

Preliminary Site Assessment
Buddy Wood Property Parcel #48
Boone, Watauga County, NC

H&H Job No. ROW-148
State Project U-4020
WBS Element # 35015.1.1
May 29, 2008



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
Buddy Wood Property Parcel #48
Boone, Watauga County, North Carolina
H&H Project ROW-148**

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**Preliminary Site Assessment Report
Buddy Wood Property Parcel #48
Boone, Watauga County, North Carolina
H&H Project ROW-148**

1.0 Introduction

Hart & Hickman, PC (H&H) has prepared this Preliminary Site Assessment (PSA) report documenting assessment activities performed at the Buddy Wood property (Parcel #48) located at 663 East King Street in Boone, Watauga County, North Carolina. This assessment was conducted on behalf of the North Carolina Department of Transportation (NC DOT) in accordance with H&H's February 29, 2008 proposal.

The purpose of this assessment was to determine the presence or absence of impacted soil at the subject property in proposed right-of-way construction areas related to the widening of US Highway 421 (State Project U-4020). 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 US Highway 421 widening area near the Buddy Wood property is attached as Appendix A.

Based on information provided by NC DOT and property neighbors, the subject site operates as Wood Masonry Supply Company and may have operated as a gas station at some unspecified time in the past. According to an Environmental Data Resources (EDR) report for the site vicinity, the property does not appear on the North Carolina Underground Storage Tank (UST) database and H&H did not observe surface evidence of current USTs or evidence of UST removal on the property.

2.0 Site Assessment

Soil Assessment Field Activities

H&H mobilized to the Buddy Wood property (Parcel #48) on April 8, 2008 to advance 7 soil borings (48-1 through 48-7) by direct push technology (DPT). Prior to advancing the soil borings, H&H reviewed a geophysical survey performed by Schnabel Engineering (Schnabel) on March 11 and 18, 2008. Schnabel utilized ground penetrating radar (GPR) and time domain electromagnetic (TDEM) technology to identify geophysical anomalies and potential USTs at the site. The Schnabel

results indicated a magnetic anomaly on the southeastern portion of the property as a potential 270-gallon UST. Follow-up with GPR also showed evidence of a potential UST at the property. Maps depicting the results of the GPR and TDEM results are included in Appendix B.

Prior to conducting soil borings, utilities were marked via NC One Call and by DOT's contractor, Vaughn and Melton. Borings were also cleared to 5 ft depth by hand auger. H&H utilized Geologic Exploration of Statesville, North Carolina to advance soil borings 48-1 through 48-7 by DPT (see Figure 2). Borings were installed to depths of 10 to 12 ft. To facilitate the selection of soil samples for laboratory analysis from these borings, soil 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, soil samples that exhibited the highest reading on the OVA were selected for laboratory analysis. Soil boring logs for 48-1 through 48-7 are included in Appendix C.

H&H submitted 7 samples (48-1 @ 2-5 ft; 48-2 @ 0-2 ft; 48-3 @ 2-5 ft; 48-4 @ 2-5 ft; 48-5 @ 5-7 ft; 48-6 @ 2-5 ft; and 48-7 @ 0-2 ft). Soil samples are identified by the NC DOT Parcel number, soil boring, and the depth in feet of sample collection. Samples were sent to Prism Laboratories Inc. of Charlotte, North Carolina for analysis of total petroleum hydrocarbons (TPH) by EPA Method 8015B for gasoline-range organics (GRO) and diesel-range organics (DRO). Table 1 summarizes sample depths and analytical results. The laboratory analytical report and chain-of-custody documentation for this site are provided in Appendix D. The chain-of-custody form includes samples from other properties. The analytical results are discussed below.

3.0 Analytical Results

TPH GRO and TPH DRO were detected in two of the seven soil samples analyzed. TPH DRO concentrations were detected in samples 48-1 (2-5 ft) and 48-7 (0-2 ft) above NC DENR Action Levels and TPH GRO concentrations were detected above the NC DENR Action Level in 48-1 (2-5 ft).

Based on laboratory analytical results and OVA readings, low level TPH concentrations are situated on Parcel 48 in two areas between the existing curb of East King Street and the proposed utility

easement line. H&H estimates that there are a total of 300 cubic yards (420 tons) of impacted soil in the southwest corner of Parcel 48 and 100 cubic yards (140 tons) in the southeast corner of Parcel 48. In both cases, the impacted soil is situated between the existing northern curb of East King Street and the proposed utility easement line. Based on OVA readings, it is assumed that the impacted soil extends to at least 10 ft in the southwest corner of Parcel 48 and to approximately 6 ft in the southeast corner of Parcel 48. DOT plans indicate a proposed fill of 1.5 ft in this area. Because this is a fill area, most of the impacted soil will not likely be disturbed. However, impacted soil will be generated by any soil grading work below the existing grade and during utility line installations in the aforementioned areas. Impacted soil that is removed should be properly managed and disposed at a permitted facility.

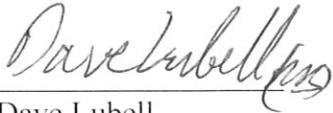
Based on the geophysical survey, one UST appears to be present within the proposed utility easement area. Soil impacts were detected just southeast of this UST in boring 48-1 (2-5 ft). This UST and its contents should be removed and disposed in accordance with NCDENR regulations.

4.0 Summary and Regulatory Considerations

H&H has reviewed Geophysical survey results and collected soil samples at Parcel 48. One UST appears to be present within the proposed utility easement area. Analytical results and OVA readings indicate low level concentrations of TPH GRO and TPH DRO above NC DENR Action Levels. H&H estimates that there are a total of 400 cubic yards (560 tons) of impacted soil above 10 ft at Parcel 48. The impacted soil is situated between the existing northern curb of East King Street and the proposed utility easement line. DOT plans indicate a proposed fill of 1.5 ft in this area. Because this is a fill area, most of the impacted soil will not likely be disturbed. However, impacted soil will be generated by any soil grading work below the existing grade and during utility line installations in the aforementioned areas. Impacted soil that is removed should be properly managed and disposed at a permitted facility. The UST and its contents should also be removed and disposed in accordance with NCDENR regulations.

5.0 Signature Page

This report was prepared by:



Dave Lubell
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
Buddy Wood Property, Parcel #48
Boone, North Carolina
H&H Job No. ROW-148

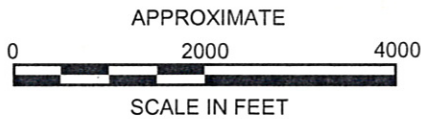
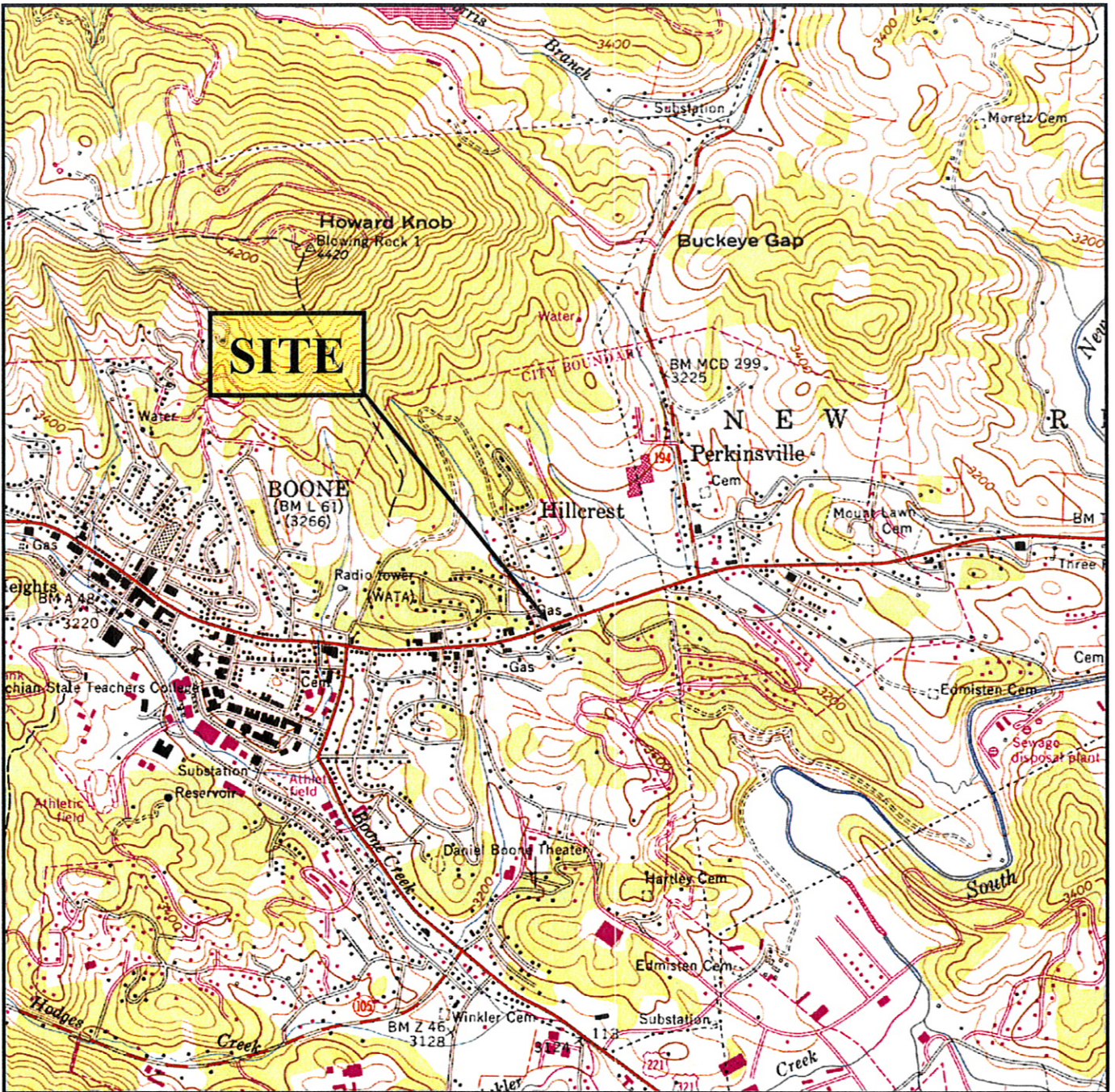
Sample ID	48-1	48-2	48-3	48-4	48-5	48-6	48-7	NC DENR Action Level (mg/kg)
	Sample Depth (ft) Sample Date Units	0-2 4/8/2008 (mg/kg)	2-5 4/8/2008 (mg/kg)	2-5 4/8/2008 (mg/kg)	5-7 4/8/2008 (mg/kg)	2-5 4/8/2008 (mg/kg)	0-2 4/8/2008 (mg/kg)	
<u>TPH-DRO/GRO (8015B)</u> Diesel-Range Organics (DRO) Gasoline-Range Organics (GRO)	45	<8.7 <6.3	<8.0 <5.8	<8.0 <5.8	<8.2 <6.0	<7.4 <5.3	38 <6.6	10 10

