

September 14, 2010

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

Reference: Preliminary Site Assessment
Lot 2 JRB Investment Group LLC Property (Parcel #52)
200 N. Bragg Blvd.
Spring Lake, Cumberland County, North Carolina
NCDOT Tip No. U-4444B
WBS Element 36492.1.2
AECOM Project No. 60158550

Dear Mr. Caldwell:

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 July 6, 2010, and the North Carolina Department of Transportation's (NCDOT's) Notice to Proceed dated July 7, 2010. 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 Lot 2 JRB Investment Group LLC Property (Parcel #52) is located at 200 N. Bragg Boulevard in Spring Lake, Cumberland County, North Carolina. The property is situated on the east side of Bragg Boulevard and in the northeast quadrant of the intersection of Bragg Boulevard and NC 210 (Figure 1). Based on information supplied by the NCDOT and the site visit, AECOM understands that the site is a former gas station where six underground storage tanks (USTs) reportedly were removed in 2005. These USTs included one 1,000-gallon heating oil tank; two 1,000-gallon motor oil tanks; and one 4,000-gallon, one 6,000-gallon, and one 8,000-gallon gasoline tanks. As of the date of this report, the gas station structures have been demolished and a Walgreens pharmacy has been built on the site. The structure on the site consists of a block building with an asphalt parking lot (Figure 2). The NCDOT has advised that the proposed right-of-way/easement will affect a portion of the the parking lot and landscaping as well as in the area of the former gas station (Figure 2). Because of the potential location of

the former tanks, 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 Groundwater Incident Number 29278 (FA3082) has been assigned to the property. According to the database, “between 10/27/2005 to 11/2/2005 three gasoline USTs, two waste oil USTs and one heating oil UST were excavated for disposal. Sampling showed TPH exceeding action limits on a portion of one sidewall of the gasoline UST basin. This area was over excavated and sampled using compound specific analysis. All compounds were below soil-to-groundwater MSCCs [Maximum Soil Contaminant Concentration]. A total of 163.82 tons of impacted soil were removed and disposed of at Oak Hill Farms. No Further Action mailed to RP.” AECOM also examined the UST registration database to obtain UST ownership information. Six USTs were operated on the site and then closed under Facility ID 0-011410. The operator and owner of the tanks are listed as follows:

Owner

David K. Darden, Jr.
PO Box 324
Spring Lake, NC 28390
(910) 497-2152

Operator

Darden 's Exxon
200N. Bragg Boulevard
Spring Lake, NC 27390
No telephone

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. A survey grid was laid out at the property with the X-axis oriented approximately perpendicular to Bragg Boulevard and the Y-axis oriented approximately parallel to Bragg Boulevard. The grid was located to cover the accessible portions of the proposed right-of-way. The survey lines were spaced 5 feet apart. Magnetic data was collected continuously along each survey line with a data logger. 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 right-of-way and several anomalies were detected with the geophysical survey. All of these anomalies were attributed to buried utility lines or conduits. A detailed report of findings and interpretations is presented in Attachment A.

Site Assessment Activities

On August 11, 2010, AECOM mobilized to the site to conduct a Geoprobe[®] direct push investigation to evaluate soil conditions within the proposed right-of-way/easement. 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 SGS North America in Wilmington, 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).

Six direct-push holes (WN-1 through WN-6) were advanced within the right-of-way to a depth of 10 feet as shown in Figure 2 and Attachment B. Borings WN-1 and WN-2 were located to evaluate the conditions at the former UST locations along Bragg Boulevard and borings WN-3 through WN-6 were placed to assess the soil conditions within the right-of-way (Attachment C). The lithology encountered by the direct-push samples generally was consistent throughout the site. The ground surface was covered with about 2 to 3 inches of asphalt or topsoil. Below the surface to a depth of 8 feet was a medium brown, loose, coarse-grained sand. Underlying this material was a medium brown sand/clay. No bedrock was encountered in any of the borings. The “Geologic Map of North Carolina” dated 1985 indicates that the site is underlain by the Middendorf and Cape Fear Formations, each of which consists predominantly of sand and mudstone. The soil observed at the site is consistent with this parent rock. All the borings were terminated at a depth of 10 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 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 six soil samples collected from the site on August 11, 2010. Consequently, no concentrations are present above applicable action levels.

Mr. Ethan Caldwell
September 14, 2010
Page 4

Conclusions and Recommendations

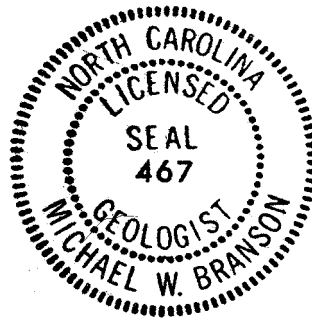
A Preliminary Site Assessment was conducted to evaluate the Lot 2 JRB Investment Group LLC Property (Parcel #52) located at 200 N. Bragg Boulevard in Spring Lake, Cumberland County, North Carolina. A geophysical investigation was conducted to evaluate the site for unknown USTs. The investigation indicated that no metallic USTs were present within the proposed right-of-way. Six 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 and/or GRO concentrations were present above the action level in any of the six soil samples analyzed.

AECOM appreciates the opportunity to work with the NCDOT on this project. Because no compounds were detected above the method detection limits in the soil samples, no notification is required to the NCDENR. 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
 LOT 2 JRB INVESTMENT GROUP LLC PROPERTY (PARCEL #52)
 SPRING LAKE, CUMBERLAND COUNTY, NORTH CAROLINA
 NCDOT PROJECT NO. U-4444B
 WBS ELEMENT 36492.1.2
 AECOM PROJECT NO. 60158550**

