

March 20, 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
Barbara Huskins Property (Parcel #118)
Route 1, Box 251, US 19E
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 Barbara Huskins Property (Parcel #118) is located at Route 1, Box 251, US 19E in Spruce Pine, Mitchell County, North Carolina. The property is situated on the north side of US 19E and approximately 250 feet west of the intersection of US 19E and Windy Cove Lane (Figure 1). Based on information supplied by the NCDOT and the site visit, AECOM understands that the site is a former car wash and "dollar" gas station where three underground storage tanks (USTs) were reportedly operated and subsequently removed in 1986. These USTs included three 4,000-gallon gasoline tanks. According to a neighboring landowner, the USTs were located in a grassy area about 100 feet east of the car wash. The structure on the site consists of a single-story block building with three wash bays. A former dispenser island is located on the easternmost side of the site and is partially on the adjacent property, although the dispenser island appears to be in the existing right-of-way. No USTs are located on the site, but the former USTs associated with the former dispenser island were located on the adjacent property and within the existing right-

of-way. An asphalt parking area and driveway surround the car wash (Figure 2). The NCDOT has advised that the proposed right-of-way will affect the building, former dispenser island, and former UST area. (The former UST area has been assessed and submitted under separate cover.) The former dispenser island and associated USTs on 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 existing 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. As noted previously, three USTs were operated and removed from the site under Facility ID 0-020173. The database lists the operator and owner of the tanks as follows:

Owner

Barbara Huskins
Route 1, Box 251/US 19E
Spruce Pine, NC 28777

Operator

Ridgeway Car Wash
Route 1, Box 251/US 19E
Spruce Pine, NC 28777

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 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 and the geophysical survey detected several anomalies. Data interpretation attributed all of these anomalies to buried utility lines, conduits, or miscellaneous metallic debris. Attachment A presents a detailed report of findings and interpretations.

Site Assessment Activities

On February 21, 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).

Five direct-push holes (HU-1 through HU-5) were advanced within the proposed right-of-way to a depth of 15 feet as shown in Figure 2 and Attachment B. Borings HU-1 through HU-3 were located to evaluate the conditions surrounding the car was building and borings HU-4 and HU-5 were placed to assess the soil conditions at the former dispenser island (Attachment C). The lithology encountered by the direct-push samples generally was consistent throughout the site. About 4 inches of asphalt and gravel covered the ground surface. Below the surface to a depth of about 10 feet was a medium brown, micaceous, stiff silt/clay. Under this material was a light brown to yellow, micaceous, silty sand with occasional quartz fragments. None of the borings encountered bedrock.

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 a depth of 15 feet. No groundwater was observed in any of the borings. 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

Based on the soil laboratory reports, summarized in Table 1 and presented in Attachment D, no petroleum hydrocarbon compounds identified as DRO and/or GRO were detected in any of the

Mr. Terry Fox
March 20, 2012
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five soil samples collected from the site on February 21, 2012. Consequently, no soil concentrations are present above applicable action levels.

Conclusions and Recommendations

A Preliminary Site Assessment was conducted to evaluate the Barbara Huskins Property (Parcel 118) located at Route 1, Box 251/US 19E in Spruce Pine, Mitchell County, North Carolina. A geophysical investigation was conducted to evaluate the site for unknown USTs. The investigation found no evidence of metallic USTs within the proposed right-of-way. Five 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 no DRO or GRO concentrations were detected. Consequently, no soil concentrations are above applicable action levels.

AECOM appreciates the opportunity to work with the NCDOT on this project. Because laboratory analysis detected no compounds above the applicable action levels in the soil samples, no NCDENR notification is required. 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

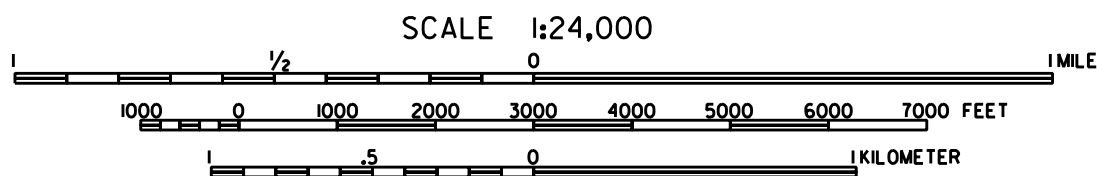
**SOIL FIELD SCREENING AND ANALYTICAL RESULTS
 BARBARA HUSKINS PROPERTY (PARCEL #118)
 SPRUCE PINE, MITCHELL COUNTY, NORTH CAROLINA
 NCDOT PROJECT NO. R-2519B
 WBS ELEMENT 35609.1.1
 AECOM PROJECT NO. 60241470**

LOCATION	DEPTH (ft)	FID READING (ppm)	SAMPLE ID	ANALYTICAL RESULTS (mg/kg)	ASSUMED ACTION LEVEL (mg/kg)
HU-1	0 - 2	1.34			
	2 - 4	2.32	HU-1	DRO (BQL) GRO (BQL)	10 10
	4 - 6	1.35			
	6 - 8	1.37			
	8 - 10	0.53			
	10 - 12	0.88			
	12 - 14	0.43			
HU-2	14 - 15	0.06			
	0 - 2	0.44			
	2 - 4	0.47			
	4 - 6	0.21			
	6 - 8	0.46			
	8 - 10	0.82			
	10 - 12	1.36	HU-2	DRO (BQL) GRO (BQL)	10 10
HU-3	12 - 14	0.66			
	14 - 15	1.24			
	0 - 2	0.37			
	2 - 4	0.72			
	4 - 6	0.01			
	6 - 8	0.94			
	8 - 10	1.12			
HU-4	10 - 12	1.62			
	12 - 14	1.29			
	14 - 15	1.78	HU-3	DRO (BQL) GRO (BQL)	10 10
	0 - 2	0.25			
	2 - 4	1.25			
	4 - 6	0.32			
	6 - 8	1.01			
HU-5	8 - 10	1.95			
	10 - 12	4.37	HU-4	DRO (BQL) GRO (BQL)	10 10
	12 - 14	3.23			
	14 - 15	3.73			
	0 - 2	2.68			
	2 - 4	2.69			
	4 - 6	2.37			
HU-4	6 - 8	3.23			
	8 - 10	3.31	HU-4	DRO (BQL) GRO (BQL)	10 10
	10 - 12	2.62			
	12 - 14	2.69			
	14 - 16	2.62			

Soil samples were collected on February 21, 2012.
 DRO - Diesel range organics.
 GRO - Gasoline range organics.
 BQL - Below quantitation limit.
 ppm - parts per million.
 mg/kg - milligrams per kilogram.