Notes:

EPA Method follows parameter in parenthesis

Bold denotes value in excess of NC DENR Action Levels


TPH=total petroleum hydrocarbons



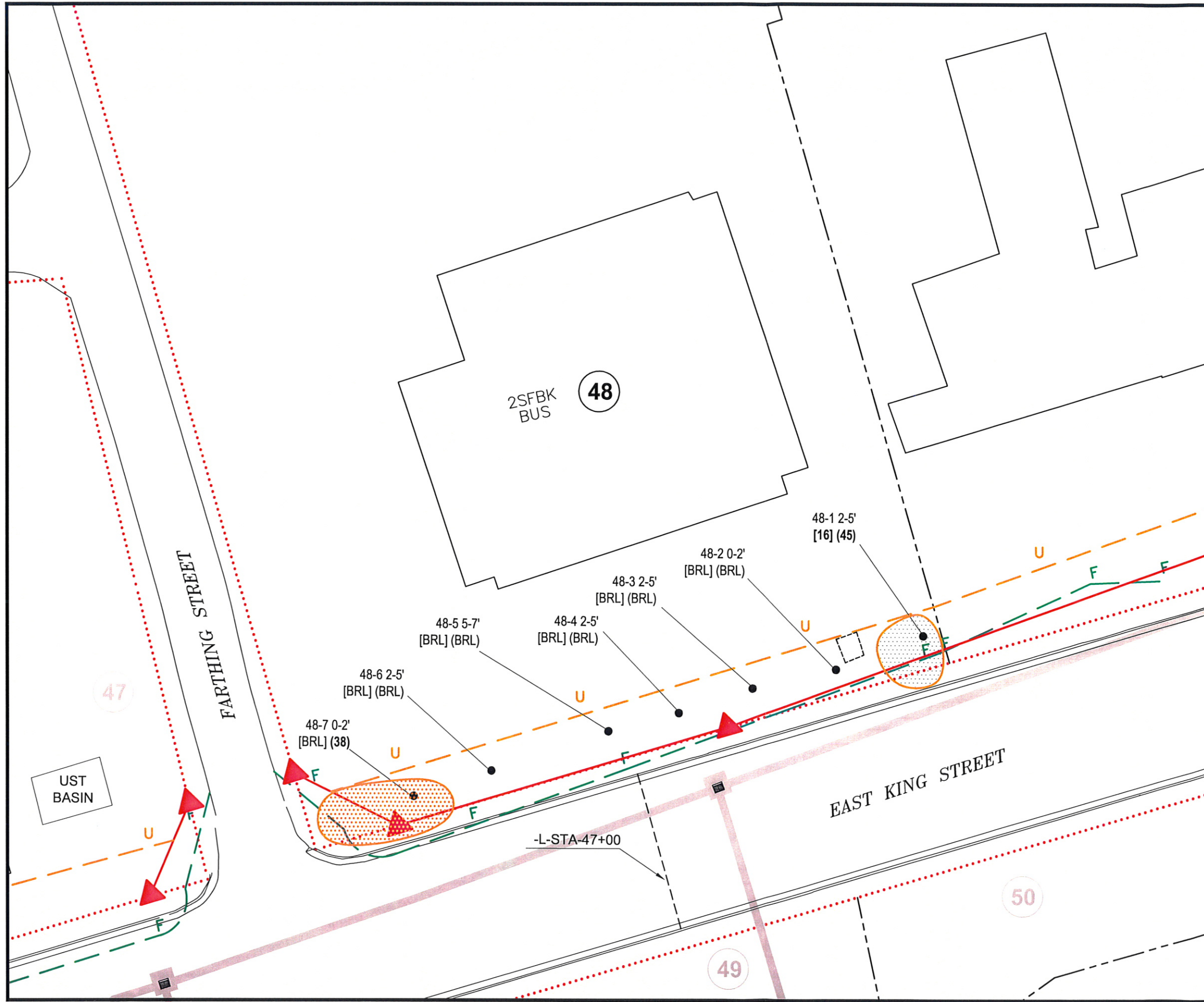
U.S.G.S. QUADRANGLE MAP

**BOONE, NC 1959
PHOTOREVISED 1978**

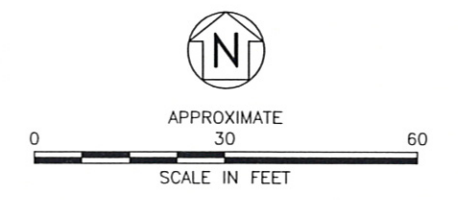
QUADRANGLE
7.5 MINUTE SERIES (TOPOGRAPHIC)


TITLE	SITE LOCATION MAP	
PROJECT	BUDDY WOOD PROPERTY PARCEL #48 BOONE, NORTH CAROLINA	
	 2923 South Tryon Street-Suite 100 Charlotte, North Carolina 28203 704-586-0007 (p) 704-586-0370 (f)	
DATE:	4-28-08	REVISION NO: 0
JOB NO:	ROW-148	FIGURE NO: 1

S:\AAA-Master Projects\NC DOT\Right-of-Way-ROW\ROW-148 Boone PSAs\Figures\38,41-43,45,47,48 A.dwg, 48, 5/28/2008 12:37:17 PM, 1:1



- LEGEND**
- PROPERTY LINE
 - EXISTING RIGHT-OF-WAY
 - ▲ PROPOSED RIGHT-OF-WAY
 - F- PROPOSED FILL LINE
 - U- PROPOSED UTILITY EASEMENT
 - IMPACTED SOIL AREA
 - PROPOSED DRAINAGE PIPE
 - CB PROPOSED CATCH BASIN
 - SOIL BORING
 - POTENTIAL UST IDENTIFIED BY SCHNABEL
 - 48 PARCEL NUMBER
 - [] = TPH GRO mg/kg
 - () = TPH DRO mg/kg
 - BOLD DENOTES REGULATORY EXCEEDANCE**
 - BRL = BELOW REPORTING LIMIT**



TITLE	
SITE MAP AND SOIL ANALYTICAL RESULTS	
PROJECT	
BUDDY WOOD PROPERTY PARCEL #48 BOONE, NORTH CAROLINA	
 2923 South Tryon Street-Suite 100 Charlotte, North Carolina 28203 704-586-0007(p) 704-586-0373(f)	
DATE: 4-24-08	REVISION NO. 0
JOB NO: ROW-148	FIGURE: 2