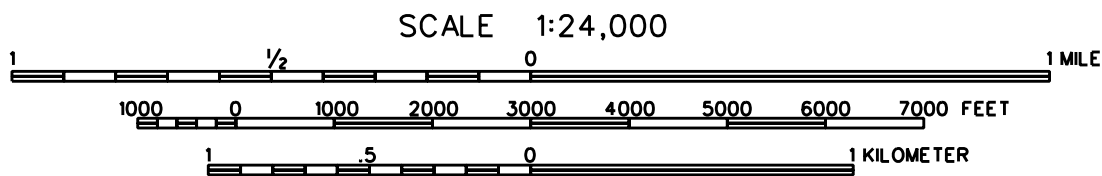
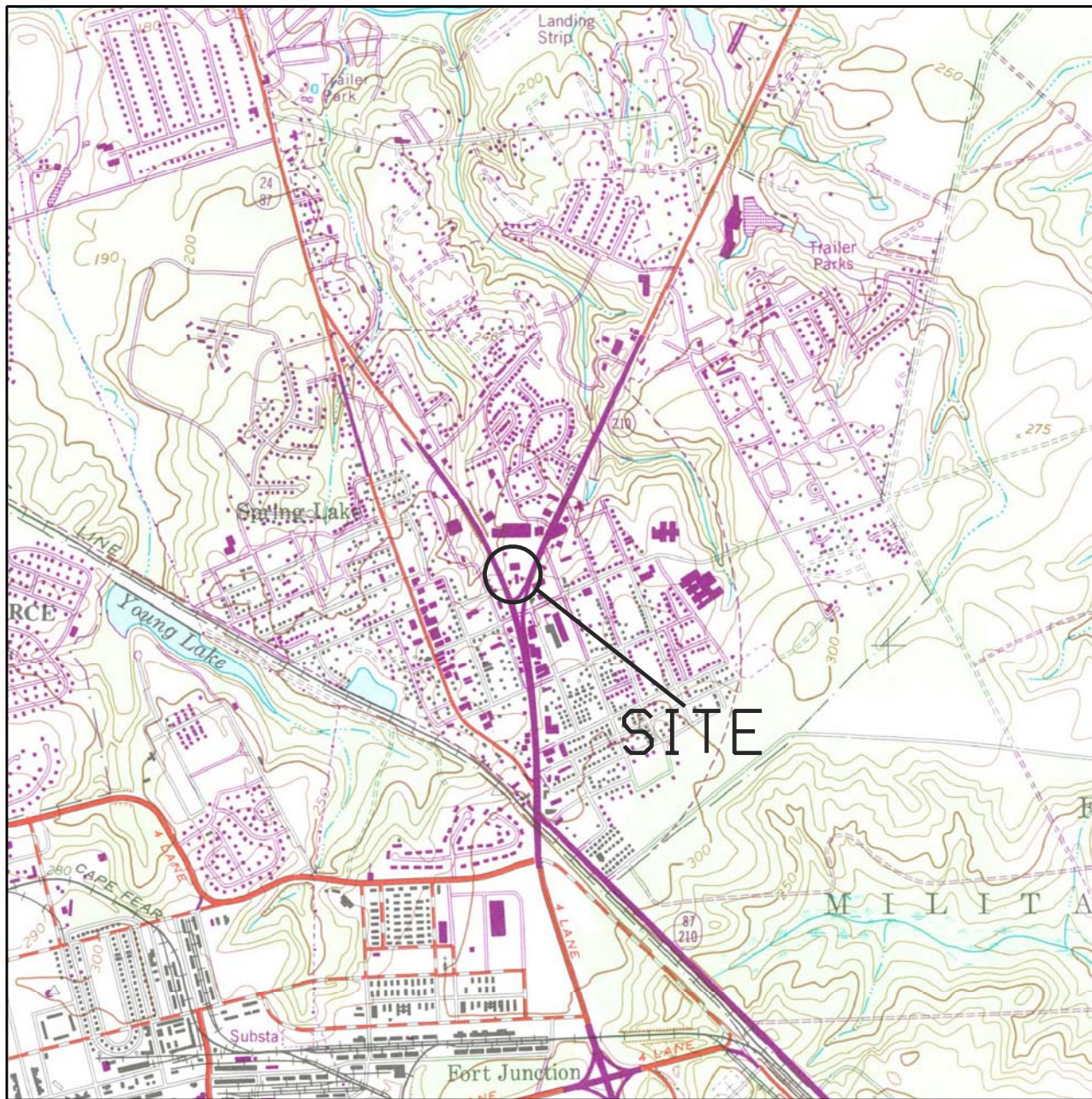
LOCATION	DEPTH (ft)	FID READING (ppm)	SAMPLE ID	ANALYTICAL RESULTS (mg/kg)	ASSUMED ACTION LEVEL (mg/kg)
WN-1	0 - 2	12.24			
	2 - 4	14.13	WN-1	DRO (BQL) GRO (BQL)	10 10
	4 - 6	3.26			
	6 - 8	3.84			
	8 - 10	1.49			
WN-2	0 - 2	3.05			
	2 - 4	4.06	WN-2	DRO (BQL) GRO (BQL)	10 10
	4 - 6	0.27			
	6 - 8	0.22			
	8 - 10	0.03			
WN-3	0 - 2	0.08			
	2 - 4	0.04			
	4 - 6	2.39	WN-3	DRO (BQL) GRO (BQL)	10 10
	6 - 8	0.41			
	8 - 10	0.30			
WN-4	0 - 2	0.01			
	2 - 4	0.12			
	4 - 6	0.08			
	6 - 8	0.24			
	8 - 10	0.36	WN-4	DRO (BQL) GRO (BQL)	10 10
WN-5	0 - 2	0.07			
	2 - 4	0.32			
	4 - 6	0.24			
	6 - 8	0.72	WN-5	DRO (BQL) GRO (BQL)	10 10
	8 - 10	0.08			
WN-6	0 - 2	0.12			
	2 - 4	0.37	WN-6	DRO (BQL) GRO (BQL)	10 10
	4 - 6	0.31			
	6 - 8	0.20			
	8 - 10	0.01			

Soil samples were collected on August 11, 2010.

DRO - Diesel range organics.
 GRO - Gasoline range organics.
 BQL - Below quantitation limit.
 ppm - parts per million.
 mg/kg - milligrams per kilogram.



