10
Gasoline-Range Organics (GRO)	<4.94	<5.54	<5.18	<5.17	<5.62	<6.17	<6.07	6.25	<5.49	<5.95	<5.81	10

**Notes:**

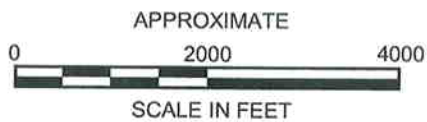
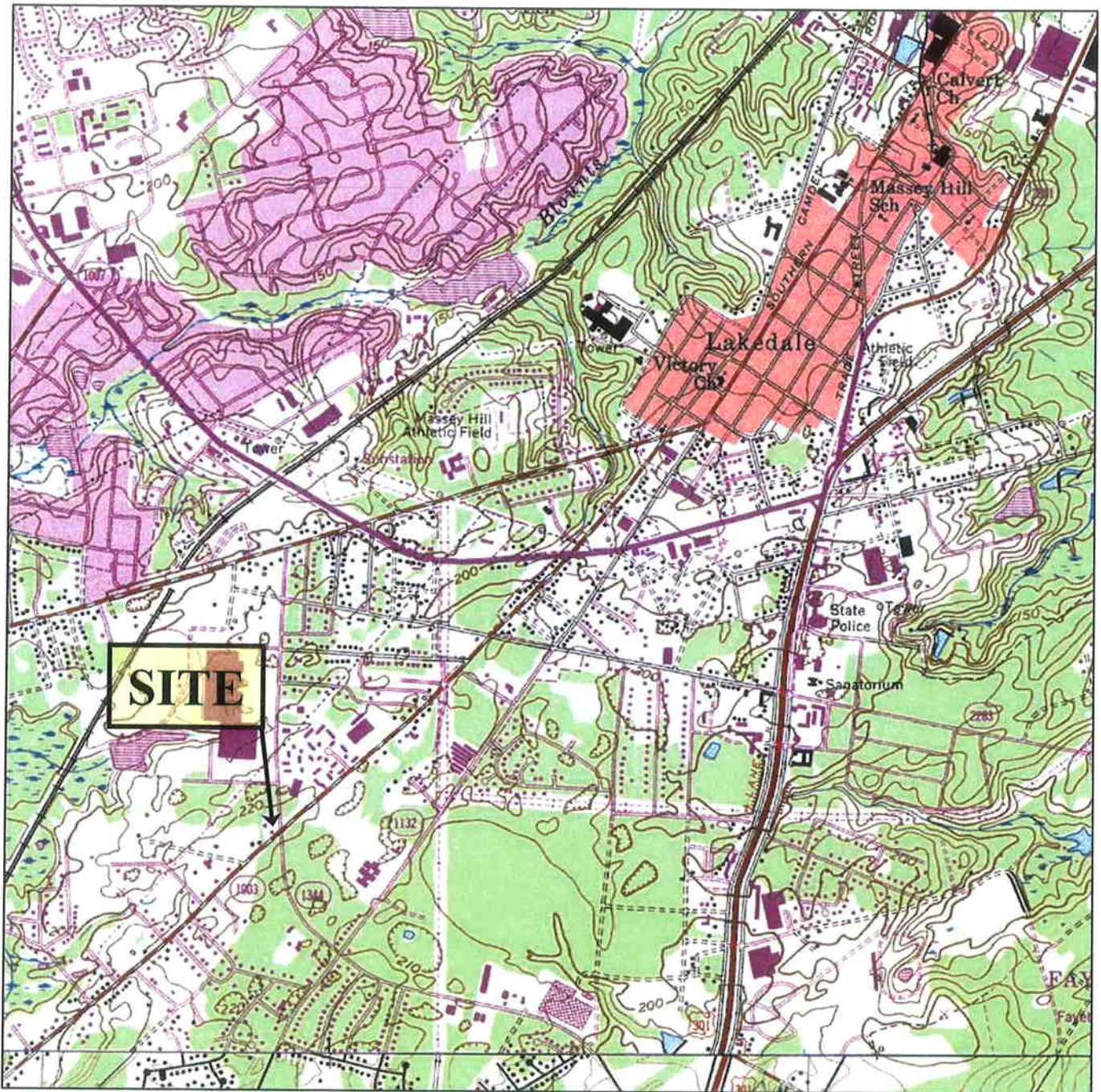
EPA Method follows parameter in parenthesis;

Bold indicates the concentration exceeds the NC DENR Action Level

TPH=total petroleum hydrocarbons

GRO was prepared using EPA Method 5035






U.S.G.S. QUADRANGLE MAP

FAYETTEVILLE, NC 1957/1987

7.5 MINUTE SERIES (TOPOGRAPHIC)

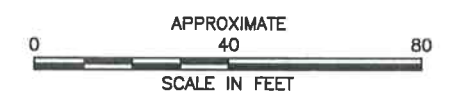
TITLE	SITE LOCATION MAP		
PROJECT	PARCEL #135 FAYETTEVILLE, NORTH CAROLINA		
	 2923 South Tryon Street-Suite 100 Charlotte, North Carolina 28203 704-586-0007 (p) 704-586-0373 (f)		
DATE:	12-16-08	REVISION NO:	0
JOB NO:	ROW-203	FIGURE:	1



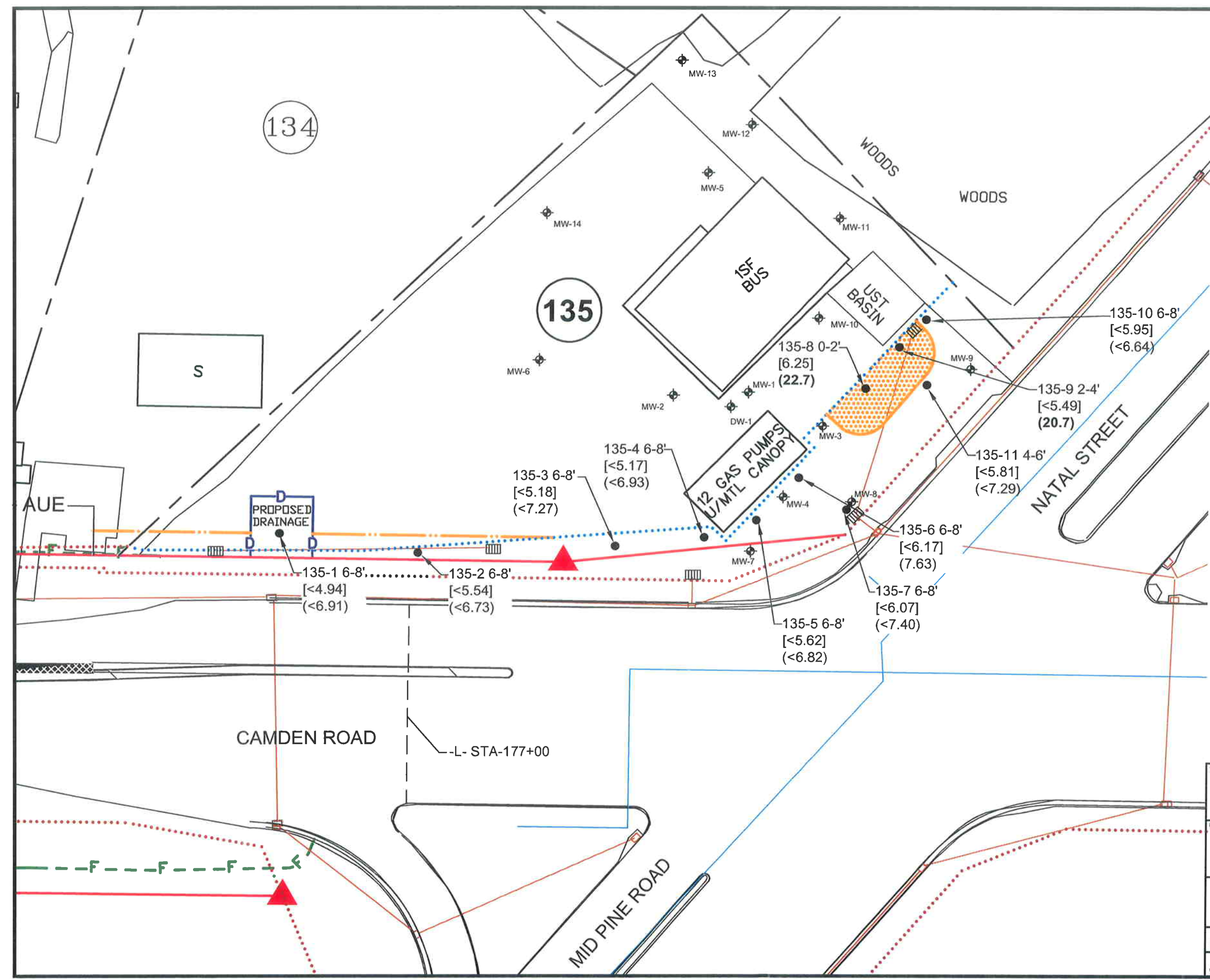
**LEGEND**

- PROPERTY LINE
- ..... EXISTING RIGHT-OF-WAY
- ..... EXISTING RIGHT-OF-WAY EASEMENT
- ▲ PROPOSED RIGHT-OF-WAY
- F- PROPOSED FILL LINE
- D- PROPOSED DRAINAGE EASEMENT
- PROPOSED CONSTRUCTION EASEMENT
- AUE- AERIAL UTILITY EASEMENT
- EXISTING WATER LINES
- EXISTING DRAINAGE LINES
- IMPACTED SOIL AREA
- EXISTING CATCH BASIN
- SOIL BORING
- ⊕ MONITORING WELL
- 135 PARCEL NUMBER
- [ ] = TPH GRO (mg/kg)
- ( ) = TPH DRO (mg/kg)

**BOLD DENOTES EXCEEDANCE OF DENR ACTION LEVEL**



<b>SITE MAP AND SOIL ANALYTICAL RESULTS</b>	
<b>PARCEL #135 FAYETTEVILLE, NORTH CAROLINA</b>	
<span style="font-size: small; vertical-align: middle;">2923 South Tryon Street-Suite 100 Charlotte, North Carolina 28203 704-586-0007(p) 704-586-0373(f)</span>	
DATE: 12-29-08	REVISION NO. 0
JOB NO: ROW-203	FIGURE NO. 2



S:\AAA-Master Projects\NC DOT Right-of-Way -ROW\ROW-203 Cumberland County PSAs\Figures\2008-12-29\_5 Parcels\_ROW-203.dwg, 1/17/2009 9:35:06 AM