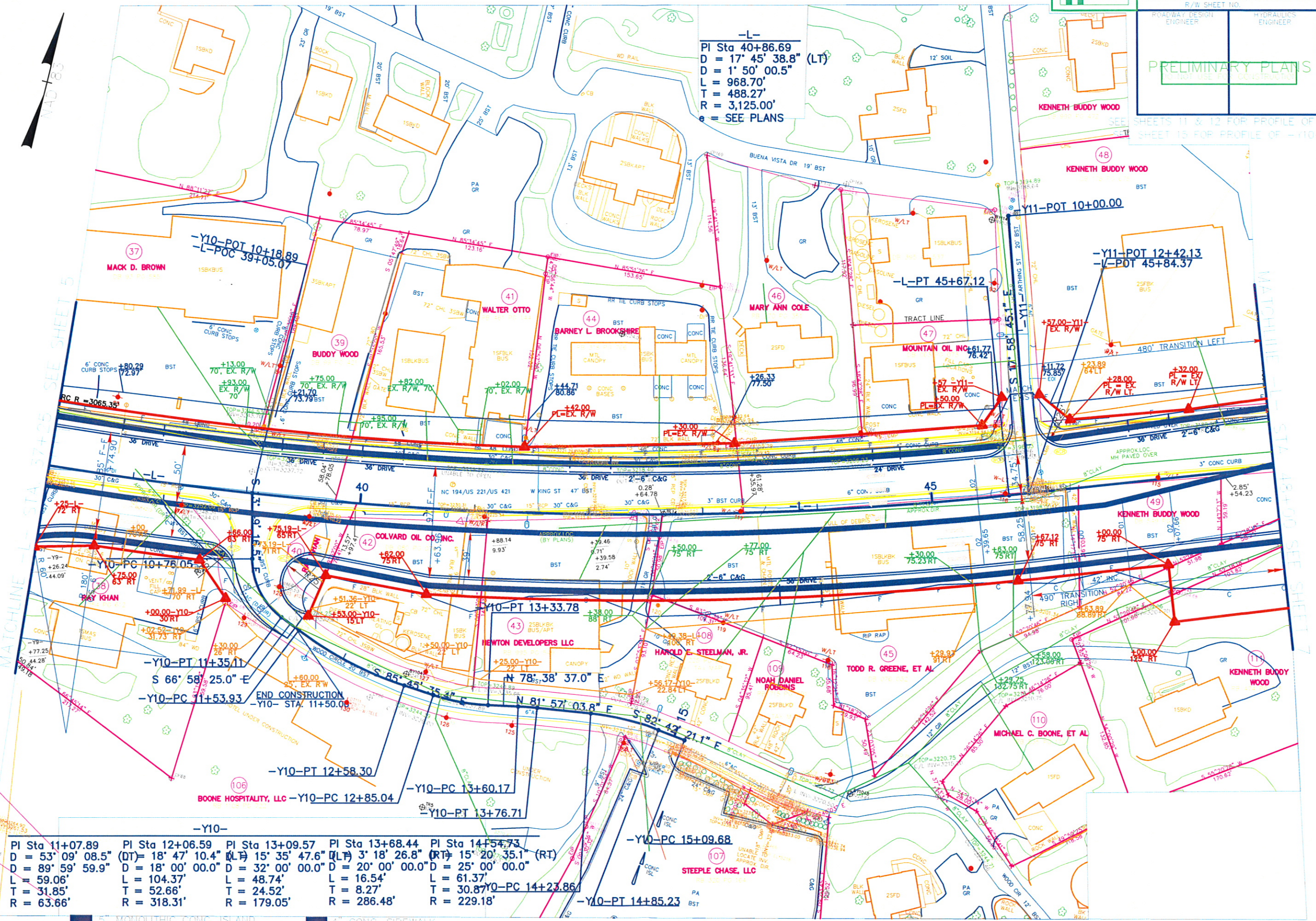
Appendix A
NC DOT Preliminary Plan

-L-
 PI Sta 40+86.69
 D = 17' 45" 38.8" (LT)
 D = 1' 50" 00.5"
 L = 968.70'
 T = 488.27'
 R = 3,125.00'
 e = SEE PLANS

MATCHLINE TO STA 37+25 SEE SHEET 5

MATCHLINE TO STA 115+00 SEE SHEET 15

-Y10-	
PI Sta 11+07.89	PI Sta 12+06.59
D = 53' 09" 08.5" (DT)	D = 18' 47" 10.4" (LT)
D = 89' 59" 59.9"	D = 32' 00" 00.0" (RT)
L = 59.06'	L = 104.37'
T = 31.85'	T = 52.66'
R = 63.66'	R = 318.31'
PI Sta 13+09.57	PI Sta 13+68.44
D = 15' 35" 47.6" (LT)	D = 3' 18" 26.8" (RT)
D = 20' 00" 00.0"	D = 25' 00" 00.0"
L = 48.74'	L = 61.37'
T = 8.27'	T = 30.87'
R = 179.05'	R = 286.48'
PI Sta 14+54.73	PI Sta 15+09.68
D = 15' 20" 35.1" (RT)	D = 25' 00" 00.0"
D = 25' 00" 00.0"	D = 25' 00" 00.0"
L = 61.37'	L = 61.37'
T = 30.87'	T = 30.87'
R = 229.18'	R = 229.18'



Appendix B

Schnabel Engineering Geophysical Survey Report

April 28, 2008

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

RE: State Project: U-4020
WBS Element: 35015.1.1
County: Watauga
Description: US 421 (King Street) from US 321 (Hardin Street) to east
of NC 194 (Jefferson Road) in Boone

SUBJECT: Report on Geophysical Surveys of Parcel 48
Schnabel Engineering Project No. 07210023.07

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 one 8.5x11 color figure and two 11x17 color figures.

1.0 INTRODUCTION

Schnabel Engineering conducted geophysical surveys on March 11 and March 18, 2008, in the accessible areas of the proposed right-of-way (ROW) sections of Parcel 48 (Buddy Wood Property, Wood Masonry Supply) under our 2007 contract with the NCDOT. Parcel 48 is located at the northeast corner of the intersection US 421 (King Street) and Farthing Street. The work was conducted at the location indicated by 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 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 spaced one to two feet apart in orthogonal directions over anomalous EM readings not attributed to cultural features. A possible UST was located and marked on the ground at this site. Pictures of the location of this possible UST as marked in the field are shown in Figure 1.

Preliminary results were sent to David Graham and Matt Bramblett of Hart & Hickman on March 24, 2008.

3.0 DISCUSSION OF RESULTS

The contoured EM61 data are shown on Figures 2 and 3. The EM61 early time gate results are plotted on Figure 2. The early time gate data provide the most sensitive detection of metal object targets, regardless of size. Figure 3 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 show linear anomalies probably caused by buried utilities, and anomalies caused by known site features (Figures 2 and 3). The GPR data indicated the presence of a possible UST about 25 feet from the eastern edge of the parcel. An example GPR image showing the reflection from the possible UST is shown on Figures 2 and 3. Figures 2 and 3 also include the location of the possible UST as marked in the field. The GPR data indicate that the possible UST is buried about 3 to 4 feet below the ground surface, and is about 3 feet in diameter and about 5 feet long, equivalent to a capacity of approximately 270 gallons.

4.0 CONCLUSIONS

Our evaluation of the geophysical data collected on Parcel 48 of Project U-4020 in Boone, NC indicates the following:

- The geophysical data indicate the presence of a possible UST on Parcel 48. The possible UST is about 270-gallon capacity and is buried about 3 to 4 feet below ground surface.

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,



Jeremy S. Strohmeyer, P.G.
Project Manager

JW/JS/NB

Attachment: Figures (3)

FILE: G:\2007 PROJECTS\07210023 (NCDOT 2007 GEOPHYSICAL SERVICES) PHASE 07 (U-4020 - WATAUGA COUNTY) REPORT HART & HICKMAN PARCEL 48 REPORT ON PARCEL 48.DOC



Parcel 48 – Wood Masonry Supply, looking east
UST: 3' x 5'



Parcel 48 – Wood Masonry Supply, looking north
UST: 3' x 5'