FIGURES

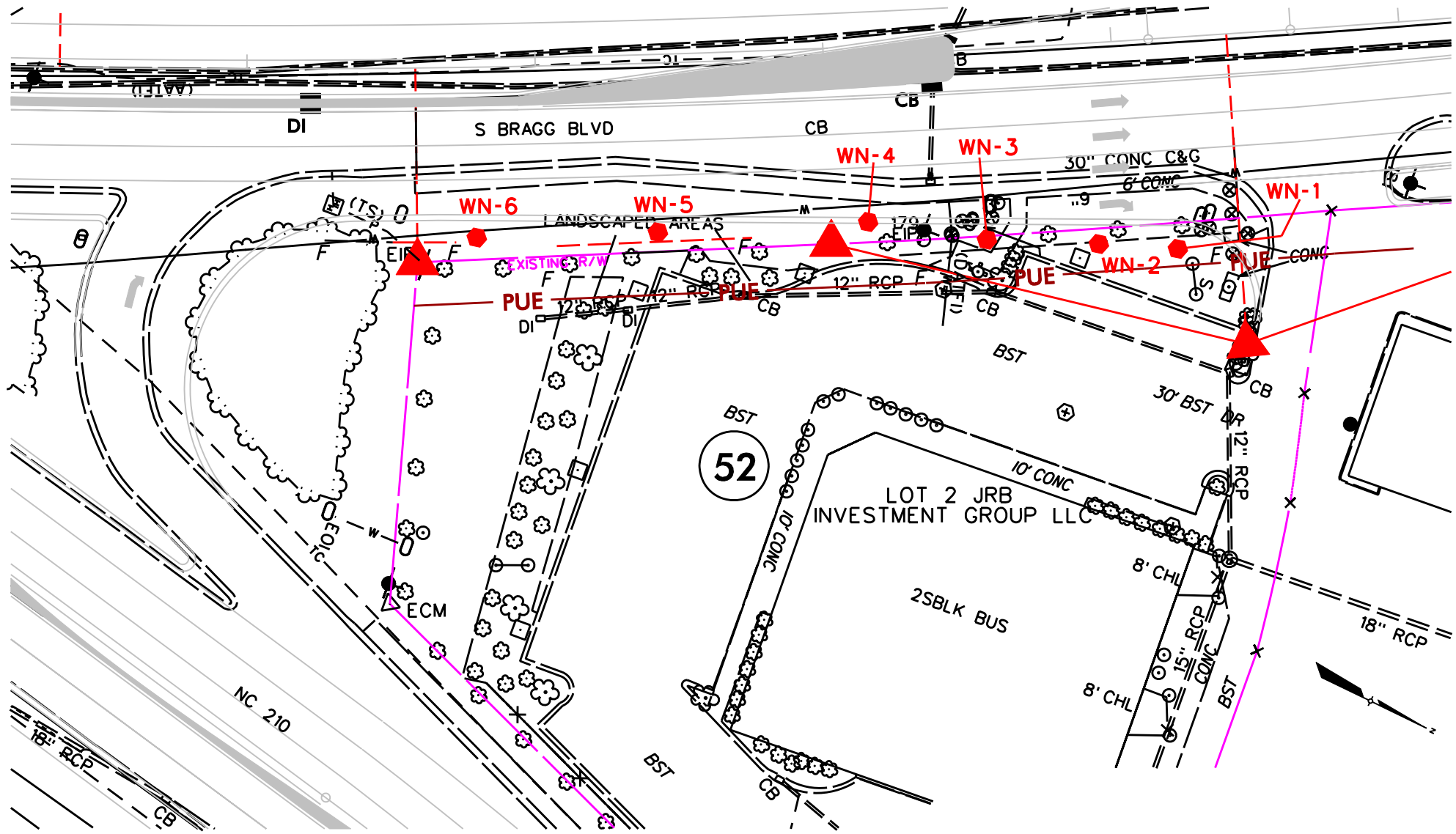


SOURCE: U.S. GEOLOGICAL SURVEY 7.5 MIN QUADRANGLE: MANCHESTER, NC (REV 1987)



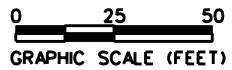
FIGURE 1
VICINITY MAP
LOT 2 JRB INVESTMENT GROUP LLC PROPERTY (PARCEL #52)
SPRING LAKE, CUMBERLAND COUNTY NORTH CAROLINA
AUGUST 2010

60158550



LEGEND

WN-1  SOIL SAMPLE LOCATION AND IDENTIFICATION



**FIGURE 2
SITE MAP**

LOT 2 JRB INVESTMENT GROUP LLC PROPERTY (PARCEL #52)
SPRING LAKE, CUMBERLAND COUNTY, NORTH CAROLINA

JULY 2010

60158550

ATTACHMENT A

GEOPHYSICAL INVESTIGATION REPORT

EM61 & GPR SURVEYS


LOT 2 JRB INVESTMENT GROUP, LLC SITE (PARCEL 52)

**North Bragg Boulevard
Spring Lake, North Carolina**

September 3, 2010

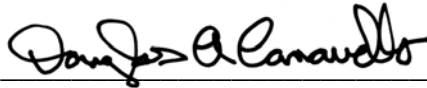
**Report prepared for: Michael W. Branson, PG
AECOM Environment
701 Corporate Center Drive, Suite 475
Raleigh, North Carolina 27607**

Prepared by:



Mark J. Denil, P.G.

Reviewed by:



Douglas Canavello, P.G.

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

AECOM Environment
GEOPHYSICAL INVESTIGATION REPORT
LOT 2 JRB INVESTMENT GROUP, LLC SITE (PARCEL 52)
Spring Lake, North Carolina

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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 at the Lot 2 JRB Investment Group, LLC site (Parcel 52) located along the easterly side of North Bragg Boulevard at the intersection of North Bragg Boulevard and Lillington Highway in Spring Lake, North Carolina. Conducted on July 23 and August 3, 2010, 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) are present beneath the proposed ROW area of the site.

The Lot 2 JRB Investment Group, LLC property consists of a Walgreens Drug store and the proposed ROW area encompasses a strip of property located along North Bragg Boulevard. The proposed ROW area (geophysical survey area) has a maximum length and width of 340 feet and 80 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 a portion of Parcel 34 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 geophysical survey area (property) 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 performed on July 23, 2010 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 northerly-southerly, or easterly-westerly, 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 surveys were conducted on August 3, 2010 across selected EM61 differential anomalies using a GSSI SIR-2000 unit equipped with a 400 MHz antenna. Data were digitally collected in a continuous mode along X-axis and/or Y-axis survey lines, spaced 2.5 to 5.0 feet apart 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 collected down to a maximum depth of approximately 5 feet, based on an estimated two-way travel time of 8 nanoseconds per foot. All of the GPR data were downloaded to a field computer and reviewed in the field and office using Radprint software.

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.

Preliminary contour plots of the EM61 bottom coil and EM61 differential results obtained from the survey area were emailed to Mr. Branson during the week of August 9, 2010.

3.0 DISCUSSION OF RESULTS

The linear EM61 bottom coil anomalies intersecting grid coordinates X=40 Y=242, X=60 Y=245, X=70 Y=200, X=75 Y=96, and X=90 Y=300 are probably in response to buried utility lines or conduits. The high amplitude, bottom coil anomalies centered near grid coordinates X=33 Y=47, X=50 Y=333 and X=70 Y=330 are probably in response to several different utility-related equipment and one or more buried lines or conduits. Similarly, the bottom coil anomalies centered near grid coordinates X=54 Y=50, X=54 Y=76 and X=61 Y=60 are probably in response to guy wires, a utility pole and a bollard.

GPR data suggest the EM61 differential anomalies centered near grid coordinates X=40 Y=174 and X=40 Y=327 are in response to miscellaneous objects or equipment. The remaining differential anomalies are probably in response to utility lines and utility line-related equipment. The geophysical investigation suggests the proposed ROW area at Parcel 52 does not contain unknown, metallic USTs.