**Appendix A**  
**NC DOT Preliminary Plan**

MARCH F. RI

BL-3 (U3312)  
-BY14- PINC 9\*95.10-  
-BL- PINC 172\*77.90-

CHARLES J. DAVIS  
-POC 178\*82.69  
29.12' LT

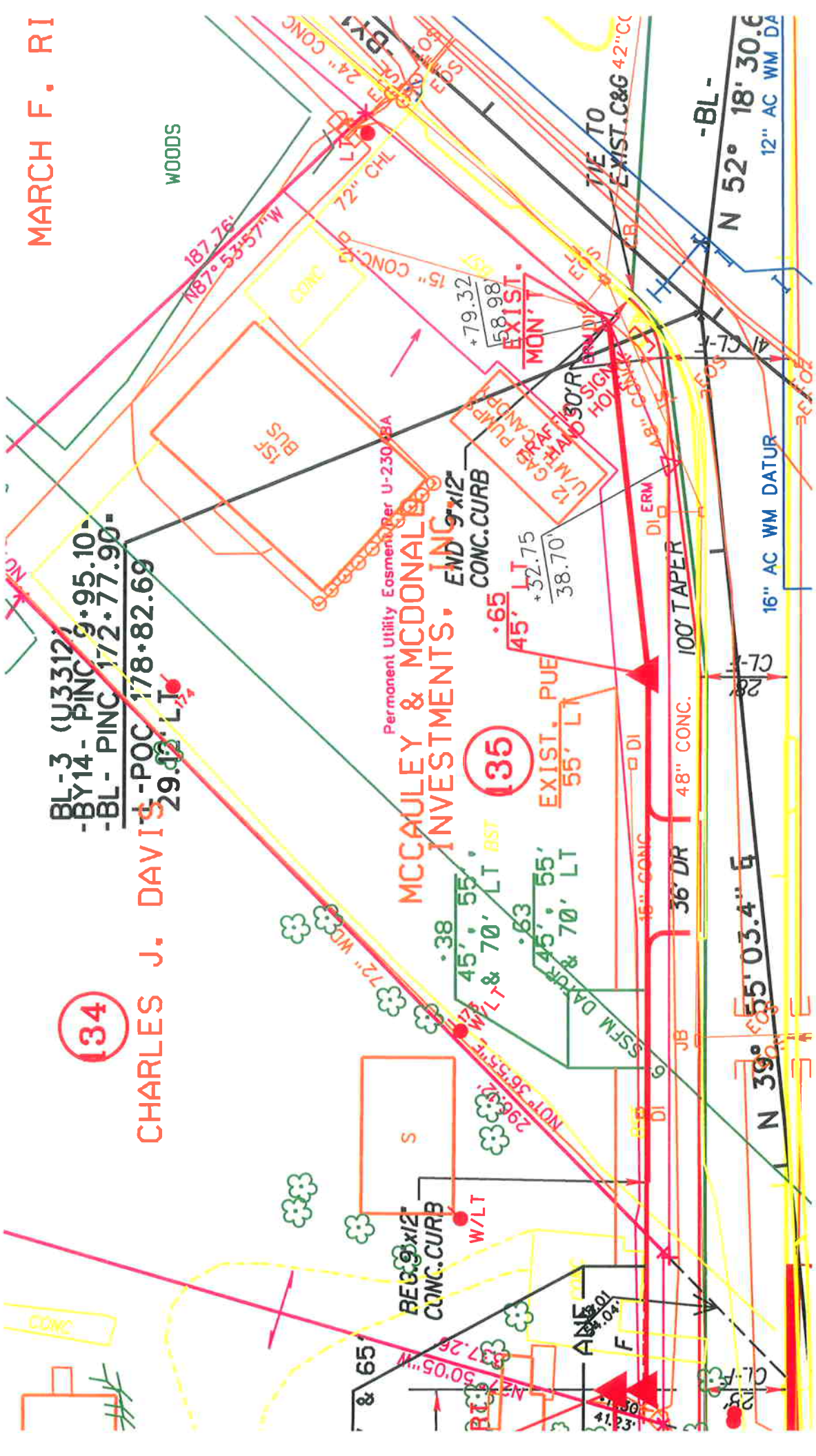
134

WOODS

MCCAULEY & MCDONALD INVESTMENTS, INC

Permanent Utility Easement Per U-230-23A

135



-BL-

N 52° 18' 30.6" E  
12" AC WM DATA

16" AC WM DATUR

CL-1

N 39° 55' 03.4" E

100' TAPER

48" CONC.

36" DR

48" CONC.

DI

DI

DI

DI

DI

DI

DI

DI

DI

DI

DI

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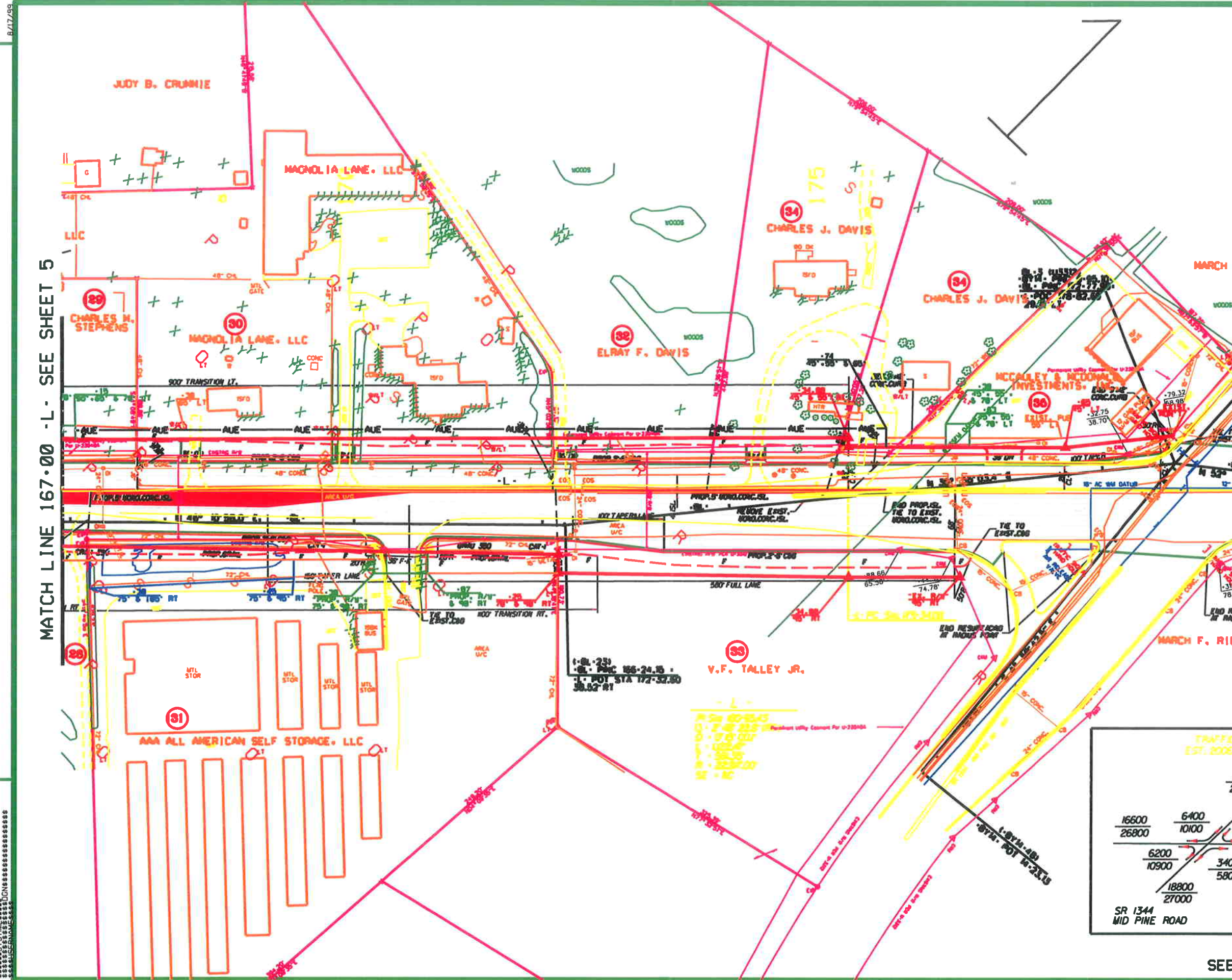
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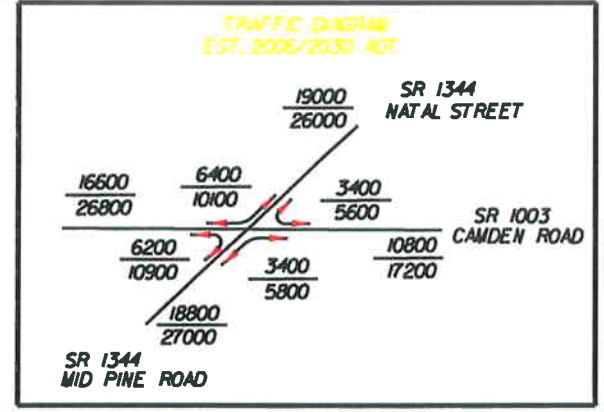
PROJECT NUMBER	U-2810C
SHEET NO.	6
DATE	15 (U-2801)
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	



MATCH LINE 167'00" - L - SEE SHEET 5

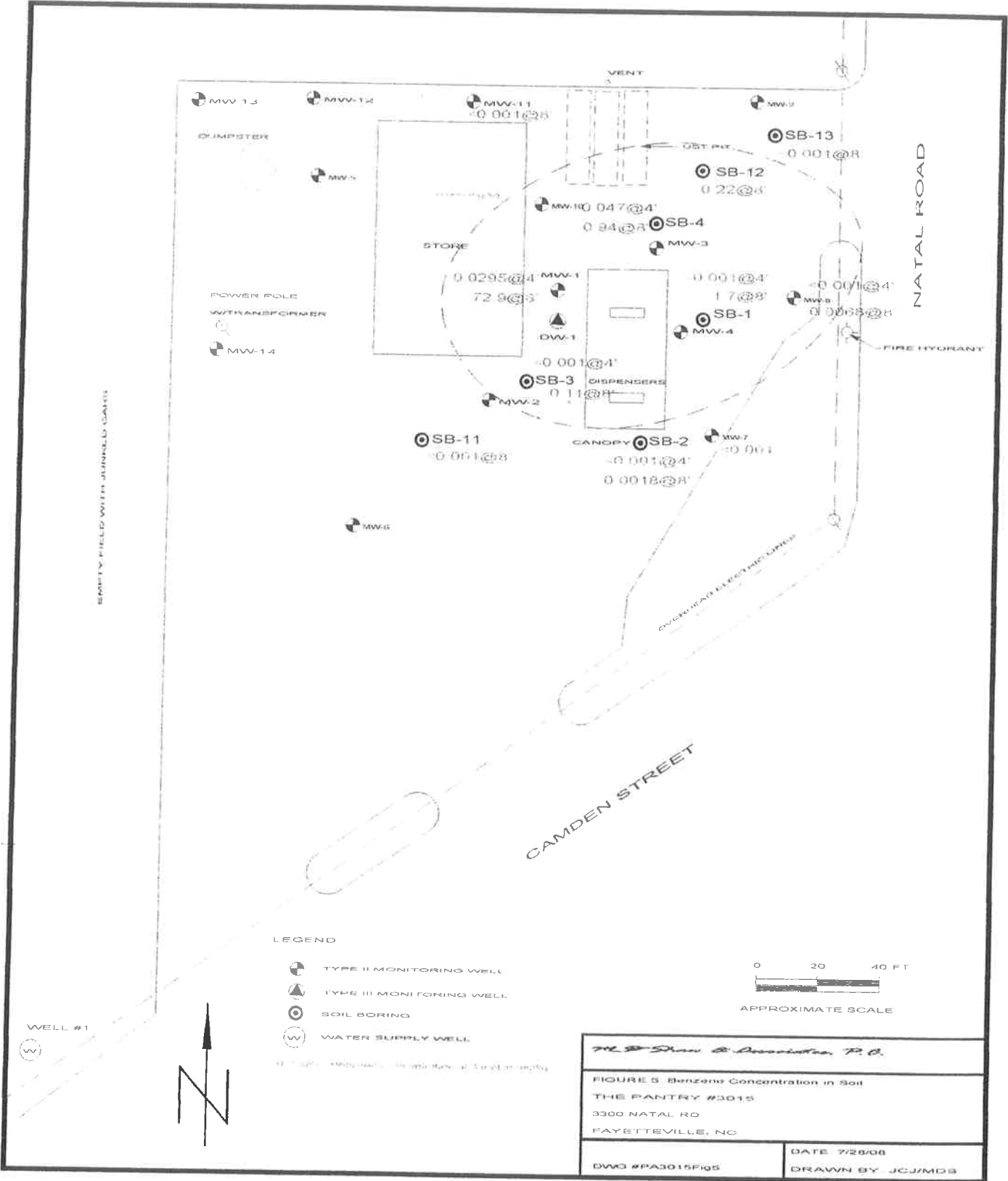
MATCH LINE 180'00" - L - SEE SHEET 7

REVISIONS



SEE SHEET 13 FOR -L- PROFILE

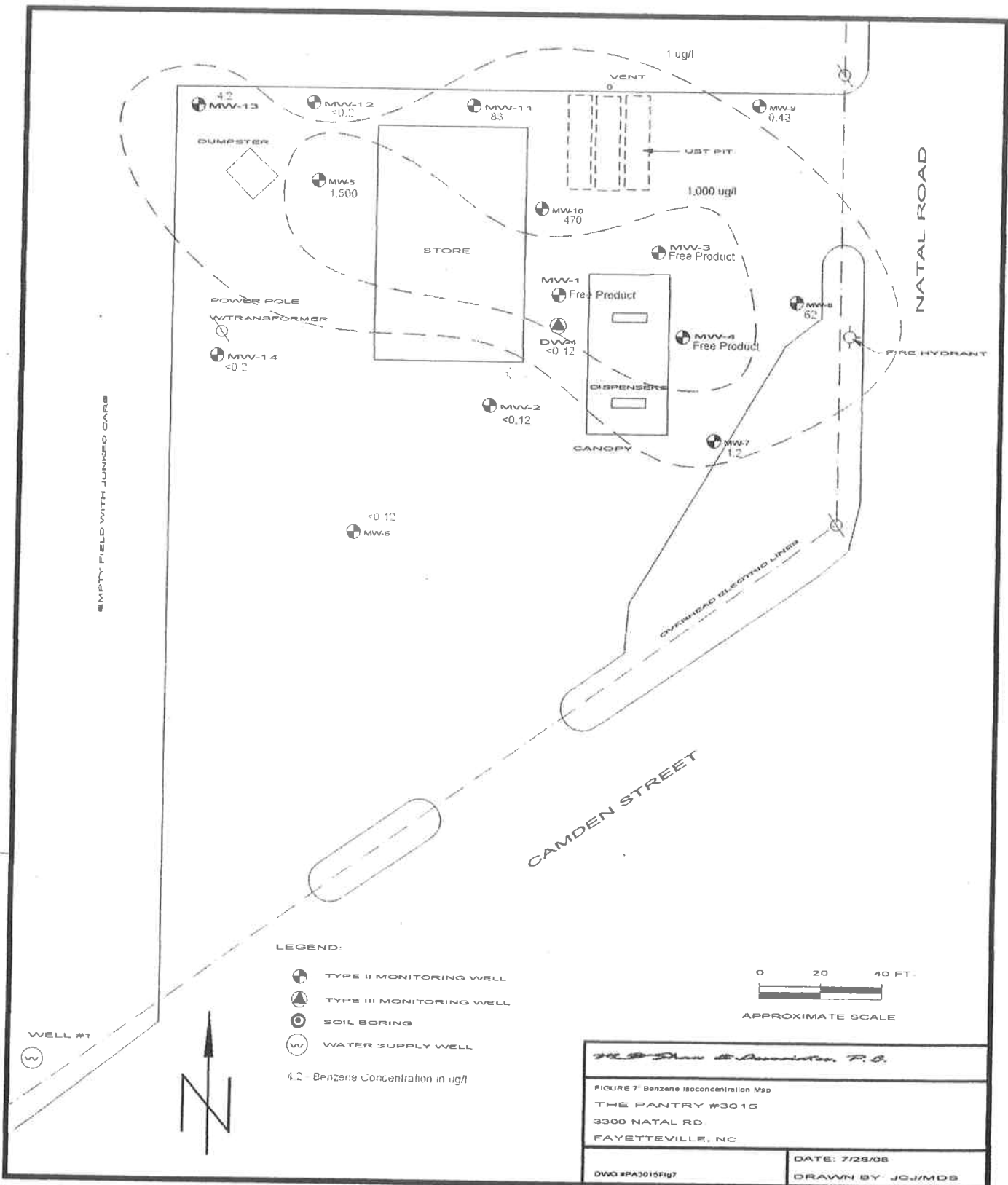
**Appendix B**  
**Comprehensive Site Assessment Figures**



