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March 21, 2012

Mr. Terry Fox, LG
North Carolina Department of Transportation
Geotechnical Engineering Unit
1589 Mail Service Center
Raleigh, North Carolina 27699-1589

Reference: Preliminary Site Assessment
Bill and Bobby Young Property (Parcel #112)
26 Mountain Music Drive
Spruce Pine, Mitchell County, North Carolina
NCDOT Tip No. R-2519B
WBS Element 35609.1.1
AECOM Project No. 60241470

Dear Mr. Fox:

AECOM Technical Services of North Carolina, Inc., (AECOM) has completed the Preliminary Site Assessment conducted at the above-referenced property. The work was performed in accordance with the Technical and Cost proposal dated January 12, 2012, and the North Carolina Department of Transportation's (NCDOT's) Notice to Proceed dated January 18, 2012. Activities associated with the assessment consisted of conducting a geophysical investigation, collecting soil samples for laboratory analysis, and reviewing applicable North Carolina Department of Environment and Natural Resources (NCDENR) records. The purpose of this report is to document the field activities, present the laboratory analyses, and provide recommendations regarding the property.

Location and Description

The Bill and Bobby Young Property (Parcel #112) is located at 26 Mountain Music Drive in Spruce Pine, Mitchell County, North Carolina. The property is situated on the north side of US 19E at the intersection of US 19E and Mountain Music Drive (Figure 1). Three structures are situated on the property; one at the intersection of Mountain Music Drive and US 19E that houses an antique and used tool store; one approximately 150 feet northwest of the antique store that accommodates a music entertainment business; and one approximately 100 feet due west of the antique store that contains a metal working shop. Based on information supplied by the NCDOT and the site visit, AECOM understands that the antique store is a former gas station/convenience store where an unknown number of underground storage tanks (USTs) were reportedly operated and subsequently removed. The antique store is a single-story block structure, the music store is a two-story wood-frame structure, and the metal works shop is a single-story wood-frame building (Figure 2). The NCDOT has advised that the proposed right-

of-way will affect the antique store and metal working shop, and presumably the former UST locations. The presence of probable former USTs within the right-of-way created an area of potential environmental concern and the NCDOT requested a Preliminary Site Assessment. The scope of work as defined in the Request for Technical and Cost Proposal was to evaluate the proposed right-of-way with respect to the presence of known and unknown USTs and assess where contamination may exist on the right-of-way. If present, an estimate of the quantity of impacted soil was to be provided.

AECOM reviewed the on-line NCDENR Incident Management database and no Incident Number has been assigned to the property. AECOM also examined the UST registration database to obtain UST ownership information. No registration records were available for this property.

Geophysical Survey

Prior to AECOM's mobilization to the site, Pyramid Environmental conducted a geophysical survey as part of this project to evaluate if USTs were present on the right-of-way/easement. The geophysical survey was limited to the antique store because metallic debris associated with the metal working shop would create unacceptable interference with the geophysical equipment. The investigation consisted of an electromagnetic survey using a Geonics EM61 time-domain electromagnetic induction meter to locate buried metallic objects, specifically USTs. Pyramid laid out a survey grid at the property with the X-axis oriented approximately parallel to US 19E and the Y-axis oriented approximately perpendicular to US 19E. The grid was located to cover the accessible portions of the right-of-way. The survey lines were spaced 5 feet apart. A data logger collected magnetic data continuously along each survey line. After collection, the data was reviewed in the field with graphical computer software. Following the electromagnetic survey, a ground penetrating radar (GPR) survey was conducted where needed to further evaluate any significant metallic anomalies.

Access was available to all areas of the proposed right-of-way at the antique store and the geophysical survey detected several anomalies. Data interpretation attributed all but two of these anomalies to buried utility lines, conduits, or miscellaneous metallic debris. One anomaly was identified within the proposed right-of-way at the northwest corner of the building and one anomaly detected in front of the building (Figure 2). According to the geophysical report, the first anomaly is about 2.5 feet wide and 4 feet long and the second is about 2 feet wide and 3 feet long. While the anomalies appear too small for USTs, the potential presence of USTs could not be totally discounted. As a result, the anomalies have a low confidence of being USTs. Attachment A presents a detailed report of findings and interpretations.

Site Assessment Activities

On February 22, 2012, AECOM mobilized to the site to conduct a Geoprobe® direct push investigation to evaluate soil conditions within the proposed right-of-way. Continuous sampling using direct push technology (Regional Probing of Wake Forest, North Carolina) resulted in generally good recovery of soil samples from the direct-push holes. Soil samples were collected and contained in acetate sleeves inside the direct push sampler. Each of these sleeves was divided into 2-foot long sections for soil sample screening. Each 2-foot interval was placed in a resealable plastic bag and the bag was set aside for a sufficient amount of time to allow volatilization of organic compounds from the soil to the bag headspace. The probe of a flame ionization detector/photo ionization detector (FID/PID) was inserted into the bag and the reading was recorded. After terminating the sample hole, the soil sample from the depth interval with the highest FID/PID reading was submitted for analysis to Pace Analytical in Asheville, North Carolina, using standard chain-of-custody procedures. The laboratory analyzed the soil samples for total petroleum hydrocarbons (TPH) in the diesel range organics (DRO) and gasoline range organics (GRO).

Nine direct-push holes (YO-1 through YO-9) were advanced within the proposed right-of-way to depths ranging from 4 to 15 feet as shown in Figure 2 and Attachment B. Borings YO-1 and YO-2 were located to evaluate the conditions at the geophysical anomalies; borings YO-4 through YO-6 were placed to assess the soil conditions within the proposed right-of-way; and borings YO-7 through YO-9 were situated to evaluate soils within the right-of-way at the metal works shop (Attachment C). The lithology encountered by the direct-push samples generally was consistent at the antique store, which was located in a cut in the hillside and at the metal works shop, which was located at a significantly lower elevation than the antique store and beside a stream. About 2 inches of topsoil covered the ground surface. Below the surface at the antique store to depths of 4 to 15 feet was a reworked soil consisting of medium brown, micaceous, silt/sand with occasional quartz fragments throughout. With the exception of boring YO-6, refusal was encountered in all the borings at the antique store at depths of 4 to 12 feet. At the metal works shop, the lithology below the surface treatment was a mottled medium brown, tan, and white, micaceous, coarse-grained sand to a depth of about 6 to 7 feet. Underlying this material was a dark brown to olive gray, organic, micaceous clayey silt. No refusal was encountered in borings YO-7 through YO-9.

The "Geologic Map of North Carolina" dated 1985 indicates that the Alligator Formation underlies the site. This formation consists of amphibolites and gneiss. The amphibolite is described as equigranular, massive to well foliated, metamorphosed intrusive and extrusive mafic rock. The gneiss is a finely laminated to thinly layered and locally contains massive gneiss and micaceous granule conglomerate. In addition to these rock types, quartz diorite intrusions are common in the area. The soil observed at the site is consistent with these parent rocks. The borings were terminated at depths ranging from 4 to 15 feet. Groundwater was observed in borings YO-7 through YO-9 a depths ranging from 12 to 14 feet. Based on field screening, soil

samples were submitted for laboratory analyses, which are summarized in Table 1. Following completion, each boring was backfilled in accordance with 15A NCAC 2C.

Analytical Results

The soil analytical reports, summarized in Table 1 and presented in Attachment D, indicated the presence of petroleum hydrocarbon compounds identified as DRO and GRO in four of the nine soil samples collected from the site on February 22, 2012. The DRO concentrations were detected in the soil samples from borings YO-1 (6.5 milligrams per kilogram (mg/kg)) and YO-2 (9.8 mg/kg). GRO concentrations were detected in the soil samples from borings YO-7 (54.1 mg/kg) and YO-8 (15.5 mg/kg). According to the North Carolina Underground Storage Tank Section's "Guidelines for Site Checks, Tank Closure, and Initial Response and Abatement for UST Releases" effective December 1, 2008, the action level for TPH analyses is 10 milligrams per kilogram (mg/kg) for both gasoline and diesel fuel. However, that agency's "Guidelines for Assessment and Corrective Action," dated December 2008, does not allow for use of TPH analyses for confirmation of the petroleum contamination extent or its cleanup. As a result, while TPH concentrations are no longer applicable in confirming if soil contamination is present, this analysis is a legitimate screening tool. Based on the TPH action level for UST closures, the assumed action level for this report is 10 mg/kg. The GRO concentrations detected in samples YO-7 and YO-8 were present above the 10 mg/kg assumed action level.

With GRO concentrations above the assumed action level in two of the samples, AECOM reviewed the field observations and found that the soil sample containing the GRO showed no staining or odors, but had elevated field screening readings. As a result, AECOM contacted the laboratory for clarification. The laboratory's response to the inquiry was to review the chromatograms associated with the samples and advised AECOM that the resulting patterns were consistent with GRO. Based on this information, the GRO concentrations were present above the assumed action level.

Conclusions and Recommendations

A Preliminary Site Assessment was conducted to evaluate the Bill and Bobby Young Property (Parcel #112) located at 26 Mountain Music Drive in Spruce Pine, Mitchell County, North Carolina. A geophysical investigation was conducted to evaluate the site for unknown USTs. The investigation found two anomalies that were classified as a low to no confidence USTs. No other evidence of metallic USTs was observed within the proposed right-of-way. Nine soil borings were advanced to evaluate the soil conditions throughout the proposed right-of-way. The laboratory reports of the soil samples from these borings suggest that two DRO concentrations (6.5 mg/kg and 9.8 mg/kg) and two GRO concentrations (54.1 mg/kg and 15.5 mg/kg) were detected. The GRO concentrations are above the assumed action level. While the DRO concentrations are not above the assumed action level, their presence may suggest a source at the site associated with the former gas station.

To evaluate the volume of soil requiring possible remediation, AECOM considered the soil samples with TPH concentrations above 10 mg/kg. The analytical results of the soil samples suggest that the soil from borings YO-7 (54.1 mg/kg) and and YO-8 (15.5 mg/kg) contained TPH concentrations identified as GRO above the assumed action level (Figure 3). A review of the field screening readings (Table 1) suggests that the thickness of the potentially contaminated soil within the existing and proposed right-of-way appears to be about 4 feet and likely confined to a depth of about 10 to 12 feet. After estimating the potential contamination geometry using field observations and experience with similar sites and geology, AECOM measured the affected sections by using CADD software, which indicated an area of about 2,000 ft^2. Based on a 4-foot contamination thickness, the potential volume calculates to about 296 cubic yards. Volume estimates are from TPH analytical data, which are no longer valid for remediation of sites reported after January 2, 2008. After this date, Massachusetts Method EPH/VPH and EPA Method 8260/8270 analyses will likely be required to confirm cleanup. However, these analyses do not correlate exactly with TPH data and, as a result, the actual volume of contaminated soil may be higher or lower.

According to the NCDOT plan sheets, the contamination area is within a fill section for road improvements and the potential contamination on the proposed right-of-way is relatively deep at 8 feet below ground surface. Consequently, any construction excavation in this vicinity will not likely encounter contaminated soil.

AECOM appreciates the opportunity to work with the NCDOT on this project. Because compounds were detected above the applicable action levels in the soil samples, AECOM recommends that NCDOT submit a copy of this report to the Asheville Regional Office UST Section. If you have any questions, please contact me at (919) 854-6238.