FIGURES



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

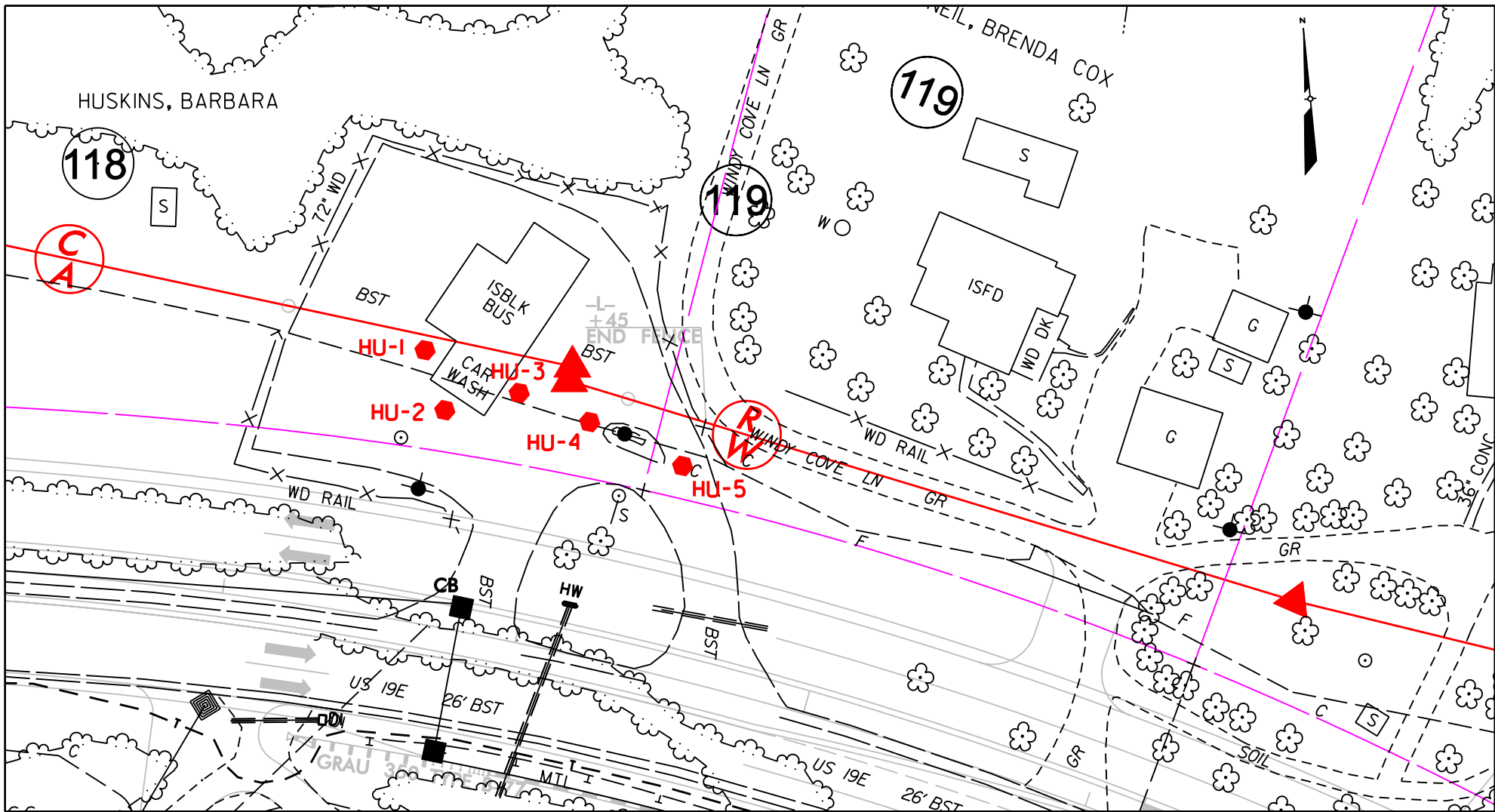


FIGURE I VICINITY MAP

BARBARA HUSKINS PROPERTY (PARCEL #118)
SPRUCE PINE, MITCHELL COUNTY NORTH CAROLINA

FEBRUARY 2012

60241470



LEGEND

HU-1



SOIL SAMPLE LOCATION AND IDENTIFICATION



**FIGURE 2
SITE MAP**

**BARBARA HUSKINS PROPERTY (PARCEL #118)
SPRUCE PINE, MITCHELL COUNTY, NORTH CAROLINA**

FEBRUARY 2012

60241470

ATTACHMENT A

GEOPHYSICAL INVESTIGATION REPORT

EM61 & GPR SURVEYS

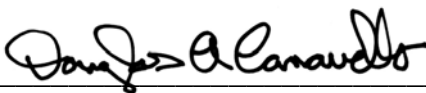
BARBARA HUSKINS PROPERTY - PARCEL 118

**Windy Cove Drive & US Highway 19 East
Mitchell County, North Carolina**

February 28, 2012

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

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Reviewed by: 
Douglas Canavello, P.G.

PYRAMID ENVIRONMENTAL & ENGINEERING, P.C.

P.O. Box 16265

GREENSBORO, NC 27416-0265

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AECOM Environment
GEOPHYSICAL INVESTIGATION REPORT
BARBARA HUSKINS PROPERTY - PARCEL 118
Windy Cove Drive & US Highway 19 East
Mitchell County, North Carolina

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3.0 DISCUSSION OF RESULTS		2
4.0 SUMMARY & CONCLUSIONS		3
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FIGURES

Figure 1	Geophysical Equipment & Site Photographs
Figure 2	EM61 Metal Detection - Bottom Coil Results
Figure 3	EM61 Metal Detection - Differential Results

1.0 INTRODUCTION

Pyramid Environmental conducted a geophysical investigation for AECOM Environmental across the proposed right-of way (ROW) area of the Barbara Huskins property (Parcel 118) located near the intersection of Windy Cove Drive and US Highway 19 East in Mitchell County, North Carolina. Conducted on February 8 and 15, 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 Barbara Huskins property consists of an inactive car wash facility surrounded primarily by asphalt-covered terrain. The Brenda Cox McNeil property and an open lot are located along the eastern and western perimeters of the property, respectively. The proposed ROW area is located along the southern three-quarters of the property located between US Highway 19 East and the car wash building. The geophysical survey area had a maximum length and width of 195 feet and 120 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 eastern portion of the property are shown in **Figure 1**.

2.0 FIELD METHODOLOGY

Prior to conducting the geophysical investigation, a 10-foot by 10-foot survey grid was established across the 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 8, 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 15, 2012 across selected EM61 differential anomalies and across the concrete floors of the car wash bays 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.