4.0 SUMMARY & CONCLUSIONS

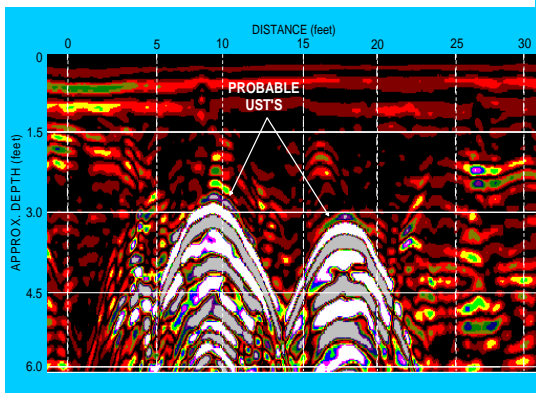
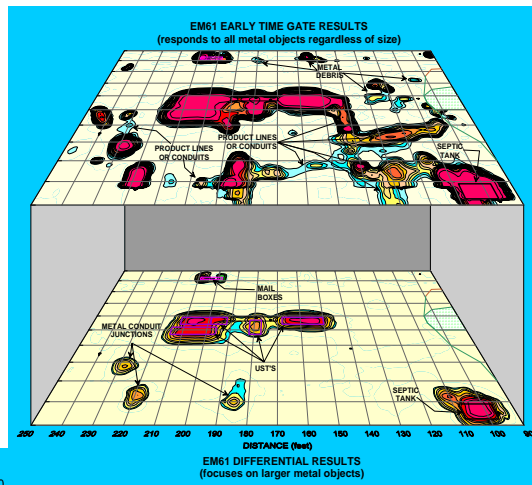
Our evaluation of the EM61 and GPR data collected across the proposed ROW area at the Lot 2 JRB Investment Group, LLC site (Parcel 52) located along the east side of North Bragg Boulevard in Spring Lake, North Carolina, provides the following summary and conclusions:

- The EM61 and GPR surveys provided reliable results for the detection of metallic USTs within the surveyed portions of the site.
- The linear EM61 bottom coil anomalies intersecting grid coordinates X=40 Y=242, X=60 Y=245, X=70 Y=200, X=75 Y=96, and X=90 Y=300 are probably in response to buried utility lines or conduits.
- GPR data suggest the EM61 differential anomalies centered near grid coordinates X=40 Y=174 and X=40 Y=327 are in response to miscellaneous objects or equipment.

- The geophysical investigation suggests the proposed ROW area at Parcel 52 does not contain unknown, metallic USTs.

5.0 LIMITATIONS

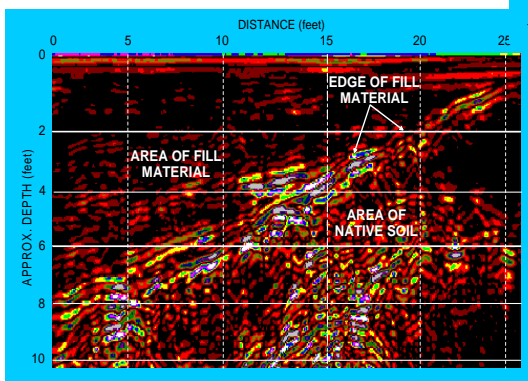
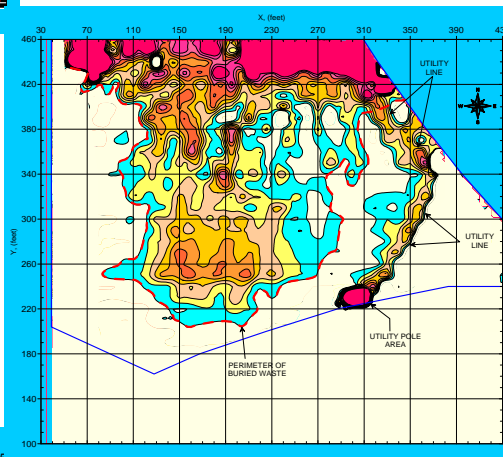
EM61 and GPR surveys have been performed and this report prepared for AECOM Environmental in accordance with generally accepted guidelines for EM61 and GPR surveys. It is generally recognized that the results of the EM61 and GPR are non-unique and may not represent actual subsurface conditions. The geophysical results obtained for this project have not conclusively determined that the surveyed portion of the site does not contain unknown, 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 Lot 2 JRB Investment Group, LLC property on July 23, 2010.



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 Lot 2 JRB Investment Group, LLC property on August 3, 2010.



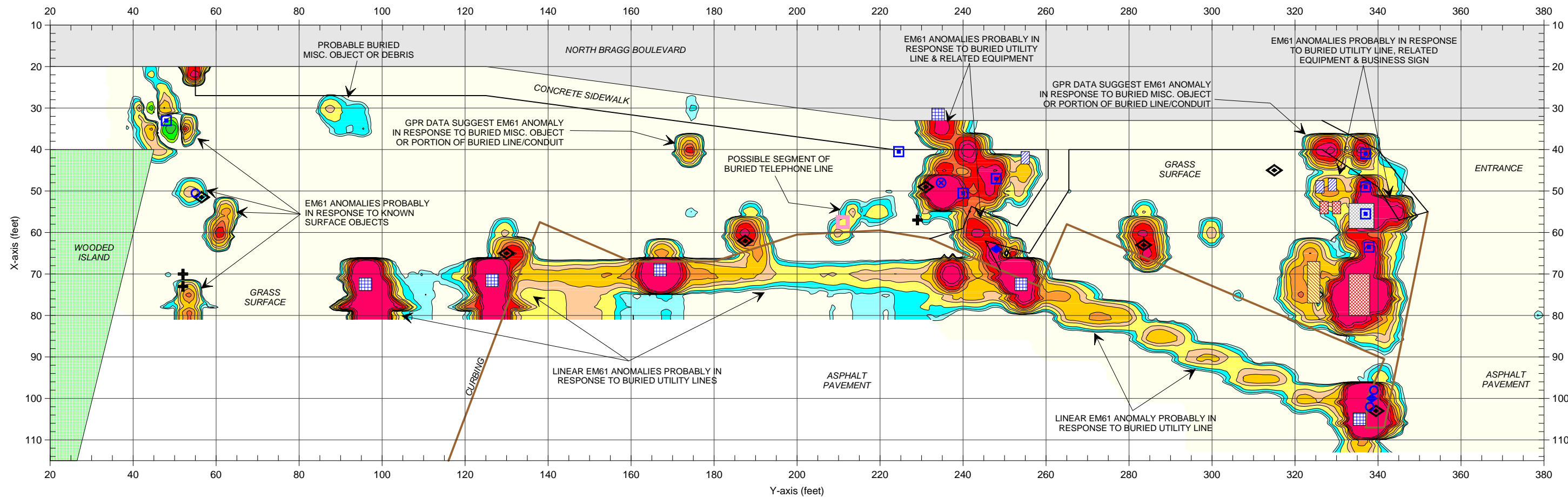
The photograph shows the proposed ROW area at the Lot 2 JRB Investment Group, LLC property (Parcel 52) located along the east side of North Bragg Boulevard in Spring Lake, North Carolina. The photograph is viewed in a northwesterly direction.



