



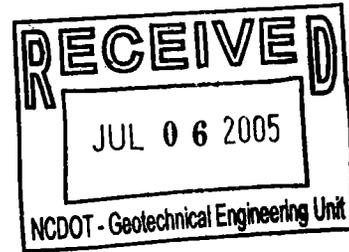
A **tyco** International Ltd. Company

701 Corporate Center Drive
Suite 475
Raleigh, NC 27607

P 919.854.6200
F 919.854.6259
earthtech.com

July 6, 2005

Mr. Greg Smith
North Carolina Department of Transportation
Geotechnical Engineering Unit
1589 Mail Service Center
Raleigh, North Carolina 27699-1589



Reference: Preliminary Site Assessment
King Outreach Ministry Property (Parcel #47)
Intersection of South Main Street and Meadowbrook Drive
King, Stokes County, North Carolina
NCDOT Project R-2201
WBS Element 34380.1.1
Earth Tech Project No. 85238

Dear Mr. Smith:

Earth Tech of North Carolina, Inc., (Earth Tech) 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 April 7, 2005, and the North Carolina Department of Transportation's (NCDOT's) Notice to Proceed dated April 12, 2005. 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 King Outreach Ministry Property (Parcel #47) is located in the southwest quadrant of the intersection of South Main Street and Meadowbrook Drive in King, North Carolina (Figure 1). Based on information supplied by the NCDOT and the site visit, Earth Tech understands that the site is an apartment complex that has the appearance of a potential former gas station. No evidence of underground storage tanks (USTs) was observed at the property, but a small above ground storage tank (AST) containing heating oil was located on the west side of the building (Figure 2). No stained soil or stressed vegetation was noted around the AST. The proposed right-of-way will affect the entire property.

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Earth Tech reviewed the North Carolina Department of Environment and Natural Resources (NCDENR) Incident Management database and no incident number was listed for this location. Earth Tech also reviewed the UST registration database to obtain UST information. According to the database, no USTs have been registered for the property.

Geophysical Survey

Prior to Earth Tech's mobilization to the site, Pyramid Environmental conducted a geophysical survey to evaluate if USTs were present on the proposed right-of-way. 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 parallel to Meadowbrook Drive and the Y-axis oriented approximately perpendicular to Meadowbrook Drive. The grid was located to cover all accessible portions of the proposed right-of-way. The survey lines were spaced 1.5 meters (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 to further evaluate any anomalies.

Several anomalies were detected in the geophysical survey. These anomalies were generally attributed to the building, steel-reinforced concrete, vehicles, and buried utility lines or conduits. The survey concluded that no metallic USTs were present on the proposed right-of-way. A detailed report of findings and interpretations is presented in Attachment A.

Site Assessment Activities

On May 11, 2005, Earth Tech 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 (Probe Technology of Concord, North Carolina) resulted in generally good recovery of soil samples from the direct-push holes. Soil samples were collected and contained in 1.2-meter (4-foot) long acetate sleeves inside the direct push sampler. Each of these sleeves was divided in half for soil sample screening. Each 0.6-meter (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 photo ionization detector (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 PID reading was submitted to Paradigm Analytical Laboratories, Inc., in Wilmington, North Carolina, using standard chain-of-custody procedures. The laboratory analyzed the soil samples for total petroleum hydrocarbons (TPH) using extraction methods 3550 (diesel fuel/fuel oil) and 5030 (gasoline).

Six direct-push holes (47-1 through 47-6) were advanced within the proposed right-of-way at the site to a depth of 2.4 to 3.0 meters (8 to 10 feet) as shown in Figure 2 and Attachment B. The

borings were located within the proposed right-of-way to evaluate the entire property (Attachment C). Boring 47-1 was located to evaluate the on-site AST. Borings 47-2 through 47-6 were located approximately equidistant around the building to assess the soil conditions on the remainder of the property. The lithology encountered by the direct-push samples generally was consistent throughout the site. The ground surface for the boring locations was covered with about 0.15 meters (6 inches) of asphalt and gravel. Below this surface treatment to a depth of 2.4 to 3.0 meters (8 to 10 feet) was a medium to reddish brown clay to sandy clay. Groundwater was encountered in all the borings at a depth of 2.4 to 3.0 meters (8 to 10 feet). Based on field screening, soil samples were submitted for laboratory analysis, which are summarized in Table 1. No groundwater samples were collected for analysis.

Analytical Results

Based on the laboratory reports, summarized in Table 1 and presented in Attachment D, petroleum hydrocarbon compounds were detected in five of the six soil samples collected from the site (Figure 3). The soil sample from boring 47-1 contained a diesel range organic (DRO) concentration of 2480 mg/kg, the soil sample from boring 47-2 contained a DRO concentration of 9.77 mg/kg, the soil sample from boring 47-3 contained a DRO concentration of 7.25 mg/kg, the soil sample from boring 47-5 contained a DRO concentration of 7.9 mg/kg, and the soil sample from boring 47-6 contained a DRO concentration of 7.9 mg/kg. The soil sample from boring 47-1 also contained a gasoline range organic (GRO) concentration of 46.4 mg/kg. Because no UST is the apparent source of the contamination, the regulatory agency with jurisdiction over the site is the NCDENR Aquifer Protection Section (formerly Groundwater Section). According to the NCDENR "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater," dated July 2000, the action level for TPH analyses is 10 mg/kg for gasoline (GRO) and 40 mg/kg for diesel fuel (DRO). The soil sample from boring 47-1 contained both DRO and GRO concentrations above the action levels.

Conclusions and Recommendations

A Preliminary Site Assessment was conducted to evaluate the King Outreach Ministry Property (Parcel #47) located at the intersection of South Main Street and Meadowbrook Drive in King, Stokes County, North Carolina. Six soil borings were advanced to evaluate the soil conditions on the property. The laboratory reports of the soil samples from these borings suggest that one of the samples contained TPH concentrations above the action levels. Based on the location of the soil boring from which the soil sample was collected and the absence of USTs, the source of the contamination appears to be the result of an above ground storage tank release. However, the depth of the contamination and lack of surface evidence of a release from the AST would suggest a source other than the AST. Insufficient data are available to verify a specific contamination source.