Please note that an EM61 metal detection and GPR reconnaissance were also conducted along the northern portion of the property (beyond the limits of the site maps shown in this report). Within this recon area, data were viewed in real time but not saved for later review or processing.

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**. 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.

GPR data suggest the large, high amplitude, EM61 anomaly centered near grid coordinates X=80 Y=110 is in response to the steel reinforced concrete floor, drain lines and walls of the car wash building. GPR data suggest the linear EM61 bottom coil anomaly intersecting grid coordinates X=120 Y=100 is in response to a buried line and the pump island area. The linear bottom coil anomaly intersecting grid coordinates X=138 Y=30 is probably in response to a culvert which runs beneath US Highway 19 East.

The EM61 anomalies centered near grid coordinates X=42 Y=72 and X=65 Y=68 are probably in response to vacuum pump stations. The EM61 anomalies centered near grid coordinates X=20 Y=13 and X=140 Y=70 are probably in response to mail boxes and a metal business sign, respectively. The remaining EM61 anomalies are probably in response to known surface objects or to insignificant buried debris.

The geophysical recon conducted across the northern portion of the site did not detect the presence of a metallic UST. The geophysical investigation and recon suggest that the proposed ROW area does not contain metallic USTs.

4.0 SUMMARY & CONCLUSIONS

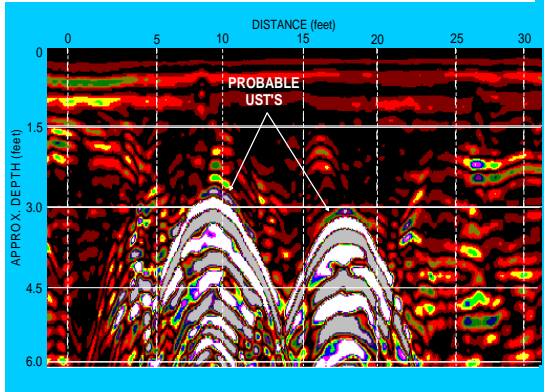
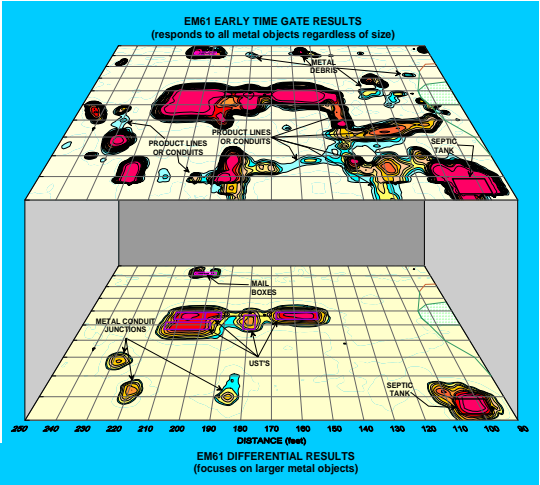
Our evaluation of the EM61 and GPR data collected across the proposed ROW area at the Barbara Huskins property located near the intersection of Windy Cove Drive and US Highway 19 East in Mitchell County, North Carolina, provides the following summary and conclusions:

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

- GPR data suggest the large, high amplitude, EM61 anomaly centered near grid coordinates X=80 Y=110 is in response to the steel reinforced concrete floor, drain lines and walls of the car wash building.
- GPR data suggest the linear EM61 bottom coil anomaly intersecting grid coordinates X=120 Y=100 is in response to a buried line and the pump island area.
- The remaining EM61 metal detection anomalies are probably in response to known surface objects or to buried, insignificant metal objects or debris.
- The geophysical investigation suggests that the proposed ROW area does not contain metallic USTs.

5.0 LIMITATIONS

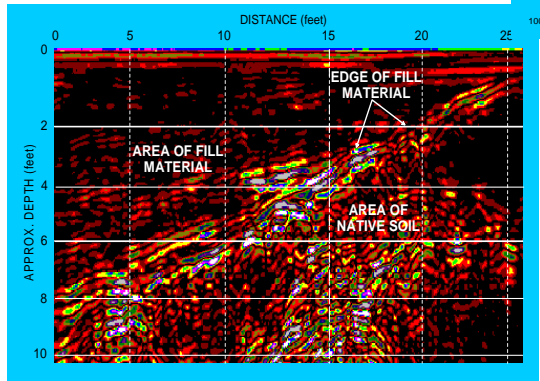
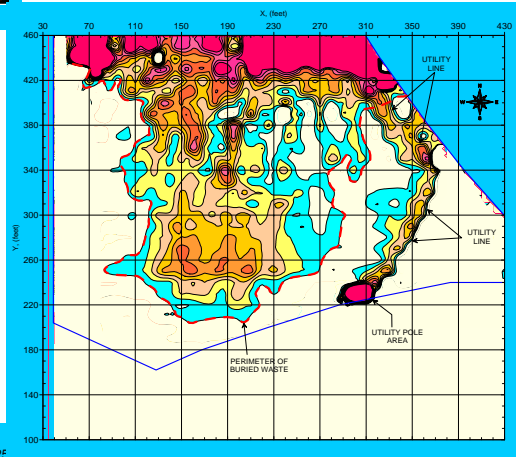
EM61 and GPR surveys have been performed and this report prepared for AECOM Environmental in accordance with generally accepted guidelines for EM61 and GPR surveys. It is generally recognized that the results of the EM61 and GPR are non-unique and may not represent actual subsurface conditions. The EM61 and GPR results obtained for this project have not conclusively determined that the proposed ROW area does 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 the proposed ROW area at the Huskins property on February 8, 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 Huskins property on February 15, 2012.