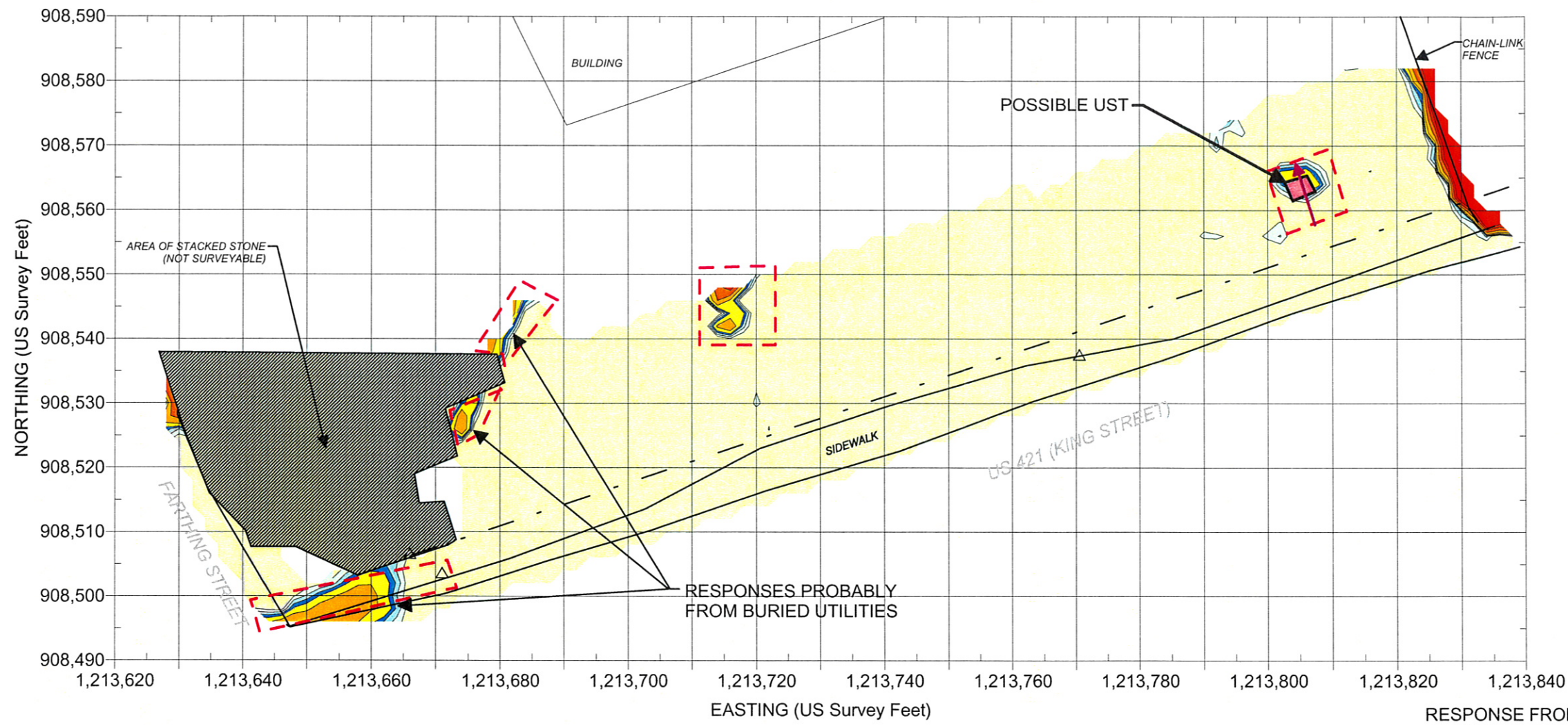


NC Department of Transportation
Geotechnical Engineering Unit

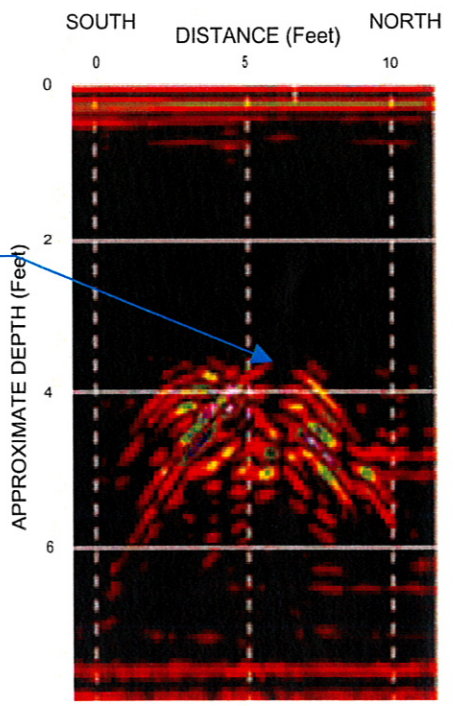
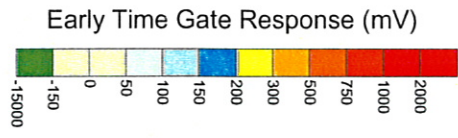
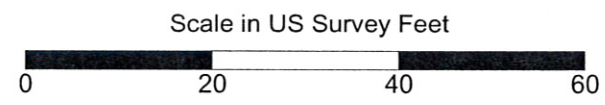
State Project No. U-4020
Watauga County, North Carolina

**PARCEL 48
PHOTOS OF POSSIBLE
UST LOCATION**

FIGURE 1



EXPLANATION	
	EM61 SURVEY AREA - DATA ACQUIRED ALONG PARALLEL SURVEY LINES SPACED APPROXIMATELY 2.5 FEET APART
	GUY WIRE
	SIGN
	METALLIC OBJECT
	NCDOT MARKER
	UTILITY POLE
	STORMWATER GRATE
	UTILITY MANHOLE
	MONITORING WELL
	LIGHTPOLE
	GPR SURVEY AREA
	LOCATION OF GPR SURVEY LINE SHOWN
	APPROXIMATE LOCATION OF POSSIBLE UTILITY (SOME MARKED IN FIELD)
	APPROXIMATE LOCATION OF POSSIBLE BURIED UST AS MARKED IN FIELD
	APPROXIMATE LIMITS OF NCDOT PROJECT



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 March 11, 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 March 18, 2008, using a Geophysical Survey Systems SIR 3000 equipped with a 400 MHz antenna.

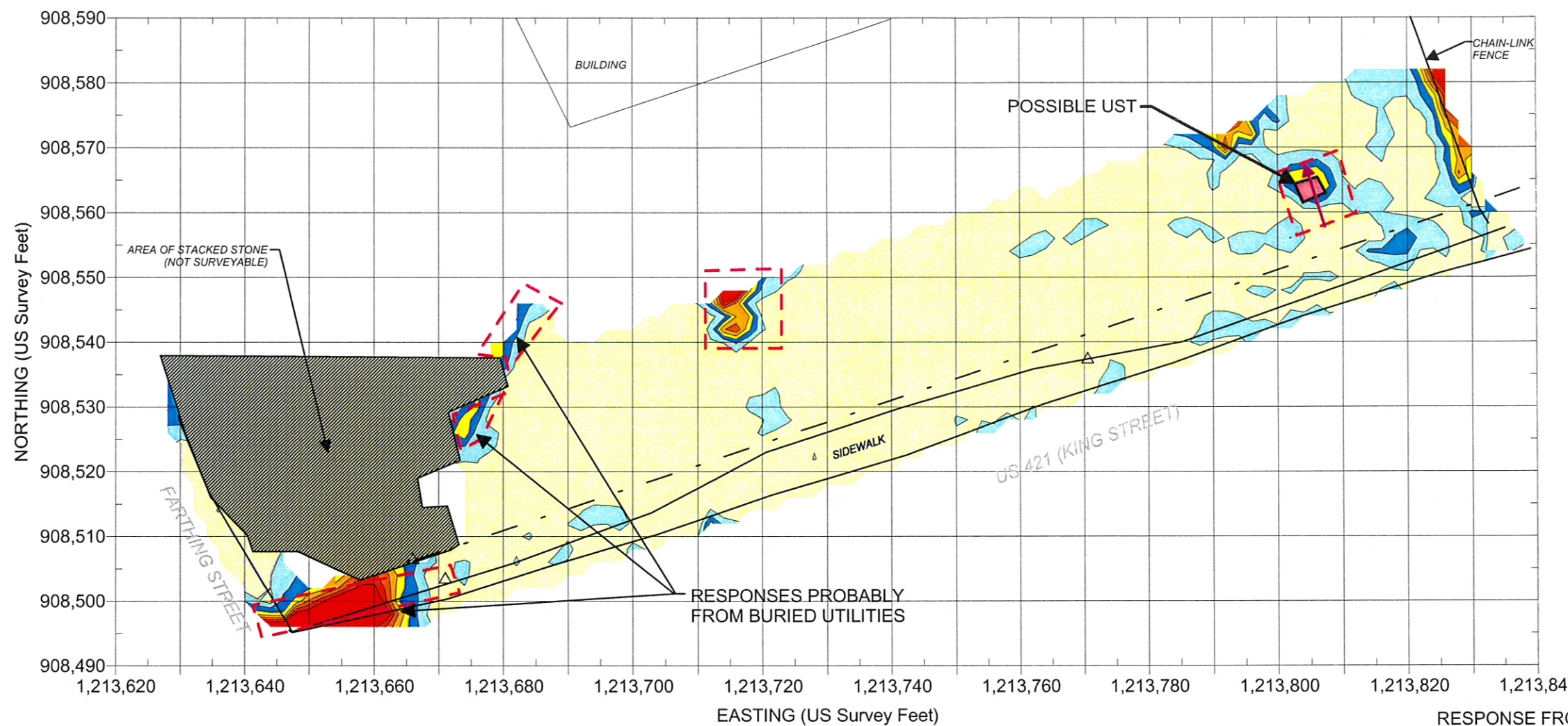


NC Department of Transportation
Geotechnical Engineering Unit

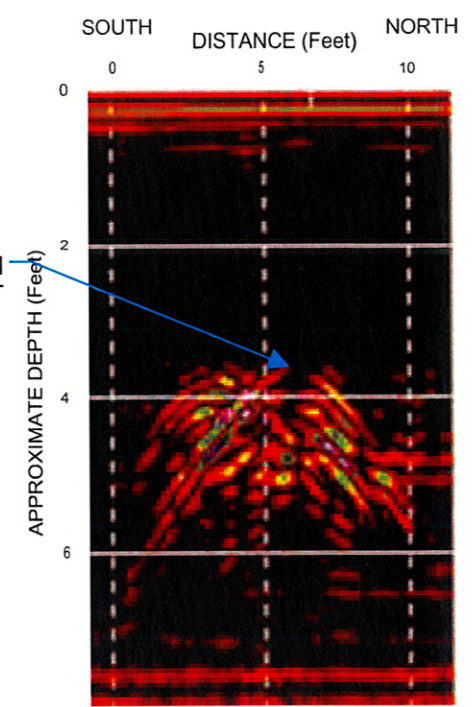
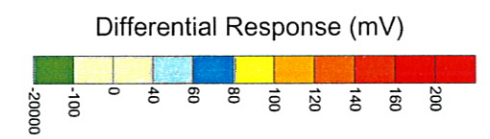
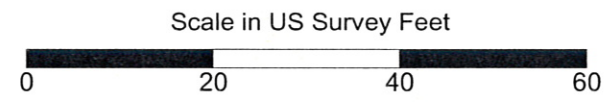
State Project No. U-4020
Watauga County, North Carolina