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To evaluate the volume of soil requiring possible remediation, the soil samples with TPH concentrations above 10 mg/kg for GRO and 40 mg/kg for DRO were considered. The analytical results of the soil samples suggest that the soil from boring 47-1 contained TPH concentrations, both DRO and GRO, above the action level. A review of the field screening readings (Table 1) suggests that a maximum contaminated soil thickness of 1.2 meters (4 feet), from 1.8 to 3.0 meters (6 to 10 feet) below ground surface is likely. The volume of potentially affected soil was estimated based on a thickness of 1.2 meters (4 feet), a width of 8 meters (26 feet), and a length of 18 meters (60 feet). These dimensions result in a volume of about 173 cubic meters (230 cubic yards) of contaminated soil. This volume is estimated from TPH analytical data from a single collection point and, as a result, the actual volume of contaminated soil may be higher or lower.

Earth Tech appreciates the opportunity to work with the NCDOT on this project. Earth Tech recommends that a copy of this report be submitted to the Division of Water Quality, Aquifer Protection Section, in the Winston-Salem Regional Office. 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

FIELD SCREENING AND ANALYTICAL RESULTS
 KING OUTREACH MINISTRY PROPERTY (PARCEL #47)
 KING, NORTH CAROLINA
 NCDOT PROJECT NO. R-2201
 WBS ELEMENT 34380.1.1
 EARTH TECH PROJECT NO. 85328

LOCATION	DEPTH (m)	PID READING (ppm)	SAMPLE ID	ANALYTICAL RESULTS (mg/kg)	NCDENR ACTION LEVEL (mg/kg)
47-1	0 - 0.6	0.1			
	0.6 - 1.2	0.1			
	1.2 - 1.8	0.1			
	1.8 - 2.4	15	47-1-6-8	DRO (2480) GRO (46.4)	40 10
	2.4 - 3.0	7.8			
47-2	0 - 0.6	0.2			
	0.6 - 1.2	0.2			
	1.2 - 1.8	0.2			
	1.8 - 2.4	0.3	47-2-6-8	DRO (9.77) GRO (BQL)	40 10
	2.4 - 3.0	0			
47-3	0 - 0.6	0			
	0.6 - 1.2	0			
	1.2 - 1.8	0	47-3-4-6	DRO (7.25) GRO (BQL)	40 10
	1.8 - 2.4	0			
	2.4 - 3.0	0			
47-4	0 - 0.6	0			
	0.6 - 1.2	0			
	1.2 - 1.8	1		DRO (BQL) GRO (BQL)	40 10
	1.8 - 2.4	0.3			
47-5	0 - 0.6	0			
	0.6 - 1.2	0.2	47-5-2-4	DRO (7.9) GRO (BQL)	40 10
	1.2 - 1.8	0			
	1.8 - 2.4	0.1			
	2.4 - 3.0				
47-6	0 - 0.6	0			
	0.6 - 1.2	0.1			
	1.2 - 1.8	1.2	47-6-4-6	DRO (7.9) GRO (BQL)	40 10
	1.8 - 2.4	0.2			

DRO - Diesel range organics.

GRO - Gasoline range organics.

BOLD values are present above the assumed action level.

ppm - parts per million.

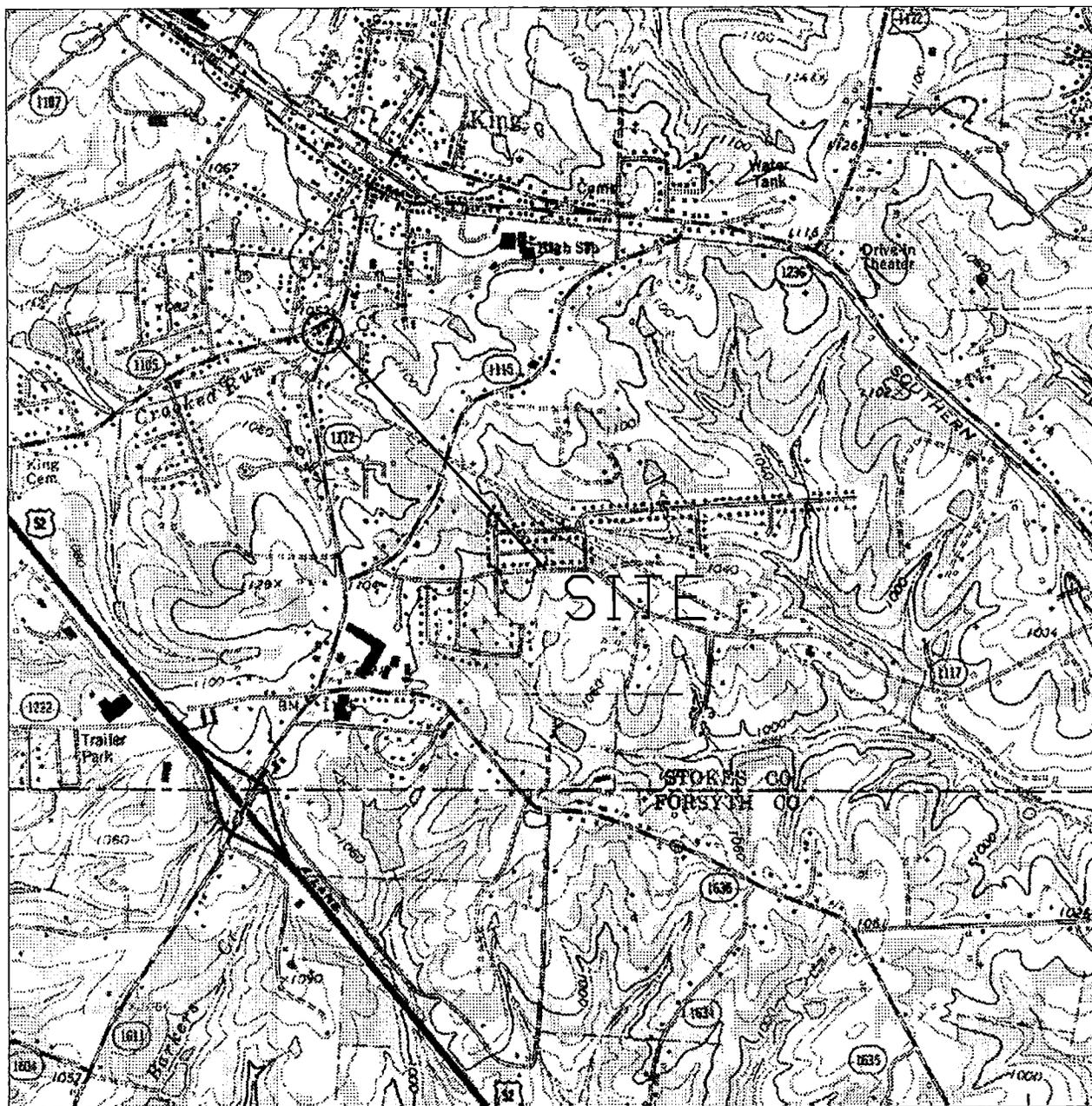
mg/kg - milligrams per kilogram.