*M.D. Shaw & Associates, P.C.*

**FIGURE 5: Benzene Concentration in Soil**  
**THE PANTRY #3015**  
 3300 NATAL RD  
 FAYETTEVILLE, NC

DWG #PA3015Fig5	DATE: 7/26/08 DRAWN BY: JCJ/MDS
-----------------	------------------------------------



EMPTY FIELD WITH JUNKED CARS



WELL #1  
 (W)

MW-13  
 4.2

MW-12  
 <0.2

MW-11  
 83

MW-9  
 0.43

DUMPSTER

MW-5  
 1,500

VENT  
 0

1 ug/l

UST PIT

1,000 ug/l

STORE

MW-10  
 470

MW-3  
 Free Product

POWER POLE  
 W/TRANSFORMER

MW-1  
 Free Product

MW-8  
 62

MW-14  
 <0.2

DWG-1  
 <0.12

MW-4  
 Free Product

NATAL ROAD

FIRE HYDRANT

MW-2  
 <0.12

DISPENSERS

CANOPY

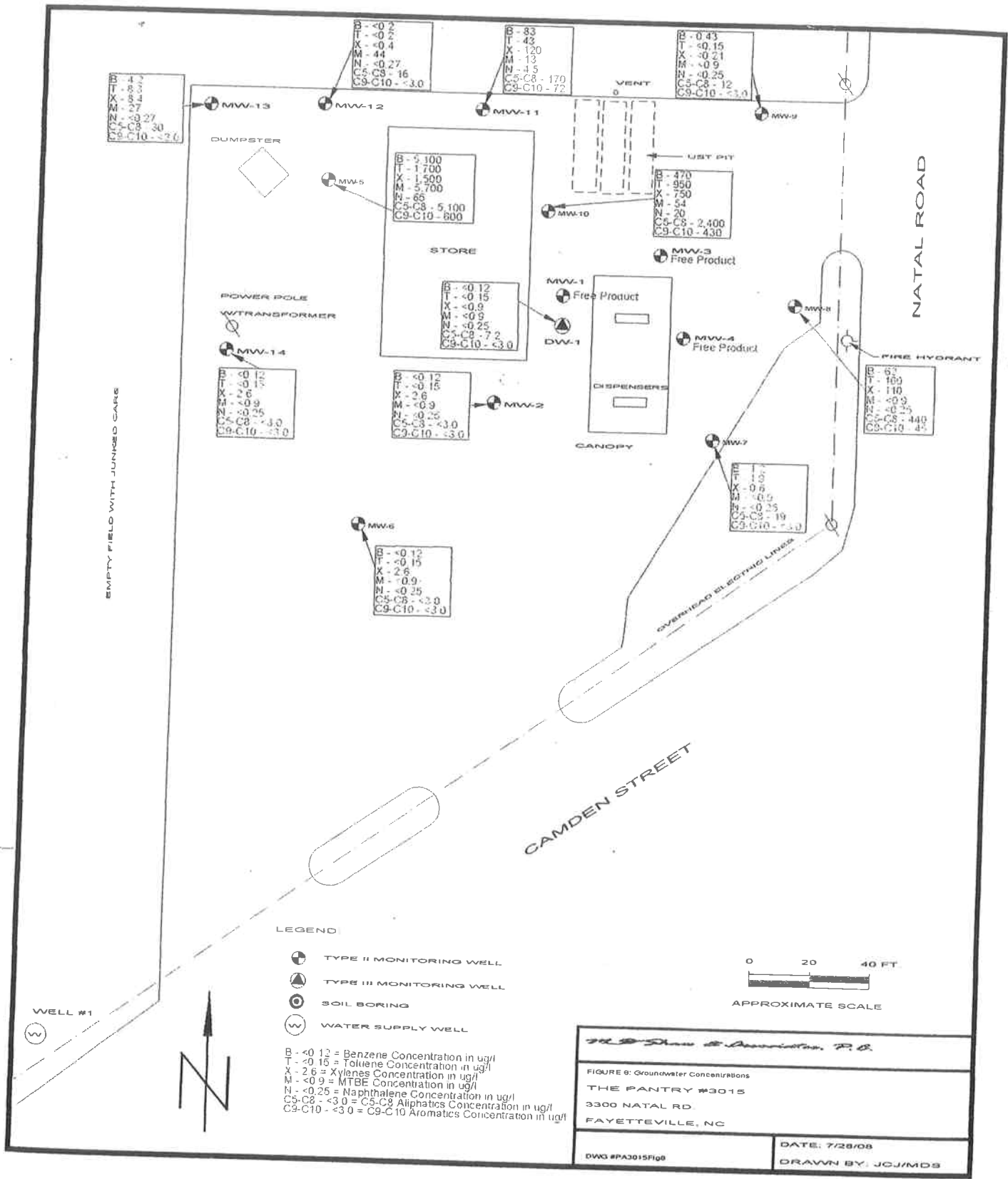
MW-7  
 1.2

<0.12  
 MW-6

OVERHEAD ELECTRIC LINES

CAMDEN STREET





B - 4.2  
T - 0.8  
X - 0.4  
M - 0.27  
N - 0.30  
C5-C8 - 3.0  
C9-C10 - 2.0

B - <0.2  
T - <0.2  
X - <0.4  
M - 44  
N - <0.27  
C5-C8 - 16  
C9-C10 - <3.0

B - 83  
T - 43  
X - 120  
M - 13  
N - 45  
C5-C8 - 170  
C9-C10 - 72

B - 0.43  
T - <0.15  
X - <0.21  
M - <0.9  
N - <0.25  
C5-C8 - 12  
C9-C10 - <3.0

DUMPSTER

POWER POLE  
W/TRANSFORMER

**STORE**

B - 5.100  
T - 1.700  
X - 1.500  
M - 5.700  
N - 68  
C5-C8 - 5.100  
C9-C10 - 800

B - <0.12  
T - <0.15  
X - <0.9  
M - <0.9  
N - <0.25  
C5-C8 - 7.2  
C9-C10 - <3.0

VENT

UST PIT

B - 470  
T - 950  
X - 750  
M - 54  
N - 20  
C5-C8 - 2,400  
C9-C10 - 430

**NATAL ROAD**

B - <0.12  
T - <0.15  
X - 2.6  
M - <0.9  
N - <0.25  
C5-C8 - <3.0  
C9-C10 - <3.0

B - <0.12  
T - <0.15  
X - 2.6  
M - <0.9  
N - <0.25  
C5-C8 - <3.0  
C9-C10 - <3.0

**Free Product**

**DISPENSERS**

**CANOPY**

**FIRE HYDRANT**

B - 63  
T - 180  
X - 110  
M - <0.9  
N - <0.25  
C5-C8 - 440  
C9-C10 - 45

B - <0.12  
T - <0.15  
X - 2.6  
M - <0.9  
N - <0.25  
C5-C8 - <3.0  
C9-C10 - <3.0

B - 1.07  
T - 1.07  
X - 0.6  
M - <0.5  
N - <0.25  
C5-C8 - 19  
C9-C10 - <3.0

**Appendix C**

**Schnabel Engineering Geophysical Survey Report**

December 16, 2008

Mr. Matt Bramblett, P.E.  
Hart & Hickman, PC  
2923 South Tryon Street, Suite 100  
Charlotte, NC 28203

Via email (pdf)

RE: State Project: U-2810C  
WBS Element: 34866.1.1  
County: Cumberland  
Description: SR 1003 (Camden Road) from SR 1290 (King Charles Road) to north  
of SR 1007 (Owen Drive)

SUBJECT: Report on Geophysical Surveys of Parcel 135  
Schnabel Engineering Project No. 08210020.06

Dear Mr. Bramblett:

This letter contains our report on the geophysical surveys we conducted on the subject property. We understand this letter report will be included as an appendix in your report to the NCDOT. The report includes two 11x17 color figures.

## 1.0 INTRODUCTION

Schnabel Engineering conducted geophysical surveys on November 18 and 25, 2008, in the accessible areas of the proposed right-of-way (ROW) section of Parcel 135 (McCauley & McDonald Investments, Inc. Property, BP gas station) under our 2008 contract with the NCDOT. Parcel 135 is located on the northwest quadrant of the intersection of SR 1003 (Camden Road) and SR 1344 (Natal Street), in Fayetteville, NC. The work was conducted at the location indicated by Hart & Hickman and the NCDOT to support their environmental assessment of the subject parcel. The purpose of the geophysical surveys was to locate possible metal underground storage tanks (UST's) and associated metal product lines in the accessible areas of the site.

## **2.0 FIELD METHODOLOGY**

Locations of geophysical data points were obtained using a sub-meter Trimble Pro-XRS DGPS system. References to direction and location in this report are based on the US State Plane 1983 system, North Carolina 3200 zone, using the NAD 83 datum, with units in US survey feet. The locations of existing site features (building, curbs, signs, etc.) were recorded for later correlation with the geophysical data and for location references to the NCDOT drawings. The geophysical investigation consisted of an electromagnetic (EM) induction survey using a Geonics EM61-MK2 instrument, and a ground-penetrating radar (GPR) survey using a Geophysical Survey Systems SIR-3000 system equipped with a 400 MHz antenna.

The EM61 data were collected along parallel survey lines spaced about 2.5 feet apart. The EM61 and DGPS data were recorded digitally using a field computer and later transferred to a desktop computer for data processing. The GPR data were collected along survey lines in orthogonal directions over anomalous EM readings not attributed to known metallic features.

Preliminary results were sent to David Graham and Wil Pineda of Hart & Hickman on December 5, 2008.

## **3.0 DISCUSSION OF RESULTS**

The contoured EM61 data are shown on Figures 1 and 2. The EM61 early time gate results are plotted on Figure 1. The early time gate data provide the most sensitive detection of metal object targets, regardless of size. Figure 2 shows the difference between the response of the top and bottom coils of the EM61 instrument (differential response). The difference is taken to remove the effect of surface and very shallowly buried metallic objects. Typically, the differential response emphasizes anomalies from deeper and larger objects such as UST's.

The early time gate and differential results indicate several linear anomalies probably caused by buried utilities and several anomalies probably caused by known metallic features. One area containing an anomaly not attributed to known metallic features in the EM61 data was investigated using GPR. The GPR data indicate that this anomaly is probably caused by reinforced concrete and a

storm sewer pipe. The GPR data did not indicate the presence of UST's in the areas surveyed on Parcel 135.

#### **4.0 CONCLUSIONS**

Our evaluation of the geophysical data collected on Parcel 135 of Project U-2810C in Fayetteville, NC indicates the following:

- The geophysical data do not indicate the presence of UST's in the areas surveyed.


#### **5.0 LIMITATIONS**

These services have been performed and this report prepared for Hart & Hickman and the North Carolina Department of Transportation in accordance with generally accepted guidelines for conducting geophysical surveys. It is generally recognized that the results of geophysical surveys are non-unique and may not represent actual subsurface conditions.

Thank you for the opportunity to serve you on this project. Please call if you need additional information or have any questions.

Sincerely,

SCHNABEL ENGINEERING SOUTH, P.C.