Sincerely,

Michael W. Branson, P.G.
Project Manager

Attachments

c: Project File

TABLE 1

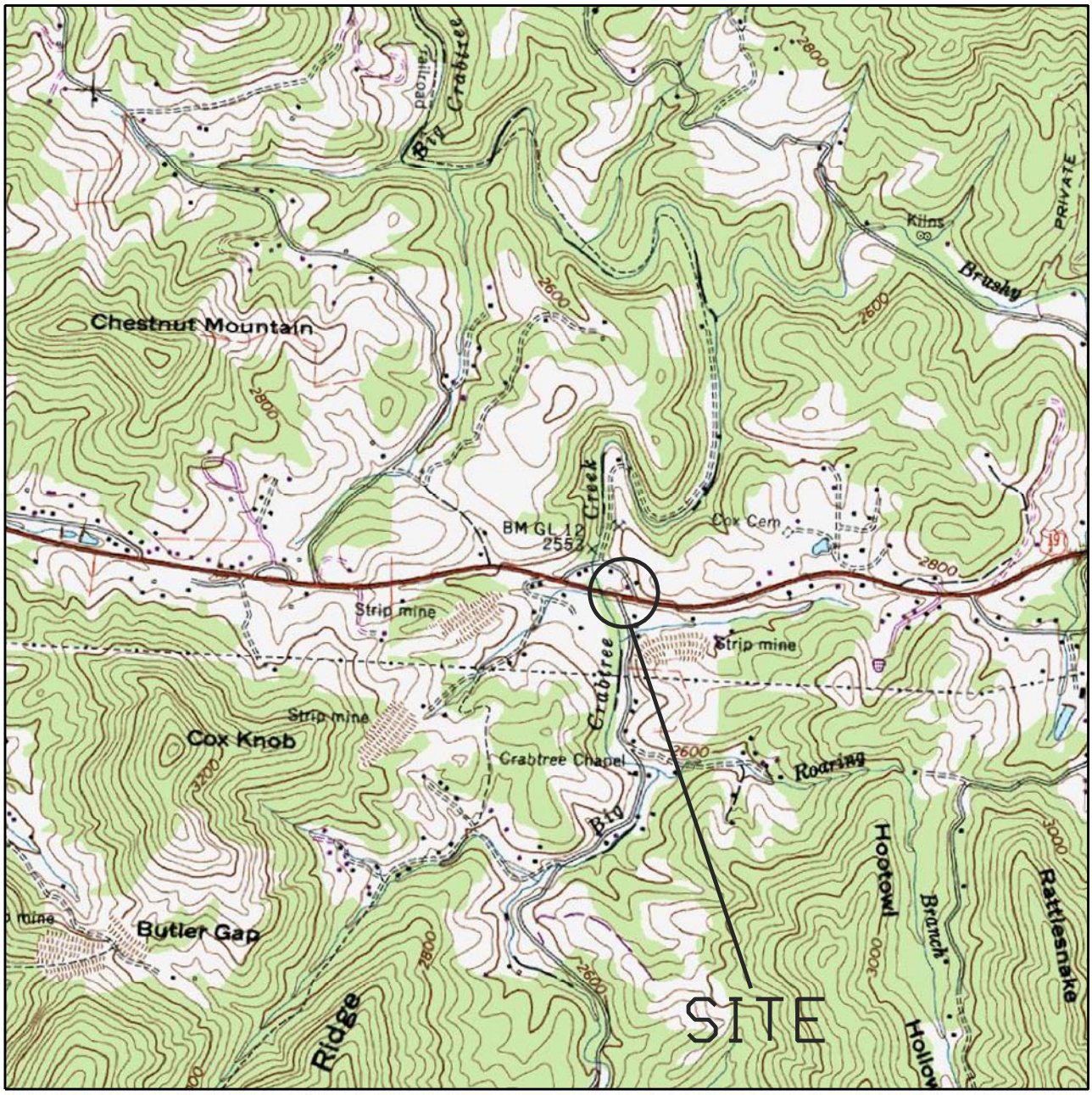
SOIL FIELD SCREENING AND ANALYTICAL RESULTS
BILL AND BOBBY YOUNG PROPERTY (PARCEL #112)
SPRUCE PINE, MITCHELL COUNTY, NORTH CAROLINA
NCDOT PROJECT NO. R-2519B
WBS ELEMENT 35609.1.1
AECOM PROJECT NO. 60241470

LOCATION	DEPTH (ft)	FID READING (ppm)	SAMPLE ID	ANALYTICAL RESULTS (mg/kg)	ASSUMED ACTION LEVEL (mg/kg)
YO-1	0 - 2	1.15			
	2 - 4	1.47	YO-1	DRO (6.5) GRO (BQL)	10 10
	4 - 6	1.05			
	6 - 8	1.45			
	8 - 10	1.31			
YO-2	0 - 2	4.56	YO-2	DRO (9.8) GRO (BQL)	10 10
	2 - 4	4.21			
	4 - 6	2.06			
	6 - 8	3.87			
	8 - 10	2.29			
	10 - 12	2.07			
YO-3	0 - 2	4.25	YO-3	DRO (BQL) GRO (BQL)	10 10
	2 - 4	3.62			
YO-4	0 - 2	1.11			
	2 - 4	1.78	YO-4	DRO (BQL) GRO (BQL)	10 10
YO-5	0 - 2	1.51			
	2 - 4	1.63	YO-5	DRO (BQL) GRO (BQL)	10 10
YO-6	0 - 2	1.58			
	2 - 4	2.96	YO-6	DRO (BQL) GRO (BQL)	10 10
	4 - 6	1.72			
	6 - 8	1.06			
	8 - 10	2.28			
	10 - 12	2.63			
	12 - 14	2.43			
	14 - 15	1.95			
YO-7	0 - 2	1.95			
	2 - 4	2.21			
	4 - 6	17.83			
	6 - 8	85			
	8 - 10	142			
	10 - 12	203	YO-7	DRO (BQL) **GRO (54.1)**	10 10
YO-8	0 - 2	2.44			
	2 - 4	2.13			
	4 - 6	5.18			
	6 - 8	32			
	8 - 10	129	YO-8	DRO (BQL) **GRO (15.5)**	10 10
	10 - 12	107			
YO-9	0 - 2	3.44			
	2 - 4	3.77			
	4 - 6	19.14	YO-9	DRO (BQL) GRO (BQL)	10 10
	6 - 8	6.79			
	8 - 10	5.73			
	10 - 12	4.81			
	12 - 14	3.67			

Soil samples were collected on February 22, 2012.
DRO - Diesel range organics.
GRO - Gasoline range organics.
BQL - Below quantitation limit.
ppm - parts per million.
mg/kg - milligrams per kilogram.
BOLD values are present above the assumed action level.

AECOM

FIGURES



SCALE 1:24,000

1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

SOURCE: U.S. GEOLOGICAL SURVEY 7.5 MIN QUADRANGLE: MICAVILLE, NC

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FIGURE 1
VICINITY MAP

BILL AND BOBBY YOUNG PROPERTY (PARCEL #112)
SPRUCE PINE, MITCHELL COUNTY NORTH CAROLINA

FEBRUARY 2012

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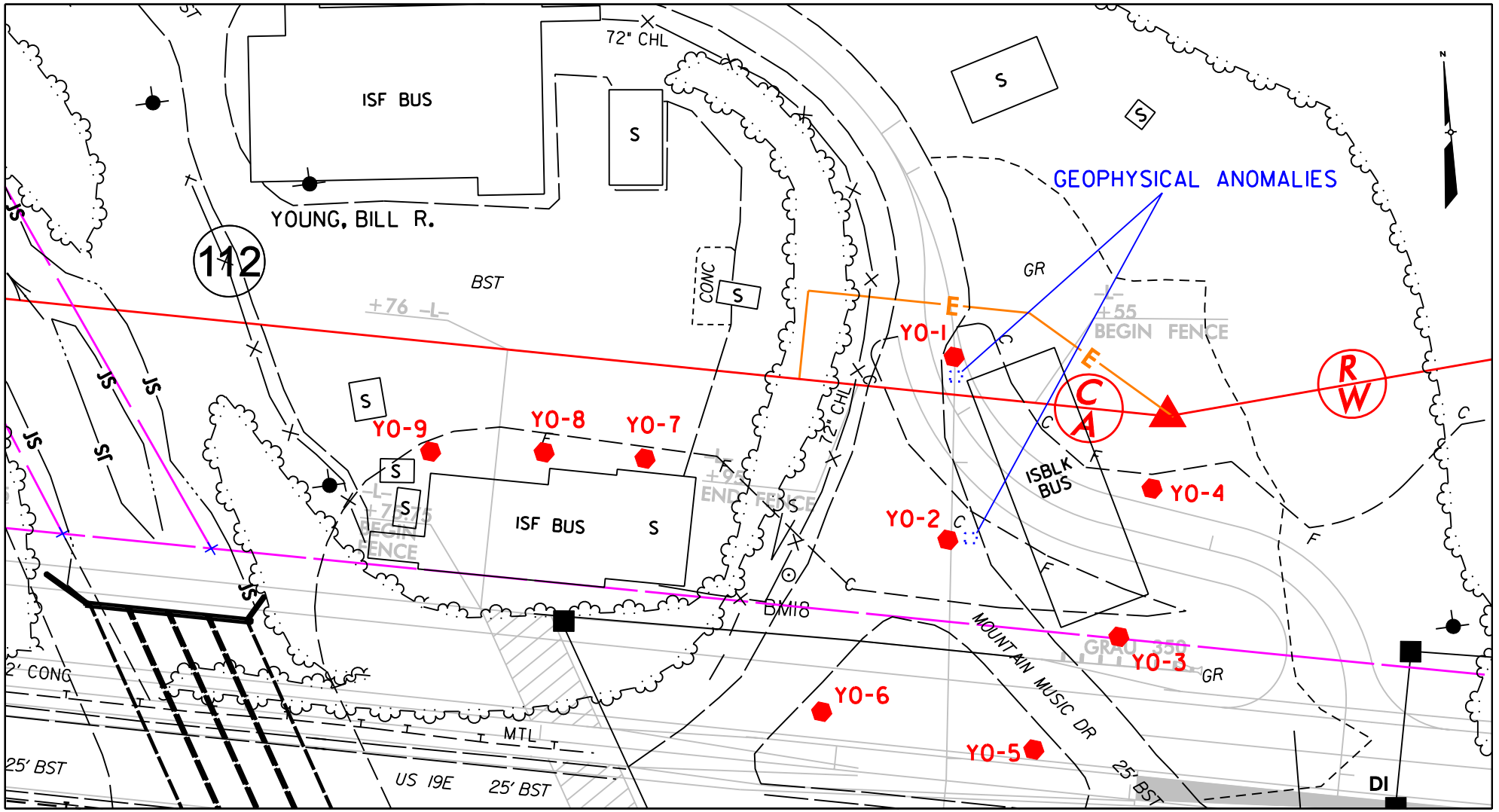

LEGEND

YO-1

SOIL SAMPLE LOCATION AND IDENTIFICATION

0 25 50

GRAPHIC SCALE (FEET)

AECOM

FIGURE 2

SITE MAP

BILL & BOBBY YOUNG PROPERTY (PARCEL #112)