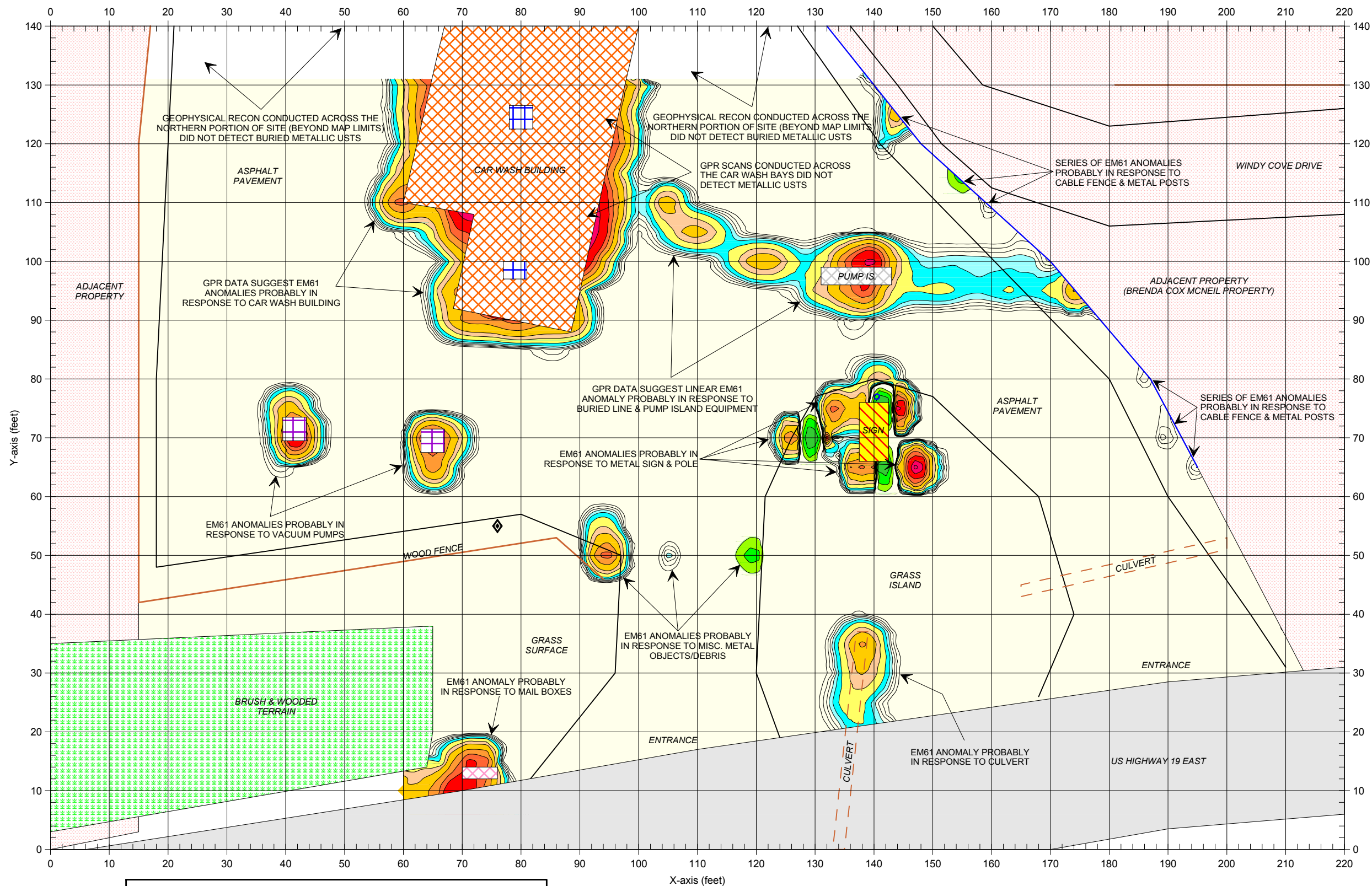


The photograph shows the Barbara Huskins property (Parcel 118) located near the intersection of US 19E and Windy Cove Drive in Mitchell County, North Carolina. The photograph is viewed in a westerly direction.



CLIENT	AECOM ENVIRONMENT		DATE	02/28/12	DRWN	MJD
SITE	BARBARA HUSKINS PROPERTY - PARCEL 118		LAY		CPND	
CITY	MITCHELL COUNTY	STATE	NORTH CAROLINA	ENWG		
TITLE	GEOPHYSICAL RESULTS		PLNG	2012-035	PROJ#	

GEOPHYSICAL EQUIPMENT & SITE PHOTOGRAPHS



LEGEND

SURVEY AREA: EM61 DATA ACQUIRED ALONG Y-AXIS TRENDING LINES SPACED 5 FEET APART	CULVERT
CAR WASH BUILDING	WOOD FENCE
VACUUM PUMP	CABLE FENCE (PROPERTY LINE)
PUMP ISLAND	UTILITY POLE
DRAIN GRATE	METAL POLE
BUSINESS SIGN	MAIL BOXES
	ROAD SIGN

EM61 BOTTOM COIL RESPONSE (MILLIVOLTS)

APPROXIMATE NORTH

The contour plot shows the bottom coil (most sensitive) response of the EM61 instrument in millivolts (mV). The bottom coil response shows buried metallic objects regardless of size. The EM61 survey was conducted on February 8, 2012 using a Geonics EM61 instrument. Ground penetrating radar (GPR) data were acquired across selected EM61 anomalies on February 15, 2012 using a Geophysical Survey Systems SIR 2000 instrument with a 400 MHz antenna.

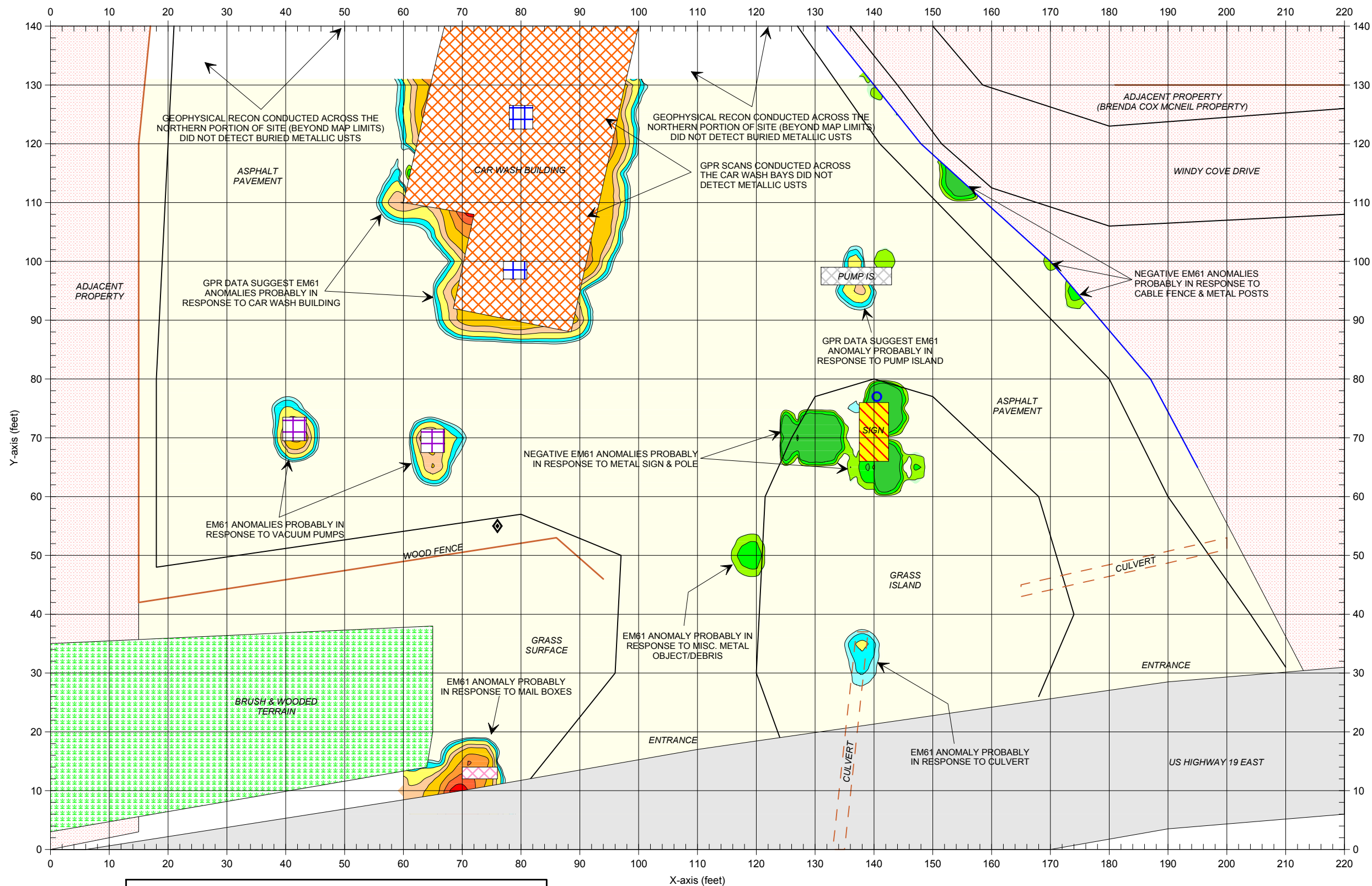
The geophysical investigation suggests the surveyed portion of the site does not contain metallic USTs.