Jeremy S. Strohmeyer, P.G.  
Project Manager

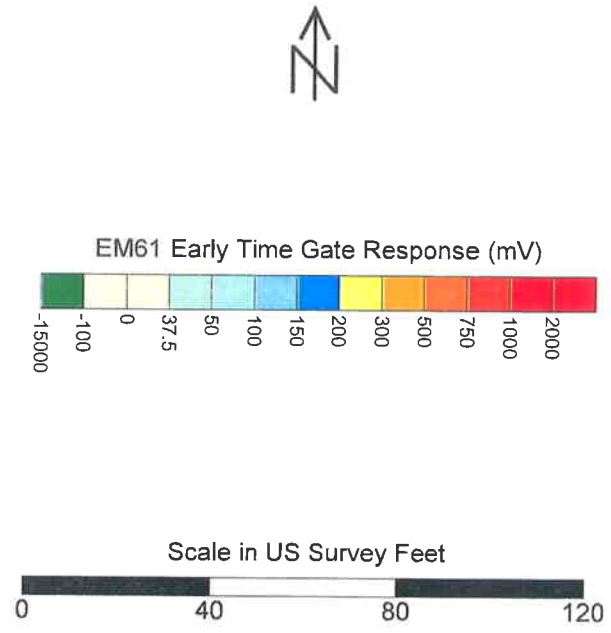
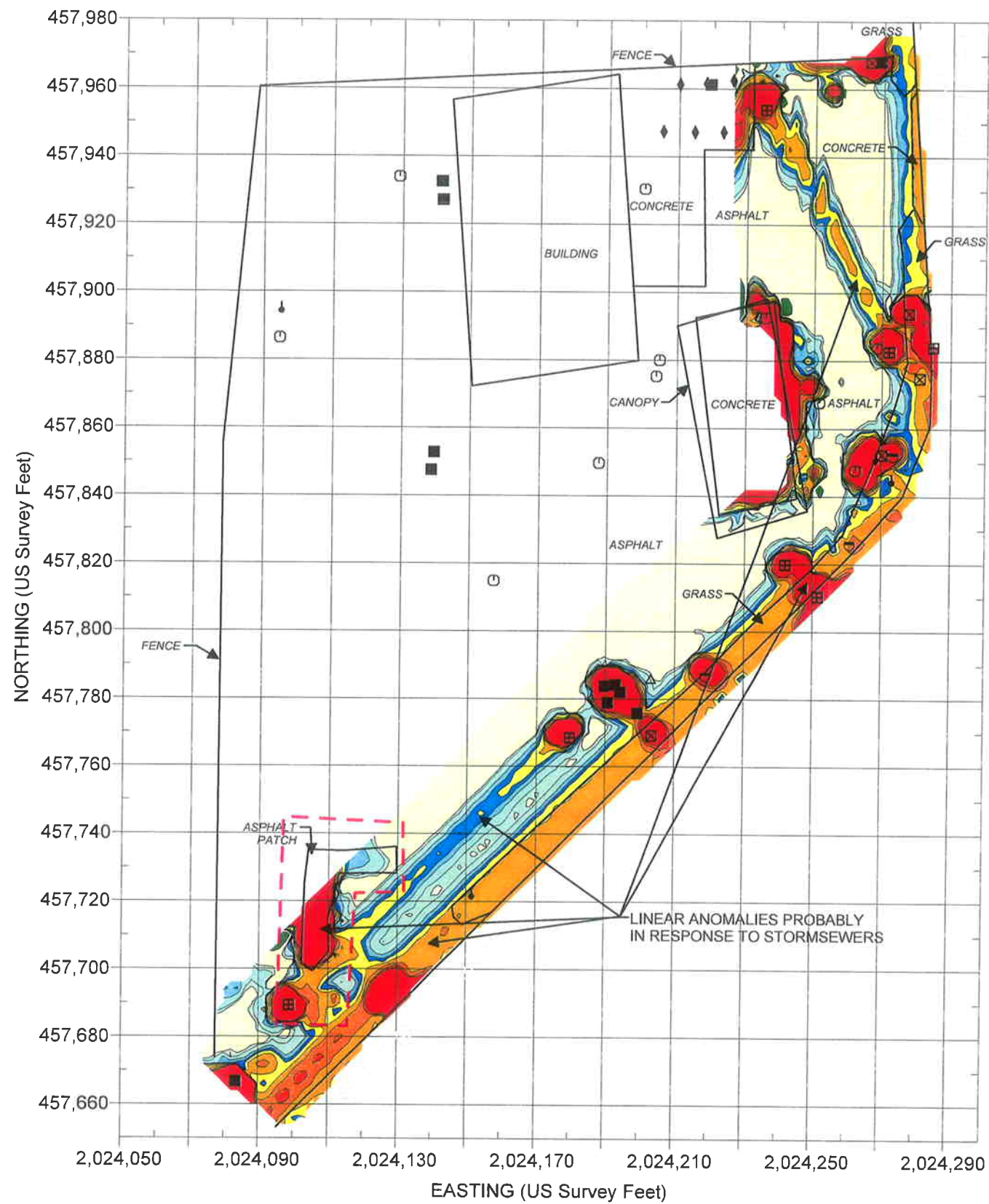


Edward D. Billington, P.G.  
Senior Vice President

JW/JS/NB

Attachment: Figures (2)

FILE: G:\2008 PROJECTS\08210020 (NCDOT 2008 GEO TECH UNIT SERVICES)\08210020.06 (U-2810C, CUMBERLAND COUNTY)\REPORT PARCEL 135\REPORT ON PARCEL 135.DOC



EXPLANATION	
	EM61 SURVEY AREA - DATA ACQUIRED ALONG PARALLEL SURVEY LINES SPACED APPROXIMATELY 2.5 FEET APART
	DOT MARKER
	TANK LID
	METALLIC OBJECT
	MONITORING WELL
	UTILITY POLE
	STORMWATER GRATE
	GPR SURVEY AREA
	GUY WIRE
	UTILITY MANHOLE OR BOX
	TREE
	SIGN

Note: The contour plot shows the earliest and most sensitive time gate of the EM61 bottom coil/channel in millivolts (mV). The EM data were collected on November 18, 2008, using a Geonics EM61-MK2 instrument. Positioning for the EM61 survey was provided using a submeter Trimble ProXRS DGPS system. Coordinates are in the US State Plane 1983 System, North Carolina Zone 3200, using the NAD 1983 datum. GPR data were acquired on November 25, 2008, using a Geophysical Survey Systems SIR 3000 equipped with a 400 MHz antenna.

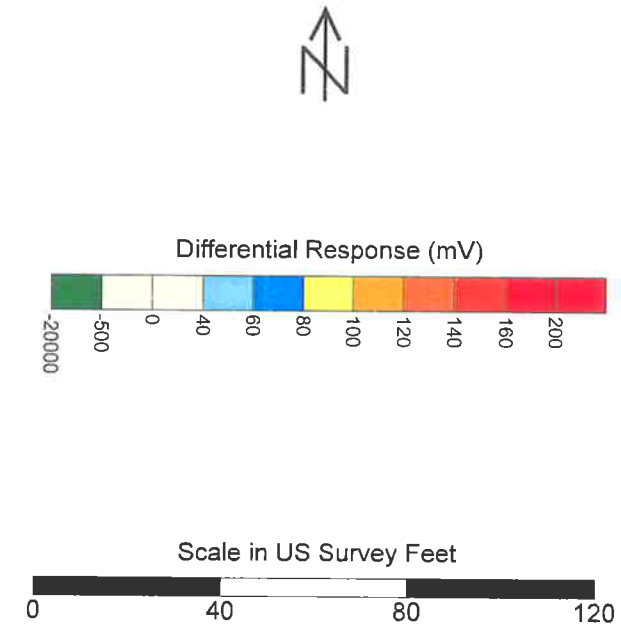
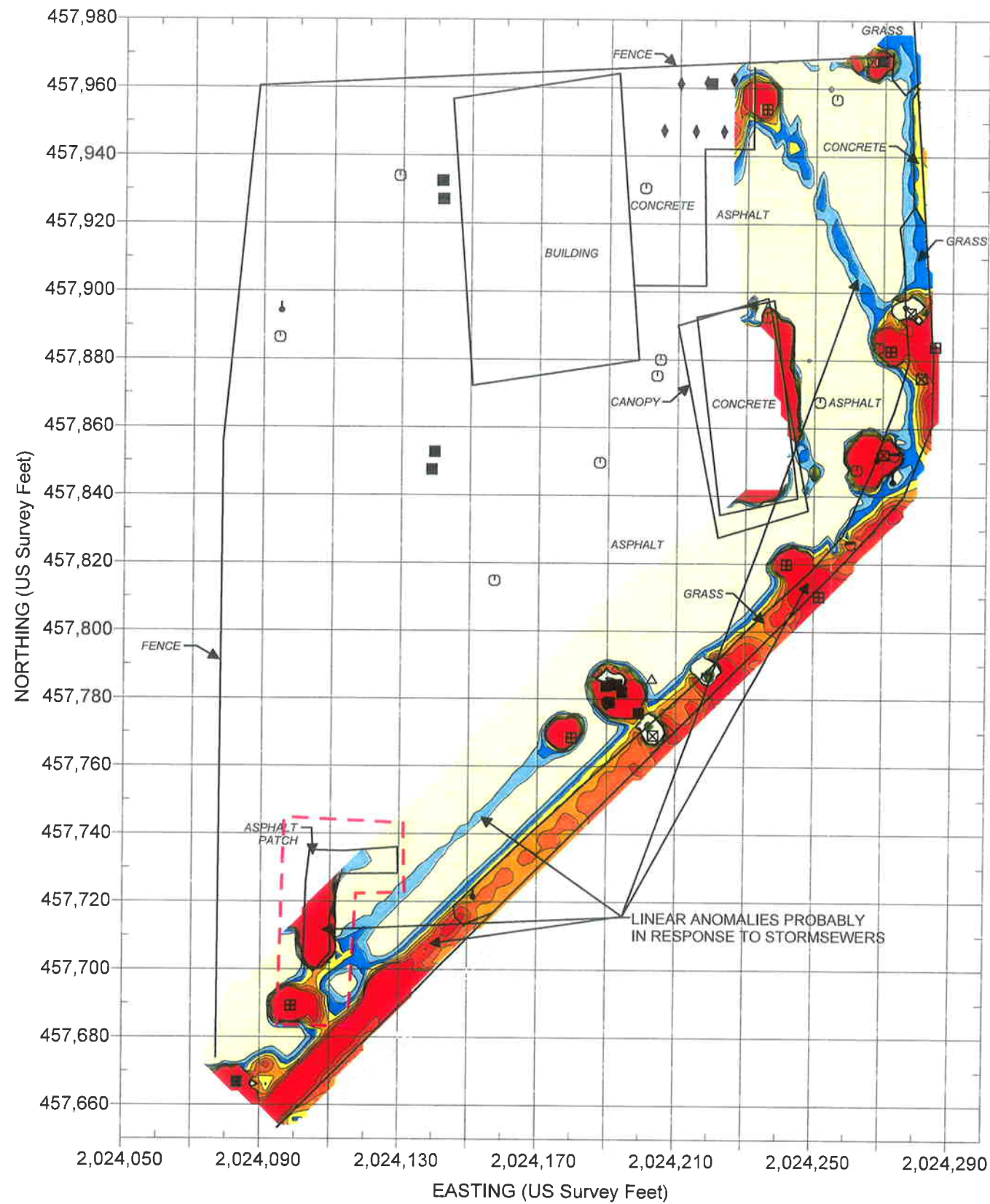


NC Department of Transportation  
Geotechnical Engineering Unit  
State Project No. U-2810C  
Cumberland County, North Carolina

**PARCEL 135**  
**EM61 EARLY TIME**  
**GATE RESPONSE**

FIGURE 1





EXPLANATION	
	EM61 SURVEY AREA - DATA ACQUIRED ALONG PARALLEL SURVEY LINES SPACED APPROXIMATELY 2.5 FEET APART
	DOT MARKER
	TANK LID
	METALLIC OBJECT
	MONITORING WELL
	UTILITY POLE
	STORMWATER GRATE
	GPR SURVEY AREA
	GUY WIRE
	UTILITY MANHOLE OR BOX
	TREE
	SIGN

Note: The contour plot shows the difference, in millivolts (mV), between the readings from the top and bottom coils of the EM61. The difference is taken to reduce the effect of shallow metal objects and emphasize anomalies caused by deeper metallic objects, such as drums and tanks. The EM data were collected on November 18, 2008, using a Geonics EM61-MK2 instrument. Positioning for the EM61 survey was provided using a submeter Trimble ProXRS DGPS system. Coordinates are in the US State Plane 1983 System, North Carolina 3200 Zone, using the NAD 1983 datum. GPR data were acquired on November 25, 2008, using a Geophysical Survey Systems SIR 3000 equipped with a 400 MHz antenna.