**PARCEL 48
EM61 EARLY TIME
GATE RESPONSE**

FIGURE 2



- EXPLANATION**
- EM61 SURVEY AREA - DATA ACQUIRED ALONG PARALLEL SURVEY LINES SPACED APPROXIMATELY 2.5 FEET APART
 - GUY WIRE
 - SIGN
 - METALLIC OBJECT
 - NCDOT MARKER
 - UTILITY POLE
 - STORMWATER GRATE
 - UTILITY MANHOLE
 - MONITORING WELL
 - LIGHTPOLE
 - GPR SURVEY AREA
 - LOCATION OF GPR SURVEY LINE SHOWN
 - APPROXIMATE LOCATION OF POSSIBLE UTILITY (SOME MARKED IN FIELD)
 - APPROXIMATE LOCATION OF POSSIBLE BURIED UST AS MARKED IN FIELD
 - APPROXIMATE LIMITS OF NCDOT PROJECT



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 pipes and tanks. The EM data were collected on March 11, 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 March 18, 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-4020
Watauga County, North Carolina

**PARCEL 48
EM61 DIFFERENTIAL
RESPONSE**

FIGURE 3

Appendix C
Soil Boring Logs



BORING NUMBER 48-1

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

3334 Hillsborough Street
Raleigh, North Carolina 27615
919-847-4241(p) 919-847-4261(f)

PROJECT: Boone PSAs
JOB NUMBER: ROW-148
LOCATION: Boone, NC

LOG OF BORING - HART HICKMAN.GDT - 5/13/08 14:07 - S:\AAA-MASTER PROJECTS\NC DOT RIGHT-OF-WAY -ROW\ROW-148 BOONE PSAS\BORING LOGS\ROW-148 (48).GFPJ

DEPTH (ft)	RECOVERY (%)	BLOW COUNT	OVA (ppm)		LITHOLOGY	MATERIAL DESCRIPTION	WELL DIAGRAM	DEPTH (ft)
			BKG.	SAMP.				
0.0						dark brown, sandy SILT w/ some clay, damp		0.0
2.5	50		0.3	5.5		dark brown, sandy CLAY, damp		2.5
5.0			0.7	17.2		orange/tan, sandy SILT, damp		5.0
7.5			0.5	8.2		dark grey/brown silty CLAY		7.5
10.0	25			1.5				10.0
12.5				1.5		Bottom of borehole at 12.0 feet.		12.5
15.0								15.0

DRILLING CONTRACTOR: GEOLOGIC EXPLORATION
DRILL RIG/ METHOD: Geoprobe 6620DT
SAMPLING METHOD: DPT Sleeves
LOGGED BY: MHF
DRAWN BY:

BORING STARTED: 4/8/08
BORING COMPLETED: 4/8/08
TOTAL DEPTH: 12
SURFACE ELEV:
DEPTH TO WATER:

Remarks:
Borehole hand-augered to 5'
Soil samples collected from 2-5'



BORING NUMBER 48-2

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

3334 Hillsborough Street
Raleigh, North Carolina 27615
919-847-4241(p) 919-847-4261(f)

PROJECT: Boone PSAs

JOB NUMBER: ROW-148

LOCATION: Boone, NC

LOG OF BORING - HART HICKMAN.GDT - 5/13/08 14:07 - S:\AAA-MASTER PROJECTS\INC DOT RIGHT-OF-WAY -ROW\ROW-148 BOONE PSAS\BORING LOGS\ROW-148 (48).GPJ

DEPTH (ft)	RECOVERY (%)	BLOW COUNT	OVA (ppm)		LITHOLOGY	MATERIAL DESCRIPTION	WELL DIAGRAM	DEPTH (ft)
			BKG.	SAMP.				
0.0						light brown, silty SAND, dry		0.0
2.5	75		0.3	1.1				2.5
5.0			0.2	1.1		brown/orange, sandy CLAY, damp		5.0
7.5	75		0.2	0.9		brown/orange, sandy CLAY w/ PWR		7.5
10.0			0.3	0.9				10.0
12.5	25		0.3	0.7				12.5
15.0						Bottom of borehole at 12.0 feet.		15.0

DRILLING CONTRACTOR: GEOLOGIC EXPLORATION
DRILL RIG/ METHOD: Geoprobe 6620DT
SAMPLING METHOD: DPT Sleeves
LOGGED BY: MHF
DRAWN BY:

BORING STARTED: 4/8/08
BORING COMPLETED: 4/8/08
TOTAL DEPTH: 12
SURFACE ELEV:
DEPTH TO WATER:

Remarks:
 Borehole hand-augered to 5'
 Soil samples collected from 0-2'



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

3334 Hillsborough Street
Raleigh, North Carolina 27615
919-847-4241(p) 919-847-4261(f)

BORING NUMBER 48-3

PROJECT: Boone PSAs
JOB NUMBER: ROW-148
LOCATION: Boone, NC

LOG OF BORING - HART HICKMAN.GDT - 5/13/08 14:07 - S:\AAA-MASTER PROJECTS\INC DOT RIGHT-OF-WAY -ROW\ROW-148 BOONE PSAS\BORING LOGS\ROW-148 (48).GPJ

DEPTH (ft)	RECOVERY (%)	BLOW COUNT	OVA (ppm)		LITHOLOGY	MATERIAL DESCRIPTION	WELL DIAGRAM	DEPTH (ft)
			BKG.	SAMP.				
0.0						brown/tan, silty SAND w/ PWR, dry		0.0
2.5	75		0.3	1.1				2.5
			0.4	1.2				
5.0						dark grey/green, silty CLAY, some medium sands, damp		5.0
				1.1				
7.5	75					grey, sandy SILT, damp		7.5
				1				
10.0						Bottom of borehole at 10.0 feet.		10.0
12.5								12.5
15.0								15.0

DRILLING CONTRACTOR: GEOLOGIC EXPLORATION
DRILL RIG/ METHOD: Geoprobe 6620DT
SAMPLING METHOD: DPT Sleeves
LOGGED BY: MHF
DRAWN BY:

BORING STARTED: 4/8/08
BORING COMPLETED: 4/8/08
TOTAL DEPTH: 10
SURFACE ELEV:
DEPTH TO WATER:

Remarks:
Borehole hand-augered to 5'
Soil samples collected from 2-5'



BORING NUMBER 48-4

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

3334 Hillsborough Street
Raleigh, North Carolina 27615
919-847-4241(p) 919-847-4261(f)

PROJECT: Boone PSAs
JOB NUMBER: ROW-148
LOCATION: Boone, NC

LOG OF BORING - HART HICKMAN.GDT - 5/13/08 14:07 - S:\AAA-MASTER PROJECTS\INC DOT RIGHT-OF-WAY -ROW\ROW-148 BOONE PSAS\BORING LOGS\ROW-148 (48).GPFJ

DEPTH (ft)	RECOVERY (%)	BLOW COUNT	OVA (ppm)		LITHOLOGY	MATERIAL DESCRIPTION	WELL DIAGRAM	DEPTH (ft)
			BKG.	SAMP.				
0.0						orange/tan, silty SAND, PWR, dry		0.0
2.5	100		0.3	1.1		orange/tan, silty SAND, PWR, damp		2.5
5.0				1.7				5.0
7.5	90		0.4	0.9		light brown/orange, sandy SILT, large PWR		7.5
10.0				0.9		dark grey/black, SILT w/ wood debris		10.0
				1.1		light grey/brown, sandy SILT, damp		
12.5	50			0.9		light grey/brown, sandy SILT w/ rock, wet		12.5
15.0						Bottom of borehole at 12.0 feet.		15.0

DRILLING CONTRACTOR: GEOLOGIC EXPLORATION
DRILL RIG/ METHOD: Geoprobe 6620DT
SAMPLING METHOD: DPT Sleeves
LOGGED BY: MHF
DRAWN BY:

BORING STARTED: 4/8/08
BORING COMPLETED: 4/8/08
TOTAL DEPTH: 12
SURFACE ELEV:
DEPTH TO WATER:

Remarks:
Borehole hand-augered to 5'
Soil samples collected from 2-5'



BORING NUMBER 48-5

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

3334 Hillsborough Street
Raleigh, North Carolina 27615
919-847-4241(p) 919-847-4261(f)

PROJECT: Boone PSAs
JOB NUMBER: ROW-148
LOCATION: Boone, NC

LOG OF BORING - HART HICKMAN.GDT - 5/13/08 14:07 - S:\AAA-MASTER PROJECTS\NC DOT RIGHT-OF-WAY-ROW\ROW-148 BOONE PSAS\BORING LOGS\ROW-148 (48).GPJ

DEPTH (ft)	RECOVERY (%)	BLOW COUNT	OVA (ppm)		LITHOLOGY	MATERIAL DESCRIPTION	WELL DIAGRAM	DEPTH (ft)
			BKG.	SAMP.				
0.0								0.0
2.5	100		0.3	2.5		light brown/orange, sandy SILT, dry		2.5
5.0				2.5				5.0
7.5	100			2.7		red/brown, SAND w/ PWR		7.5
10.0				2.3		grey/green, sandy SILT, saturated		10.0
12.5				2				12.5
15.0						Bottom of borehole at 10.0 feet.		15.0

DRILLING CONTRACTOR: GEOLOGIC EXPLORATION
DRILL RIG/ METHOD: Geoprobe 6620DT
SAMPLING METHOD: DPT Sleeves
LOGGED BY: MHF
DRAWN BY:

BORING STARTED: 4/8/08
BORING COMPLETED: 4/8/08
TOTAL DEPTH: 10
SURFACE ELEV:
DEPTH TO WATER:

Remarks:
Borehole hand-augered to 5'
Soil samples collected from 5-7'



BORING NUMBER 48-6

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

3334 Hillsborough Street
Raleigh, North Carolina 27615
919-847-4241(p) 919-847-4261(f)

PROJECT: Boone PSAs

JOB NUMBER: ROW-148

LOCATION: Boone, NC

LOG OF BORING - HART HICKMAN.GDT - 5/13/08 14:07 - S:\AAA-MASTER PROJECTS\INC DOT RIGHT-OF-WAY -ROW\ROW-148 BOONE PSAS\BORING LOGS\ROW-148 (48).GPJ

DEPTH (ft)	RECOVERY (%)	BLOW COUNT	OVA (ppm)		LITHOLOGY	MATERIAL DESCRIPTION	WELL DIAGRAM	DEPTH (ft)
			BKG.	SAMP.				
0.0						red/brown silty SAND w/ PWR		0.0
2.5	90		0.4	1.3				2.5
5.0				1.9		orange/dark brown silty SAND w/ some clay and PWR		5.0
7.5	90			1.8				7.5
10.0				1.3		saturated		10.0
12.5	50			1.2		Bottom of borehole at 12.0 feet.		12.5
15.0								15.0

DRILLING CONTRACTOR: GEOLOGIC EXPLORATION
DRILL RIG/ METHOD: Geoprobe 6620DT
SAMPLING METHOD: DPT Sleeves
LOGGED BY: MHF
DRAWN BY:

BORING STARTED: 4/8/08
BORING COMPLETED: 4/8/08
TOTAL DEPTH: 12
SURFACE ELEV:
DEPTH TO WATER:

Remarks:
 Borehole hand-augered to 5'
 Soil samples collected from 2-5'



BORING NUMBER 48-7

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

3334 Hillsborough Street
Raleigh, North Carolina 27615
919-847-4241(p) 919-847-4261(f)

PROJECT: Boone PSAs

JOB NUMBER: ROW-148

LOCATION: Boone, NC

LOG OF BORING - HART HICKMAN.GDT - 5/13/08 14:07 - S:\AAA-MASTER PROJECTS\INC DOT RIGHT-OF-WAY -ROW\ROW-148 BOONE PSAS\BORING LOGS\ROW-148 (48).GPJ

DEPTH (ft)	RECOVERY (%)	BLOW COUNT	OVA (ppm)		LITHOLOGY	MATERIAL DESCRIPTION	WELL DIAGRAM	DEPTH (ft)
			BKG.	SAMP.				
0.0						orange/red, silty SAND, dry		0.0
2.5	100		0.5	2.6				2.5
5.0				1.9				5.0
7.5	50		0.6	1.8		orange/red, silty SAND w/ PWR		7.5
10.0	50		0.5	1.8				10.0
12.5						brown/grey, sandy CLAY, saturated		12.5
15.0						Bottom of borehole at 12.0 feet.		15.0

DRILLING CONTRACTOR: GEOLOGIC EXPLORATION
DRILL RIG/ METHOD: Geoprobe 6620DT
SAMPLING METHOD: DPT Sleeves
LOGGED BY: MHF
DRAWN BY:

BORING STARTED: 4/8/08
BORING COMPLETED: 4/8/08
TOTAL DEPTH: 12
SURFACE ELEV:
DEPTH TO WATER:

Remarks:
 Borehole hand-augered to 5'
 Soil samples collected from 0-2'

Appendix D
Laboratory Analytical Report



NC Certification No. 402
 SC Certification No. 99012
 NC Drinking Water Cert. No. 37735

Laboratory Report

04/28/08

North Carolina Department of
 Transportation
 Attn: David Graham
 c/o Hart and Hickman
 2923 South Tryon St. Ste 100
 Charlotte, NC 28203

Project Name: Boone PSAs
 Project ID: ROW-148
 Project No.: WBS# 35015.1.1
 Sample Matrix: Soil

Client Sample ID: 48-1 (2-5)
 Prism Sample ID: 211240
 COC Group: G0408351
 Time Collected: 04/08/08 11:58
 Time Submitted: 04/11/08 9:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Percent Solids Determination									
Percent Solids	79.2	%			1	SM2540 G	04/14/08 14:15	mbarber	
Diesel Range Organics (DRO) by GC-FID									
Diesel Range Organics (DRO)	45	mg/kg	8.8	1.4	1	8015B	04/19/08 5:21	jvogel	Q31877
Sample Preparation:			25.14 g	/	1 mL	3545	04/16/08 16:00	wconder	P21362
					Surrogate		% Recovery	Control Limits	
					o-Terphenyl		74	49 - 124	
Sample Weight Determination									
Weight 1	6.69	g			1	GRO	04/17/08 0:00	athao	
Weight 2	6.85	g			1	GRO	04/17/08 0:00	athao	
Gasoline Range Organics (GRO) by GC-FID									
Gasoline Range Organics (GRO)	16	mg/kg	6.3	4.0	50	8015B	04/16/08 14:32	wbradley	Q31784
					Surrogate		% Recovery	Control Limits	
					aaa-TFT		106	55 - 129	

Sample Comment(s):

BRL = Below Reporting Limit

Values are reported down to the reporting limit only. No J-Flags applied.

The results in this report relate only to the samples submitted for analysis and meet state certification requirements other than NELAC certification except for those instances indicated in the case narrative and/or test comments.

All results are reported on a dry-weight basis

Angela D. Overcash, V.P. Laboratory Services

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NC Certification No. 402
 SC Certification No. 99012
 NC Drinking Water Cert. No. 37735

Laboratory Report

04/28/08

North Carolina Department of
 Transportation
 Attn: David Graham
 c/o Hart and Hickman
 2923 South Tryon St. Ste 100
 Charlotte, NC 28203

Project Name: Boone PSAs
 Project ID: ROW-148
 Project No.: WBS# 35015.1.1
 Sample Matrix: Soil

Client Sample ID: 48-2 (0-2)
 Prism Sample ID: 211241
 COC Group: G0408351
 Time Collected: 04/08/08 12:10
 Time Submitted: 04/11/08 9:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Percent Solids Determination									
Percent Solids	79.3	%			1	SM2540 G	04/14/08 14:15	mbarber	
Diesel Range Organics (DRO) by GC-FID									
Diesel Range Organics (DRO)	BRL	mg/kg	8.7	1.4	1	8015B	04/19/08 5:57	javogel	Q31877
Sample Preparation:			25.24 g	/	1 mL	3545	04/16/08 16:00	wconder	P21362
					Surrogate		% Recovery	Control Limits	
					o-Terphenyl		66	49 - 124	
Sample Weight Determination									
Weight 1	6.01	g			1	GRO	04/17/08 0:00	athao	
Weight 2	6.00	g			1	GRO	04/17/08 0:00	athao	
Gasoline Range Organics (GRO) by GC-FID									
Gasoline Range Organics (GRO)	BRL	mg/kg	6.3	3.9	50	8015B	04/16/08 15:04	wbradley	Q31784
					Surrogate		% Recovery	Control Limits	
					aaa-TFT		104	55 - 129	

Sample Comment(s):

BRL = Below Reporting Limit

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Angela D. Overcash, V.P. Laboratory Services