2

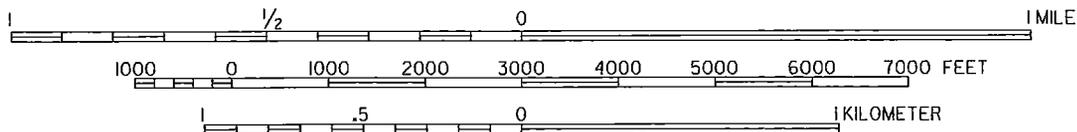
3

4

FIGURES



SCALE 1:24,000



SOURCE: U.S. GEOLOGICAL SURVEY 7.5 MIN QUADRANGLE: KING, NC (REV 1983)

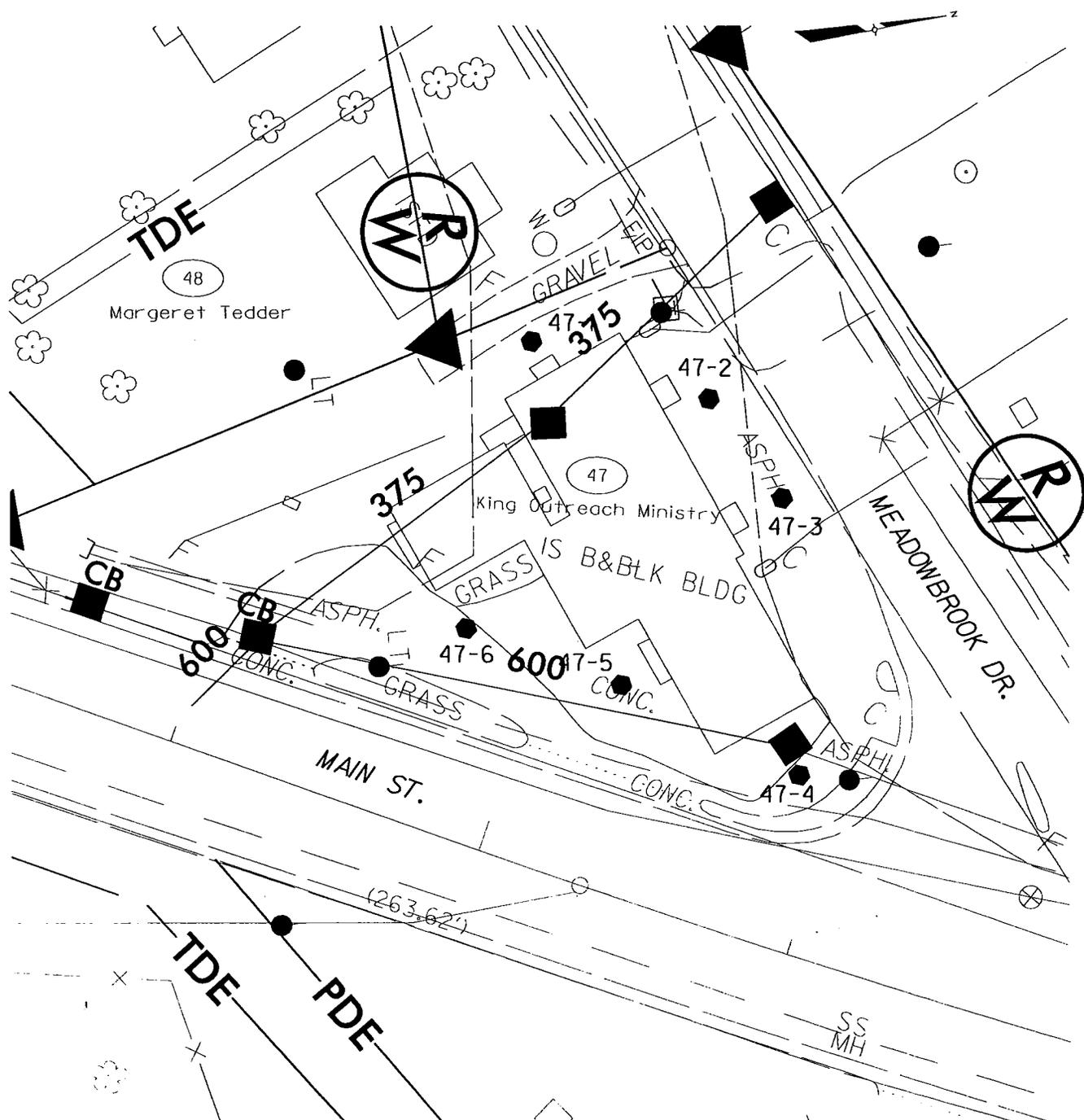
EARTH  TECH

FIGURE 1
VICINITY MAP

KING OUTREACH MINISTRY PROPERTY (PARCEL #47)
KING, NORTH CAROLINA

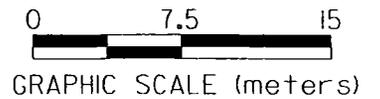
MAY 2005

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47-1 ● SOIL BORING LOCATION AND IDENTIFICATION