SPRUCE PINE, MITCHELL COUNTY, NORTH CAROLINA

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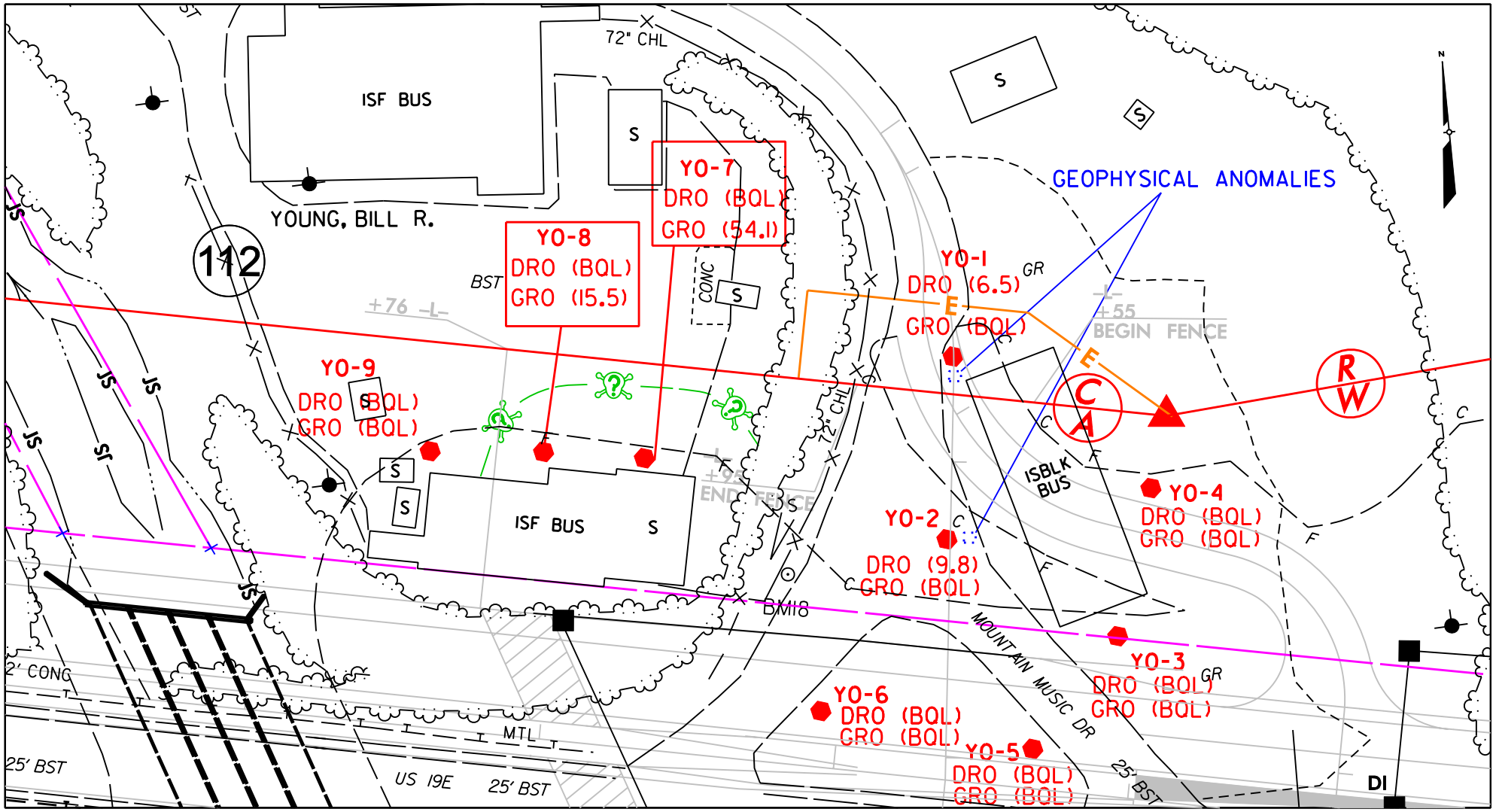

LEGEND

YO-1 — SOIL SAMPLE LOCATION AND IDENTIFICATION

DRO (123) — TPH AS DIESEL FUEL IN MG/KG

GRO (123) — TPH AS GASOLINE IN MG/KG

BQL — BELOW QUANTITATION LIMIT

ESTIMATED LIMIT OF CONTAMINATION AT 10 MG/KG

0 25 50

GRAPHIC SCALE (FEET)

AECOM

FIGURE 3

SOIL ANALYTICAL RESULTS MAP

BILL & BOBBY YOUNG PROPERTY (PARCEL #112)

SPRUCE PINE, MITCHELL COUNTY, NORTH CAROLINA

FEBRUARY 2012

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ATTACHMENT A

Pyramid Project # 2012035

GEOPHYSICAL INVESTIGATION REPORT

EM61 & GPR SURVEYS

BILL & BOBBY YOUNG PROPERTY - PARCEL 112
Mountain Music Drive & US Highway 19 East
Mitchell County, North Carolina

February 29, 2012

Report prepared for: **Michael W. Branson, PG**
AECOM Environment
701 Corporate Center Drive, Suite 475
Raleigh, North Carolina 27607

Prepared by: _____
Mark J. Denil, P.G.

Reviewed by: _____
Douglas Canavello, P.G.

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AECOM Environment
GEOPHYSICAL INVESTIGATION REPORT
BILL & BOBBY YOUNG PROPERTY - PARCEL 112
Mountain Music Drive & US Highway 19 East
Mitchell County, North Carolina

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FIGURES

1.0 INTRODUCTION

Pyramid Environmental conducted a geophysical investigation for AECOM Environmental across the proposed right-of way (ROW) area of the Bill and Bobby Young property (Parcel 112) located at the intersection of Mountain Music Drive and US Highway 19 East in Mitchell County, North Carolina. Conducted on February 10 and 14, 2012, the geophysical investigation was performed as part of the North Carolina Department of Transportation (NCDOT) preliminary site assessment project to determine if unknown, metallic underground storage tanks (USTs) were present beneath the proposed ROW area of the site.

The Bill and Bobby Young property consists of an active equipment supply store surrounded by an asphalt and dirt-covered parking areas and a grass island. At the time of the geophysical investigation, an assorted amount of equipment and vehicles were present along the eastern portion of the site (along the base of the embankment). The proposed ROW area encompassed most of the property and the geophysical survey area had a maximum length and width of 240 feet and 230 feet, respectively

AECOM Environment representative Mr. Michael Branson, PG identified the geophysical survey area to Pyramid Environmental personnel and provided site maps showing the boundaries of the proposed survey area prior to conducting the investigation. Photographs of the geophysical equipment used in this investigation and the southern portion of the property are shown in **Figure 1**.

2.0 FIELD METHODOLOGY

Prior to conducting the geophysical investigation, a 10-foot by 20-foot survey grid was established across the accessible portions of the geophysical survey area using measuring tapes and water-based marking paint. These grid marks were used as X-Y coordinates for location control when collecting the geophysical data and establishing base maps for the geophysical results.

The geophysical investigation consisted of electromagnetic (EM) induction-metal detection surveys and ground penetrating radar (GPR) surveys. The EM survey was performed on February 10, 2012 using a Geonics EM61-MK1 metal detection instrument. According to the instrument specifications, the EM61 can detect a metal drum down to a maximum depth of approximately 8 feet. Smaller objects (1-foot or less in size) can be detected to a maximum depth of 4 to 5 feet. All of the EM61 data were digitally collected at approximately 0.8 foot intervals along easterly-westerly trending, parallel survey lines spaced five feet apart. All of the data were downloaded to a computer and reviewed in the field and office using the Geonics DAT61W and Surfer for Windows Version 7.0 software programs.

GPR data were acquired on February 14, 2012 across selected EM61 differential anomalies using a GSSI SIR-2000 unit equipped with a 400 MHz antenna. GPR data were viewed in real time using a vertical scan of 512 samples, at a rate of 48 scans per second. A 70 MHz high pass filter and an 800 MHz low pass filter were used during data acquisition with the 400 MHz antenna. GPR data were viewed down to a maximum depth of approximately 5 feet, based on an estimated two-way travel time of 8 nanoseconds per foot.

Preliminary geophysical results obtained from the site were emailed to Mr. Branson during the week of February 20, 2012.

3.0 DISCUSSION OF RESULTS

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

The EM61 anomalies centered around grid coordinates X=130 Y=100, X=178 Y=140, X=220 Y=150, and X=240 Y=110 are probably in response to equipment, signs, vehicles, or the building. The EM61 anomalies centered near grid coordinates X=50 Y=130 and X=95 Y=155 are probably in response to a business sign, electrical outlets and the edge of metal fence line. The linear EM61 bottom coil anomaly intersecting grid coordinates X=130 Y=186 is probably in response to the metal fence line.

GPR data suggest the EM61 differential anomaly centered near grid coordinates X=135 Y=132 is probably in response to steel reinforced concrete which underlies the asphalt pavement. GPR data acquired across the EM61 differential anomaly centered near grid coordinates X=146 Y=145 detected a possible metallic object or a small, "very low confidence" UST buried approximately 1.75 feet below the asphalt pavement. Based on the GPR data, the possible buried object or small UST is approximately 2.75 feet long and 2.75 feet wide. The GPR image obtained along a portion of survey line Y=145, which crosses the possible object or UST, and a photograph showing the location of the possible buried object are presented in **Figure 4.** The foot print of the possible buried object or small, "low-confidence" UST was marked in the field using orange spray paint and pin flags.

GPR data acquired across the EM61 differential anomaly centered near grid coordinates X=180 Y=212 detected a possible metallic object or a small, "low confidence" UST buried approximately 1.5 feet below present grade. Based on the GPR data, the possible buried object or small UST is approximately 4 feet long and 2.5 feet wide. The GPR image obtained along a portion of survey line X=180, which crosses the possible object or UST, and a photograph showing the location of the possible buried object are presented in **Figure 5.** The foot print of the possible buried object or small, "low-confidence" UST was marked in the field using orange spray paint and pin flags.

Excluding the two possible buried objects or "low confidence" USTs located at grid coordinates X=146 Y=145, and X=180 Y=212 the geophysical investigation suggests that the remaining accessible portions of the proposed ROW area do <u>not</u> contain metallic USTs.

4.0 SUMMARY & CONCLUSIONS

Our evaluation of the EM61 and GPR data collected across the proposed ROW area at the Bill and Bobby Young property located at the intersection of Music Mountain Drive and US Highway 19 East in Mitchell County, North Carolina, provides the following summary and conclusions:

- The EM61 and GPR surveys provided reliable results for the detection of metallic USTs within the geophysical survey area.

- The EM61 anomalies centered around grid coordinates X=130 Y=100 X=178 Y=140, X=220 Y=150, and X=240 Y=110, are probably in response to equipment, signs, vehicles or the building.

- GPR data acquired across the EM61 differential anomaly centered near grid coordinates X=146 Y=145 detected a possible metallic object or a small, "very low confidence" UST buried approximately 1.75 feet below the asphalt pavement. Based on the GPR data, the possible buried object or small UST is approximately 2.75 feet long and 2.75 feet wide.

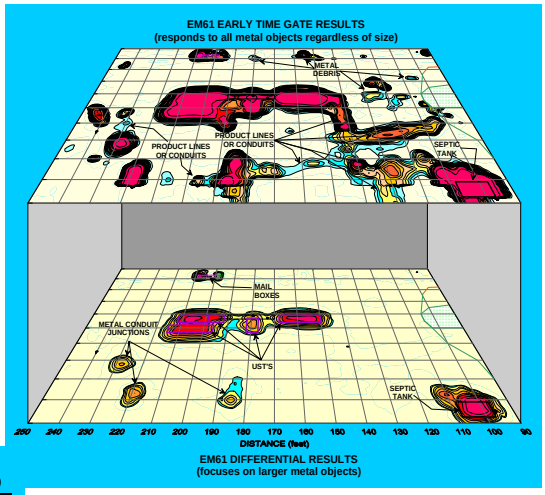
- GPR data acquired across the EM61 differential anomaly centered near grid coordinates X=180 Y=212 detected a possible metallic object or a small, "low confidence" UST buried approximately 1.5 feet below present grade. Based on the GPR data, the possible buried object or small UST is approximately 4 feet long and 2.5 feet wide.

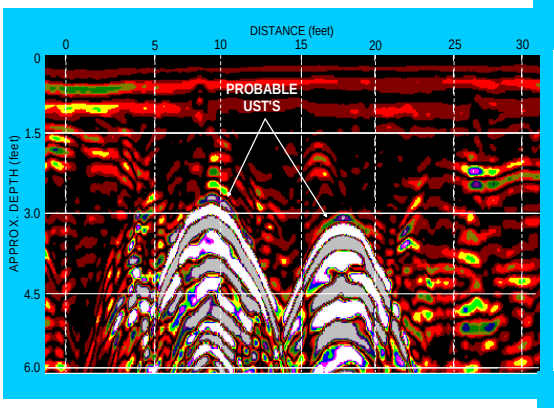
- Excluding the two possible buried objects or "low confidence" USTs located at grid coordinates X=146 Y=145, and X=180 Y=212, the geophysical investigation suggests that the remaining accessible portions of the proposed ROW area do not contain metallic USTs.