NC Department of Transportation  
Geotechnical Engineering Unit  
State Project No. U-2810C  
Cumberland County, North Carolina

**PARCEL 135  
EM61 DIFFERENTIAL  
RESPONSE**  
FIGURE 2

**Appendix D**  
**Soil Boring Logs**





# BORING NUMBER 135-1

2923 South Tryon Street-Suite 100  
Charlotte, North Carolina 28203  
704-586-0007(p) 704-586-0373(f)

3334 Hillsborough Street  
Raleigh, North Carolina 27607  
919-847-4241(p) 919-847-4261(f)

**PROJECT:** Cumberland County PSAs

**JOB NUMBER:** ROW-203

**LOCATION:** Fayetteville, NC

DEPTH (ft)	RECOVERY (%)	BLOW COUNT	OVA (ppm)		LITHOLOGY	MATERIAL DESCRIPTION	WELL DIAGRAM	DEPTH (ft)
			BKG.	SAMP.				
0						ASPHALT		0
100			0	0		(ML) Brown, medium sandy SILT, dry		
100			0	0				
5			0	0				5
100			0	0		(SM) Tan, silty fine SAND, dry (damp at 8 feet)		
100			0	0				
100			0	0				
10								10
100			0	0				
Bottom of borehole at 12.0 feet.								
15								15
20								20

LOG OF BORING - HART HICKMAN.GDT - 17709 08:31 - S:\AAA-MASTER GINT PROJECTS\ROW-203\PARCEL 135.GPJ

**DRILLING CONTRACTOR:** SEI  
**DRILL RIG/ METHOD:** Geoprobe / Direct-Push Sleeve  
**SAMPLING METHOD:** DPT Sleeves  
**LOGGED BY:** GAB  
**DRAWN BY:**

**BORING STARTED:** 12/9/08  
**BORING COMPLETED:** 12/9/08  
**TOTAL DEPTH:** 12  
**SURFACE ELEV:**  
**DEPTH TO WATER:**

**Remarks:**  
 Borehole hand-augered to 5 feet.  
 Sample collected from 6-8 feet.



# BORING NUMBER 135-2

2923 South Tryon Street-Suite 100  
 Charlotte, North Carolina 28203  
 704-586-0007(p) 704-586-0373(f)

3334 Hillsborough Street  
 Raleigh, North Carolina 27607  
 919-847-4241(p) 919-847-4261(f)

**PROJECT:** Cumberland County PSAs

**JOB NUMBER:** ROW-203

**LOCATION:** Fayetteville, NC

DEPTH (ft)	RECOVERY (%)	BLOW COUNT	OVA (ppm)		LITHOLOGY	MATERIAL DESCRIPTION	WELL DIAGRAM	DEPTH (ft)
			BKG.	SAMP.				
0					ASPHALT			0
100			0	0	(SW) Tan, silty fine SAND, dry			
100			0	0				
5			0	0				5
100			0	0				
100			0	0	(SC) Brown-tan, clayey medium SAND, moist			
100			0	0				
10								10
100			0	0				
Bottom of borehole at 12.0 feet.								
15								15
20								20

LOG OF BORING - HART HICKMAN.GDT - 17709 08:31 - S:\AAA-MASTER GINT PROJECTS\ROW-203\PARCEL\_135.GPJ

**DRILLING CONTRACTOR:** SEI  
**DRILL RIG/ METHOD:** Geoprobe / Direct-Push Sleeve  
**SAMPLING METHOD:** DPT Sleeves  
**LOGGED BY:** GAB  
**DRAWN BY:**

**BORING STARTED:** 12/9/08  
**BORING COMPLETED:** 12/9/08  
**TOTAL DEPTH:** 12  
**SURFACE ELEV:**  
**DEPTH TO WATER:**

**Remarks:**  
 Borehole hand-augered to 5 feet.  
 Sample collected from 6-8 feet.



# BORING NUMBER 135-3

2923 South Tryon Street-Suite 100  
Charlotte, North Carolina 28203  
704-586-0007(p) 704-586-0373(f)

3334 Hillsborough Street  
Raleigh, North Carolina 27607  
919-847-4241(p) 919-847-4261(f)

**PROJECT:** Cumberland County PSAs

**JOB NUMBER:** ROW-203

**LOCATION:** Fayetteville, NC

DEPTH (ft)	RECOVERY (%)	BLOW COUNT	OVA (ppm)		LITHOLOGY	MATERIAL DESCRIPTION	WELL DIAGRAM	DEPTH (ft)
			BKG.	SAMP.				
0					ASPHALT			0
100			0	0	(SM) Tan, silty fine SAND, dry			
100			0	0				
5			0	0				5
100			0	0				
100			0	0	(SC) Grey, clayey medium SAND, moist			
10			0	0				10
100			0	0				
Bottom of borehole at 12.0 feet.								
15								15
20								20

LOG OF BORING - HART HICKMAN.GDT - 1/7/08 08:31 - S:\AAA-MASTER GINT PROJECTS\ROW-203\PARCEL 135.GPJ

**DRILLING CONTRACTOR:** SEI  
**DRILL RIG/ METHOD:** Geoprobe / Direct-Push Sleeve  
**SAMPLING METHOD:** DPT Sleeves  
**LOGGED BY:** GAB  
**DRAWN BY:**

**BORING STARTED:** 12/9/08  
**BORING COMPLETED:** 12/9/08  
**TOTAL DEPTH:** 12  
**SURFACE ELEV:**  
**DEPTH TO WATER:**

**Remarks:**  
 Borehole hand-augered to 5 feet.  
 Sample collected from 6-8 feet.



# BORING NUMBER 135-4

2923 South Tryon Street-Suite 100  
Charlotte, North Carolina 28203  
704-586-0007(p) 704-586-0373(f)

3334 Hillsborough Street  
Raleigh, North Carolina 27607  
919-847-4241(p) 919-847-4261(f)

**PROJECT:** Cumberland County PSAs

**JOB NUMBER:** ROW-203

**LOCATION:** Fayetteville, NC

DEPTH (ft)	RECOVERY (%)	BLOW COUNT	OVA (ppm)		LITHOLOGY	MATERIAL DESCRIPTION	WELL DIAGRAM	DEPTH (ft)
			BKG.	SAMP.				
0					ASPHALT			0
100			0	0		(SM) Tan, silty fine SAND, dry		100
100			0	0				
5			0	0				
100			0	0				
100			0	4.8		(SC) Grey, clayey medium SAND, moist		5
100			0	145				
Bottom of borehole at 12.0 feet.								10
15								15
20								20

LOG OF BORING - HART HICKMAN.GDT - 1/7/09 08:31 - S:\AAA-MASTER GINT PROJECTS\ROW-203\PARCEL 135.GPJ

**DRILLING CONTRACTOR:** SEI  
**DRILL RIG/ METHOD:** Geoprobe / Direct-Push Sleeve  
**SAMPLING METHOD:** DPT Sleeves  
**LOGGED BY:** GAB  
**DRAWN BY:**

**BORING STARTED:** 12/9/08  
**BORING COMPLETED:** 12/9/08  
**TOTAL DEPTH:** 12  
**SURFACE ELEV:**  
**DEPTH TO WATER:**

**Remarks:**  
 Borehole hand-augered to 5 feet.  
 Sample collected from 6-8 feet.



# BORING NUMBER 135-5

2923 South Tryon Street-Suite 100  
Charlotte, North Carolina 28203  
704-586-0007(p) 704-586-0373(f)

3334 Hillsborough Street  
Raleigh, North Carolina 27607  
919-847-4241(p) 919-847-4261(f)

**PROJECT:** Cumberland County PSAs

**JOB NUMBER:** ROW-203

**LOCATION:** Fayetteville, NC

DEPTH (ft)	RECOVERY (%)	BLOW COUNT	OVA (ppm)		LITHOLOGY	MATERIAL DESCRIPTION	WELL DIAGRAM	DEPTH (ft)
			BKG.	SAMP.				
0					ASPHALT			0
100			0	0		(SM) Brown-tan, silty fine SAND, dry		100
100			0	0				
5			0	0				
100			0	0				
100			0	1.1		(ML) Grey, fine to medium sandy SILT, some clay, moist		10
100			0	59.6				
Bottom of borehole at 12.0 feet.								15
20								20

**DRILLING CONTRACTOR:** SEI  
**DRILL RIG/ METHOD:** Geoprobe / Direct-Push Sleeve  
**SAMPLING METHOD:** DPT Sleeves  
**LOGGED BY:** GAB  
**DRAWN BY:**

**BORING STARTED:** 12/9/08  
**BORING COMPLETED:** 12/9/08  
**TOTAL DEPTH:** 12  
**SURFACE ELEV:**  
**DEPTH TO WATER:**

**Remarks:**  
 Borehole hand-augered to 5 feet.  
 Sample collected from 6-8 feet.

LOG OF BORING - HART HICKMAN.GDT - 1/7/09 08:31 - S:\AAA-MASTER GINT PROJECTS\ROW-203\PARCEL 135.GPJ



# BORING NUMBER 135-6

2923 South Tryon Street-Suite 100  
 Charlotte, North Carolina 28203  
 704-586-0007(p) 704-586-0373(f)

3334 Hillsborough Street  
 Raleigh, North Carolina 27607  
 919-847-4241(p) 919-847-4261(f)

**PROJECT:** Cumberland County PSAs  
**JOB NUMBER:** ROW-203  
**LOCATION:** Fayetteville, NC

DEPTH (ft)	RECOVERY (%)	BLOW COUNT	OVA (ppm)		LITHOLOGY	MATERIAL DESCRIPTION	WELL DIAGRAM	DEPTH (ft)
			BKG.	SAMP.				
0						ASPHALT		0
100			0	0		(SM) Tan-brown, silty fine SAND, dry		
100			0	0				
5			0	0				5
100			0	70.2		(SM) Grey, silty fine SAND, some clay, moist		
100			0	1860				10
100			0	3167				10
Bottom of borehole at 12.0 feet.								
15								15
20								20

**DRILLING CONTRACTOR:** SEI  
**DRILL RIG/ METHOD:** Geoprobe / Direct-Push Sleeve  
**SAMPLING METHOD:** DPT Sleeves  
**LOGGED BY:** GAB  
**DRAWN BY:**

**BORING STARTED:** 12/9/08  
**BORING COMPLETED:** 12/9/08  
**TOTAL DEPTH:** 12  
**SURFACE ELEV:**  
**DEPTH TO WATER:**

**Remarks:**  
 Borehole hand-auger to 5 feet.  
 Sample collected from 6-8 feet.

LOG OF BORING - HART\_HICKMAN.GDT - 1/7/09 08:31 - S:\AAA-MASTER GINT PROJECTS\ROW-203\PARCEL 135.GPJ



# BORING NUMBER 135-7

2923 South Tryon Street-Suite 100  
Charlotte, North Carolina 28203  
704-586-0007(p) 704-586-0373(f)

3334 Hillsborough Street  
Raleigh, North Carolina 27607  
919-847-4241(p) 919-847-4261(f)

**PROJECT:** Cumberland County PSAs

**JOB NUMBER:** ROW-203

**LOCATION:** Fayetteville, NC

DEPTH (ft)	RECOVERY (%)	BLOW COUNT	OVA (ppm)		LITHOLOGY	MATERIAL DESCRIPTION	WELL DIAGRAM	DEPTH (ft)
			BKG.	SAMP.				
0					ASPHALT			0
100			0	0	(SM) Tan, silty medium SAND			
100			0	0				
5	100		0	0				5
100			0	0				
100			0	5.9	(ML) Grey, medium sandy SILT, some clay, moist			
10	100		0	133				10
						Bottom of borehole at 12.0 feet.		
15								15
20								20

LOG OF BORING - HART HICKMAN.GDT - 17/09 08:31 - S:\AAA-MASTER GINT PROJECTS\ROW-203\PARCEL 135.GPJ

**DRILLING CONTRACTOR:** SEI  
**DRILL RIG/ METHOD:** Geoprobe / Direct-Push Sleeve  
**SAMPLING METHOD:** DPT Sleeves  
**LOGGED BY:** GAB  
**DRAWN BY:**

**BORING STARTED:** 12/9/08  
**BORING COMPLETED:** 12/9/08  
**TOTAL DEPTH:** 12  
**SURFACE ELEV:**  
**DEPTH TO WATER:**

**Remarks:**  
 Borehole hand-augered to 5 feet.  
 Sample collected from 6-8 feet.





# BORING NUMBER 135-8

2923 South Tryon Street-Suite 100  
 Charlotte, North Carolina 28203  
 704-586-0007(p) 704-586-0373(f)

3334 Hillsborough Street  
 Raleigh, North Carolina 27607  
 919-847-4241(p) 919-847-4261(f)

**PROJECT:** Cumberland County PSAs

**JOB NUMBER:** ROW-203

**LOCATION:** Fayetteville, NC

DEPTH (ft)	RECOVERY (%)	BLOW COUNT	OVA (ppm)		LITHOLOGY	MATERIAL DESCRIPTION	WELL DIAGRAM	DEPTH (ft)
			BKG.	SAMP.				
0						ASPHALT		0
100			0	50.3		(SM) Tan, silty fine SAND, dry		
100			0	7.6				
5			0	13.8				5
100			0	45.4		(SM) Grey, silty fine SAND, some clay, moist		
100			0	77.7				
10			0	1543				10
						Bottom of borehole at 12.0 feet.		
15								15
20								20