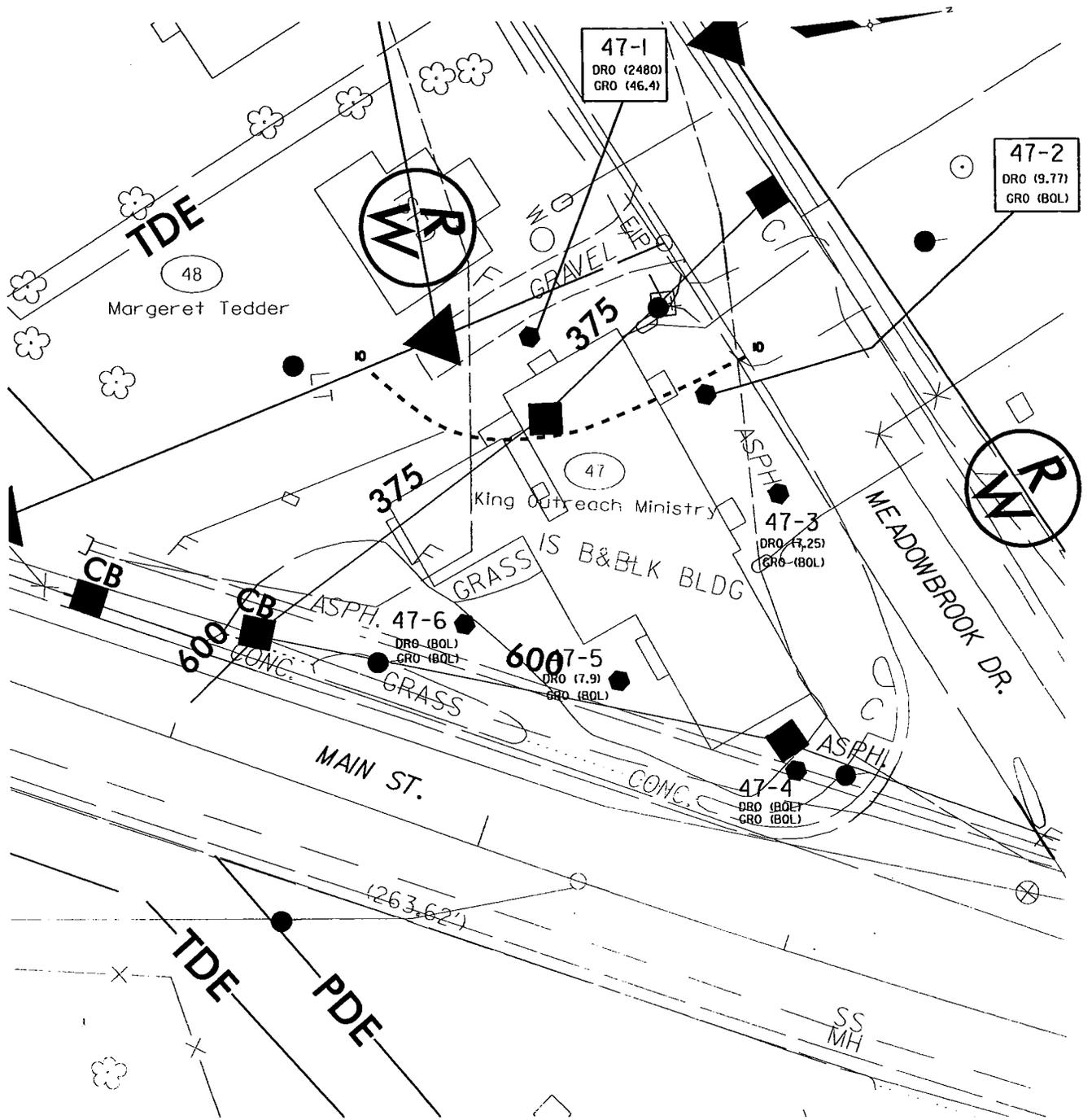


EARTH  TECH

FIGURE 2
SITE MAP
KING OUTREACH MINISTRY PROPERTY (PARCEL #47)
KING, NORTH CAROLINA

MAY 2005

85238



LEGEND

- SOIL SAMPLE LOCATION
- - - - - TPH ISOCONCENTRATION CONTOUR
- DRO (123) TPH AS DIESEL FUEL IN MG/KG
- GRD (123) TPH AS GASOLINE IN MG/KG
- BOL BELOW QUANTITATION LIMIT

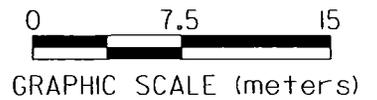
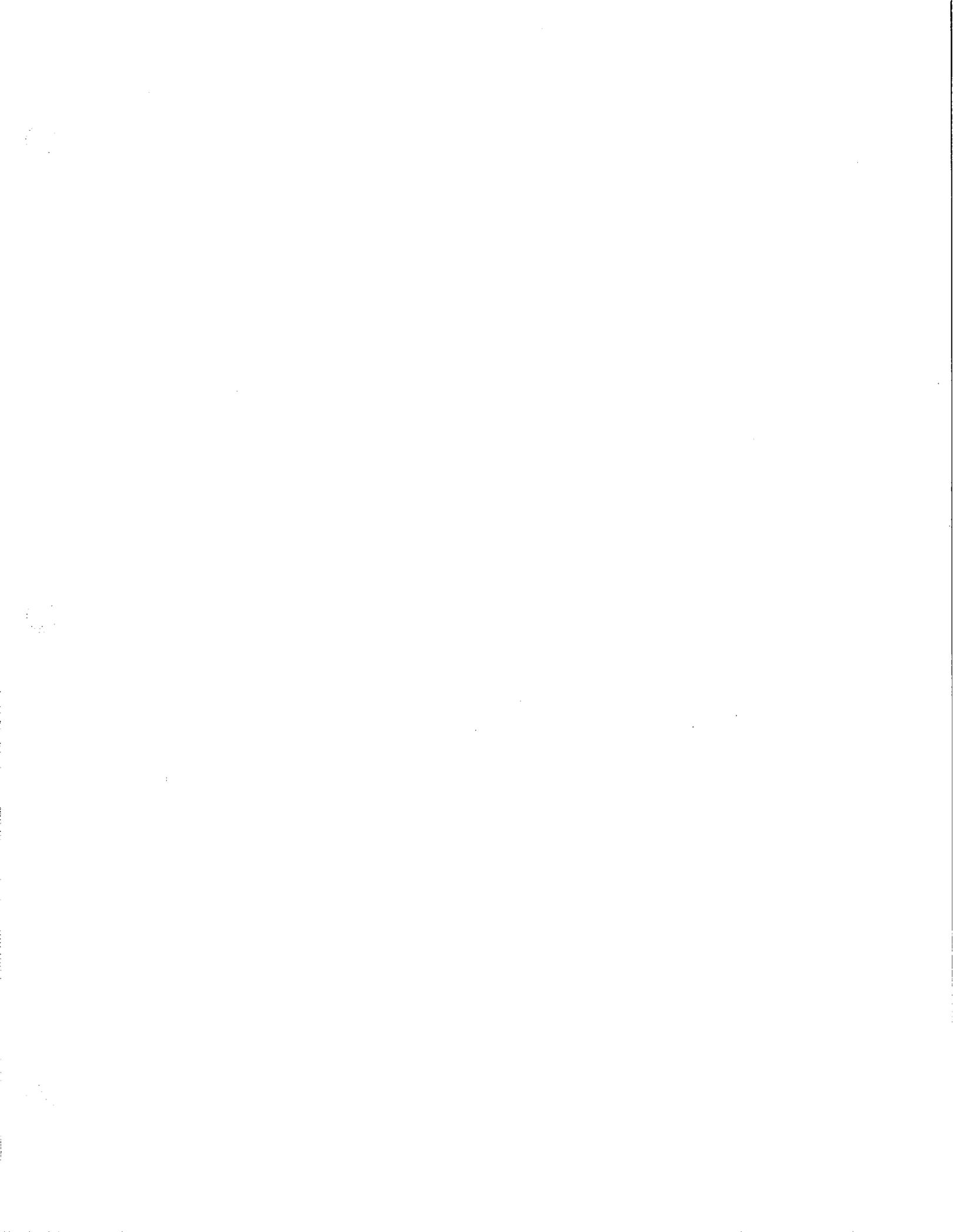