5.0 LIMITATIONS

EM61 and GPR surveys have been performed and this report prepared for AECOM Environmental in accordance with generally accepted guidelines for EM61 and GPR surveys. It is generally

recognized that the results of the EM61 and GPR are non-unique and may not represent actual subsurface conditions. Excluding the two detected objects or USTs, the EM61 and GPR results obtained for this project have not conclusively determined that the remaining accessible portions of the proposed ROW area do not contain buried metallic USTs but that none were detected.

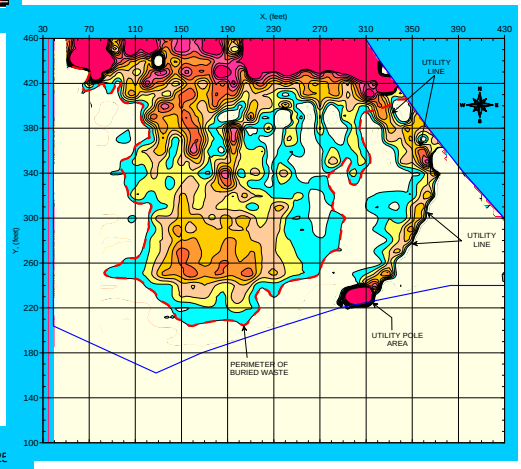


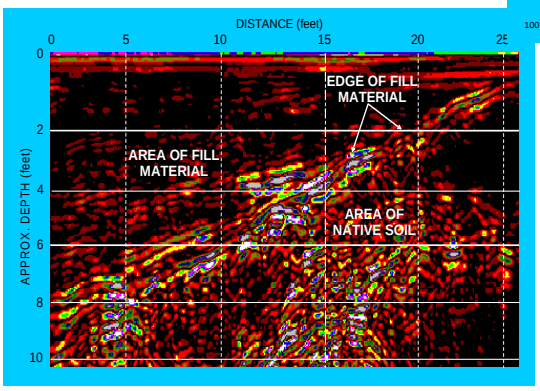


FIGURES

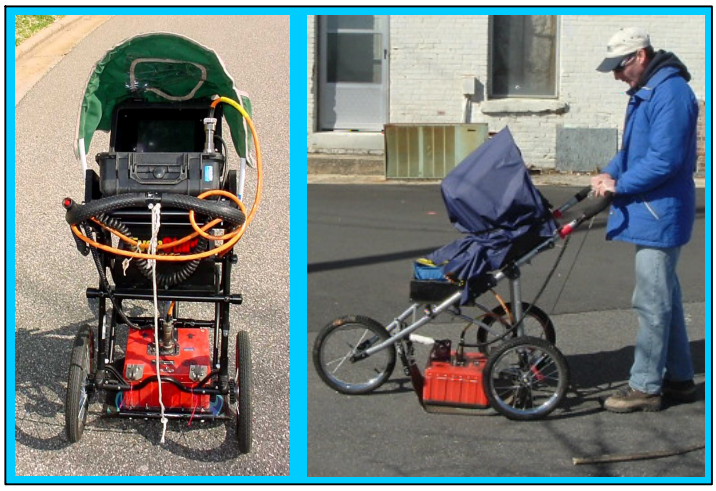
(on the following pages)

Figures shown on this page are for esthetic purposes only and are not related to the geophysical results discussed in this report.





The photograph shows the Geonics EM61 metal detector that was used to conduct the metal detection survey across portions of the proposed ROW area at the Young property on February 10, 2012.



The photographs show the SIR-2000 GPR system equipped with a 400 MHz antenna that were used to conduct the ground penetrating radar investigation at the Young property on February 14, 2012.

The photograph shows the western portion of the Young property located at the intersection of US Highway 19 East and Mountain Music Drive in Mitchell County, North Carolina. The photograph is viewed in a northeasterly direction.

PYRAMID
ENVIRONMENTAL & ENGINEERING, P.C.

CLIENT	AECOM ENVIRONMENT	DATE	02/29/12	DRWN	MJD
SITE	BILL & BOBBY YOUNG PROPERTY - PARCEL 112	LAY		CHKD	
CITY	MITCHELL COUNTY	STATE	NORTH CAROLINA	DWG	
TITLE	GEOPHYSICAL RESULTS	JNO	2012-035	FIGURE	

GEOPHYSICAL EQUIPMENT & SITE PHOTOGRAPHS

FIGURE 1

EM61 METAL DETECTION (BOTTOM COIL RESULTS)

FIGURE 2

APPROXIMATE NORTH

LEGEND

- SURVEY AREA: EM61 DATA ACQUIRED ALONG X-AXIS OR Y-AXIS TRENDING LINES SPACED 5 FEET APART
- BUILDING OR STRUCTURE
- EQUIPMENT OR DEBRIS PILE
- VEHICLE
- BUSINESS SIGN OR FRAME
- METAL FENCE LINE
- UTILITY OR SIGN POLE
- ROAD SIGN
- POSSIBLE BURIED METAL OBJECT OR UST, AS SUGGESTED BY GEOPHYSICAL DATA
- BURIED CONDUIT, AS SUGGESTED BY GEOPHYSICAL DATA

EM61 BOTTOM COIL RESPONSE (MILLIVOLTS)

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

The contour plot shows the bottom coil (most sensitive) response of the EM61instrument in millivolts (mV). The bottom coil response shows buried metallic objects regardless of size. The EM61 survey was conducted on February 10, 2012 using a Geonics EM61 instrument. Ground penetrating radar (GPR) data were acquired across selected EM61 anomalies on February 14, 2012 using a Geophysical Survey Systems SIR 2000 instrument with a 400 MHz antenna.

The geophysical investigation detected two possible buried, metal objects or USTs within the surveyed portion of the site.

GRAPHIC SCALE IN FEET

J.NO.	DWG	LAY	DATE	CHKD	DRWN	FIGURE
2012-035			02/29/12		MJD	

CLIENT: AECOM ENVIRONMENT

SITE: BILL & BOBBY YOUNG PROPERTY - PARCEL 112

CITY: MITCHELL COUNTY

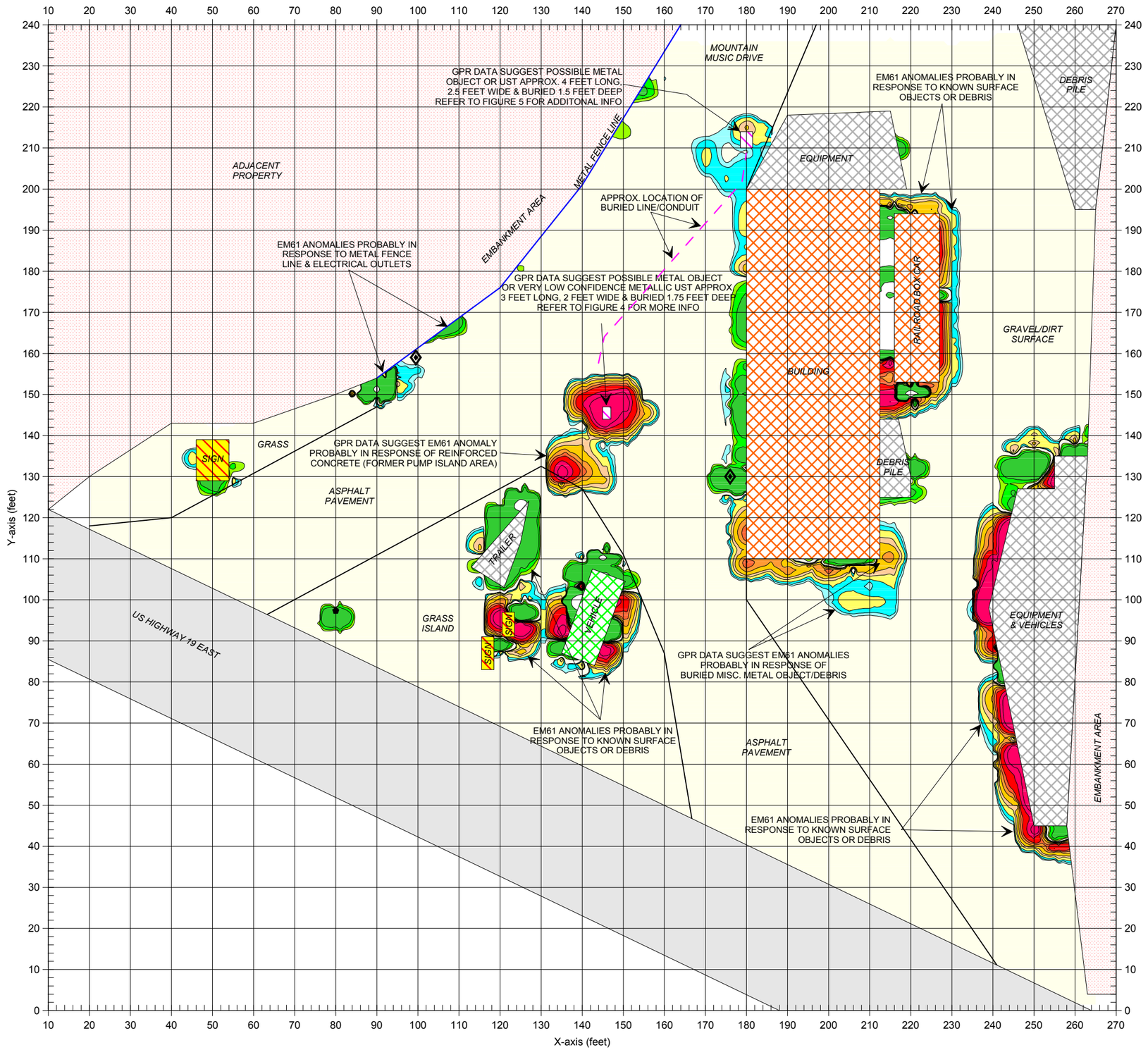
STATE: NORTH CAROLINA

TITLE: GEOPHYSICAL RESULTS

PYRAMID
ENVIRONMENTAL & ENGINEERING, P.C.

EM61 METAL DETECTION (DIFFERENTIAL RESULTS)

FIGURE 3



APPROXIMATE NORTH

LEGEND

- SURVEY AREA: EM61 DATA ACQUIRED ALONG X-AXIS OR Y-AXIS TRENDING LINES SPACED 5 FEET APART
- BUILDING OR STRUCTURE
- EQUIPMENT OR DEBRIS PILE
- VEHICLE
- BUSINESS SIGN OR FRAME
- METAL FENCE LINE
- UTILITY OR SIGN POLE
- ROAD SIGN
- POSSIBLE BURIED METAL OBJECT OR UST, AS SUGGESTED BY GEOPHYSICAL DATA
- BURIED CONDUIT, AS SUGGESTED BY GEOPHYSICAL DATA

EM61 DIFFERENTIAL RESPONSE (MILLIVOLTS)

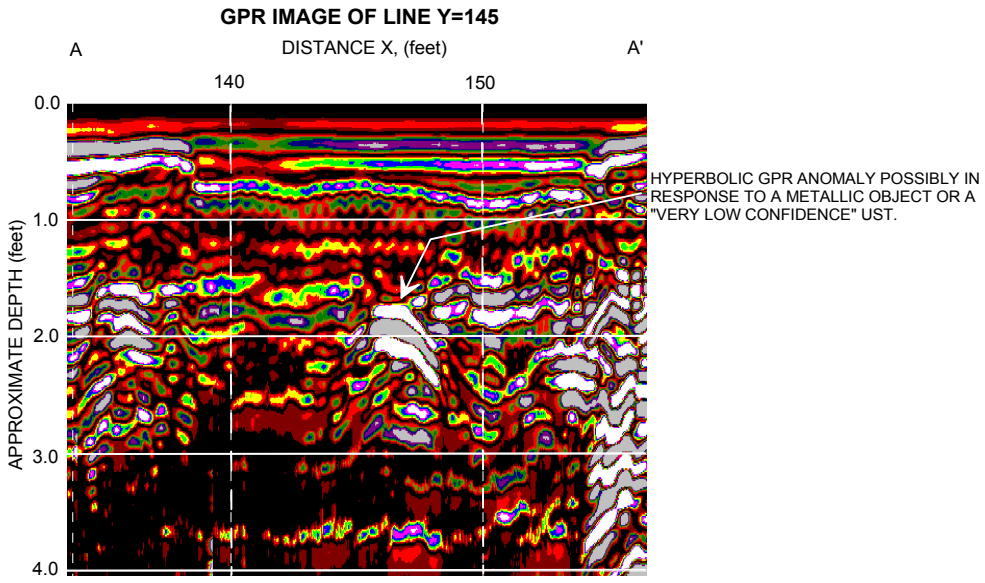
-5000 -400 -200 -100 -90 -45 -60 -75 -100 -150 -200 -300 -400 -500 -750 -1000

Note: The contour plot shows the differential response between the bottom and top coils of the EM61 instrument in millivolts (mV). The differential response focuses on larger, buried metallic objects such as drums and USTs and ignores smaller miscellaneous, buried, metal debris. The EM61 data were collected on February 10, 2012 using a Geonics EM61 instrument. Ground penetrating radar (GPR) data were acquired across selected EM61 anomalies on February 14, 2012 using a Geophysical Survey Systems SIR 2000 instrument with a 400 MHz antenna.