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NC Certification No. 402
 SC Certification No. 99012
 NC Drinking Water Cert. No. 37735

Laboratory Report

04/28/08

North Carolina Department of
 Transportation
 Attn: David Graham
 c/o Hart and Hickman
 2923 South Tryon St. Ste 100
 Charlotte, NC 28203

Project Name: Boone PSAs
 Project ID: ROW-148
 Project No.: WBS# 35015.1.1
 Sample Matrix: Soil

Client Sample ID: 48-3 (2-5)
 Prism Sample ID: 211242
 COC Group: G0408351
 Time Collected: 04/08/08 12:20
 Time Submitted: 04/11/08 9:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
<u>Percent Solids Determination</u>									
Percent Solids	85.8	%			1	SM2540 G	04/14/08 14:15	mbarber	
<u>Diesel Range Organics (DRO) by GC-FID</u>									
Diesel Range Organics (DRO)	BRL	mg/kg	8.0	1.3	1	8015B	04/19/08 6:33	jvogel	Q31877
Sample Preparation:			25.48 g	/	1 mL	3545	04/16/08 16:00	wconder	P21362
					Surrogate	% Recovery	Control Limits		
					o-Terphenyl	55	49 - 124		
<u>Sample Weight Determination</u>									
Weight 1	4.63	g			1	GRO	04/17/08 0:00	athao	
Weight 2	5.07	g			1	GRO	04/17/08 0:00	athao	
<u>Gasoline Range Organics (GRO) by GC-FID</u>									
Gasoline Range Organics (GRO)	BRL	mg/kg	5.8	3.6	50	8015B	04/16/08 16:07	wbradley	Q31784
					Surrogate	% Recovery	Control Limits		
					aaa-TFT	111	55 - 129		

Sample Comment(s):

BRL = Below Reporting Limit

Values are reported down to the reporting limit only. No J-Flags applied.

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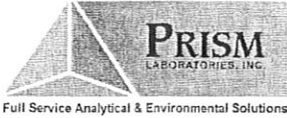
All results are reported on a dry-weight basis

Angela D. Overcash, V.P. Laboratory Services

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NC Certification No. 402
 SC Certification No. 99012
 NC Drinking Water Cert. No. 37735

Laboratory Report

04/28/08

North Carolina Department of
 Transportation
 Attn: David Graham
 c/o Hart and Hickman
 2923 South Tryon St. Ste 100
 Charlotte, NC 28203

Project Name: Boone PSAs
 Project ID: ROW-148
 Project No.: WBS# 35015.1.1
 Sample Matrix: Soil

Client Sample ID: 48-4 (2-5)
 Prism Sample ID: 211243
 COC Group: G0408351
 Time Collected: 04/08/08 13:20
 Time Submitted: 04/11/08 9:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
<u>Percent Solids Determination</u>									
Percent Solids	85.7	%			1	SM2540 G	04/14/08 14:15	mbarber	
<u>Diesel Range Organics (DRO) by GC-FID</u>									
Diesel Range Organics (DRO)	BRL	mg/kg	8.0	1.3	1	8015B	04/19/08 7:44	jvogel	Q31877
Sample Preparation:			25.4 g	/	1 mL	3545	04/16/08 16:00	wconder	P21362
					Surrogate		% Recovery	Control Limits	
					o-Terphenyl		55	49 - 124	
<u>Sample Weight Determination</u>									
Weight 1	5.88	g			1	GRO	04/17/08 0:00	athao	
Weight 2	6.06	g			1	GRO	04/17/08 0:00	athao	
<u>Gasoline Range Organics (GRO) by GC-FID</u>									
Gasoline Range Organics (GRO)	BRL	mg/kg	5.8	3.7	50	8015B	04/16/08 17:27	wbradley	Q31784
					Surrogate		% Recovery	Control Limits	
					aaa-TFT		79	55 - 129	

Sample Comment(s):

BRL = Below Reporting Limit

Values are reported down to the reporting limit only. No J-Flags applied.

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All results are reported on a dry-weight basis

Angela D. Overcash, V.P. Laboratory Services



NC Certification No. 402
 SC Certification No. 99012
 NC Drinking Water Cert. No. 37735

Laboratory Report

04/28/08

North Carolina Department of
 Transportation
 Attn: David Graham
 c/o Hart and Hickman
 2923 South Tryon St. Ste 100
 Charlotte, NC 28203

Project Name: Boone PSAs
 Project ID: ROW-148
 Project No.: WBS# 35015.1.1
 Sample Matrix: Soil

Client Sample ID: 48-5 (5-7)
 Prism Sample ID: 211244
 COC Group: G0408351
 Time Collected: 04/08/08 13:35
 Time Submitted: 04/11/08 9:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
<u>Percent Solids Determination</u>									
Percent Solids	83.3	%			1	SM2540 G	04/14/08 14:15	mbarber	
<u>Diesel Range Organics (DRO) by GC-FID</u>									
Diesel Range Organics (DRO)	BRL	mg/kg	8.2	1.3	1	8015B	04/19/08 7:08	jvogel	Q31877
Sample Preparation:			25.53 g	/	1 mL	3545	04/16/08 16:00	wconder	P21362
					Surrogate		% Recovery	Control Limits	
					o-Terphenyl		54	49 - 124	
<u>Sample Weight Determination</u>									
Weight 1	6.82	g			1	GRO	04/17/08 0:00	athao	
Weight 2	5.93	g			1	GRO	04/17/08 0:00	athao	
<u>Gasoline Range Organics (GRO) by GC-FID</u>									
Gasoline Range Organics (GRO)	BRL	mg/kg	6.0	3.8	50	8015B	04/16/08 17:59	wbradley	Q31784
					Surrogate		% Recovery	Control Limits	
					aaa-TFT		75	55 - 129	

Sample Comment(s):

BRL = Below Reporting Limit

Values are reported down to the reporting limit only. No J-Flags applied.

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All results are reported on a dry-weight basis

Angela D. Overcash, V.P. Laboratory Services



NC Certification No. 402
 SC Certification No. 99012
 NC Drinking Water Cert. No. 37735

Laboratory Report

04/28/08

North Carolina Department of
 Transportation
 Attn: David Graham
 c/o Hart and Hickman
 2923 South Tryon St. Ste 100
 Charlotte, NC 28203

Project Name: Boone PSAs
 Project ID: ROW-148
 Project No.: WBS# 35015.1.1
 Sample Matrix: Soil

Client Sample ID: 48-6 (2-5)
 Prism Sample ID: 211245
 COC Group: G0408351
 Time Collected: 04/08/08 13:45
 Time Submitted: 04/11/08 9:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
<u>Percent Solids Determination</u>									
Percent Solids	94.3	%			1	SM2540 G	04/14/08 14:15	mbarber	
<u>Diesel Range Organics (DRO) by GC-FID</u>									
Diesel Range Organics (DRO)	BRL	mg/kg	7.4	1.2	1	8015B	04/18/08 22:21	jvogel	Q31875
Sample Preparation:			25.06 g	/	1 mL	3545	04/17/08 17:40	wconder	P21369
					Surrogate	% Recovery		Control Limits	
					o-Terphenyl	99		49 - 124	
<u>Sample Weight Determination</u>									
Weight 1	5.66	g			1	GRO	04/17/08 0:00	athao	
Weight 2	5.93	g			1	GRO	04/17/08 0:00	athao	
<u>Gasoline Range Organics (GRO) by GC-FID</u>									
Gasoline Range Organics (GRO)	BRL	mg/kg	5.3	3.3	50	8015B	04/16/08 18:31	wbradley	Q31784
					Surrogate	% Recovery		Control Limits	
					aaa-TFT	88		55 - 129	

Sample Comment(s):

BRL = Below Reporting Limit

Values are reported down to the reporting limit only. No J-Flags applied.

The results in this report relate only to the samples submitted for analysis and meet state certification requirements other than NELAC certification except for those instances indicated in the case narrative and/or test comments.

All results are reported on a dry-weight basis

Angela D. Overcash, V.P. Laboratory Services

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NC Certification No. 402
 SC Certification No. 99012
 NC Drinking Water Cert. No. 37735

Laboratory Report

04/28/08

North Carolina Department of
 Transportation
 Attn: David Graham
 c/o Hart and Hickman
 2923 South Tryon St. Ste 100
 Charlotte, NC 28203

Project Name: Boone PSAs
 Project ID: ROW-148
 Project No.: WBS# 35015.1.1
 Sample Matrix: Soil

Client Sample ID: 48-7 (0-2)
 Prism Sample ID: 211246
 COC Group: G0408351
 Time Collected: 04/08/08 14:05
 Time Submitted: 04/11/08 9:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
<u>Percent Solids Determination</u>									
Percent Solids	75.4	%			1	SM2540 G	04/14/08 14:15	mbarber	
<u>Diesel Range Organics (DRO) by GC-FID</u>									
Diesel Range Organics (DRO)	38	mg/kg	9.3	2.3	1	8015B	04/18/08 2:07	javogel	Q31874
Sample Preparation:				50 g	/	2 mL	3550B	04/17/08 10:30	javogel P21377
				Surrogate		% Recovery		Control Limits	
				o-Terphenyl		74		48 - 130	
<u>Sample Weight Determination</u>									
Weight 1	5.07	g			1	GRO	04/17/08 0:00	athao	
Weight 2	5.44	g			1	GRO	04/17/08 0:00	athao	
<u>Gasoline Range Organics (GRO) by GC-FID</u>									
Gasoline Range Organics (GRO)	BRL	mg/kg	6.6	4.2	50	8015B	04/16/08 19:02	wbradley	Q31784
				Surrogate		% Recovery		Control Limits	
				aaa-TFT		75		55 - 129	

Sample Comment(s):

BRL = Below Reporting Limit

Values are reported down to the reporting limit only. No J-Flags applied.