FIGURE 3
ANALYTICAL RESULTS MAP
KING OUTREACH MINISTRY PROPERTY (PARCEL #47)
KING, NORTH CAROLINA

MAY 2005

85238



ATTACHMENT A

GEOPHYSICAL INVESTIGATION REPORT

EM-61 & GPR SURVEYS

**King-Tobaccoville Road (Main Street) Sites
King, North Carolina**

May 13, 2005

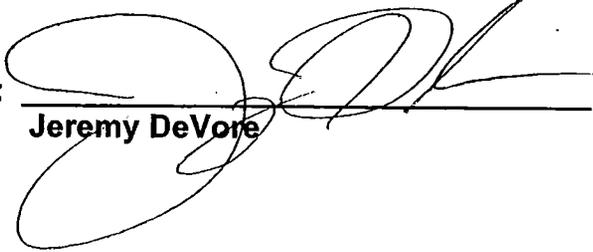
Report prepared for: **Mike Branson
EarthTech, Inc.
701 Corporate Center Drive, Suite 475
Raleigh, North Carolina 27607**

Prepared by:



Douglas Canavello, PG

Reviewed by:



Jeremy DeVore

**PYRAMID ENVIRONMENTAL & ENGINEERING, P.C.
700 NORTH EUGENE ST.
GREENSBORO, NC 27401
(336) 335-3489**

1.0 INTRODUCTION

Pyramid Environmental conducted geophysical investigations for Earth Tech of North Carolina, Inc. during the period of April 13 to May 2, 2005, within the proposed Right-of-Way (ROW) and easement areas at nine sites in King, North Carolina. The work was done as part of the North Carolina Department of Transportation (NCDOT) road widening project. The sites are located along the both sides of King-Tobacoville Road (Main Street) from 0.25 miles west of US 52 to Meadowbrook Road. The geophysical surveys were conducted to determine if unknown metallic underground storage tanks (UST's) were present beneath the proposed ROW and easement areas of each site.

Earth Tech's representative Mr. Michael Branson, PG, provided maps that outlined the geophysical survey areas of each site and visited the sites with Pyramid Environmental's representative Mr. Douglas Canavello, PG during the week of March 28, 2005. Geophysical surveys were conducted at the following nine sites:

[REDACTED]

King Outreach Ministries Property (Parcel 47) Apartment Building

[REDACTED]

2.0 FIELD METHODOLOGY

Prior to conducting the geophysical investigations, a 10-foot by 10-foot survey grid was established across the proposed ROW and easement areas of eight of the nine sites using water-based marking paint. The exception was the William Oil Property (Parcel 6) where the entire site was gridded and surveyed. These 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 investigations consisted of electromagnetic (EM) induction-metal detection surveys and ground penetrating radar (GPR) surveys. The EM surveys were performed using a Geonics EM61-MK1 metal detection instrument. According to the manufacture's specifications, the EM61 can detect a metal drum down to a maximum depth of approximately 8 feet. The EM61 data were digitally collected at each site along parallel northerly-southerly or easterly-westerly trending survey lines spaced five feet apart. The data were downloaded to a computer and reviewed in the office using the Geonics DAT61W and Surfer for Windows Version 7.0 software programs.

Contour plots of the EM61 bottom coil results and the EM61 differential results for each site are included in this report. 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 drums and UST's and ignore the smaller insignificant metal objects.

GPR surveys were conducted across selected EM61 differential anomalies, and steel-reinforced concrete using a GSSI SIR-2000 unit equipped with a 400 MHz antenna. Surveys were also performed across several areas where parked vehicles that obstructed the EM61 survey had since been removed. GPR data were digitally collected in a continuous mode along X and/or Y survey lines, spaced two to five feet apart using a vertical scan of 512 samples, at a rate of 24 scans per second. A 110 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 eight feet, based on an estimated two-way travel time of 6 nanoseconds per foot.

The GPR data were downloaded to a field computer and later reviewed in the office using Radprint software. Photos of the EM61 and GPR instruments are shown in Figure 1. The perimeters of possible UST's, based on the geophysical results, were marked and labeled in the field using orange, water-based marking paint.

During the weeks of April 25 and May 2 2005, preliminary contour plots of the EM61 bottom coil and the differential results were emailed to Mr. Branson.

3.0 DISCUSSION OF RESULTS

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

3.8 King Outreach Ministries Property (Parcel 47)

The King Outreach Ministries property is located along the southwest corner of the Main Street and Meadowbrook Drive intersection and consists of grass, concrete and asphalt surfaces surrounding a vacant building. The geophysical investigation was conducted across the entire parcel and a site map showing the EM61 and GPR survey lines is presented in Figure 23.

The EM61 bottom coil results and the differential results are presented in Figures 24 and 25, respectively. The linear EM anomalies are probably in response to utility lines or conduits. The majority of non-linear anomalies are probably in response to cultural features such as storm drains, signs, utility related objects, and the building. The geophysical results suggest that the survey area at Parcel 47 does not contain metallic UST's.