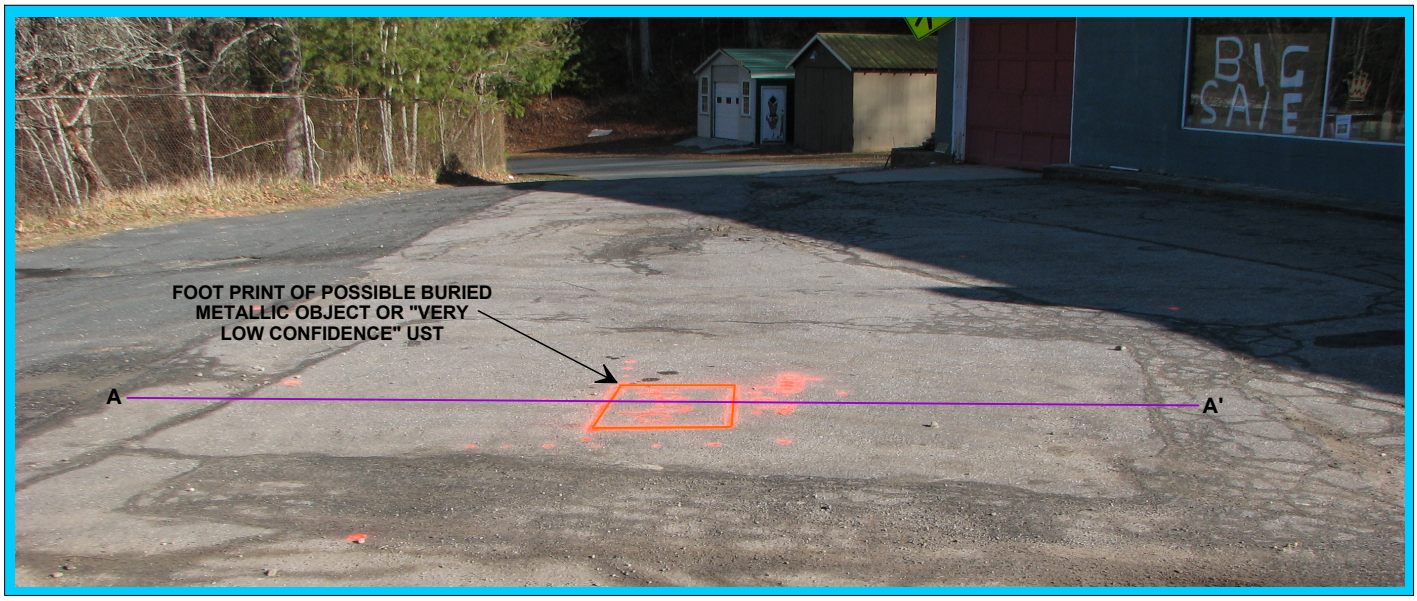
The geophysical investigation detected two possible buried, metal objects or USTs within the surveyed portion of the site.

GRAPHIC SCALE IN FEET	
DRWN	MJD
CHKD	
LAY	
DWG	
FIGURE	
DATE	02/29/12
J.-NO.	2012-035
CLIENT	AECOM ENVIRONMENT
SITE	BILL & BOBBY YOUNG PROPERTY - PARCEL 112
CITY	MITCHELL COUNTY
STATE	NORTH CAROLINA
TITLE	GEOPHYSICAL RESULTS

PYRAMID
ENVIRONMENTAL & ENGINEERING, P.C.



The GPR image obtained along a portion of survey line Y=145 recorded a hyperbolic GPR anomaly across the EM61 metal detection anomaly centered near grid coordinates X=146 Y=145 that is possibly in response to a buried, metallic object or a "very low confidence" UST. The solid purple line labeled AA' in the photograph below shows the location of the GPR image.



The orange rectangle in the photograph represents the approximate perimeter of a possible, metallic object or a "very low confidence" UST, as suggested by the GPR data. Centered near grid coordinates X=146 Y=145, the possible metallic object is 2.75 feet long, 2.75 feet wide and buried 1.75 feet below present grade. The solid purple line in the photograph represents the approximate location of the GPR image shown above. The photograph is viewed in a northerly direction.

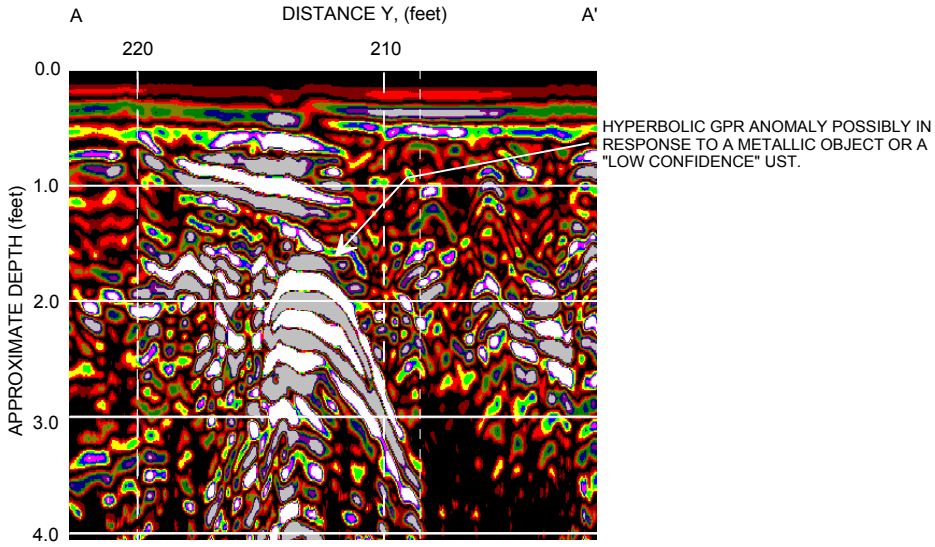
PYRAMID
ENVIRONMENTAL & ENGINEERING, P.C.

CLIENT	AECOM ENVIRONMENT		DATE	02/29/12	DRWN MJD
SITE	BILL & BOBBY YOUNG PROPERTY - PARCEL 112		LAY		CHKD
CITY	MITCHELL COUNTY	STATE NORTH CAROLINA	DWG		
TITLE	GEOPHYSICAL RESULTS		JNO	2012-035	FIGURE

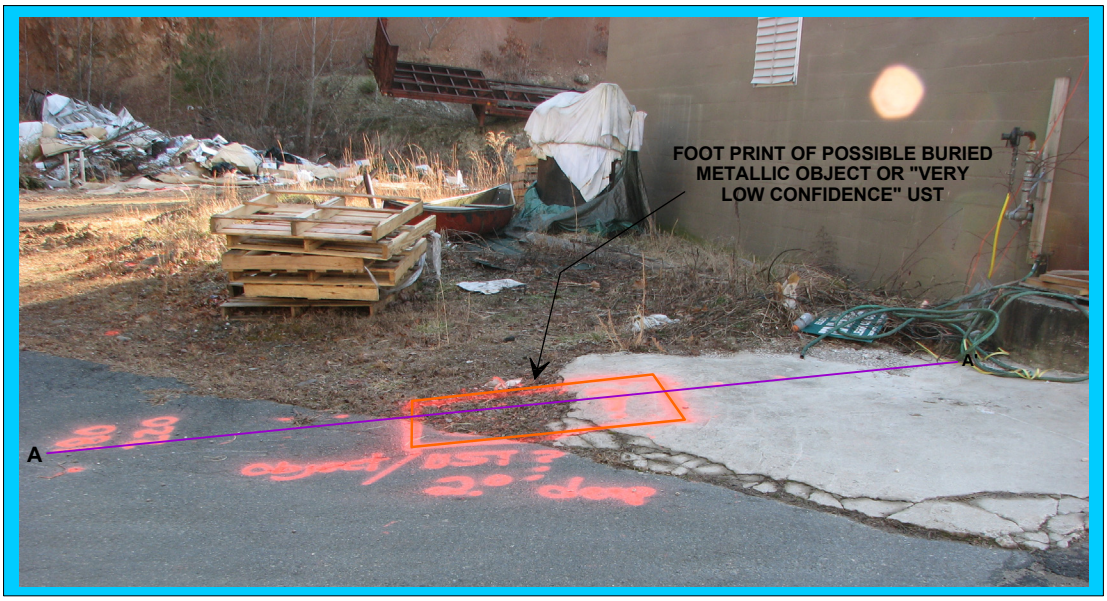
GPR IMAGE ACROSS POSSIBLE BURIED OBJECT

FIGURE 4

GPR IMAGE OF LINE X=180



The GPR image obtained along a portion of survey line X=180 recorded a hyperbolic GPR anomaly across the EM61 metal detection anomaly centered near grid coordinates X=180 Y=212 that is possibly in response to a buried, metallic object or a "low confidence" UST. The solid purple line labeled AA' in the photograph below shows the location of the GPR image.



The orange rectangle in the photograph represents the approximate perimeter of a possible, metallic object or a "low confidence" UST, as suggested by the GPR data. Centered near grid coordinates X=180 Y=212, the possible metallic object is 4 feet long, 2.5 feet wide and buried 1.5 feet below present grade. The solid purple line in the photograph represents the approximate location of the GPR image shown above. The photograph is viewed in an easterly direction.

PYRAMID
ENVIRONMENTAL & ENGINEERING, P.C.