CLIENT	AECOM ENVIRONMENT		DATE	08/27/10	BY	MJD
SITE	LOT 2 JRB INVESTMENT GROUP SITE (PARCEL 52)		LAY		CPND	
CITY	SPRING LAKE	STATE	NORTH CAROLINA	ENG		
TITLE	GEOPHYSICAL RESULTS		PLNG	2010-176	PROJ	

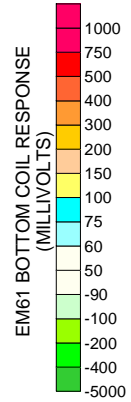
GEOPHYSICAL EQUIPMENT & SITE PHOTOGRAPHS

FIGURE 1



LEGEND

	SURVEY AREA: EM61 DATA ACQUIRED ALONG X-AXIS OR Y-AXIS TRENDING SPACED 5 FEET APART
	CONCRETE COVER
	BUSHES & TREES
	LARGE WATER LINE VALVE COVER
	ELECTRICAL BOX
	BUSINESS SIGN
	FIRE HYDRANT
	BOLLARD
	CONCRETE CURBING
	WATER LINE VALVE COVER
	STORM SEWER GRATE
	GUY WIRE
	UTILITY POLE
	MANHOLE COVER
	TELEPHONE



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 EM metal detection data were collected on July 23, 2010 using a Geonics EM61 instrument. Ground penetrating radar (GPR) data were acquired on August 3, 2010 using a Geophysical Survey Systems SIR 2000 instrument with a 400 MHz antenna.

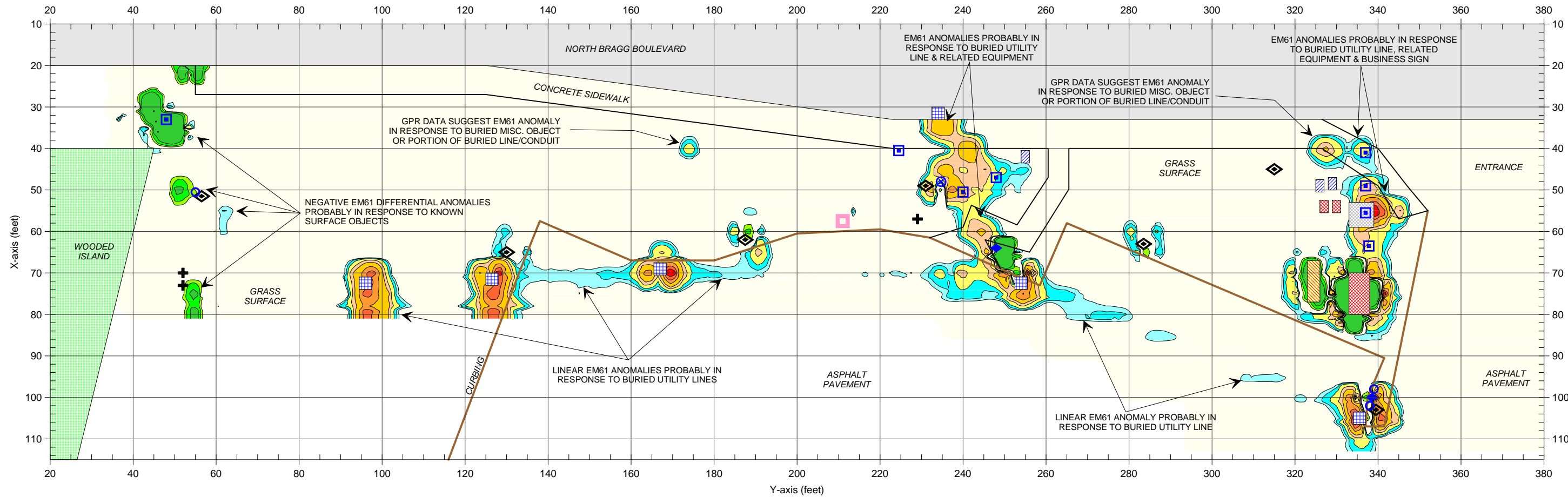
The geophysical investigation suggest that the surveyed portion of the site does not contain metallic USTs.

AECOM ENVIRONMENT		DATE	09/01/10	FIGURE	2010-176
LOT 2 JRB INVESTMENT GROUP SITE (PARCEL 52)		LAY			
SPRING LAKE		DWG			
NORTH CAROLINA		L.N.O.			
STATE					
CLIENT		TITLE			
SITE		GEOPHYSICAL RESULTS			
CITY					
STATE					
MJD					
DRWN					
CHKD					
GRAPHIC SCALE IN FEET					

PYRAMID
ENVIRONMENTAL & ENGINEERING, P.C.

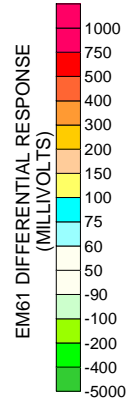
EM61 METAL DETECTION (BOTTOM COIL RESULTS)

FIGURE 2



LEGEND

- SURVEY AREA: EM61 DATA ACQUIRED ALONG X-AXIS OR Y-AXIS TRENDING SPACED 5 FEET APART
- CONCRETE COVER
- BUSHES & TREES
- LARGE WATER LINE VALVE COVER
- ELECTRICAL BOX
- BUSINESS SIGN
- FIRE HYDRANT
- BOLLARD
- CONCRETE CURBING
- WATER LINE VALVE COVER
- STORM SEWER GRATE
- GUY WIRE
- UTILITY POLE
- MANHOLE COVER
- TELEPHONE



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 July 23, 2010 using a Geonics EM61 instrument. Ground penetrating radar (GPR) data were acquired on August 3, 2010 using a Geophysical Survey Systems SIR 2000 instrument with a 400 MHz antenna.

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

EM61 METAL DETECTION (DIFFERENTIAL RESULTS)

FIGURE 3

GRAPHIC SCALE IN FEET	
DATE: 09/01/10	MJD
LAY: _____	CHKD: _____
DWG: _____	FIGURE: _____
L. NO.: _____	2010-176
AECOM ENVIRONMENT	
LOT 2 JRB INVESTMENT GROUP SITE (PARCEL 52)	
SPRING LAKE	NORTH CAROLINA
GEOPHYSICAL RESULTS	
CLIENT: _____	TITLE: _____

PYRAMID
ENVIRONMENTAL & ENGINEERING, P.C.

ATTACHMENT B

TEST BORING REPORT

PROJECT LOT 2 JRB INVESTMENT GROUP PROPERTY (PARCEL 52)

CLIENT NCDOT

PROJECT NUMBER 60158550 (WBS 36492.1.2)

CONTRACTOR REGIONAL PROBING

EQUIPMENT GEOPROBE

BORING NUMBER WN-1

PAGE 1

ELEVATION _____

DATE 8/11/2010

DRILLER OPPER

PREPARED BY BRANSON

DEPTH IN FEET	CASING BLOWS FOOT	BLOWS PER 6 INCHES	OVA (ppm)	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
			12.24		4" TOPSOIL, MEDIUM BROWN, LOOSE, COARSE-GRAINED SAND, DRY, NO ODOR.
			14.13		AS ABOVE, DRY, NO ODOR. SUBMIT TO LABORATORY FOR ANALYSIS.
5.0			3.26		AS ABOVE, DRY, NO ODOR.
			3.84		AS ABOVE, DRY, NO ODOR.
10.0			1.49		MEDIUM BROWN SAND/CLAY, STIFF, DRY, NO ODOR.
					BORING TERMINATED AT 10 FEET. NO GROUNDWATER ENCOUNTERED
15.0					
20.0					



TEST BORING REPORT

PROJECT LOT 2 JRB INVESTMENT GROUP PROPERTY (PARCEL 52)