[REDACTED]

[REDACTED]

[REDACTED]

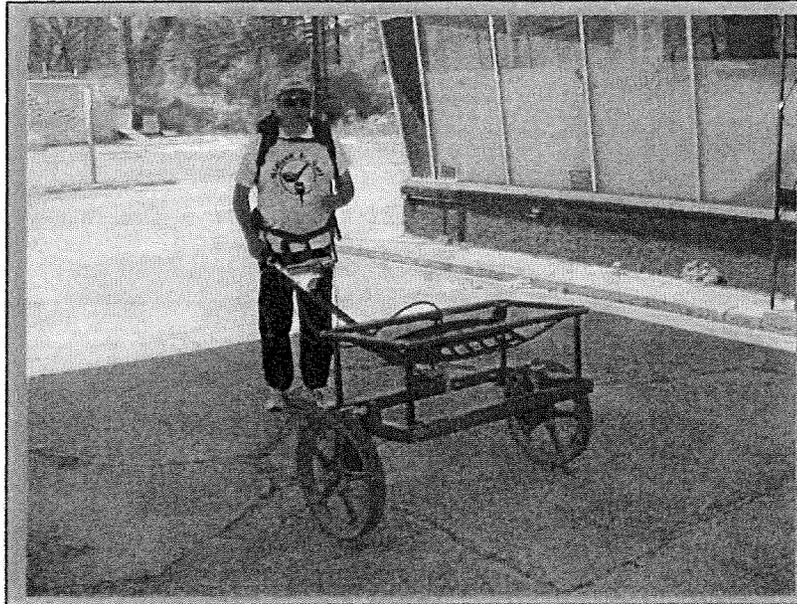
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King Outreach Ministries Property (Parcel 47)

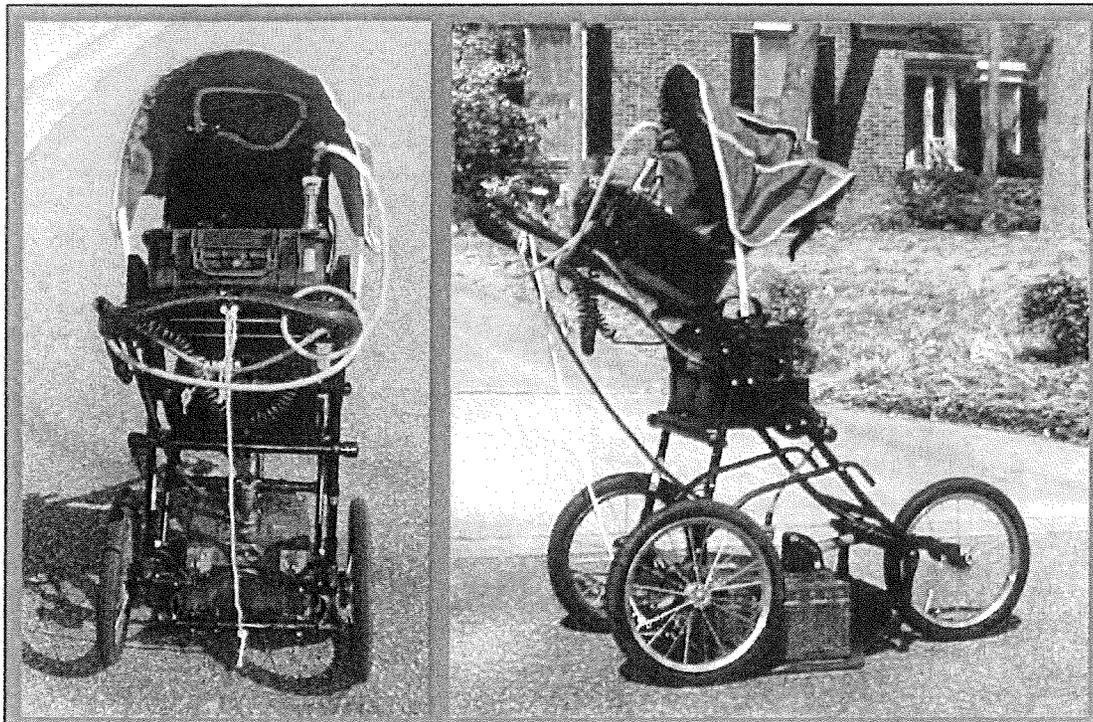
- [REDACTED]
- [REDACTED]

5.0 LIMITATIONS

EM61 and GPR surveys have been performed and this report prepared for Earth Tech of North Carolina, Inc. 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 do not conclusively define the locations of all metallic UST's but only suggest where some of the metallic UST's may be present. The EM61 and GPR anomalies, interpreted as possible UST's or tanks, may be attributed to other surface or subsurface conditions or cultural interference.



The Geonics EM61 metal detector was used to conduct the metal detection surveys at the King-Tobacco Road sites in April 2005.