CLIENT	AECOM ENVIRONMENT		DATE	02/29/12	DRWN MJD
SITE	BILL & BOBBY YOUNG PROPERTY - PARCEL 112		LAY		CHKD
CITY	MITCHELL COUNTY	STATE NORTH CAROLINA	DWG		
TITLE	GEOPHYSICAL RESULTS		JOB NO.	2012-035	FIGURE

GPR IMAGE ACROSS POSSIBLE BURIED OBJECT OR UST

FIGURE 5

ATTACHMENT B

TEST BORING REPORT

PROJECT BOBBY YOUNG PROPERTY (PARCEL #112)
CLIENT NCDOT R-2519B
PROJECT NUMBER 60241470
CONTRACTOR REGIONAL PROBING
EQUIPMENT GEOPROBE

BORING NUMBER YO-1
PAGE 1
ELEVATION
DATE 2/22/12
DRILLER OPPER
PREPARED BY BRANSON

DEPTH IN FEET	CASING BLOWS FOOT	BLOWS PER 6 INCHES	OVA (ppm)	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
			1.15		MOTTLED MEDIUM BROWN, DARK BROWN, WHITE, AND BLACK SILTY SAND, MICACEOUS, ABUNDANT ROCK FRAGMENTS. DRY. NO ODORS.
			1.47		AS ABOVE. DRY. NO ODORS.
			1.05		AS ABOVE. DRY. NO ODORS.
5.0					
			1.45		AS ABOVE. DRY. NO ODORS.
			1.31		AS ABOVE. DRY. NO ODORS.
10.0					REFUSAL AT 10.5 FEET. NO GROUNDWATER ENCOUNTERED.
15.0					
20.0					

AECOM

TEST BORING REPORT

PROJECT BOBBY YOUNG PROPERTY (PARCEL #112)
CLIENT NCDOT R-2519B
PROJECT NUMBER 60241470
CONTRACTOR REGIONAL PROBING
EQUIPMENT GEOPROBE

BORING NUMBER YO-2
PAGE 1
ELEVATION
DATE 2/22/12
DRILLER OPPER
PREPARED BY BRANSON

DEPTH IN FEET	CASING BLOWS FOOT	BLOWS PER 6 INCHES	OVA (ppm)	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
			4.56		6" ASPHALT/GRAVEL OVER CONCRETE, MOTTLED MEDIUM BROWN, DARK BROWN, WHITE, AND BLACK SILTY SAND, MICACEOUS, ROCK FRAGMENTS COMMON. DRY. NO ODORS. SUBMIT TO LABORATORY FOR ANALYSIS.
			4.21		AS ABOVE. DRY. NO ODORS.
5.0			2.06		AS ABOVE. DRY. NO ODORS.
			3.87		AS ABOVE. DRY. NO ODORS.
			2.29		AS ABOVE. DRY. NO ODORS.
10.0			2.07		AS ABOVE. DRY. NO ODORS.
					REFUSAL AT 12 FEET. NO GROUNDWATER ENCOUNTERED.
15.0					
20.0					

AECOM

TEST BORING REPORT

PROJECT BOBBY YOUNG PROPERTY (PARCEL #112)
CLIENT NCDOT R-2519B
PROJECT NUMBER 60241470
CONTRACTOR REGIONAL PROBING
EQUIPMENT GEOPROBE

BORING NUMBER YO-3
PAGE 1
ELEVATION
DATE 2/22/12
DRILLER OPPER
PREPARED BY BRANSON

DEPTH IN FEET	CASING BLOWS FOOT	BLOWS PER 6 INCHES	OVA (ppm)	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
			4.25		MOTTLED MEDIUM BROWN, REDDISH BROWN, WHITE, AND BLACK COARSE-GRAINED SAND, MICACEOUS, ROCK FRAGMENTS COMMON. DRY. NO ODORS. SUBMIT TO LABORATORY FOR ANALYSIS.
			3.62		AS ABOVE TO 2 FEET. BECOMES MOTTLED WHITE, BLACK, AND PINK PARTIALLY WEATHERED ROCK.
5.0					REFUSAL AT 5 FEET. NO GROUNDWATER ENCOUNTERED.
10.0					
15.0					
20.0					

AECOM

TEST BORING REPORT

PROJECT BOBBY YOUNG PROPERTY (PARCEL #112)
CLIENT NCDOT R-2519B
PROJECT NUMBER 60241470
CONTRACTOR REGIONAL PROBING
EQUIPMENT GEOPROBE

BORING NUMBER YO-4
PAGE 1
ELEVATION
DATE 2/22/12
DRILLER OPPER
PREPARED BY BRANSON

DEPTH IN FEET	CASING BLOWS FOOT	BLOWS PER 6 INCHES	OVA (ppm)	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
			1.11		MOTTLED MEDIUM BROWN, DARK BROWN, WHITE, AND BLACK COARSE-GRAINED SAND, MICACEOUS, ROCK FRAGMENTS COMMON. DRY. NO ODORS. SUBMIT TO LABORATORY FOR ANALYSIS.
			1.78		AS ABOVE. DRY. NO ODORS. SUBMIT TO LABORATORY FOR ANALYSIS.
					REFUSAL AT 4 FEET. NO GROUNDWATER ENCOUNTERED.
5.0					
10.0					
15.0					
20.0					

AECOM

TEST BORING REPORT

PROJECT BOBBY YOUNG PROPERTY (PARCEL #112)
CLIENT NCDOT R-2519B
PROJECT NUMBER 60241470
CONTRACTOR REGIONAL PROBING
EQUIPMENT GEOPROBE

BORING NUMBER YO-5
PAGE 1
ELEVATION
DATE 2/22/12
DRILLER OPPER
PREPARED BY BRANSON

DEPTH IN FEET	CASING BLOWS FOOT	BLOWS PER 6 INCHES	OVA (ppm)	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
			1.51		2" TOPSOIL, MOTTLED MEDIUM BROWN, DARK BROWN, WHITE, AND BLACK COARSE-GRAINED SAND, MICACEOUS. DRY. NO ODORS. SUBMIT TO LABORATORY FOR ANALYSIS.
			1.63		AS ABOVE. DRY. NO ODORS. SUBMIT TO LABORATORY FOR ANALYSIS.
5.0					REFUSAL AT 5 FEET. NO GROUNDWATER ENCOUNTERED.
10.0					
15.0					
20.0					

AECOM

TEST BORING REPORT

PROJECT BOBBY YOUNG PROPERTY (PARCEL #112)
CLIENT NCDOT R-2519B
PROJECT NUMBER 60241470
CONTRACTOR REGIONAL PROBING
EQUIPMENT GEOPROBE

BORING NUMBER YO-6
PAGE 1
ELEVATION
DATE 2/22/12
DRILLER OPPER
PREPARED BY BRANSON

DEPTH IN FEET	CASING BLOWS FOOT	BLOWS PER 6 INCHES	OVA (ppm)	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
			1.58		2" TOPSOIL, MEDIUM BROWN, MICACEOUS, SILT/SAND WITH OCCASIONAL QUARTZ FRAGMENTS. DRY, NO ODORS.
			2.96		AS ABOVE. DRY. NO ODORS. SUBMIT TO LABORATORY FOR ANALYSIS.
5.0			1.72		AS ABOVE. DRY. NO ODORS.
			1.06		AS ABOVE. DRY. NO ODORS.
			2.28		AS ABOVE. DRY. NO ODORS.
10.0			2.63		AS ABOVE TO 11 FEET. BECOMES MOTTLED MEDIUM BROWN, DARK BROWN, WHITE, AND BLACK SILTY SAND, MICACEOUS, QUARTZ FRAGMENTS COMMON. DRY. NO ODORS.
			2.43		AS ABOVE. DRY. NO ODORS.
15.0			1.95		AS ABOVE. DRY. NO ODORS.
					BORING TERMINATED AT 15 FEET. NO GROUNDWATER ENCOUNTERED.
20.0					

AECOM

TEST BORING REPORT

PROJECT BOBBY YOUNG PROPERTY (PARCEL #112)
CLIENT NCDOT R-2519B
PROJECT NUMBER 60241470
CONTRACTOR REGIONAL PROBING
EQUIPMENT GEOPROBE

BORING NUMBER YO-7
PAGE 1
ELEVATION
DATE 2/22/12
DRILLER OPPER
PREPARED BY BRANSON

DEPTH IN FEET	CASING BLOWS FOOT	BLOWS PER 6 INCHES	OVA (ppm)	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
			1.95		MOTTLED MEDIUM BROWN, TAN, AND WHITE, MICACEOUS, COARSE-GRAINED SAND. DRY. NO ODORS.
			2.21		AS ABOVE. DRY. NO ODORS.
			17.83		AS ABOVE. DRY. NO ODORS.
5.0					
			85		MOTTLED MEDIUM BROWN, DARK BROWN, AND BLACK, MICACEOUS, COARSE-GRAINED SAND, ABUNDANT ROCK FRAGMENTS. DRY. NO ODORS.
			142		AS ABOVE. DRY. NO ODORS.
10.0					
			203		AS ABOVE. DRY. NO ODORS. SUBMIT TO LABORATORY FOR ANALYSIS.
					BORING TERMINATED AT 12 FEET. GROUNDWATER ENCOUNTERED AT 12 FEET.
15.0					
20.0					

AECOM

TEST BORING REPORT

PROJECT BOBBY YOUNG PROPERTY (PARCEL #112)
CLIENT NCDOT R-2519B
PROJECT NUMBER 60241470
CONTRACTOR REGIONAL PROBING
EQUIPMENT GEOPROBE

BORING NUMBER YO-8
PAGE 1
ELEVATION
DATE 2/22/12
DRILLER OPPER
PREPARED BY BRANSON

DEPTH IN FEET	CASING BLOWS FOOT	BLOWS PER 6 INCHES	OVA (ppm)	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
			2.44		MOTTLED MEDIUM BROWN, TAN, BLACK, AND WHITE, MICACEOUS, COARSE-GRAINED SAND, ABUNDANT ROCK FRAGMENTS. DRY. NO ODORS.
			2.13		AS ABOVE. DRY. NO ODORS.
			5.18		AS ABOVE. DRY. NO ODORS.
5.0					
			32		AS ABOVE TO 7 FEET. BECOMES DARK BROWN TO OLIVE GRAY ORGANIC CLAYEY SILT, MICACEOUS. DRY. NO ODORS. SUBMIT TO LABORATORY FOR ANALYSIS.
			129		AS ABOVE. DRY. NO ODORS. SUBMIT TO LABORATORY FOR ANALYSIS.
10.0					
			107		AS ABOVE. WET AT 12 FEET. NO ODORS.
					AS ABOVE. WET. NOT SAMPLED.
					AS ABOVE. WET. NOT SAMPLED.
15.0					
					BORING TERMINATED AT 15 FEET. GROUNDWATER ENCOUNTERED AT 12 FEET.
20.0					

AECOM

TEST BORING REPORT

PROJECT BOBBY YOUNG PROPERTY (PARCEL #112)
CLIENT NCDOT R-2519B
PROJECT NUMBER 60241470
CONTRACTOR REGIONAL PROBING
EQUIPMENT GEOPROBE

BORING NUMBER YO-9
PAGE 1
ELEVATION
DATE 2/22/12
DRILLER OPPER
PREPARED BY BRANSON

DEPTH IN FEET	CASING BLOWS FOOT	BLOWS PER 6 INCHES	OVA (ppm)	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
			3.44		MOTTLED MEDIUM BROWN, TAN, BLACK, AND WHITE, MICACEOUS, COARSE-GRAINED SAND, ABUNDANT ROCK FRAGMENTS. DRY. NO ODORS.
			3.77		AS ABOVE. DRY. NO ODORS.
5.0			19.14		AS ABOVE. DRY. NO ODORS. SUBMIT TO LABORATORY FOR ANALYSIS.
			6.79		AS ABOVE TO 7 FEET. BECOMES DARK BROWN TO OLIVE GRAY ORGANIC CLAYEY SILT, MICACEOUS. DRY. NO ODORS. SUBMIT TO LABORATORY FOR ANALYSIS.
			5.73		AS ABOVE. DRY. NO ODORS.
10.0			4.81		AS ABOVE. DRY. NO ODORS.
			3.67		AS ABOVE. WET AT 14 FEET. NO ODORS.
15.0					AS ABOVE. WET. NOT SAMPLED.
					BORING TERMINATED AT 15 FEET. GROUNDWATER ENCOUNTERED AT 14 FEET.
20.0					