LOG OF BORING - HART HICKMAN.GDT - 1/7/09 08:31 - S:\AAA-MASTER GINT PROJECTS\ROW-203\PARCEL 135.GPJ

**DRILLING CONTRACTOR:** SEI  
**DRILL RIG/ METHOD:** Geoprobe / Direct-Push Sleeve  
**SAMPLING METHOD:** DPT Sleeves  
**LOGGED BY:** GAB  
**DRAWN BY:**

**BORING STARTED:** 12/9/08  
**BORING COMPLETED:** 12/9/08  
**TOTAL DEPTH:** 12  
**SURFACE ELEV:**  
**DEPTH TO WATER:**

**Remarks:**  
 Borehole hand-augered to 5 feet.  
 Sample collected from 0-2 feet.





# BORING NUMBER 135-9

2923 South Tryon Street-Suite 100  
 Charlotte, North Carolina 28203  
 704-586-0007(p) 704-586-0373(f)

3334 Hillsborough Street  
 Raleigh, North Carolina 27607  
 919-847-4241(p) 919-847-4261(f)

**PROJECT:** Cumberland County PSAs  
**JOB NUMBER:** ROW-203  
**LOCATION:** Fayetteville, NC

DEPTH (ft)	RECOVERY (%)	BLOW COUNT	OVA (ppm)		LITHOLOGY	MATERIAL DESCRIPTION	WELL DIAGRAM	DEPTH (ft)
			BKG.	SAMP.				
0						ASPHALT		0
100			0	0		(SM) Tan, silty fine SAND, dry		
100			0	15				
5			0	2.7				5
100			0	2.3		(SM) Grey, silty fine SAND, some clay, moist		
100			0	10.3				10
100			0	25.1				10
						Bottom of borehole at 12.0 feet.		
15								15
20								20

LOG OF BORING - HART HICKMAN.GDT - 1/7/09 08:31 - S:\AAA-MASTER GINT PROJECTS\ROW-203\PARCEL 135.GPJ

**DRILLING CONTRACTOR:** SEI  
**DRILL RIG/ METHOD:** Geoprobe / Direct-Push Sleeve  
**SAMPLING METHOD:** DPT Sleeves  
**LOGGED BY:** GAB  
**DRAWN BY:**

**BORING STARTED:** 12/9/08  
**BORING COMPLETED:** 12/9/08  
**TOTAL DEPTH:** 12  
**SURFACE ELEV:**  
**DEPTH TO WATER:**

**Remarks:**  
 Borehole hand-augered to 5 feet.  
 Sample collected from 2-4 feet.



# BORING NUMBER 135-10

2923 South Tryon Street-Suite 100  
Charlotte, North Carolina 28203  
704-586-0007(p) 704-586-0373(f)

3334 Hillsborough Street  
Raleigh, North Carolina 27607  
919-847-4241(p) 919-847-4261(f)

**PROJECT:** Cumberland County PSAs

**JOB NUMBER:** ROW-203

**LOCATION:** Fayetteville, NC

DEPTH (ft)	RECOVERY (%)	BLOW COUNT	OVA (ppm)		LITHOLOGY	MATERIAL DESCRIPTION	WELL DIAGRAM	DEPTH (ft)
			BKG.	SAMP.				
0						ASPHALT		0
100			0	0		(SM) Brown-tan, silty fine SAND, dry		
100			0	0				
5	100		0	3.7				5
100			0	21.8		(SM) Grey, silty fine SAND, some clay, moist		
100			0	35				
10	100		0	27.9				10
						Bottom of borehole at 12.0 feet.		
15								15
20								20

**DRILLING CONTRACTOR:** SEI  
**DRILL RIG/ METHOD:** Geoprobe / Direct-Push Sleeve  
**SAMPLING METHOD:** DPT Sleeves  
**LOGGED BY:** GAB  
**DRAWN BY:**

**BORING STARTED:** 12/9/08  
**BORING COMPLETED:** 12/9/08  
**TOTAL DEPTH:** 12  
**SURFACE ELEV:**  
**DEPTH TO WATER:**

**Remarks:**  
 Borehole hand-augered to 5 feet.  
 Sample collected from 6-8 feet.



# BORING NUMBER 135-11

2923 South Tryon Street-Suite 100  
Charlotte, North Carolina 28203  
704-586-0007(p) 704-586-0373(f)

3334 Hillsborough Street  
Raleigh, North Carolina 27607  
919-847-4241(p) 919-847-4261(f)

**PROJECT:** Cumberland County PSAs

**JOB NUMBER:** ROW-203

**LOCATION:** Fayetteville, NC

DEPTH (ft)	RECOVERY (%)	BLOW COUNT	OVA (ppm)		LITHOLOGY	MATERIAL DESCRIPTION	WELL DIAGRAM	DEPTH (ft)
			BKG.	SAMP.				
0						ASPHALT		0
100			0	0		(SM) Tan, silty fine SAND, dry		
100			0	0				
5			0	20.3		(ML) Tan-orange, medium sandy SILT, some clay, moist		5
100			0	20.1				
100			0	21.2		(SM) Grey, silty medium SAND, some clay, moist		
100			0	42.3				10
						Bottom of borehole at 12.0 feet.		
15								15
20								20

LOG OF BORING - HART HICKMAN.GDT - 1/7/09 08:31 - S:\AAA-MASTER GINT PROJECTS\ROW-203\PARCEL 135.GPJ

**DRILLING CONTRACTOR:** SEI  
**DRILL RIG/ METHOD:** Geoprobe / Direct-Push Sleeve  
**SAMPLING METHOD:** DPT Sleeves  
**LOGGED BY:** GAB  
**DRAWN BY:**

**BORING STARTED:** 12/9/08  
**BORING COMPLETED:** 12/9/08  
**TOTAL DEPTH:** 12  
**SURFACE ELEV:**  
**DEPTH TO WATER:**

**Remarks:**  
 Borehole hand-augered to 5 feet.  
 Sample collected from 4-6 feet.

**Appendix E**  
**Laboratory Analytical Report**



Mr. David Graham  
Hart & Hickman  
2923 S. Tryon St.  
Suite 100  
Charlotte NC 28203  
Report Number: G609-45  
Client Project: Row-203


Dear Mr. Graham:

Enclosed are the results of the analytical services performed under the referenced project. 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. 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 the services performed during this project, please call SGS at (910) 350-1903. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS Environmental Services for your analytical services. We look forward to working with you again on any additional analytical needs which you may have.

Sincerely,  
SGS Environmental Services, Inc.

  
Project Manager  
Lori Lockamy

12/19/08  
Date

List of Reporting Abbreviations  
And Data Qualifiers

B = Compound also detected in batch blank

BQL = Below Quantification Limit (RL or MDL)

DF = Dilution Factor

Dup = Duplicate

P/D = Detected, but RPD is > 25/40% between results in dual column method.

E = Estimated concentration, exceeds calibration range.

J = Estimated concentration, below calibration range and above MDL

LCS(D) = Laboratory Control Spike (Duplicate)

MDL = Method Detection Limit

MS(D) = Matrix Spike (Duplicate)

PQL = Practical Quantitation Limit

RL/CL = Reporting Limit / Control Limit

RPD = Relative Percent Difference

mg/kg = milligram per kilogram, ppm, parts per million

ug/kg = micrograms per kilogram, ppb, parts per billion

mg/L = milligram per liter, ppm, parts per million

ug/L = micrograms per liter, ppb, parts per billion

% Rec = Percent Recovery

% solids = Percent Solids

Special Notes:

- 1) Metals and mercury samples are digested with a hot block, see the standard operating procedure document for details.
- 2) Uncertainty for all reported data is less than or equal to 30 percent.

SGS Environmental Services, Inc.

Results for Total Petroleum Hydrocarbons  
by GC/FID 8015

Client Sample ID: 135-1 (6-8)  
Client Project ID: Row-203  
Lab Sample ID: G609-45-1A  
Lab Project ID: G609-45  
Report Basis: Dry Weight

Analyzed By: DVG  
Date Collected: 12/9/2008 10:15  
Date Received: 12/12/2008  
Matrix: Soil  
Solids 88.48

Analyte	Result	RL	Units	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	4.94	mg/Kg	1	12/18/08 10:11

Surrogate Spike Results

	Added	Result	Recovery	Flag	Limits
BFB	100	96	95.6		70-130

Comments:

Batch Information

Analytical Batch: VP121808  
Analytical Method: 8015  
Instrument ID: GC4  
Analyst: DVG

Prep Method: 5035  
Initial Wt/Vol: 6.86 g  
Final Volume: 5 mL

Analyst: DVG

SGS Environmental Services, Inc.

Results for Total Petroleum Hydrocarbons  
by GC/FID 8015

Client Sample ID: 135-2 (6-8)  
Client Project ID: Row-203  
Lab Sample ID: G609-45-2A  
Lab Project ID: G609-45  
Report Basis: Dry Weight

Analyzed By: DVG  
Date Collected: 12/9/2008 10:30  
Date Received: 12/12/2008  
Matrix: Soil  
Solids 91.49

Analyte	Result	RL	Units	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	5.54	mg/Kg	1	12/18/08 10:38

Surrogate Spike Results

	Added	Result	Recovery	Flag	Limits
BFB	100	100	99.6		70-130

Comments:

Batch Information

Analytical Batch: VP121808  
Analytical Method: 8015  
Instrument ID: GC4  
Analyst: DVG

Prep Method: 5035  
Initial Wt/Vol: 5.92 g  
Final Volume: 5 mL

Analyst: DVG



SGS Environmental Services, Inc.

Results for Total Petroleum Hydrocarbons  
by GC/FID 8015

Client Sample ID: 135-3 (6-8)  
Client Project ID: Row-203  
Lab Sample ID: G609-45-3A  
Lab Project ID: G609-45  
Report Basis: Dry Weight

Analyzed By: DVG  
Date Collected: 12/9/2008 10:45  
Date Received: 12/12/2008  
Matrix: Soil  
Solids 83.38

Analyte	Result	RL	Units	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	5.18	mg/Kg	1	12/18/08 11:04

Surrogate Spike Results

	Added	Result	Recovery	Flag	Limits
BFB	100	98	98.1		70-130

Comments:

Batch Information

Analytical Batch: VP121808  
Analytical Method: 8015  
Instrument ID: GC4  
Analyst: DVG

Prep Method: 5035  
Initial Wt/Vol: 6.95 g  
Final Volume: 5 mL

Analyst: DVG

SGS Environmental Services, Inc.

Results for Total Petroleum Hydrocarbons  
by GC/FID 8015

Client Sample ID: 135-4 (6-8)  
Client Project ID: Row-203  
Lab Sample ID: G609-45-4A  
Lab Project ID: G609-45  
Report Basis: Dry Weight

Analyzed By: DVG  
Date Collected: 12/9/2008 11:00  
Date Received: 12/12/2008  
Matrix: Soil  
Solids 88.71

Analyte	Result	RL	Units	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	5.17	mg/Kg	1	12/18/08 11:31

Surrogate Spike Results

	Added	Result	Recovery	Flag	Limits
BFB	100	96	96.1		70-130

Comments:

Batch Information

Analytical Batch: VP121808  
Analytical Method: 8015  
Instrument ID: GC4  
Analyst: DVG

Prep Method: 5035  
Initial Wt/Vol: 6.54 g  
Final Volume: 5 mL

Analyst: DVG

SGS Environmental Services, Inc.

Results for Total Petroleum Hydrocarbons  
by GC/FID 8015

Client Sample ID: 135-6 (6-8)  
Client Project ID: Row-203  
Lab Sample ID: G609-45-5A  
Lab Project ID: G609-45  
Report Basis: Dry Weight

Analyzed By: DVG  
Date Collected: 12/9/2008 11:30  
Date Received: 12/12/2008  
Matrix: Soil  
Solids 86.62

Analyte	Result	RL	Units	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	6.17	mg/Kg	1	12/18/08 11:58

Surrogate Spike Results

	Added	Result	Recovery	Flag	Limits
BFB	100	97	96.9		70-130

Comments:

Batch Information

Analytical Batch: VP121808  
Analytical Method: 8015  
Instrument ID: GC4  
Analyst: DVG

Prep Method: 5035  
Initial Wt/Vol: 5.61 g  
Final Volume: 5 mL

Analyst: DVG

SGS Environmental Services, Inc.