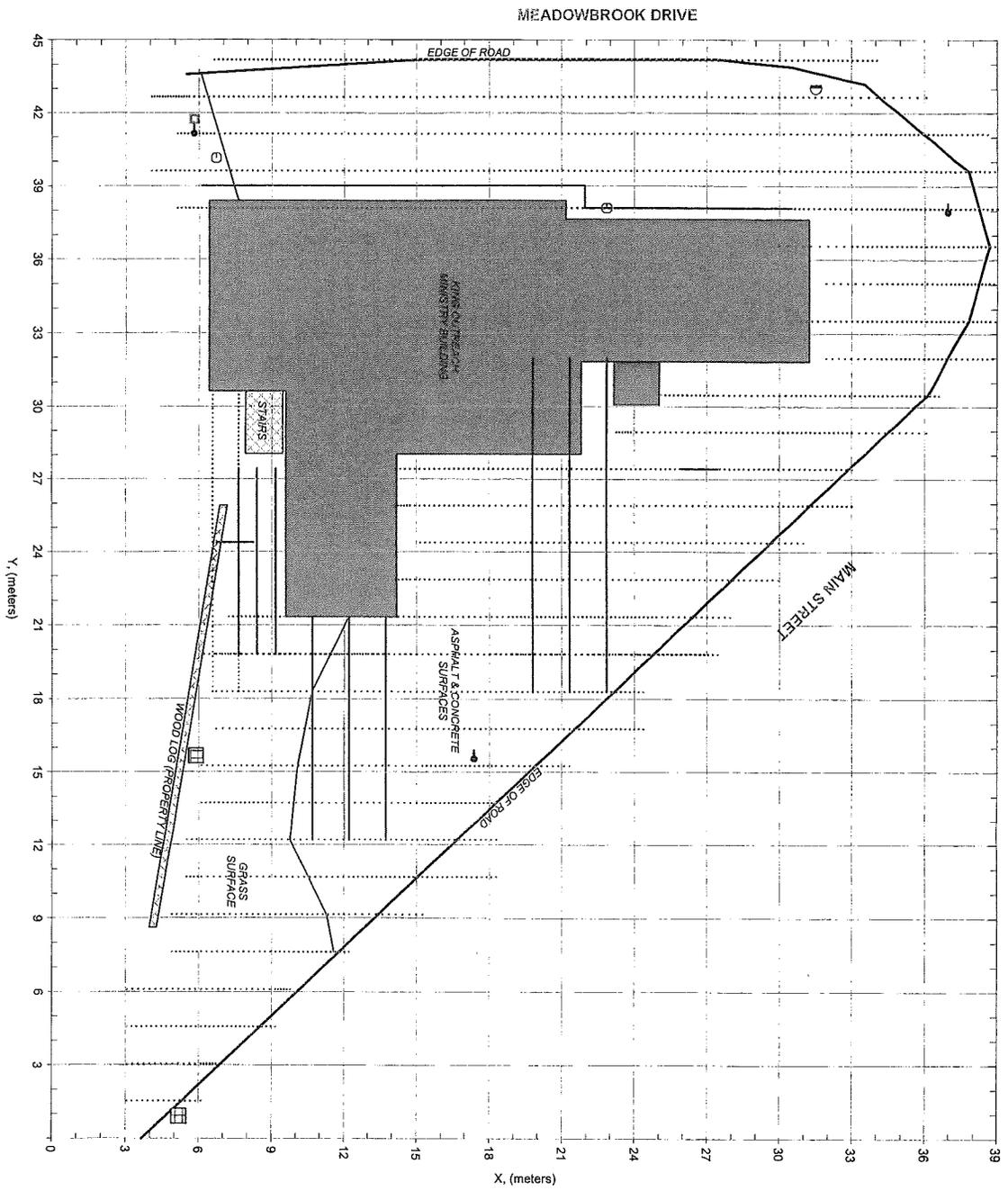
The SIR-2000 GPR system equipped with a 400 MHz antenna that was used at the King-Tobacco Road sites in April and May 2005.

	CLIENT	EARTH TECH OF NORTH CAROLINA, INC.		DATE	5/11/05	LOG	
	SITE	KING-TOBACCOVILLE ROAD (MAIN STREET) SITES		DAY		TYPE	
	CITY	KING	STATE	NORTH CAROLINA	NO.		
	TITLE	GEOPHYSICAL RESULTS		NO.	2005-100	REV	

GEOGRAPHIC SCALE IN METERS

GEOPHYSICAL EQUIPMENT

FIGURE 1



Note: The plot shows the EM61 and GPR survey line locations in red dots and purple lines, respectively. The EM1 metal detection data were collected on April 15, 2005 using a Geonics EM61 instrument. Ground penetrating radar (GPR) data were acquired on April 22, 2005 using a Geophysical Survey Systems SIR 2000 instrument with a 400 MHz antenna.

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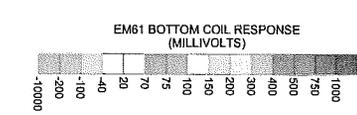
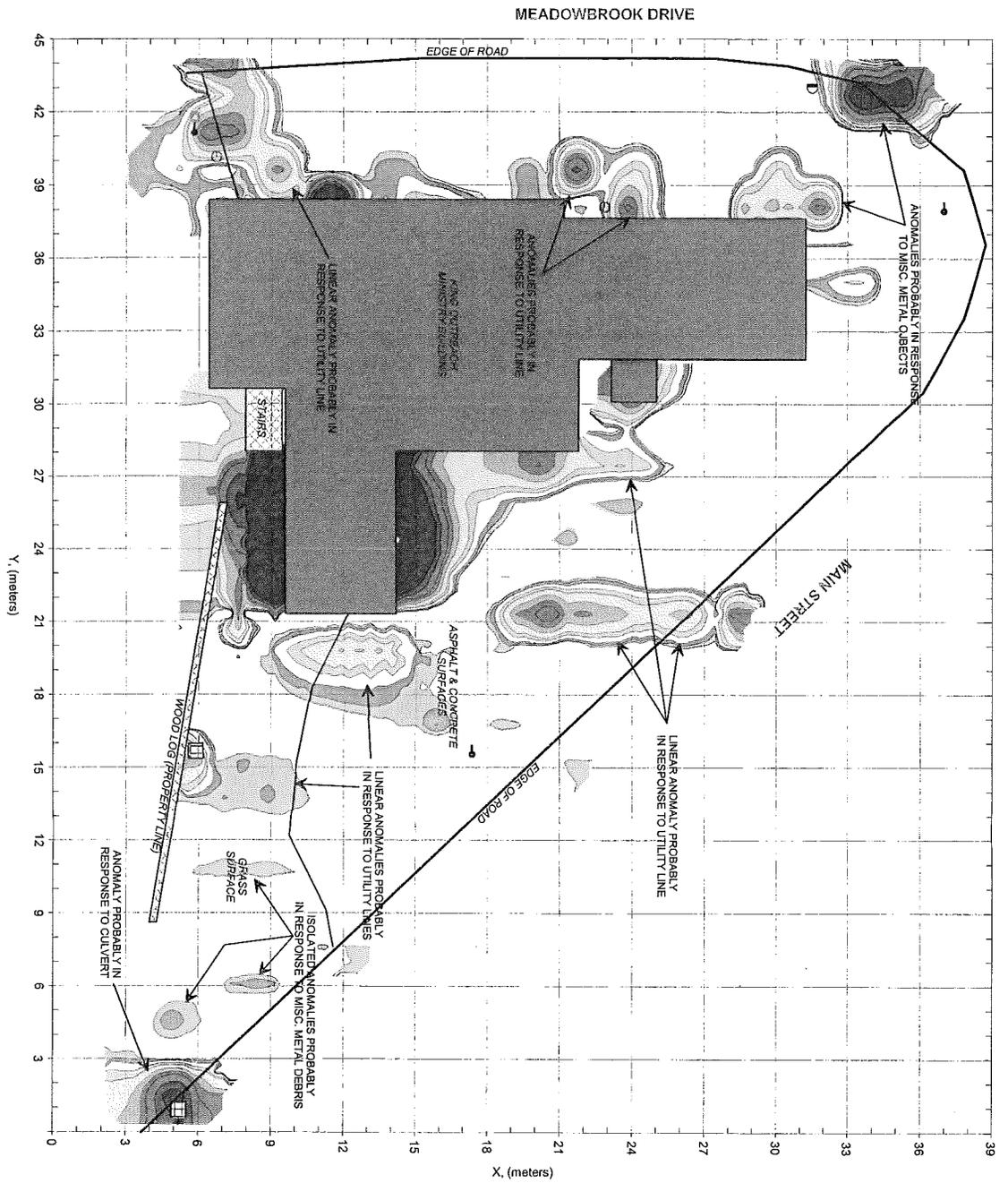
- EM1 SURVEY AREA - EM DATA ACQUIRED ALONG NORTHERLY-SOUTHERLY OR EASTERNLY-WESTERNLY TRENDS LINES SPACED 1.5 METERS APART
- BUILDING
- UTILITY POLE
- WATER METER COVER
- GUY WIRE
- CABLE BOX
- STORM SEWER GRATE
- TRAFFIC SIGN
- INDIVIDUAL EM61 SURVEY LINE
- INDIVIDUAL GPR SURVEY LINE