CLIENT NCDOT

PROJECT NUMBER 60158550 (WBS 36492.1.2)

CONTRACTOR REGIONAL PROBING

EQUIPMENT GEOPROBE

BORING NUMBER WN-2

PAGE 1

ELEVATION _____

DATE 8/11/2010

DRILLER OPPER

PREPARED BY BRANSON

DEPTH IN FEET	CASING BLOWS FOOT	BLOWS PER 6 INCHES	OVA (ppm)	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
			3.05		4" TOPSOIL, MEDIUM BROWN, LOOSE, COARSE-GRAINED SAND, DRY, NO ODOR.
			4.06		AS ABOVE, DRY, NO ODOR. SUBMIT TO LABORATORY FOR ANALYSIS.
5.0			0.27		AS ABOVE, DRY, NO ODOR.
			0.22		AS ABOVE, DRY, NO ODOR.
10.0			0.03		AS ABOVE, DRY, NO ODOR.
					BORING TERMINATED AT 10 FEET. NO GROUNDWATER ENCOUNTERED
15.0					
20.0					



TEST BORING REPORT

PROJECT LOT 2 JRB INVESTMENT GROUP PROPERTY (PARCEL 52)

BORING NUMBER WN-3

CLIENT NCDOT

PAGE 1

PROJECT NUMBER 60158550 (WBS 36492.1.2)

ELEVATION _____

CONTRACTOR REGIONAL PROBING

DATE 8/11/2010

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
			0.08		4" TOPSOIL, MEDIUM BROWN, LOOSE, COARSE-GRAINED SAND, DRY, NO ODOR.
			0.04		AS ABOVE, DRY, NO ODOR.
5.0			2.39		AS ABOVE, DRY, NO ODOR. SUBMIT TO LABORATORY FOR ANALYSIS.
			0.41		AS ABOVE, DRY, NO ODOR.
10.0			0.30		MEDIUM BROWN SAND/CLAY, STIFF, DRY, NO ODOR.
					BORING TERMINATED AT 10 FEET. NO GROUNDWATER ENCOUNTERED
15.0					
20.0					



TEST BORING REPORT

PROJECT LOT 2 JRB INVESTMENT GROUP PROPERTY (PARCEL 52)

BORING NUMBER WN-4

CLIENT NCDOT

PAGE 1

PROJECT NUMBER 60158550 (WBS 36492.1.2)

ELEVATION _____

CONTRACTOR REGIONAL PROBING

DATE 8/11/2010

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			0.01		4" TOPSOIL, MEDIUM BROWN, LOOSE, COARSE-GRAINED SAND, DRY, NO ODOR.	
				0.12		AS ABOVE, DRY, NO ODOR.
				0.08		AS ABOVE, DRY, NO ODOR.
				0.24		AS ABOVE, DRY, NO ODOR.
10.0						
				0.36		MEDIUM BROWN SAND/CLAY, STIFF, DRY, NO ODOR. SUBMIT TO LABORATORY FOR ANALYSIS.
15.0						
20.0						



TEST BORING REPORT

PROJECT LOT 2 JRB INVESTMENT GROUP PROPERTY (PARCEL 52)

BORING NUMBER WN-5

CLIENT NCDOT

PAGE 1

PROJECT NUMBER 60158550 (WBS 36492.1.2)

ELEVATION _____

CONTRACTOR REGIONAL PROBING

DATE 8/11/2010

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			0.07		4" TOPSOIL, MEDIUM BROWN, LOOSE, COARSE-GRAINED SAND, DRY, NO ODOR.	
				0.32		AS ABOVE, DRY, NO ODOR.
				0.24		AS ABOVE, DRY, NO ODOR.
				0.72		AS ABOVE, DRY, NO ODOR. SUBMIT TO LABORATORY FOR ANALYSIS.
10.0			0.08		MEDIUM BROWN SAND/CLAY, STIFF, DRY, NO ODOR.	
15.0						
20.0						



TEST BORING REPORT

PROJECT LOT 2 JRB INVESTMENT GROUP PROPERTY (PARCEL 52)

BORING NUMBER WN-6

CLIENT NCDOT

PAGE 1

PROJECT NUMBER 60158550 (WBS 36492.1.2)

ELEVATION _____

CONTRACTOR REGIONAL PROBING

DATE 8/11/2010

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			0.12		4" TOPSOIL, MEDIUM BROWN, LOOSE, COARSE-GRAINED SAND, DRY, NO ODOR.	
				0.37		AS ABOVE, DRY, NO ODOR. SUBMIT TO LABORATORY FOR ANALYSIS.
				0.31		AS ABOVE, DRY, NO ODOR.
				0.20		AS ABOVE, DRY, NO ODOR.
				0.01		AS ABOVE, DRY, NO ODOR.
10.0						
15.0						
20.0						



ATTACHMENT C



PHOTO 1 - BORING IN PROPOSED R/W LOOKING NORTHEAST



PHOTO 2 - BORING IN PROPOSED R/W LOOKING EAST



PHOTO 3 - BORING WITHIN PROPOSED R/W LOOKING EAST



PHOTO 4 - BORING WITHIN PROPOSED R/W LOOKING EAST



PHOTO 5 - BORING WITHIN PROPOSED R/W LOOKING EAST



PHOTO 6 - BORING WITHIN PROPOSED R/W LOOKING NORTH

ATTACHMENT D



Mike Branson
AECOM
701 Corporate Center Drive
Suite 475
Raleigh, NC 27607

Report Number: G1037-102

Client Project: NCDOT

Dear Mike Branson,

Enclosed are the results of the analytical services performed under the referenced project for the received samples and associated QC as applicable. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of five years in the event they are required for future reference. Any samples submitted to our laboratory will be retained for a maximum of thirty (30) days from the date of this report unless other arrangements are requested.

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

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

Sincerely,
SGS North America, Inc.

Barbara Hager *Aug. 19. 2010*
Project Manager Date
Barbara Hager

SGS North America, Inc.
List of Reporting Abbreviations
And Data Qualifiers

B = Compound also detected in batch blank

BQL = Below Quantification Limit (RL or MDL)

DF = Dilution Factor

Dup = Duplicate

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

E = Estimated concentration, exceeds calibration range.

J = Estimated concentration, below calibration range and above MDL

LCS(D) = Laboratory Control Spike (Duplicate)

MDL = Method Detection Limit

MS(D) = Matrix Spike (Duplicate)

PQL = Practical Quantitation Limit

RL/CL = Reporting Limit / Control Limit

RPD = Relative Percent Difference

UJ = Target analytes with recoveries that are $10\% < \%R < LCL$; # of MEs are allowable and compounds are not detected in the sample.