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All results are reported on a dry-weight basis

Angela D. Overcash, V.P. Laboratory Services

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Full Service Analytical & Environmental Solutions

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Phone: 704/529-6364 • Fax: 704/525-0409

Client Company Name: HARTF HICKMAN

Report To/Contact Name: D. Cochran

Reporting Address: 25233 Tyson St

Phone: 704-586-0007 Fax (Yes) (No):

Email (Yes/No) Email Address: debra@hartf-hickman.com

EDD Type: PDF Excel Other

Site Location Name: Boone Det

Site Location Physical Address: Boone, NC

CHAIN OF CUSTODY RECORD

PAGE 3 OF 10 QUOTE # TO ENSURE PROPER BILLING:

Project Name: Row-148

Short Hold Analysis: (Yes) (No) Project: (Yes) (No)

*Please ATTACH any project specific reporting (QC LEVEL I III IIII IV) provisions and/or QC Requirements

Invoice To:

Address:

Purchase Order No./Billing Reference

Requested Due Date 1 Day 2 Days 3 Days 4 Days 5 Days

"Working Days" 6-9 Days Standard 10 days Rush Work Must Be Pre-Approved

Samples received after 15:00 will be processed next business day, excluding weekends and holidays. Turnaround time is based on business days, excluding weekends and holidays. (SEE REVERSE FOR TERMS & CONDITIONS REGARDING SERVICES RENDERED BY PRISM LABORATORIES, INC. TO CLIENT)

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER			PRESERVATIVES	ANALYSES REQUESTED	REMARKS	PRISM LAB ID NO.
				*TYPE SEE BELOW	NO.	SIZE				
55-1(5-7)	4/8/08	0810	soil	voh	4	40ml	meth/born			211231
51-1(5-7)		0920		cb	3					211232
51-3(2-5)		0935								211233
51-4(2-5)		0945								211234
51-5(0-2)		0955								211235
51-6(0-2)		1005								211236
51-7(0-2)		1050								211237
51-8(0-2)		1110								211238
51-9(0-2)		1117								211239
48-1(2-5)		1158								211245

Sampler's Signature: [Signature] Sampled By (Print Name): M. Falkner Affiliation: H&H

Upon relinquishing, this Chain of Custody is your authorization for Prism to proceed with the analyses as requested above. Any changes must be submitted in writing to the Prism Project Manager. There will be charges for any changes after analyses have been initialized.

Relinquished By: (Signature) [Signature]

Relinquished By: (Signature) [Signature]

Relinquished By: (Signature) [Signature]

Relinquished By: (Signature) [Signature]

Relinquished By: (Signature) [Signature]

Method of Shipment: Fed Ex UPS Hand-delivered Prism Field Service Other

NPDES: NC SC NC SC NC SC

UST: NC SC NC SC

DRINKING WATER: NC SC NC SC

SOLID WASTE: NC SC NC SC

RCRA: NC SC NC SC

CERCLA: NC SC NC SC

OTHER: NC SC NC SC

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic TI = Teflon-lined Can VOA = Volatile Organics Analysis (Zero Head Space)

TO BE FILLED IN BY CLIENT/SAMPLING PERSONNEL
Certification: NELAC USACE FL NC
SC OTHER N/A
Water Chlorinated: YES NO
Sample Iced Upon Collection: YES NO

LAB USE ONLY
Samples INTACT upon arrival? YES NO N/A
Received ON WET ICE? Temp 1.3
PROPER PRESERVATIVES indicated?
Received WITHIN HOLDING TIMES?
CUSTODY SEALS INTACT?
VOLATILES rec'd W/O OUT HEADSPACE?
PROPER CONTAINERS used?

PRESS DOWN FIRMLY - 3 COPIES

PRISM USE ONLY
Site Arrival Time:
Site Departure Time:
Field Tech Fee:
Mileage:

Additional Comments:

SEE REVERSE FOR TERMS & CONDITIONS

ORIGINAL



Full Service Analytical & Environmental Solutions

449 Springbrook Road • P.O. Box 240543 • Charlotte, NC 28224-0543
 Phone: 704/529-6364 • Fax: 704/525-0409

Client Company Name: Hart & Halkner
 Report To/Contact Name: D. Gorman
 Reporting Address: 203 S. Tryon St.

Phone: 704-586-0007 Fax (Yes) (No):
 Email (Yes) (No) Email Address: prism@prismlabs.com
 EDD Type: PDF / Excel / Other
 Site Location Name: DONE DOT
 Site Location Physical Address: Boone, NC

CHAIN OF CUSTODY RECORD

PAGE 4 OF 10 QUOTE # TO ENSURE PROPER BILLING:

Project Name: RDW-148
 Short Hold Analysis: (Yes) (No) UST Project: (Yes) (No)
 *Please ATTACH any project specific reporting (QC LEVEL I III III IV) provisions and/or QC Requirements
 Invoice To:
 Address:

Purchase Order No./Billing Reference

Requested Due Date 1 Day 2 Days 3 Days 4 Days 5 Days
 "Working Days" 6-9 Days Standard 10 days Rush Work Must Be Pre-Approved
 Samples received after 15:00 will be processed next business day. Turnaround time is based on business days, excluding weekends and holidays.
 (SEE REVERSE FOR TERMS & CONDITIONS REGARDING SERVICES RENDERED BY PRISM LABORATORIES, INC. TO CLIENT)

LAB USE ONLY

Samples INTACT upon arrival? YES NO N/A
 Received ON WET ICE? Temp 1-1
 PROPER PRESERVATIVES indicated?
 Received WITHIN HOLDING TIMES?
 CUSTODY SEALS INTACT?
 VOLATILES rec'd W/O HEADSPACE?
 PROPER CONTAINERS used?

TO BE FILLED IN BY CLIENT/SAMPLING PERSONNEL

Certification: NELAC USACE FL NC
 SC OTHER N/A
 Water Chlorinated: YES NO
 Sample Iced Upon Collection: YES NO

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER			PRESERVATIVES	ANALYSES REQUESTED	REMARKS	PRISM LAB ID NO.
				*TYPE SEE BELOW	NO.	SIZE				
48-2 (0-2)	4/8/08	1210	soil	VPA	3	40ml	none/meth	TPH, PCB	X	211241
48-3 (2-5)		1220							X	211242
48-4 (2-5)		1320							X	211243
48-5 (5-11)		1335							X	211244
48-6 (2-5)		1345							X	211245
48-7 (0-2)		1405							X	211246
47-1 (2-5)		1425							X	211247
47-2 (2-5)		1440							X	211243
47-3 (0-2)		1455							X	211244
47-4 (2-5)		1510							X	211250

PRESS DOWN FIRMLY - 3 COPIES

Sampler's Signature: [Signature] Sampled By (Print Name): M. Falkner Affiliation: H&H
 Upon relinquishing, this Chain of Custody is your authorization for Prism to proceed with the analyses as requested above. Any changes must be submitted in writing to the Prism Project Manager. There will be charges for any changes after analyses have been initialized.

Relinquished By: (Signature) [Signature] Date: _____ Military/Hours: _____
 Received By: (Signature) _____ Date: _____
 Relinquished By: (Signature) [Signature] Date: 4/11/08 Military/Hours: 120
 Received By: (Signature) _____ Date: _____
 Relinquished By: (Signature) _____ Date: _____
 Received By: (Signature) _____ Date: _____
 Mileage: _____

Method of Shipment: NOTE: ALL SAMPLE COOLERS SHOULD BE TAPED SHUT WITH CUSTODY SEALS FOR TRANSPORTATION TO THE LABORATORY. SAMPLES ARE NOT ACCEPTED AND VERIFIED AGAINST COC UNTIL RECEIVED AT THE LABORATORY.
 Fed Ex UPS Hand-delivered Prism Field Service Other
 NPDES: NC SC NC SC NC SC NC SC NC SC
 DRINKING WATER: NC SC NC SC NC SC
 SOLID WASTE: NC SC NC SC
 CERCLA: NC SC NC SC
 OTHER: NC SC NC SC
 CONTAINER TYPE CODES: A - Amber C - Clear G - Glass P - Plastic TI - Teflon-lined Can VOA - Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

ORIGINAL