EM61 METAL DETECTION (BOTTOM COIL RESULTS)

FIGURE 2

CLIENT	SITE	CITY	STATE	CLIENT	DATE	DATE	DATE	FIGURE
AECOM ENVIRONMENT	BARBARA HUSKINS PROPERTY - PARCEL 118	MITCHELL COUNTY	NORTH CAROLINA	MJD	02/28/12	02/28/12	02/28/12	2012-035
				DRWN		CHKD		
GEOPHYSICAL RESULTS								

PYRAMID
ENVIRONMENTAL & ENGINEERING, P.C.



LEGEND

SURVEY AREA: EM61 DATA ACQUIRED ALONG Y-AXIS TRENDING LINES SPACED 5 FEET APART	CULVERT
CAR WASH BUILDING	WOOD FENCE
VACUUM PUMP	CABLE FENCE (PROPERTY LINE)
PUMP ISLAND	UTILITY POLE
DRAIN GRATE	METAL POLE
BUSINESS SIGN	MAIL BOXES
	ROAD SIGN

EM61 DIFFERENTIAL RESPONSE (MILLIVOLTS)

APPROXIMATE NORTH

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 8, 2012 using a Geonics EM61 instrument. Ground penetrating radar (GPR) data were acquired across selected EM61 anomalies on February 15, 2012 using a Geophysical Survey Systems SIR 2000 instrument with a 400 MHz antenna.

The geophysical investigation suggests the surveyed portion of the site does not contain metallic USTs.

**EM61 METAL DETECTION
(DIFFERENTIAL RESULTS)**

FIGURE 3

CLIENT	SITE	CITY	STATE
AECOM ENVIRONMENT	BARBARA HUSKINS PROPERTY - PARCEL 118	MITCHELL COUNTY	NORTH CAROLINA
DATE	LAY	DWG	L.N.O.
02/28/12			2012-035
DRWN	CHKD	FIGURE	
MJD			
GRAPHIC SCALE IN FEET			

GEOPHYSICAL RESULTS

PYRAMID
ENVIRONMENTAL & ENGINEERING, P.C.

ATTACHMENT B

TEST BORING REPORT

PROJECT BARBARA HUSKINS PROPERTY (PARCEL #118)

BORING NUMBER HU-1

CLIENT NCDOT R-2519B

PAGE 1

PROJECT NUMBER 60241470

ELEVATION _____

CONTRACTOR REGIONAL PROBING

DATE 2/21/12

EQUIPMENT GEOPROBE

DRILLER OPPER

PREPARED BY BRANSON

DEPTH IN FEET	CASING BLOWS FOOT	BLOWS PER 6 INCHES	OVA (ppm)	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
5.0			1.34		4" ASPHALT/GRAVEL, REDDISH BROWN, SILT/CLAY, STIFF. DRY, NO ODORS.
			2.32		AS ABOVE. DRY. NO ODORS. SUBMIT TO LABORATORY FOR ANALYSIS.
			1.35		AS ABOVE. DRY. NO ODORS.
			1.37		AS ABOVE. DRY. NO ODORS.
10.0			0.53		AS ABOVE. DRY. NO ODORS.
			0.88		MOTTLED RED, BROWN, WHITE, AND BLACK MICACEOUS SILT/SAND. DRY. NO ODORS.
			0.43		AS ABOVE. DRY. NO ODORS.
			0.06		AS ABOVE. DRY. NO ODORS.
15.0					
20.0					

BORING TERMINATED AT 15 FEET. NO GROUNDWATER ENCOUNTERED.



TEST BORING REPORT

PROJECT BARBARA HUSKINS PROPERTY (PARCEL #118)

CLIENT NCDOT R-2519B

PROJECT NUMBER 60241470

CONTRACTOR REGIONAL PROBING

EQUIPMENT GEOPROBE

BORING NUMBER HU-2

PAGE 1

ELEVATION _____

DATE 2/21/12

DRILLER OPPER

PREPARED BY BRANSON

DEPTH IN FEET	CASING BLOWS FOOT	BLOWS PER 6 INCHES	OVA (ppm)	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
5.0			0.44		4" ASPHALT/GRAVEL, MEDIUM TO REDDISH BROWN SILT /CLAY, STIFF. DRY, NO ODORS.
			0.47		AS ABOVE. DRY. NO ODORS.
			0.21		AS ABOVE. DRY. NO ODORS.
			0.46		AS ABOVE. DRY. NO ODORS.
			0.82		AS ABOVE. DRY. NO ODORS.
10.0			1.36		LIGHT BROWN TO YELLOW, MICACEOUS, SILTY SAND, OCCASIONAL QUARTZ FRAGMENT. DRY. NO ODORS. SUBMIT TO LABORATORY FOR ANALYSIS.
			0.66		AS ABOVE. DRY. NO ODORS.
			1.24		AS ABOVE. DRY. NO ODORS.
15.0					
20.0					