Results for Total Petroleum Hydrocarbons  
by GC/FID 8015

Client Sample ID: 135-7 (6-8)  
Client Project ID: Row-203  
Lab Sample ID: G609-45-6A  
Lab Project ID: G609-45  
Report Basis: Dry Weight

Analyzed By: DVG  
Date Collected: 12/9/2008 11:45  
Date Received: 12/12/2008  
Matrix: Soil  
Solids 83.70

Analyte	Result	RL	Units	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	6.07	mg/Kg	1	12/18/08 12:24

Surrogate Spike Results

	Added	Result	Recovery	Flag	Limits
BFB	100	100	99.7		70-130

Comments:

Batch Information

Analytical Batch: VP121808  
Analytical Method: 8015  
Instrument ID: GC4  
Analyst: DVG

Prep Method: 5035  
Initial Wt/Vol: 5.9 g  
Final Volume: 5 mL

Analyst: DVG

SGS Environmental Services, Inc.

Results for Total Petroleum Hydrocarbons  
by GC/FID 8015

Client Sample ID: 135-8 (0-2)  
Client Project ID: Row-203  
Lab Sample ID: G609-45-7A  
Lab Project ID: G609-45  
Report Basis: Dry Weight

Analyzed By: DVG  
Date Collected: 12/9/2008 12:15  
Date Received: 12/12/2008  
Matrix: Soil  
Solids 95.74

Analyte	Result	RL	Units	Dilution Factor	Date Analyzed
Gasoline Range Organics	6.25	5.42	mg/Kg	1	12/18/08 12:51

Surrogate Spike Results

	Added	Result	Recovery	Flag	Limits
BFB	100	102	102		70-130

Comments:

Batch Information

Analytical Batch: VP121808  
Analytical Method: 8015  
Instrument ID: GC4  
Analyst: DVG

Prep Method: 5035  
Initial Wt/Vol: 5.78 g  
Final Volume: 5 mL

Analyst: DVG

SGS Environmental Services, Inc.

Results for Total Petroleum Hydrocarbons  
by GC/FID 8015

Client Sample ID: 135-9 (2-4)  
Client Project ID: Row-203  
Lab Sample ID: G609-45-8A  
Lab Project ID: G609-45  
Report Basis: Dry Weight

Analyzed By: DVG  
Date Collected: 12/9/2008 12:45  
Date Received: 12/12/2008  
Matrix: Soil  
Solids 90.92

Analyte	Result	RL	Units	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	5.49	mg/Kg	1	12/18/08 13:17

Surrogate Spike Results

	Added	Result	Recovery	Flag	Limits
BFB	100	96	96.1		70-130

Comments:

Batch Information

Analytical Batch: VP121808  
Analytical Method: 8015  
Instrument ID: GC4  
Analyst: DVG

Prep Method: 5035  
Initial Wt/Vol: 6.01 g  
Final Volume: 5 mL

Analyst: DVG



SGS Environmental Services, Inc.

Results for Total Petroleum Hydrocarbons  
by GC/FID 8015

Client Sample ID: 135-10 (6-8)  
Client Project ID: Row-203  
Lab Sample ID: G609-45-9A  
Lab Project ID: G609-45  
Report Basis: Dry Weight

Analyzed By: DVG  
Date Collected: 12/9/2008 13:45  
Date Received: 12/12/2008  
Matrix: Soil  
Solids 88.85

Analyte	Result	RL	Units	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	5.95	mg/Kg	1	12/18/08 13:44

Surrogate Spike Results

	Added	Result	Recovery	Flag	Limits
BFB	100	96	96.1		70-130

Comments:

Batch Information

Analytical Batch: VP121808  
Analytical Method: 8015  
Instrument ID: GC4  
Analyst: DVG

Prep Method: 5035  
Initial Wt/Vol: 5.67 g  
Final Volume: 5 mL

Analyst: DVG

SGS Environmental Services, Inc.

Results for Total Petroleum Hydrocarbons  
by GC/FID 8015

Client Sample ID: 135-5 (6-8)  
Client Project ID: Row-203  
Lab Sample ID: G609-45-10A  
Lab Project ID: G609-45  
Report Basis: Dry Weight

Analyzed By: DVG  
Date Collected: 12/9/2008 11:15  
Date Received: 12/12/2008  
Matrix: Soil  
Solids 85.68

Analyte	Result	RL	Units	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	5.62	mg/Kg	1	12/18/08 14:11

Surrogate Spike Results

	Added	Result	Recovery	Flag	Limits
BFB	100	98	98		70-130

Comments:

Batch Information

Analytical Batch: VP121808  
Analytical Method: 8015  
Instrument ID: GC4  
Analyst: DVG

Prep Method: 5035  
Initial Wt/Vol: 6.23 g  
Final Volume: 5 mL

Analyst: DVG

SGS Environmental Services, Inc.

Results for Total Petroleum Hydrocarbons  
by GC/FID 8015

Client Sample ID: 135-11 (4-6)  
Client Project ID: Row-203  
Lab Sample ID: G609-45-11A  
Lab Project ID: G609-45  
Report Basis: Dry Weight

Analyzed By: DVG  
Date Collected: 12/9/2008 14:45  
Date Received: 12/12/2008  
Matrix: Soil  
Solids 82.48

Analyte	Result	RL	Units	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	5.81	mg/Kg	1	12/18/08 14:38

Surrogate Spike Results

	Added	Result	Recovery	Flag	Limits
BFB	100	99	98.6		70-130

Comments:

Batch Information

Analytical Batch: VP121808  
Analytical Method: 8015  
Instrument ID: GC4  
Analyst: DVG

Prep Method: 5035  
Initial Wt/Vol: 6.26 g  
Final Volume: 5 mL

Analyst: DVG

SGS Environmental Services, Inc.

**Results for Total Petroleum Hydrocarbons**  
by GC/FID 8015

Client Sample ID: Method Blank  
Client Project ID:  
Lab Sample ID: VBLK4121808A  
Lab Project ID:  
Report Basis: Dry Weight

Analyzed By: DVG  
Date Collected:  
Date Received:  
Matrix: Soil  
Solids 100.00

Analyte	Result	RL	Units	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	6.00	mg/kg	1	12/18/08 06:12

**Surrogate Spike Results**

	Added	Result	Recovery	Flag	Limits
BFB	100	95	94.9		70-130

Comments:

**Batch Information**

Analytical Batch: VP121808  
Analytical Method: 8015  
Instrument ID: GC4  
Analyst: DVG

Prep Method: 5035  
Initial Wt/Vol: 5 g  
Final Volume: 5 mL

Analyst: DVG

SGS Environmental Services, Inc.

**QC Results for Total Petroleum Hydrocarbons**  
by GC/FID

Client Sample ID: Batch QC

Lab Sample ID: g609-44-1a

LCS ID: LCS4121808A / VP121808

Analyzed By: DVG

Matrix: Soil

Solids 98.47

**MS/MSD**

Analyte	Sample MG/KG	Spiked MG/KG	MS MG/KG	REC		Spiked MG/KG	MSD MG/KG	REC		RPD	
				%	#			%	#	%	#
				(70-130%)						(30%)	
GRO	BQL	16	15.8	98.8		16	14.9	93.1		5.94	

**LCS**

Analyte	Spiked MG/KG	Result MG/KG	REC		LIMITS	
			%	#	Lower	Upper
GRO	16	18	109	✓	70	130

Comments:

Reviewed By: 

SGS Environmental Services, Inc.

**Results for Total Petroleum Hydrocarbons**  
by GC/FID 8015

Client Sample ID: 135-1 (6-8)  
Client Project ID: Row-203  
Lab Sample ID: G609-45-1D  
Lab Project ID: G609-45

Date Collected: 12/9/2008 10:15  
Date Received: 12/12/2008  
Matrix: Soil  
Solids 88.48  
Report Basis: Dry Weight

Parameter	Result	RL	Units	Dilution Factor	Date Analyzed
Diesel Range Organics	BQL	6.91	mg/Kg	1	12/18/08 02:08

Surrogate Spike Results	Spike Added	Control Limits	Spike Result	Percent Recovery
OTP	40	40-140	31.7	79.4

Comments:

**Batch Information**

Analytical Batch: EP121708  
Analytical Method: 8015  
Instrument: GC6  
Analyst: EAW

Prep batch: 13229  
Prep Method: 3541  
Prep Date: 12/15/08  
Initial Prep Wt/Vol: 32.7 G  
Prep Final Vol: 10 mL

Analyst:                     

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N.C. Certification #481

Reviewed By:                       
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SGS Environmental Services, Inc.

**Results for Total Petroleum Hydrocarbons**  
by GC/FID 8015

Client Sample ID: 135-2 (6-8)  
Client Project ID: Row-203  
Lab Sample ID: G609-45-2D  
Lab Project ID: G609-45

Date Collected: 12/9/2008 10:30  
Date Received: 12/12/2008  
Matrix: Soil  
Solids 91.49  
Report Basis: Dry Weight

Parameter	Result	RL	Units	Dilution Factor	Date Analyzed
Diesel Range Organics	BQL	6.73	mg/Kg	1	12/18/08 02:36

Surrogate Spike Results	Spike Added	Control Limits	Spike Result	Percent Recovery
OTP	40	40-140	34.3	85.8

Comments:

**Batch Information**

Analytical Batch: EP121708  
Analytical Method: 8015  
Instrument: GC6  
Analyst: EAW

Prep batch: 13229  
Prep Method: 3541  
Prep Date: 12/15/08  
Initial Prep Wt/Vol: 32.46 G  
Prep Final Vol: 10 mL

Analyst:     *W*    

NC Certification #481

N.C. Certification #481

Reviewed By:     *[Signature]*      
DRO XLS  
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**Results for Total Petroleum Hydrocarbons**  
by GC/FID 8015

Client Sample ID: 135-3 (6-8)  
Client Project ID: Row-203  
Lab Sample ID: G609-45-3D  
Lab Project ID: G609-45

Date Collected: 12/9/2008 10:45  
Date Received: 12/12/2008  
Matrix: Soil  
Solids 83.38  
Report Basis: Dry Weight

Parameter	Result	RL	Units	Dilution Factor	Date Analyzed
Diesel Range Organics	BQL	7.27	mg/Kg	1	12/18/08 03:05
<b>Surrogate Spike Results</b>		<b>Spike Added</b>	<b>Control Limits</b>	<b>Spike Result</b>	<b>Percent Recovery</b>
OTP		40	40-140	30.7	76.7

Comments:

**Batch Information**

Analytical Batch: EP121708  
Analytical Method: 8015  
Instrument: GC6  
Analyst: EAW

Prep batch: 13229  
Prep Method: 3541  
Prep Date: 12/15/08  
Initial Prep Wt/Vol: 33.01 G  
Prep Final Vol: 10 mL

Analyst: 

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**Results for Total Petroleum Hydrocarbons**  
by GC/FID 8015

Client Sample ID: 135-4 (6-8)  
Client Project ID: Row-203  
Lab Sample ID: G609-45-4D  
Lab Project ID: G609-45

Date Collected: 12/9/2008 11:00  
Date Received: 12/12/2008  
Matrix: Soil  
Solids 88.71  
Report Basis: Dry Weight

Parameter	Result	RL	Units	Dilution Factor	Date Analyzed
Diesel Range Organics	BQL	6.93	mg/Kg	1	12/18/08 03:34
<b>Surrogate Spike Results</b>		<b>Spike Added</b>	<b>Control Limits</b>	<b>Spike Result</b>	<b>Percent Recovery</b>
OTP		40	40-140	32.6	81.6

**Comments:**

**Batch Information**

Analytical Batch: EP121708  
Analytical Method: 8015  
Instrument: GC6  
Analyst: EAW

Prep batch: 13229  
Prep Method: 3541  
Prep Date: 12/15/08  
Initial Prep Wt/Vol: 32.55 G  
Prep Final Vol: 10 mL

Analyst:                      

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DRO.XLS  
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**Results for Total Petroleum Hydrocarbons**  
by GC/FID 8015

Client Sample ID: 135-6 (6-8)  
Client Project ID: Row-203  
Lab Sample ID: G609-45-5D  
Lab Project ID: G609-45

Date Collected: 12/9/2008 11:30  
Date Received: 12/12/2008  
Matrix: Soil  
Solids 86.62  
Report Basis: Dry Weight

Parameter	Result	RL	Units	Dilution Factor	Date Analyzed
Diesel Range Organics	7.63	7.10	mg/Kg	1	12/18/08 04:02

Surrogate Spike Results	Spike Added	Control Limits	Spike Result	Percent Recovery
OTP	40	40-140	32.9	82.1

Comments:

**Batch Information**


Analytical Batch: EP121708  
Analytical Method: 8015  
Instrument: GC6  
Analyst: EAW

Prep batch: 13229  
Prep Method: 3541  
Prep Date: 12/15/08  
Initial Prep Wt/Vol: 32.53 G  
Prep Final Vol: 10 mL

Analyst: 

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**Results for Total Petroleum Hydrocarbons**  
by GC/FID 8015