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

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

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

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

% Rec = Percent Recovery

% solids = Percent Solids

Special Notes:

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

Results for Total Petroleum Hydrocarbons
by GC/FID 8015

Client Sample ID: WN-1
 Client Project ID: NCDOT
 Lab Sample ID: G1037-102-1A
 Lab Project ID: G1037-102
 Report Basis: Dry Weight

Analyzed By: LMC
 Date Collected: 8/11/2010 12:15
 Date Received: 8/12/2010
 Matrix: Soil
 Solids 94.77

Analyte	Result	RL	Units	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	4.87	mg/Kg	1	08/19/10 04:35

Surrogate Spike Results

	Added	Result	Recovery	Flag	Limits
BFB	100	96.3	96.3		70-130

Comments:

Batch Information

Analytical Batch: VP081810
 Analytical Method: 8015
 Instrument ID: GC4
 Analyst: LMC

Prep Method: 5035
 Initial Wt/Vol: 6.5 g
 Final Volume: 5 mL

Analyst: LMC

NC Certification #481

Reviewed By: 
 GRO.XLS

Results for Total Petroleum Hydrocarbons
by GC/FID 8015

Client Sample ID: WN-2
 Client Project ID: NCDOT
 Lab Sample ID: G1037-102-2A
 Lab Project ID: G1037-102
 Report Basis: Dry Weight

Analyzed By: LMC
 Date Collected: 8/11/2010 12:30
 Date Received: 8/12/2010
 Matrix: Soil
 Solids 94.83

Analyte	Result	RL	Units	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	5.66	mg/Kg	1	08/19/10 05:02

Surrogate Spike Results

	Added	Result	Recovery	Flag	Limits
BFB	100	96.2	96.2		70-130

Comments:

Batch Information

Analytical Batch: VP081810
 Analytical Method: 8015
 Instrument ID: GC4
 Analyst: LMC

Prep Method: 5035
 Initial Wt/Vol: 5.59 g
 Final Volume: 5 mL

Analyst: LMC

NC Certification #481

Reviewed By: [Signature]
GRO.XLS

Results for Total Petroleum Hydrocarbons
by GC/FID 8015

Client Sample ID: WN-3
 Client Project ID: NCDOT
 Lab Sample ID: G1037-102-3A
 Lab Project ID: G1037-102
 Report Basis: Dry Weight

Analyzed By: LMC
 Date Collected: 8/11/2010 12:45
 Date Received: 8/12/2010
 Matrix: Soil
 Solids 94.58

Analyte	Result	RL	Units	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	5.38	mg/Kg	1	08/19/10 05:29

Surrogate Spike Results

	Added	Result	Recovery	Flag	Limits
BFB	100	95.1	95.1		70-130

Comments:


Batch Information

Analytical Batch: VP081810
 Analytical Method: 8015
 Instrument ID: GC4
 Analyst: LMC

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

Analyst: LMC

NC Certification #481

Reviewed By: 
GRO.XLS

Results for Total Petroleum Hydrocarbons
by GC/FID 8015

Client Sample ID: WN-4
 Client Project ID: NCDOT
 Lab Sample ID: G1037-102-4A
 Lab Project ID: G1037-102
 Report Basis: Dry Weight

Analyzed By: LMC
 Date Collected: 8/11/2010 13:00
 Date Received: 8/12/2010
 Matrix: Soil
 Solids 86.85

Analyte	Result	RL	Units	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	4.70	mg/Kg	1	08/19/10 05:56

Surrogate Spike Results

	Added	Result	Recovery	Flag	Limits
BFB	100	98.4	98.4		70-130

Comments:

Batch Information

Analytical Batch: VP081810
 Analytical Method: 8015
 Instrument ID: GC4
 Analyst: LMC

Prep Method: 5035
 Initial Wt/Vol: 7.35 g
 Final Volume: 5 mL

Analyst: LMC

NC Certification #481

Reviewed By: [Signature]
GRO.XLS

Results for Total Petroleum Hydrocarbons
by GC/FID 8015

Client Sample ID: WN-5
 Client Project ID: NCDOT
 Lab Sample ID: G1037-102-5A
 Lab Project ID: G1037-102
 Report Basis: Dry Weight

Analyzed By: LMC
 Date Collected: 8/11/2010 13:10
 Date Received: 8/12/2010
 Matrix: Soil
 Solids 93.88

Analyte	Result	RL	Units	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	5.20	mg/Kg	1	08/19/10 06:22

Surrogate Spike Results

	Added	Result	Recovery	Flag	Limits
BFB	100	93.6	93.6		70-130

Comments:

Batch Information

Analytical Batch: VP081810
 Analytical Method: 8015
 Instrument ID: GC4
 Analyst: LMC

Prep Method: 5035
 Initial Wt/Vol: 6.15 g
 Final Volume: 5 mL

Analyst: LMC

NC Certification #481

Reviewed By: MD
GRO.XLS

Results for Total Petroleum Hydrocarbons
by GC/FID 8015

Client Sample ID: WN-6
 Client Project ID: NCDOT
 Lab Sample ID: G1037-102-6A
 Lab Project ID: G1037-102
 Report Basis: Dry Weight

Analyzed By: LMC
 Date Collected: 8/11/2010 13:30
 Date Received: 8/12/2010
 Matrix: Soil
 Solids 95.52

Analyte	Result	RL	Units	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	5.37	mg/Kg	1	08/19/10 06:50

Surrogate Spike Results

	Added	Result	Recovery	Flag	Limits
BFB	100	94.5	94.5		70-130

Comments:


Batch Information

Analytical Batch: VP081810
 Analytical Method: 8015
 Instrument ID: GC4
 Analyst: LMC

Prep Method: 5035
 Initial Wt/Vol: 5.85 g
 Final Volume: 5 mL

Analyst: LMC

NC Certification #481

Reviewed By: 
 GRO.XLS

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

Client Sample ID: WN-1
 Client Project ID: NCDOT
 Lab Sample ID: G1037-102-1D
 Lab Project ID: G1037-102

Date Collected: 8/11/2010 12:15
 Date Received: 8/12/2010
 Matrix: Soil
 Solids 94.77
 Report Basis: Dry Weight

Parameter	Result	RL	Units	Dilution Factor	Date Analyzed
Diesel Range Organics	BQL	6.40	mg/Kg	1	08/18/10 02:26
Surrogate Spike Results		Spike Added	Control Limits	Spike Result	Percent Recovery
OTP		40	40-140	30.9	77.3

Comments:

Batch Information


Analytical Batch: EP081710
 Analytical Method: 8015
 Instrument: GC6
 Analyst: DTF

Prep batch: 17210
 Prep Method: 3541
 Prep Date: 08/16/10
 Initial Prep Wt/Vol: 32.99 G
 Prep Final Vol: 10 mL

Analyst: FA

NC Certification #481

N.C. Certification #481

Reviewed By: 
 DRO.XLS
 Page 9 of 15

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

Client Sample ID: WN-2
 Client Project ID: NCDOT
 Lab Sample ID: G1037-102-2D
 Lab Project ID: G1037-102

Date Collected: 8/11/2010 12:30
 Date Received: 8/12/2010
 Matrix: Soil
 Solids 94.83
 Report Basis: Dry Weight