TEST BORING REPORT

PROJECT BARBARA HUSKINS PROPERTY (PARCEL #118)
CLIENT NCDOT R-2519B
PROJECT NUMBER 60241470
CONTRACTOR REGIONAL PROBING
EQUIPMENT GEOPROBE

BORING NUMBER HU-3
PAGE 1
ELEVATION _____
DATE 2/21/12
DRILLER OPPER
PREPARED BY BRANSON

DEPTH IN FEET	CASING BLOWS FOOT	BLOWS PER 6 INCHES	OVA (ppm)	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS	
5.0			0.37		4" ASPHALT/GRAVEL, MEDIUM TO REDDISH BROWN SILT /CLAY, STIFF. DRY, NO ODORS.	
			0.72		AS ABOVE. DRY. NO ODORS.	
			0.01		AS ABOVE. DRY. NO ODORS.	
			0.94		AS ABOVE. DRY. NO ODORS.	
			1.12		AS ABOVE. DRY. NO ODORS.	
	10.0			1.62		LIGHT BROWN TO YELLOW, MICACEOUS, SILTY SAND, OCCASIONAL QUARTZ FRAGMENT. DRY. NO ODORS. SUBMIT TO LABORATORY FOR ANALYSIS.
				1.29		AS ABOVE. DRY. NO ODORS.
				1.78		AS ABOVE. DRY. NO ODORS.
						BORING TERMINATED AT 15 FEET. NO GROUNDWATER ENCOUNTERED.
	15.0					
20.0						



TEST BORING REPORT

PROJECT BARBARA HUSKINS PROPERTY (PARCEL #118)

CLIENT NCDOT R-2519B

PROJECT NUMBER 60241470

CONTRACTOR REGIONAL PROBING

EQUIPMENT GEOPROBE

BORING NUMBER HU-4

PAGE 1

ELEVATION _____

DATE 2/21/12

DRILLER OPPER

PREPARED BY BRANSON

DEPTH IN FEET	CASING BLOWS FOOT	BLOWS PER 6 INCHES	OVA (ppm)	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
5.0			0.25		4" ASPHALT/GRAVEL, MEDIUM TO REDDISH BROWN SILT /CLAY, STIFF. DRY, NO ODORS.
			1.25		AS ABOVE. DRY. NO ODORS.
			0.32		AS ABOVE. DRY. NO ODORS.
			1.01		AS ABOVE. DRY. NO ODORS.
			1.95		AS ABOVE. DRY. NO ODORS.
10.0			4.37		LIGHT BROWN TO YELLOW, MICACEOUS, SILTY SAND, OCCASIONAL QUARTZ FRAGMENT. DRY. NO ODORS. SUBMIT TO LABORATORY FOR ANALYSIS.
			3.23		AS ABOVE. DRY. NO ODORS.
			3.73		AS ABOVE. DRY. NO ODORS.
15.0					BORING TERMINATED AT 15 FEET. NO GROUNDWATER ENCOUNTERED.
20.0					



TEST BORING REPORT

PROJECT BARBARA HUSKINS PROPERTY (PARCEL #118)

BORING NUMBER HU-5

CLIENT NCDOT R-2519B

PAGE 1

PROJECT NUMBER 60241470

ELEVATION _____

CONTRACTOR REGIONAL PROBING

DATE 2/21/12

EQUIPMENT GEOPROBE

DRILLER OPPER

PREPARED BY BRANSON

DEPTH IN FEET	CASING BLOWS FOOT	BLOWS PER 6 INCHES	OVA (ppm)	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
5.0			2.68		4" ASPHALT/GRAVEL, MEDIUM TO REDDISH BROWN SILT /CLAY, STIFF. DRY, NO ODORS.
			2.69		AS ABOVE. DRY. NO ODORS.
			2.37		AS ABOVE. DRY. NO ODORS.
			3.23		AS ABOVE. DRY. NO ODORS.
10.0			3.31		AS ABOVE. DRY. NO ODORS. SUBMIT TO LABORATORY FOR ANALYSIS.
			2.62		MEDIUM BROWN TO YELLOW, MICACEOUS, SILTY SAND, OCCASIONAL QUARTZ FRAGMENT. DRY. NO ODORS. SUBMIT TO LABORATORY FOR ANALYSIS.
			2.69		AS ABOVE. DRY. NO ODORS.
			2.62		AS ABOVE. DRY. NO ODORS.
15.0					
20.0					