Client Sample ID: 135-7 (6-8)  
Client Project ID: Row-203  
Lab Sample ID: G609-45-6D  
Lab Project ID: G609-45

Date Collected: 12/9/2008 11:45  
Date Received: 12/12/2008  
Matrix: Soil  
Solids 83.70  
Report Basis: Dry Weight

Parameter	Result	RL	Units	Dilution Factor	Date Analyzed
Diesel Range Organics	BQL	7.40	mg/Kg	1	12/18/08 04:30
<b>Surrogate Spike Results</b>		<b>Spike Added</b>	<b>Control Limits</b>	<b>Spike Result</b>	<b>Percent Recovery</b>
OTP		40	40-140	31.6	78.9

**Comments:**

**Batch Information**

Analytical Batch: EP121708  
Analytical Method: 8015  
Instrument: GC6  
Analyst: EAW

Prep batch: 13229  
Prep Method: 3541  
Prep Date: 12/15/08  
Initial Prep Wt/Vol: 32.31 G  
Prep Final Vol: 10 mL

Analyst: 

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N.C. Certification #481

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**Results for Total Petroleum Hydrocarbons**  
by GC/FID 8015

Client Sample ID: 135-8 (0-2)  
Client Project ID: Row-203  
Lab Sample ID: G609-45-7D  
Lab Project ID: G609-45

Date Collected: 12/9/2008 12:15  
Date Received: 12/12/2008  
Matrix: Soil  
Solids 95.74  
Report Basis: Dry Weight

Parameter	Result	RL	Units	Dilution Factor	Date Analyzed
Diesel Range Organics	22.7	6.35	mg/Kg	1	12/18/08 04:59


Surrogate Spike Results	Spike Added	Control Limits	Spike Result	Percent Recovery
OTP	40	40-140	35.2	88.1

Comments:


**Batch Information**

Analytical Batch: EP121708  
Analytical Method: 8015  
Instrument: GC6  
Analyst: EAW

Prep batch: 13229  
Prep Method: 3541  
Prep Date: 12/15/08  
Initial Prep Wt/Vol: 32.88 G  
Prep Final Vol: 10 mL

Analyst: 

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N.C. Certification #481

Reviewed By:   
DRO.XLS  
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**Results for Total Petroleum Hydrocarbons**  
by GC/FID 8015

Client Sample ID: 135-9 (2-4)  
Client Project ID: Row-203  
Lab Sample ID: G609-45-8D  
Lab Project ID: G609-45

Date Collected: 12/9/2008 12:45  
Date Received: 12/12/2008  
Matrix: Soil  
Solids 90.92  
Report Basis: Dry Weight

Parameter	Result	RL	Units	Dilution Factor	Date Analyzed
Diesel Range Organics	20.7	6.45	mg/Kg	1	12/18/08 05:27

Surrogate Spike Results	Spike Added	Control Limits	Spike Result	Percent Recovery
OTP	40	40-140	33.2	82.9

Comments:

**Batch Information**

Analytical Batch: EP121708  
Analytical Method: 8015  
Instrument: GC6  
Analyst: EAW

Prep batch: 13229  
Prep Method: 3541  
Prep Date: 12/15/08  
Initial Prep Wt/Vol: 34.09 G  
Prep Final Vol: 10 mL

Analyst: aw

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N.C. Certification #481

Reviewed By: PRO  
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**Results for Total Petroleum Hydrocarbons**  
by GC/FID 8015

Client Sample ID: 135-10 (6-8)  
Client Project ID: Row-203  
Lab Sample ID: G609-45-9D  
Lab Project ID: G609-45

Date Collected: 12/9/2008 13:45  
Date Received: 12/12/2008  
Matrix: Soil  
Solids 88.85  
Report Basis: Dry Weight

Parameter	Result	RL	Units	Dilution Factor	Date Analyzed
Diesel Range Organics	BQL	6.64	mg/Kg	1	12/18/08 06:24

Surrogate Spike Results	Spike Added	Control Limits	Spike Result	Percent Recovery
OTP	40	40-140	31.3	78.3

**Comments:**

**Batch Information**


Analytical Batch: EP121708  
Analytical Method: 8015  
Instrument: GC6  
Analyst: EAW

Prep batch: 13229  
Prep Method: 3541  
Prep Date: 12/15/08  
Initial Prep Wt/Vol: 33.92 G  
Prep Final Vol: 10 mL

Analyst: 

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N.C. Certification #481

Reviewed By:   
DRO.XLS  
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**Results for Total Petroleum Hydrocarbons**  
by GC/FID 8015

Client Sample ID: 135-5 (6-8)  
Client Project ID: Row-203  
Lab Sample ID: G609-45-10D  
Lab Project ID: G609-45

Date Collected: 12/9/2008 11:15  
Date Received: 12/12/2008  
Matrix: Soil  
Solids 85.68  
Report Basis: Dry Weight

Parameter	Result	RL	Units	Dilution Factor	Date Analyzed
Diesel Range Organics	BQL	6.82	mg/Kg	1	12/18/08 07:48
<b>Surrogate Spike Results</b>		<b>Spike Added</b>	<b>Control Limits</b>	<b>Spike Result</b>	<b>Percent Recovery</b>
OTP		40	40-140	31	77.6

Comments:

**Batch Information**


Analytical Batch: EP121708  
Analytical Method: 8015  
Instrument: GC6  
Analyst: EAW

Prep batch: 13229  
Prep Method: 3541  
Prep Date: 12/15/08  
Initial Prep Wt/Vol: 34.22 G  
Prep Final Vol: 10 mL

Analyst: 

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DRO.XLS  
Page 25 of 30

SGS Environmental Services, Inc.

**Results for Total Petroleum Hydrocarbons**  
by GC/FID 8015

Client Sample ID: 135-11 (4-6)  
Client Project ID: Row-203  
Lab Sample ID: G609-45-11D  
Lab Project ID: G609-45

Date Collected: 12/9/2008 14:45  
Date Received: 12/12/2008  
Matrix: Soil  
Solids 82.48  
Report Basis: Dry Weight

Parameter	Result	RL	Units	Dilution Factor	Date Analyzed
Diesel Range Organics	BQL	7.29	mg/Kg	1	12/18/08 08:16
<b>Surrogate Spike Results</b>		<b>Spike Added</b>	<b>Control Limits</b>	<b>Spike Result</b>	<b>Percent Recovery</b>
OTP		40	40-140	34.1	85.3

Comments:

**Batch Information**


Analytical Batch: EP121708  
Analytical Method: 8015  
Instrument: GC6  
Analyst: EAW

Prep batch: 13229  
Prep Method: 3541  
Prep Date: 12/15/08  
Initial Prep Wt/Vol: 33.27 G  
Prep Final Vol: 10 mL

Analyst: 

NC Certification #481

N.C. Certification #481

Reviewed By:   
DRO XLS  
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SGS Environmental Services, Inc.

**Results for Total Petroleum Hydrocarbons**  
by GC/FID 8015

Client Sample ID: Method Blank  
Client Project ID:  
Lab Sample ID: PB13229  
Lab Project ID:

Date Collected:  
Date Received:  
Matrix: SOIL  
Solids 100.00  
Report Basis: Dry Weight

Parameter	Result	RL	Units	Dilution Factor	Date Analyzed
Diesel Range Organics	BQL	6.25	mg/Kg	1	12/18/08 00:43
<b>Surrogate Spike Results</b>		<b>Spike Added</b>	<b>Control Limits</b>	<b>Spike Result</b>	<b>Percent Recovery</b>
OTP		40	40-140	34.2	85.5

Comments:

**Batch Information**

Analytical Batch: EP121708  
Analytical Method: 8015  
Instrument: GC6  
Analyst: EAW

Prep batch: 13229  
Prep Method: 3541  
Prep Date: 12/15/08  
Initial Prep Wt/Vol: 32 G  
Prep Final Vol: 10 mL

Analyst: 

NC Certification #481

N.C. Certification #481

Reviewed By:   
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DPO.XLS

**QC Results for Total Petroleum Hydrocarbons**  
by GC/FID

Client Sample ID: Batch QC  
Lab Sample ID: G609-45-11D  
Batch ID: 13229

Analyzed By: EAW  
Matrix: Soil  
Solids 82.48

**MS/MSD**

Analyte	Sample MG/KG	Spiked MG/KG	MS MG/KG	REC		Spiked MG/KG	MSD MG/KG	REC		RPD %
				%	#			%	#	
DRO	BQL	73	56.2	77	✓	73.1	65.2	89.2	✓	14.7

**LCS**

Analyte	Spiked MG/KG	Result MG/KG	REC		LIMITS	
			%	#	Lower	Upper
DRO	62.5	56.1	89.8	✓	55.3	137

Reviewed By: CPA



# CHAIN OF CUSTODY RECORD

## SGS Environmental Services Inc.

- Locations Nationwide
- Alaska
  - Hawaii
  - Ohio
  - Maryland
  - New Jersey
  - North Carolina
  - West Virginia
- www.us.sgs.com

090997

1 CLIENT: Hart & Hickman PHONE NO: (704) 586-0007

CONTACT: David Graham SITE/PWSID#:

PROJECT: ROW-203 E-MAIL: dgraham@hart-hickman.com

REPORTS TO: David Graham FAX NO: ( )

INVOICE TO: Hart & Hickman, David Graham, P.O. NUMBER ROW-203 QUOTE #

SGS Reference: 5609-45 PAGE 1 OF 2

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	No	CONTAINERS	SAMPLE TYPE	C= COMP G= GRAB	Preservatives Used Analysis Required	REMARKS	Samples Received Cold? (Circle YES/NO)	Temperature (C): <u>5.2</u>	Chain of Custody Seal: (Circle) INTACT / BROKEN
✓	135-1 (6-8)	12/9/07	1015	SOIL	3		G		③				
✓	135-2 (6-8)	12/9/08	1030	SOIL	3		G						
✓	135-3 (6-8)	12/9/08	1045	SOIL	3		G						
✓	135-4 (6-8)	12/9/08	1100	SOIL	3		G						
✓	135-6 (6-8)	12/9/08	1130	SOIL	3		G						
✓	135-7 (6-8)	12/9/07	1145	SOIL	3		G						
✓	135-8 (0-2)	12/9/07	1215	SOIL	3		G						
✓	135-9 (0-4)	12/9/08	1245	SOIL	3		G						
✓	135-10 (6-8)	12/9/08	1345	SOIL	3		G						
✓	135-5 (6-8)	12/9/08	1115	SOIL	3		G						

2

3

4

5

Collected/Relinquished By: (1) Grant Barrett / HRH Date 12/11/08 Time 1500 Received By: [Signature] Date 12/12/08 Time 10:15

Relinquished By: (2)

Relinquished By: (3)

Relinquished By: (4)

Shipping Carrier: \_\_\_\_\_ Shipping Ticket No: \_\_\_\_\_

Special Deliverable Requirements: \_\_\_\_\_

Special Instructions: \_\_\_\_\_

Requested Turnaround Time: \_\_\_\_\_ Date Needed: \_\_\_\_\_

RUSH  STD

SGS Environmental Services, Inc.



**CHAIN OF CUSTODY RECORD**  
**SGS Environmental Services Inc.**

- Locations Nationwide
- Alaska
  - Hawaii
  - Ohio
  - Maryland
  - New Jersey
  - North Carolina
  - West Virginia
- www.us.egs.com

090998

1 CLIENT: Hart & Hickman  
 CONTACT: David Graham  
 PROJECT: ROW-203  
 REPORTS TO: David Graham  
 E-MAIL: dgraham@hartandhickman.com  
 INVOICE TO: Hart & Hickman  
David Graham  
 QUOTE #  
 P.O. NUMBER ROW-003

SGS Reference: 6609-45 PAGE 2 OF 2

No	SAMPLE TYPE	Preservatives Used	Analysis Required	REMARKS
CONTAINERS	Q= COMP Q= GRAB		<b>(3)</b> <u>EPA 815B ERO, TO</u>	
5	6		<input checked="" type="checkbox"/>	

SGS Environmental Services, Inc.

5 Collected/Relinquished By: (1)  
Grant Barron / ALH  
 Relinquished By: (2)  
 Relinquished By: (3)  
 Relinquished By: (4)

Date	Time	Received By:	Date	Time	Shipping Carrier:	Samples Received Cold? (Circle) YES NO
<u>12/11/08</u>	<u>1500</u>	<i>[Signature]</i>	<u>12/15/08</u>	<u>10:15</u>		<u>NO</u>
Date	Time	Received By:	Date	Time	Shipping Ticket No:	Temperature (C): <u>5.2</u>
Date	Time	Received By:	Date	Time	Special Deliverable Requirements:	Chain of Custody Seal: (Circle) INTACT BROKEN
Date	Time	Received By:	Date	Time	Special Instructions:	<u>ABSENT</u>
Date	Time	Received By:	Date	Time	Requested Turnaround Time:	<input type="checkbox"/> RUSH <input type="checkbox"/> STD