Parameter	Result	RL	Units	Dilution Factor	Date Analyzed
Diesel Range Organics	BQL	6.39	mg/Kg	1	08/18/10 02:54
Surrogate Spike Results		Spike Added	Control Limits	Spike Result	Percent Recovery
OTP		40	40-140	32.6	81.5

Comments:

Batch Information

Analytical Batch: EP081710
 Analytical Method: 8015
 Instrument: GC6
 Analyst: DTF

Prep batch: 17210
 Prep Method: 3541
 Prep Date: 08/16/10
 Initial Prep Wt/Vol: 32.98 G
 Prep Final Vol: 10 mL

Analyst: FA

NC Certification #481

N.C. Certification #481

Reviewed By: [Signature]
 DRO.XLS

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

Client Sample ID: WN-3
 Client Project ID: NCDOT
 Lab Sample ID: G1037-102-3D
 Lab Project ID: G1037-102

Date Collected: 8/11/2010 12:45
 Date Received: 8/12/2010
 Matrix: Soil
 Solids 94.58
 Report Basis: Dry Weight

Parameter	Result	RL	Units	Dilution Factor	Date Analyzed
Diesel Range Organics	BQL	6.29	mg/Kg	1	08/18/10 03:23
Surrogate Spike Results		Spike Added	Control Limits	Spike Result	Percent Recovery
OTP		40	40-140	32.1	80.2

Comments:

Batch Information


Analytical Batch: EP081710
 Analytical Method: 8015
 Instrument: GC6
 Analyst: DTF

Prep batch: 17210
 Prep Method: 3541
 Prep Date: 08/16/10
 Initial Prep Wt/Vol: 33.62 G
 Prep Final Vol: 10 mL

Analyst: FX

NC Certification #481

N.C. Certification #481

Reviewed By: 
 DRO.XLS
 Page 11 of 15

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

Client Sample ID: WN-4
 Client Project ID: NCDOT
 Lab Sample ID: G1037-102-4D
 Lab Project ID: G1037-102

Date Collected: 8/11/2010 13:00
 Date Received: 8/12/2010
 Matrix: Soil
 Solids 86.85
 Report Basis: Dry Weight

Parameter	Result	RL	Units	Dilution Factor	Date Analyzed
Diesel Range Organics	BQL	6.82	mg/Kg	1	08/18/10 03:51
Surrogate Spike Results		Spike Added	Control Limits	Spike Result	Percent Recovery
OTP		40	40-140	28.5	71.3

Comments:

Batch Information


Analytical Batch: EP081710
 Analytical Method: 8015
 Instrument: GC6
 Analyst: DTF

Prep batch: 17210
 Prep Method: 3541
 Prep Date: 08/16/10
 Initial Prep Wt/Vol: 33.75 G
 Prep Final Vol: 10 mL

Analyst: FA

NC Certification #481

N.C. Certification #481

Reviewed By: 
 DRO.XLS
 Page 12 of 15

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

Client Sample ID: WN-5
 Client Project ID: NCDOT
 Lab Sample ID: G1037-102-5D
 Lab Project ID: G1037-102

Date Collected: 8/11/2010 13:10
 Date Received: 8/12/2010
 Matrix: Soil
 Solids 93.88
 Report Basis: Dry Weight

Parameter	Result	RL	Units	Dilution Factor	Date Analyzed
Diesel Range Organics	BQL	6.53	mg/Kg	1	08/18/10 04:19
Surrogate Spike Results		Spike Added	Control Limits	Spike Result	Percent Recovery
OTP		40	40-140	29.7	74.2

Comments:

Batch Information


Analytical Batch: EP081710
 Analytical Method: 8015
 Instrument: GC6
 Analyst: DTF

Prep batch: 17210
 Prep Method: 3541
 Prep Date: 08/16/10
 Initial Prep Wt/Vol: 32.63 G
 Prep Final Vol: 10 mL

Analyst: FM

NC Certification #481

N.C. Certification #481

Reviewed By: 
 DRO.XLS
 Page 13 of 15

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

Client Sample ID: WN-6
 Client Project ID: NCDOT
 Lab Sample ID: G1037-102-6D
 Lab Project ID: G1037-102

Date Collected: 8/11/2010 13:30
 Date Received: 8/12/2010
 Matrix: Soil
 Solids 95.52
 Report Basis: Dry Weight

Parameter	Result	RL	Units	Dilution Factor	Date Analyzed
Diesel Range Organics	BQL	6.43	mg/Kg	1	08/18/10 04:47
Surrogate Spike Results		Spike Added	Control Limits	Spike Result	Percent Recovery
OTP		40	40-140	27.9	69.7

Comments:

Batch Information


Analytical Batch: EP081710
 Analytical Method: 8015
 Instrument: GC6
 Analyst: DTF

Prep batch: 17210
 Prep Method: 3541
 Prep Date: 08/16/10
 Initial Prep Wt/Vol: 32.54 G
 Prep Final Vol: 10 mL

Analyst: FA

NC Certification #481

N.C. Certification #481

Reviewed By: 
 DRO.XLS



CHAIN OF CUSTODY RECORD SGS North America Inc.

- Locations Nationwide
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 - Maryland
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SGS North America, Inc.

1 CLIENT: AECOM
 CONTACT: Mike Branson PHONE NO: 919 854 6238
 PROJECT: NCDOT SITE/PWSID#: LOT 2 INVESTMENT
 REPORTS TO: Above FAX NO.: 919 854 6259
 INVOICE TO: NCDOT QUOTE #: _____
 P.O. NUMBER: Wbs 36492.1.2

2

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	REMARKS
	WN-1	8/11/10	1215	SOILC	✓
	WN-2	8/11/10	1230	SOILC	✓
	WN-3	8/11/10	1245	SOILC	✓
	WN-4	8/11/10	1300	SOILC	✓
	WN-5	8/11/10	1310	SOILC	✓
	WN-6	8/11/10	1330	SOILC	✓

3 No CONTAINERS

SGS Reference: 91037-102 PAGE 1 OF 1

Preservatives Used: Meat
 Analysis Required: 3
GR
DR

4 Shipping Carrier: FedEx Samples Received Cold? (Circle) YES NO
 Shipping Ticket No: _____ Temperature °C: 6.35.9.ATP
 Special Deliverable Requirements: _____ Chain of Custody Seal: (Circle) 8/18/10
 INTACT BROKEN
 RUSH STD Date Needed _____
 Special Instructions: _____

5 Collected/Relinquished By: (1) MB Date 8/11/10 Time 1730 Received By: _____
 Relinquished By: (2) _____ Date _____ Time _____ Received By: _____
 Relinquished By: (3) _____ Date _____ Time _____ Received By: _____
 Relinquished By: (4) _____ Date 8/12/10 Time 9:45 Received By: [Signature]

White - Retained by Lab
Pink - Retained by Client

200 W. Potter Drive Anchorage, AK 99518 Tel: (907) 562-2343 Fax: (907) 562-5304
 5500 Business Drive Wilmington, NC 28405 Tel: (910) 350-1903 Fax: (910) 350-1557