AECOM

ATTACHMENT C

PHOTO 1- BORING ON NORTH SIDE OF BUILDING AT ANOMALY LOOKING SOUTH

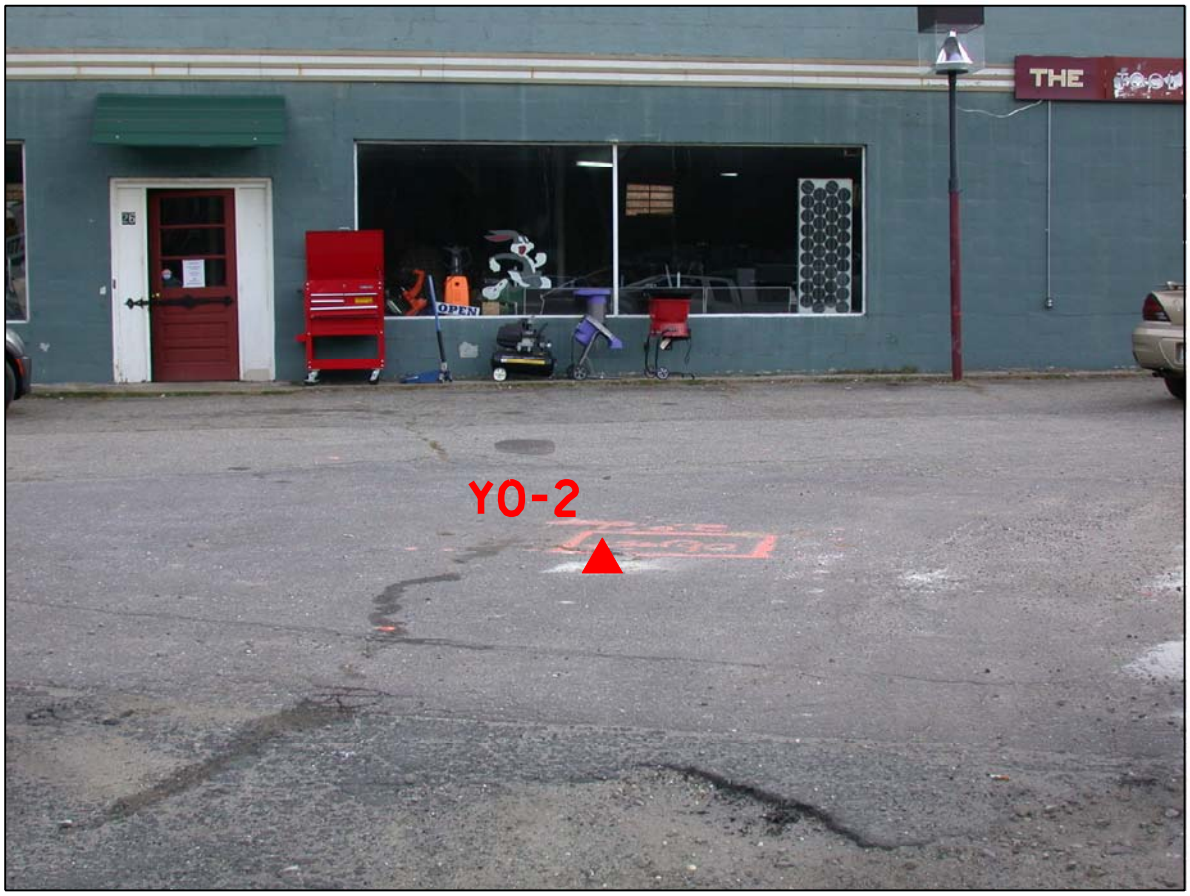


PHOTO 2 - BORING ON WEST SIDE OF BUILDING AT ANOMALY LOOKING EAST

PHOTO 3 - BORING ON SOUTH SIDE OF BUILDING LOOKING NORTH

PHOTO 4 - BORING ON EAST SIDE OF BUILDING LOOKING NORTH

PHOTO 5 - BORING WITHIN RIGHT-OF-WAY LOOKING SOUTHWEST

PHOTO 6 - BORING WITHIN RIGHT-OF-WAY LOOKING NORTHEAST

PHOTO 7 - BORING AT METAL WORKS SHOP LOOKING SOUTH

PHOTO 8 - BORING AT METAL WORKS SHOP LOOKING SOUTH

PHOTO 9 - BORING AT METAL WORKS SHOP LOOKING SOUTH

ATTACHMENT D

Pace Analytical Services, Inc.
205 East Meadow Road - Suite A
Eden, NC 27288
(336)623-8921

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

March 05, 2012

Chemical Testing Engineer
NCDOT
Materials & Tests Unit
1801 Blue Ridge Road
Raleigh, NC 27607

RE: Project: Young 112 WBS#35609.1.1
Pace Project No.: 92112772

Dear Chemical Engineer:
Enclosed are the analytical results for sample(s) received by the laboratory on February 23, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

Analyses were performed at the Pace Analytical Services location indicated on the sample analyte page for analysis unless otherwise footnoted.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Lorri Patton

Lorri Patton

lorri.patton@pacelabs.com
Project Manager

Enclosures

cc: Mr. Mike Branson, AECOM

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CERTIFICATIONS

Project: Young 112 WBS#35609.1.1
Pace Project No.: 92112772

Charlotte Certification IDs
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Certification #: 99006001
South Carolina Drinking Water Cert. #: 99006003
Virginia Drinking Water Certification #: 00213
Connecticut Certification #: PH-0104
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Louisiana DHH Drinking Water # LA 100031
West Virginia Certification #: 357
Virginia/VELAP Certification #: 460144

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SAMPLE ANALYTE COUNT

Project: Young 112 WBS#35609.1.1
Pace Project No.: 92112772

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92112772001	**YO-1**	EPA 8015 Modified	MEJ	2	PASI-C
		EPA 8015 Modified	AW	2	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
92112772002	**YO-2**	EPA 8015 Modified	MEJ	2	PASI-C
		EPA 8015 Modified	AW	2	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
92112772003	**YO-3**	EPA 8015 Modified	MEJ	2	PASI-C
		EPA 8015 Modified	AW	2	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
92112772004	**YO-4**	EPA 8015 Modified	MEJ	2	PASI-C
		EPA 8015 Modified	AW	2	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
92112772005	**YO-5**	EPA 8015 Modified	MEJ	2	PASI-C
		EPA 8015 Modified	AW	2	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
92112772006	**YO-6**	EPA 8015 Modified	MEJ	2	PASI-C
		EPA 8015 Modified	AW	2	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
92112772007	**YO-7**	EPA 8015 Modified	MEJ	2	PASI-C
		EPA 8015 Modified	AW	2	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
92112772008	**YO-8**	EPA 8015 Modified	MEJ	2	PASI-C
		EPA 8015 Modified	AW	2	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
92112772009	**YO-9**	EPA 8015 Modified	MEJ	2	PASI-C
		EPA 8015 Modified	AW	2	PASI-C
		ASTM D2974-87	TNM	1	PASI-C

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ANALYTICAL RESULTS

Project: Young 112 WBS#35609.1.1
Pace Project No.: 92112772

Sample: YO-1 **Lab ID: 92112772001** Collected: 02/22/12 10:30 Received: 02/23/12 11:55 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3546							
Diesel Components	**6.5**	mg/kg	5.7	1	02/24/12 11:50	02/26/12 16:24	68334-30-5	
Surrogates								
n-Pentacosane (S)	70	%	41-119	1	02/24/12 11:50	02/26/12 16:24	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B							
Gasoline Range Organics	ND	mg/kg	5.6	1	02/28/12 17:35	02/29/12 06:56	8006-61-9	
Surrogates								
4-Bromofluorobenzene (S)	86	%	70-167	1	02/28/12 17:35	02/29/12 06:56	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**11.8**	%	0.10	1		02/24/12 14:27		

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ANALYTICAL RESULTS

Project: Young 112 WBS#35609.1.1
Pace Project No.: 92112772

Sample: YO-2 **Lab ID: 92112772002** Collected: 02/22/12 10:50 Received: 02/23/12 11:55 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3546							
Diesel Components	**9.8**	mg/kg	5.6	1	02/24/12 11:50	02/26/12 16:53	68334-30-5	
Surrogates								
n-Pentacosane (S)	73	%	41-119	1	02/24/12 11:50	02/26/12 16:53	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B							
Gasoline Range Organics	ND	mg/kg	6.4	1	02/28/12 17:35	02/29/12 07:20	8006-61-9	
Surrogates								
4-Bromofluorobenzene (S)	86	%	70-167	1	02/28/12 17:35	02/29/12 07:20	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**10.9**	%	0.10	1		02/24/12 14:27		

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ANALYTICAL RESULTS

Project: Young 112 WBS#35609.1.1
Pace Project No.: 92112772

Sample: YO-3 **Lab ID: 92112772003** Collected: 02/22/12 11:15 Received: 02/23/12 11:55 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3546							
Diesel Components	ND	mg/kg	5.7	1	02/24/12 11:50	02/26/12 16:53	68334-30-5	
Surrogates								
n-Pentacosane (S)	78	%	41-119	1	02/24/12 11:50	02/26/12 16:53	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B							
Gasoline Range Organics	ND	mg/kg	6.9	1	02/28/12 17:35	02/29/12 07:44	8006-61-9	
Surrogates								
4-Bromofluorobenzene (S)	89	%	70-167	1	02/28/12 17:35	02/29/12 07:44	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**11.5**	%	0.10	1		02/24/12 14:27		

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ANALYTICAL RESULTS

Project: Young 112 WBS#35609.1.1
Pace Project No.: 92112772

Sample: YO-4 **Lab ID: 92112772004** Collected: 02/22/12 11:20 Received: 02/23/12 11:55 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3546							
Diesel Components	ND	mg/kg	5.4	1	02/24/12 11:50	02/26/12 17:52	68334-30-5	
Surrogates								
n-Pentacosane (S)	80	%	41-119	1	02/24/12 11:50	02/26/12 17:52	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B							
Gasoline Range Organics	ND	mg/kg	6.3	1	02/28/12 17:35	02/29/12 08:09	8006-61-9	
Surrogates								
4-Bromofluorobenzene (S)	91	%	70-167	1	02/28/12 17:35	02/29/12 08:09	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**8.0**	%	0.10	1		02/24/12 14:27		

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ANALYTICAL RESULTS

Project: Young 112 WBS#35609.1.1
Pace Project No.: 92112772

Sample: YO-5 **Lab ID: 92112772005** Collected: 02/22/12 11:30 Received: 02/23/12 11:55 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3546							
Diesel Components	ND	mg/kg	5.3	1	02/24/12 11:50	02/26/12 17:52	68334-30-5	
Surrogates								
n-Pentacosane (S)	69	%	41-119	1	02/24/12 11:50	02/26/12 17:52	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B							
Gasoline Range Organics	ND	mg/kg	6.1	1	02/28/12 17:35	02/29/12 08:33	8006-61-9	
Surrogates								
4-Bromofluorobenzene (S)	88	%	70-167	1	02/28/12 17:35	02/29/12 08:33	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**6.6**	%	0.10	1		02/24/12 14:28		

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ANALYTICAL RESULTS

Project: Young 112 WBS#35609.1.1
Pace Project No.: 92112772

Sample: YO-6 **Lab ID: 92112772006** Collected: 02/22/12 11:45 Received: 02/23/12 11:55 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3546							
Diesel Components	ND	mg/kg	5.8	1	02/24/12 11:50	02/26/12 18:22	68334-30-5	
Surrogates								
n-Pentacosane (S)	87	%	41-119	1	02/24/12 11:50	02/26/12 18:22	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B							
Gasoline Range Organics	ND	mg/kg	6.2	1	03/01/12 15:34	03/01/12 17:56	8006-61-9	
Surrogates								
4-Bromofluorobenzene (S)	86	%	70-167	1	03/01/12 15:34	03/01/12 17:56	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**13.8**	%	0.10	1		02/24/12 14:28		

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ANALYTICAL RESULTS

Project: Young 112 WBS#35609.1.1
Pace Project No.: 92112772

Sample: YO-7 **Lab ID: 92112772007** Collected: 02/22/12 12:30 Received: 02/23/12 11:55 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3546							
Diesel Components	ND	mg/kg	6.8	1	02/24/12 11:50	02/26/12 18:22	68334-30-5	
Surrogates								
n-Pentacosane (S)	81	%	41-119	1	02/24/12 11:50	02/26/12 18:22	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B							
Gasoline Range Organics	**54.1**	mg/kg	9.7	1	03/01/12 15:34	03/01/12 19:09	8006-61-9	
Surrogates								
4-Bromofluorobenzene (S)	109	%	70-167	1	03/01/12 15:34	03/01/12 19:09	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**27.8**	%	0.10	1		02/24/12 14:28		