ATTACHMENT C



PHOTO 1 - BORING ON WEST SIDE OF CAR WASH LOOKING NORTHEAST



PHOTO 2 - BORING ON SOUTH SIDE OF CAR WASH LOOKING NORTHEAST



PHOTO 3 - BORING IN RIGHT-OF-WAY AT ANOMALY LOOKING NORTH

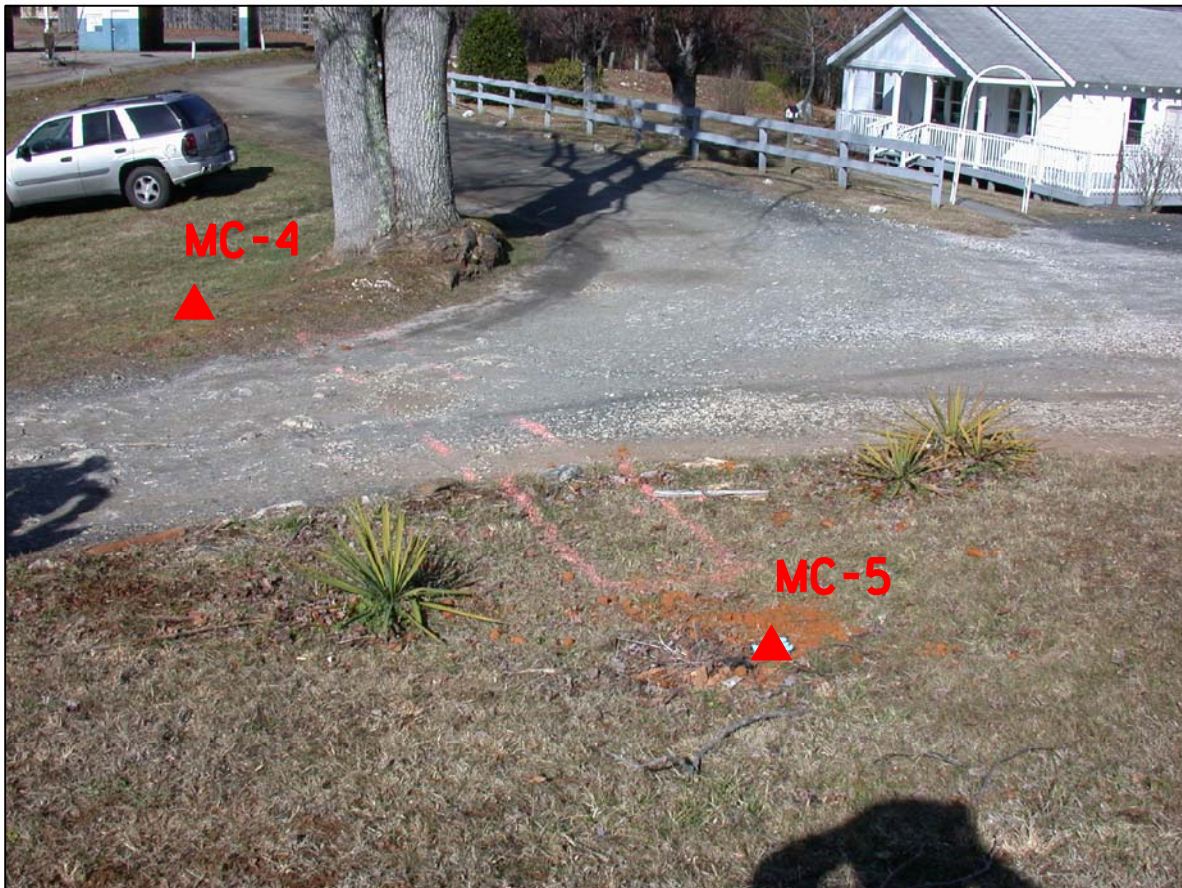


PHOTO 4 - BORINGS IN RIGHT-OF-WAY AT ANOMALY LOOKING WEST

ATTACHMENT D



Pace Analytical Services, Inc.
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Pace Analytical Services, Inc.
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Huntersville, NC 28078
(704)875-9092

March 01, 2012

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

RE: Project: Huskins WBS#35609.1.1
Pace Project No.: 92112769

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@pacelabs.com
Project Manager

Enclosures

cc: Mr. Mike Branson, AECOM



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Huskins WBS#35609.1.1
Pace Project No.: 92112769

Charlotte Certification IDs

9800 Kinsey 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

REPORT OF LABORATORY ANALYSIS



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SAMPLE ANALYTE COUNT

Project: Huskins WBS#35609.1.1
 Pace Project No.: 92112769

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92112769001	HU-1	EPA 8015 Modified	MEJ	2	PASI-C
		EPA 8015 Modified	AW	2	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
92112769002	HU-2	EPA 8015 Modified	MEJ	2	PASI-C
		EPA 8015 Modified	AW	2	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
92112769003	HU-3	EPA 8015 Modified	MEJ	2	PASI-C
		EPA 8015 Modified	AW	2	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
92112769004	HU-4	EPA 8015 Modified	MEJ	2	PASI-C
		EPA 8015 Modified	AW	2	PASI-C
		ASTM D2974-87	TNM	1	PASI-C
92112769005	HU-5	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: Huskins WBS#35609.1.1
 Pace Project No.: 92112769

Sample: HU-1 **Lab ID:** 92112769001 Collected: 02/21/12 13:45 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	6.8	1	02/24/12 10:35	02/26/12 01:48	68334-30-5	
Surrogates								
n-Pentacosane (S)	69 %		41-119	1	02/24/12 10:35	02/26/12 01:48	629-99-2	
Gasoline Range Organics		Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B						
Gasoline Range Organics	ND	mg/kg	8.2	1	02/28/12 17:35	02/29/12 02:53	8006-61-9	
Surrogates								
4-Bromofluorobenzene (S)	92 %		70-167	1	02/28/12 17:35	02/29/12 02:53	460-00-4	
Percent Moisture		Analytical Method: ASTM D2974-87						
Percent Moisture	26.9 %		0.10	1		02/24/12 14:25		



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ANALYTICAL RESULTS

Project: Huskins WBS#35609.1.1
 Pace Project No.: 92112769

Sample: HU-2 **Lab ID: 92112769002** Collected: 02/21/12 14:20 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	6.1	1	02/24/12 10:35	02/26/12 02:17	68334-30-5	
Surrogates								
n-Pentacosane (S)	81	%	41-119	1	02/24/12 10:35	02/26/12 02:17	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 03:17	8006-61-9	
Surrogates								
4-Bromofluorobenzene (S)	93	%	70-167	1	02/28/12 17:35	02/29/12 03:17	460-00-4	
Percent Moisture		Analytical Method: ASTM D2974-87						
Percent Moisture	17.0	%	0.10	1		02/24/12 14:25		

ANALYTICAL RESULTS

Project: Huskins WBS#35609.1.1

Pace Project No.: 92112769

Sample: HU-3 **Lab ID: 92112769003** Collected: 02/21/12 14:45 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	6.6	1	02/24/12 10:35	02/26/12 02:17	68334-30-5	
Surrogates								
n-Pentacosane (S)	78	%	41-119	1	02/24/12 10:35	02/26/12 02:17	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 03:41	8006-61-9	
Surrogates								
4-Bromofluorobenzene (S)	87	%	70-167	1	02/28/12 17:35	02/29/12 03:41	460-00-4	
Percent Moisture		Analytical Method: ASTM D2974-87						
Percent Moisture	25.8	%	0.10	1		02/24/12 14:26		

ANALYTICAL RESULTS

Project: Huskins WBS#35609.1.1

Pace Project No.: 92112769

Sample: HU-4 **Lab ID: 92112769004** Collected: 02/21/12 15:20 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	7.6	1	02/24/12 10:35	02/26/12 02:47	68334-30-5	
Surrogates								
n-Pentacosane (S)	82	%	41-119	1	02/24/12 10:35	02/26/12 02:47	629-99-2	
Gasoline Range Organics								
Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B								
Gasoline Range Organics	ND	mg/kg	8.6	1	02/28/12 17:35	02/29/12 04:05	8006-61-9	
Surrogates								
4-Bromofluorobenzene (S)	87	%	70-167	1	02/28/12 17:35	02/29/12 04:05	460-00-4	
Percent Moisture								
Analytical Method: ASTM D2974-87								
Percent Moisture	34.3	%	0.10	1		02/24/12 14:26		



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ANALYTICAL RESULTS

Project: Huskins WBS#35609.1.1
 Pace Project No.: 92112769

Sample: HU-5 **Lab ID:** 92112769005 Collected: 02/21/12 15:45 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	7.6	1	02/24/12 10:35	02/26/12 02:47	68334-30-5	
Surrogates								
n-Pentacosane (S)	73	%	41-119	1	02/24/12 10:35	02/26/12 02:47	629-99-2	
Gasoline Range Organics		Analytical Method: EPA 8015 Modified Preparation Method: EPA 5035A/5030B						
Gasoline Range Organics	ND	mg/kg	8.2	1	02/28/12 17:35	02/29/12 04:30	8006-61-9	
Surrogates								
4-Bromofluorobenzene (S)	85	%	70-167	1	02/28/12 17:35	02/29/12 04:30	460-00-4	
Percent Moisture		Analytical Method: ASTM D2974-87						
Percent Moisture	34.9	%	0.10	1		02/24/12 14:26		