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ANALYTICAL RESULTS

Project: Young 112 WBS#35609.1.1
Pace Project No.: 92112772

Sample: YO-8 **Lab ID: 92112772008** Collected: 02/22/12 12:45 Received: 02/23/12 11:55 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3546							
Diesel Components	ND	mg/kg	6.3	1	02/24/12 11:50	02/26/12 18:52	68334-30-5	
Surrogates								
n-Pentacosane (S)	96	%	41-119	1	02/24/12 11:50	02/26/12 18:52	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B							
Gasoline Range Organics	**15.5**	mg/kg	6.1	1	03/01/12 15:34	03/01/12 19:33	8006-61-9	
Surrogates								
4-Bromofluorobenzene (S)	106	%	70-167	1	03/01/12 15:34	03/01/12 19:33	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**21.8**	%	0.10	1		02/24/12 14:28		

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ANALYTICAL RESULTS

Project: Young 112 WBS#35609.1.1
Pace Project No.: 92112772

Sample: YO-9 **Lab ID: 92112772009** Collected: 02/22/12 13:00 Received: 02/23/12 11:55 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3546							
Diesel Components	ND	mg/kg	6.0	1	02/24/12 11:50	02/26/12 18:52	68334-30-5	
Surrogates								
n-Pentacosane (S)	79	%	41-119	1	02/24/12 11:50	02/26/12 18:52	629-99-2	
Gasoline Range Organics	Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B							
Gasoline Range Organics	ND	mg/kg	5.9	1	03/01/12 15:34	03/01/12 19:57	8006-61-9	
Surrogates								
4-Bromofluorobenzene (S)	89	%	70-167	1	03/01/12 15:34	03/01/12 19:57	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**16.9**	%	0.10	1		02/24/12 14:28		

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QUALITY CONTROL DATA

Project: Young 112 WBS#35609.1.1
Pace Project No.: 92112772

QC Batch: GCV/5777 Analysis Method: EPA 8015 Modified
QC Batch Method: EPA 5035A/5030B Analysis Description: Gasoline Range Organics
Associated Lab Samples: 92112772001, 92112772002, 92112772003, 92112772004, 92112772005

METHOD BLANK: 728539 Matrix: Solid
Associated Lab Samples: 92112772001, 92112772002, 92112772003, 92112772004, 92112772005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Gasoline Range Organics	mg/kg	ND	5.9	02/29/12 00:02	
4-Bromofluorobenzene (S)	%	88	70-167	02/29/12 00:02	

LABORATORY CONTROL SAMPLE: 728540

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Gasoline Range Organics	mg/kg	24.5	24.0	98	70-165	
4-Bromofluorobenzene (S)	%			89	70-167	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 728541 728542

Parameter	Units	92112768003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Gasoline Range Organics	mg/kg	ND	27.6	27.6	32.1	32.4	116	117	47-187	1	
4-Bromofluorobenzene (S)	%						91	89	70-167		

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QUALITY CONTROL DATA

Project: Young 112 WBS#35609.1.1
Pace Project No.: 92112772

QC Batch: GCV/5784 Analysis Method: EPA 8015 Modified
QC Batch Method: EPA 5035A/5030B Analysis Description: Gasoline Range Organics
Associated Lab Samples: 92112772006, 92112772007, 92112772008, 92112772009

METHOD BLANK: 729634 Matrix: Solid
Associated Lab Samples: 92112772006, 92112772007, 92112772008, 92112772009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Gasoline Range Organics	mg/kg	ND	5.9	03/01/12 17:31	
4-Bromofluorobenzene (S)	%	86	70-167	03/01/12 17:31	

LABORATORY CONTROL SAMPLE: 729635

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Gasoline Range Organics	mg/kg	24.8	24.9	101	70-165	
4-Bromofluorobenzene (S)	%			97	70-167	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 729636 729637

Parameter	Units	92112772006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Gasoline Range Organics	mg/kg	ND	25.8	25.8	32.3	28.6	121	107	47-187	12	
4-Bromofluorobenzene (S)	%						94	92	70-167		

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QUALITY CONTROL DATA

Project: Young 112 WBS#35609.1.1
Pace Project No.: 92112772

QC Batch: OEXT/16542 Analysis Method: EPA 8015 Modified
QC Batch Method: EPA 3546 Analysis Description: 8015 Solid GCSV
Associated Lab Samples: 92112772001, 92112772002, 92112772003, 92112772004, 92112772005, 92112772006, 92112772007, 92112772008, 92112772009

METHOD BLANK: 727081 Matrix: Solid
Associated Lab Samples: 92112772001, 92112772002, 92112772003, 92112772004, 92112772005, 92112772006, 92112772007, 92112772008, 92112772009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diesel Components	mg/kg	ND	5.0	02/26/12 14:55	
n-Pentacosane (S)	%	85	41-119	02/26/12 14:55	

LABORATORY CONTROL SAMPLE: 727082

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Diesel Components	mg/kg	66.7	47.1	71	49-113	
n-Pentacosane (S)	%			74	41-119	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 727083 727084

Parameter	Units	92112772003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Diesel Components	mg/kg	ND	75.1	75.1	52.7	55.5	70	73	10-146	5	
n-Pentacosane (S)	%						83	80	41-119		

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QUALITY CONTROL DATA

Project: Young 112 WBS#35609.1.1
Pace Project No.: 92112772

QC Batch: PMST/4518
Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87
Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 92112772001, 92112772002, 92112772003, 92112772004, 92112772005, 92112772006, 92112772007, 92112772008, 92112772009

SAMPLE DUPLICATE: 726838

Parameter	Units	92112768006 Result	Dup Result	RPD	Qualifiers
Percent Moisture	%	24.6	25.2	3	

SAMPLE DUPLICATE: 726839

Parameter	Units	92112772009 Result	Dup Result	RPD	Qualifiers
Percent Moisture	%	16.9	16.7	1	

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QUALIFIERS

Project: Young 112 WBS#35609.1.1
Pace Project No.: 92112772

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Acid preservation may not be appropriate for 2-Chloroethylvinyl ether, Styrene, and Vinyl chloride.

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LABORATORIES

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Young 112 WBS#35609.1.1
Pace Project No.: 92112772

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92112772001	**YO-1**	EPA 3546	OEXT/16542	EPA 8015 Modified	GCSV/11450
92112772002	**YO-2**	EPA 3546	OEXT/16542	EPA 8015 Modified	GCSV/11450
92112772003	**YO-3**	EPA 3546	OEXT/16542	EPA 8015 Modified	GCSV/11450
92112772004	**YO-4**	EPA 3546	OEXT/16542	EPA 8015 Modified	GCSV/11450
92112772005	**YO-5**	EPA 3546	OEXT/16542	EPA 8015 Modified	GCSV/11450
92112772006	**YO-6**	EPA 3546	OEXT/16542	EPA 8015 Modified	GCSV/11450
92112772007	**YO-7**	EPA 3546	OEXT/16542	EPA 8015 Modified	GCSV/11450
92112772008	**YO-8**	EPA 3546	OEXT/16542	EPA 8015 Modified	GCSV/11450
92112772009	**YO-9**	EPA 3546	OEXT/16542	EPA 8015 Modified	GCSV/11450
92112772001	**YO-1**	EPA 5035A/5030B	GCV/5777	EPA 8015 Modified	GCV/5778
92112772002	**YO-2**	EPA 5035A/5030B	GCV/5777	EPA 8015 Modified	GCV/5778
92112772003	**YO-3**	EPA 5035A/5030B	GCV/5777	EPA 8015 Modified	GCV/5778
92112772004	**YO-4**	EPA 5035A/5030B	GCV/5777	EPA 8015 Modified	GCV/5778
92112772005	**YO-5**	EPA 5035A/5030B	GCV/5777	EPA 8015 Modified	GCV/5778
92112772006	**YO-6**	EPA 5035A/5030B	GCV/5784	EPA 8015 Modified	GCV/5785
92112772007	**YO-7**	EPA 5035A/5030B	GCV/5784	EPA 8015 Modified	GCV/5785
92112772008	**YO-8**	EPA 5035A/5030B	GCV/5784	EPA 8015 Modified	GCV/5785
92112772009	**YO-9**	EPA 5035A/5030B	GCV/5784	EPA 8015 Modified	GCV/5785
92112772001	**YO-1**	ASTM D2974-87	PMST/4518		
92112772002	**YO-2**	ASTM D2974-87	PMST/4518		
92112772003	**YO-3**	ASTM D2974-87	PMST/4518		
92112772004	**YO-4**	ASTM D2974-87	PMST/4518		
92112772005	**YO-5**	ASTM D2974-87	PMST/4518		
92112772006	**YO-6**	ASTM D2974-87	PMST/4518		
92112772007	**YO-7**	ASTM D2974-87	PMST/4518		
92112772008	**YO-8**	ASTM D2974-87	PMST/4518		
92112772009	**YO-9**	ASTM D2974-87	PMST/4518		

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: of 1551769

Section A Required Client Information:

Company: AECOM
Address: 701 Corporate Center Dr
Raleigh NC 27607
Email To: Mike.Branson@AECOM.com
Phone: 919 854 6238 Fax: 919 854 6259
Requested Due Date/TAT: 2 week

Section B Required Project Information:

Report To: Mike Branson
Copy To: NCDOT
Purchase Order No.: WBS 35609.1.1
Project Name: Young 112
Project Number: 60241470

Section C Invoice Information:

Attention:
Company Name: NCDOT
Address:
Pace Quote Reference: Blanket PO
Pace Project Manager:
Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☒ UST ☐ RCRA ☐ OTHER

Site Location STATE: NC

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Matrix Codes (MATRIX / CODE): Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Tissue TS; Other OT

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	DRO	GRO	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	YO-1	SL		2/22/12	1030				4	2						2		✓	✓			92112772-001
2	YO-2	SL		2/22/12	1050				4	2						2		✓	✓			-002
3	YO-3	SL		2/22/12	1115				4	2						2		✓	✓			-003
4	YO-4	SL		2/22/12	1120				4	2						2		✓	✓			-004
5	YO-5	SL		2/22/12	1130				4	2						2		✓	✓			-005
6	YO-6	SL		2/22/12	1145				4	2						2		✓	✓			-006
7	YO-7	SL		2/22/12	1230				4	2						2		✓	✓			-007
8	YO-8	SL		2/22/12	1245				4	2						2		✓	✓			-008
9	YO-9	SL		2/22/12	1300				4	2						2		✓	✓			-009
10																						
11																						
12																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	M Branson / AECOM	2/23/12	1100		2-23-12	1100				
		2-23-12	1150		2/23/12	1155	40	Y		Y

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: M Branson
SIGNATURE of SAMPLER: M Branson
DATE Signed (MM/DD/YY):

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Pace Analytical www.pacelabs.com	Document Name: **Sample Condition Upon Receipt (SCUR)**	Document Revised: October 19, 2011 Page 1 of 2
	Document No.: F-ASV-CS-003-rev.07	Issuing Authorities: Pace Asheville Quality Office

Client Name: AEcom Project # 92112772

Where Received: ☐ Huntersville ☑ Asheville ☐ Eden

Courier (Circle): Fed Ex UPS USPS Client Commercial Pace Other____

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Optional
Proj. Due Date:
Proj. Name:

Packing Material: ☑ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other____

Circle Thermometer Used: IR Gun#2 -80344039 **Type of Ice:** Wet Blue None ☑ Samples on ice, cooling process has begun

IR Gun Back Up- 111565135

Temp Correction Factor: Add / Subtract 0.2 C

Corrected Cooler Temp.: 4.0 C **Biological Tissue is Frozen:** Yes No N/A

Temp should be above freezing to 6°C

Comments:

Date and Initials of person examining contents: LA 2/23/12

Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes ☑No ☐N/A	6.
Rush Turn Around Time Requested:	☑Yes ☐No ☐N/A	7. 2 week
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: SL		
All containers needing preservation have been checked.	☑Yes ☐No ☐N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☑Yes ☐No ☐N/A	LA Initial when completed
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes ☑No	
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☑N/A	15.
Trip Blank Present:	☐Yes ☐No ☑N/A	16.
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

SCURF Review: LP Date: 2/24/12 **SRF Review:** LP Date: 2/24/12

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)