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QUALITY CONTROL DATA

Project: Huskins WBS#35609.1.1
 Pace Project No.: 92112769

QC Batch: GCV/5777 Analysis Method: EPA 8015 Modified
 QC Batch Method: EPA 5035A/5030B Analysis Description: Gasoline Range Organics
 Associated Lab Samples: 92112769001, 92112769002, 92112769003, 92112769004, 92112769005

METHOD BLANK: 728539 Matrix: Solid
 Associated Lab Samples: 92112769001, 92112769002, 92112769003, 92112769004, 92112769005

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: Huskins WBS#35609.1.1
 Pace Project No.: 92112769

QC Batch: OEXT/16538 Analysis Method: EPA 8015 Modified
 QC Batch Method: EPA 3546 Analysis Description: 8015 Solid GCSV
 Associated Lab Samples: 92112769001, 92112769002, 92112769003, 92112769004, 92112769005

METHOD BLANK: 726961 Matrix: Solid
 Associated Lab Samples: 92112769001, 92112769002, 92112769003, 92112769004, 92112769005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diesel Components	mg/kg	ND	5.0	02/25/12 21:22	
n-Pentacosane (S)	%	88	41-119	02/25/12 21:22	

LABORATORY CONTROL SAMPLE: 726962

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Diesel Components	mg/kg	66.7	47.9	72	49-113	
n-Pentacosane (S)	%			77	41-119	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 726963 726964

Parameter	Units	92112766005		726964		MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result					
Diesel Components	mg/kg	ND	75.2	74.7	47.2	62	74	10-146	17	
n-Pentacosane (S)	%					71	86	41-119		



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QUALITY CONTROL DATA

Project: Huskins WBS#35609.1.1
 Pace Project No.: 92112769

QC Batch: PMST/4518 Analysis Method: ASTM D2974-87
 QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture
 Associated Lab Samples: 92112769001, 92112769002, 92112769003, 92112769004, 92112769005

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: Huskins WBS#35609.1.1
Pace Project No.: 92112769

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.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

LABORATORIES

PASI-C Pace Analytical Services - Charlotte



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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Huskins WBS#35609.1.1
 Pace Project No.: 92112769

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92112769001	HU-1	EPA 3546	OEXT/16538	EPA 8015 Modified	GCSV/11447
92112769002	HU-2	EPA 3546	OEXT/16538	EPA 8015 Modified	GCSV/11447
92112769003	HU-3	EPA 3546	OEXT/16538	EPA 8015 Modified	GCSV/11447
92112769004	HU-4	EPA 3546	OEXT/16538	EPA 8015 Modified	GCSV/11447
92112769005	HU-5	EPA 3546	OEXT/16538	EPA 8015 Modified	GCSV/11447
92112769001	HU-1	EPA 5035A/5030B	GCV/5777	EPA 8015 Modified	GCV/5778
92112769002	HU-2	EPA 5035A/5030B	GCV/5777	EPA 8015 Modified	GCV/5778
92112769003	HU-3	EPA 5035A/5030B	GCV/5777	EPA 8015 Modified	GCV/5778
92112769004	HU-4	EPA 5035A/5030B	GCV/5777	EPA 8015 Modified	GCV/5778
92112769005	HU-5	EPA 5035A/5030B	GCV/5777	EPA 8015 Modified	GCV/5778
92112769001	HU-1	ASTM D2974-87	PMST/4518		
92112769002	HU-2	ASTM D2974-87	PMST/4518		
92112769003	HU-3	ASTM D2974-87	PMST/4518		
92112769004	HU-4	ASTM D2974-87	PMST/4518		
92112769005	HU-5	ASTM D2974-87	PMST/4518		

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 1
1551768

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company: AECOM	Report To: Mike Branson	Attention:	Company Name: PCOR	Address:	REGULATORY AGENCY
Address: 701 Corporate Center Dr	Copy To:				<input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER
Raleigh NC 27607					<input checked="" type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER
Email To: Mike Branson@AECOM.com	Purchase Order No.: UBS 35609.1	Pace Quote Reference:	Branson PO	Pace Project Manager:	
919 854 6238	919 854 6259	Pace Profile #:			
Requested Due Date: 8/24/07	Project Number: 60241476				Site Location STATE: NC

ITEM #	Section D Required Client Information	Matrix Codes MATRIX / CODE	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives		Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)
			COMPOSITE START	COMPOSITE END/GRAB			H ₂ SO ₄	HNO ₃		
1	HU-1		2/2/12	1345	4	2				
2	HU-2		2/2/12	1420	4	2				
3	HU-3		2/2/12	1445	4	2				
4	HU-4		2/2/12	1520	4	2				
5	HU-5		2/2/12	1545	4	2				
6										
7										
8										
9										
10										
11										
12										

ADDITIONAL COMMENTS		REINQUISHED BY / AFFILIATION		DATE		ACCEPTED BY / AFFILIATION		DATE		SAMPLE CONDITIONS	
		Mike Branson		2-23-12		Mike Branson		2-23-12		Temp in °C	
		AECOM		2/3/12		Mike Branson		11:55		Received on Ice (Y/N)	
		2-23-12		11:55		Mike Branson		3:2		Custody Sealed Cooler (Y/N)	
										Samples Intact (Y/N)	

ORIGINAL

SAMPLER NAME AND SIGNATURE		DATE Signed (MM/DD/YY)
PRINT Name of SAMPLER: Mike Branson		
SIGNATURE of SAMPLER: <i>Mike Branson</i>		

*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.

F-ALL-Q-020(rev.07, 15-May-2007)



Document Name: **Sample Condition Upon Receipt (SCUR)**
 Document No.: F-ASV-CS-003-rev.07

Document Revised: October 19, 2011
 Page 1 of 2
 Issuing Authorities:
 Pace Asheville Quality Office

Client Name: AECOM Project # 92112769

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.: 3.2 C Biological Tissue is Frozen: Yes No N/A
 Temp should be above freezing to 6°C

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

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

Client Notification/ Resolution: _____ Field Data Required? Y / N
 Person Contacted: _____ Date/Time: _____
 Comments/ Resolution: _____

SCURF Review: JP Date: 2/24/12 SRF Review: JP 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 non-compliance, preservation, seal of temp, incorrect containers)