EARTH TECH OF NORTH CAROLINA, INC.		DATE	4/25/05
KING OUTREACH MINISTRIES PROPERTY (PARCEL 47)		PROJECT	
KING	NORTH CAROLINA	CITY	
GEOPHYSICAL RESULTS		SCALE	2005-100



GEOPHYSICAL SURVEY AREA



LEGEND

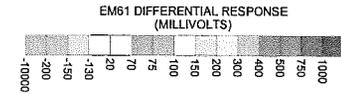
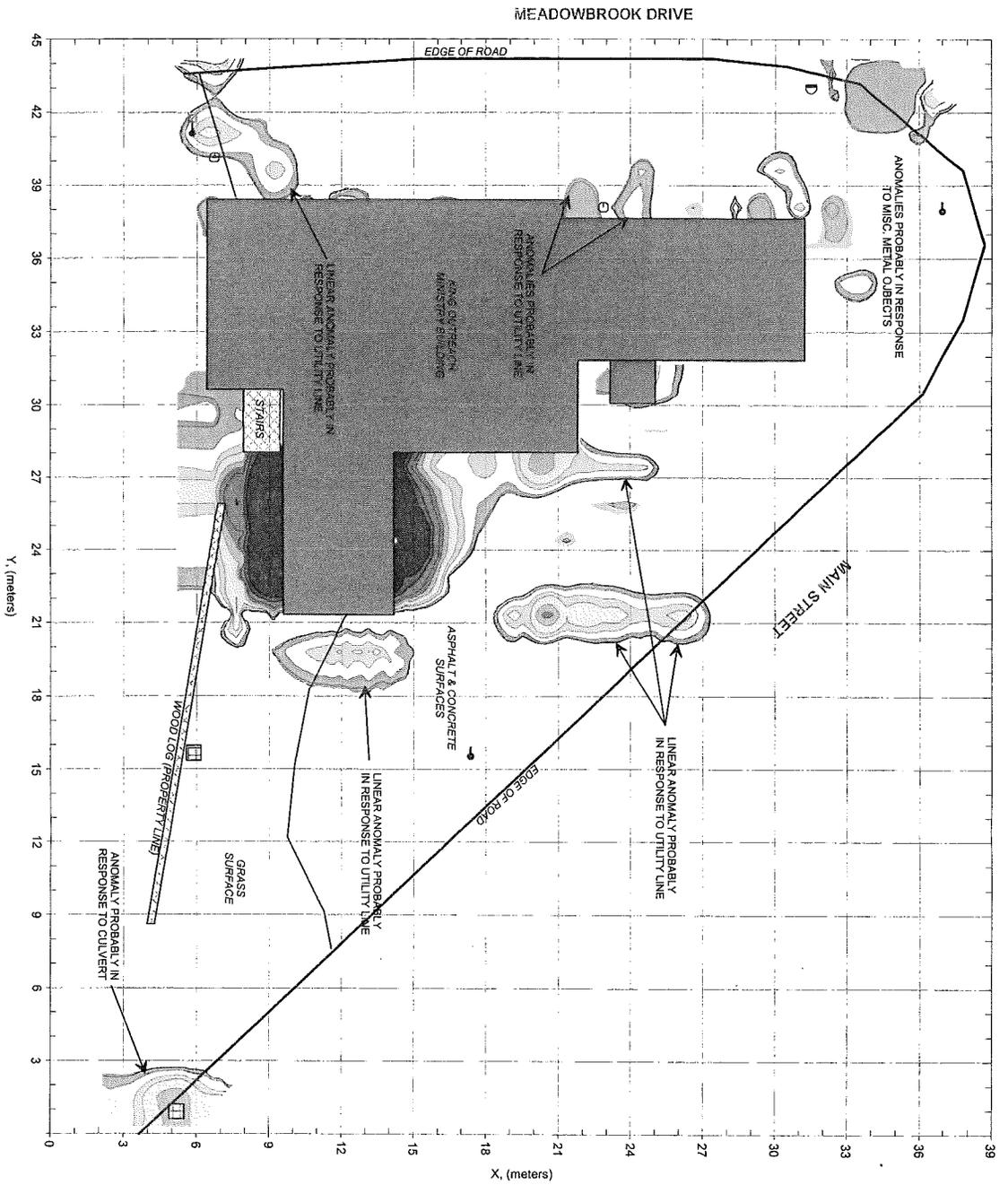
- DATA SURVEY AREA. EM61 DATA ACQUIRED ALONG TRENDED LINES SPACED 1.5 METERS APART
- BUILDING
- ⊙ UTILITY POLE
- WATER METER COVER
- + GUY WIRE
- CABLE BOX
- STORM SEWER GRATE
- ⊙ TRAFFIC SIGN

Note: 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 metal detection data were collected on April 15, 2005 using a Geonics EM61 instrument. Ground penetrating radar (GPR) data were acquired on April 22, 2005 using a Geophysical Survey Systems SIR 2000 instrument with a 400 MHz antenna. The GPR results are not shown on this map.

	EARTH TECH OF NORTH CAROLINA, INC.		DATE	5/12/05
	KING OUTREACH MINISTRIES PROPERTY (PARCEL 47)		CLIENT	
	KING	NORTH CAROLINA	PROJECT	
	EM61 GEOPHYSICAL RESULTS		SCALE	2005-100

**EM61
BOTTOM COIL
RESULTS**

FIGURE 24



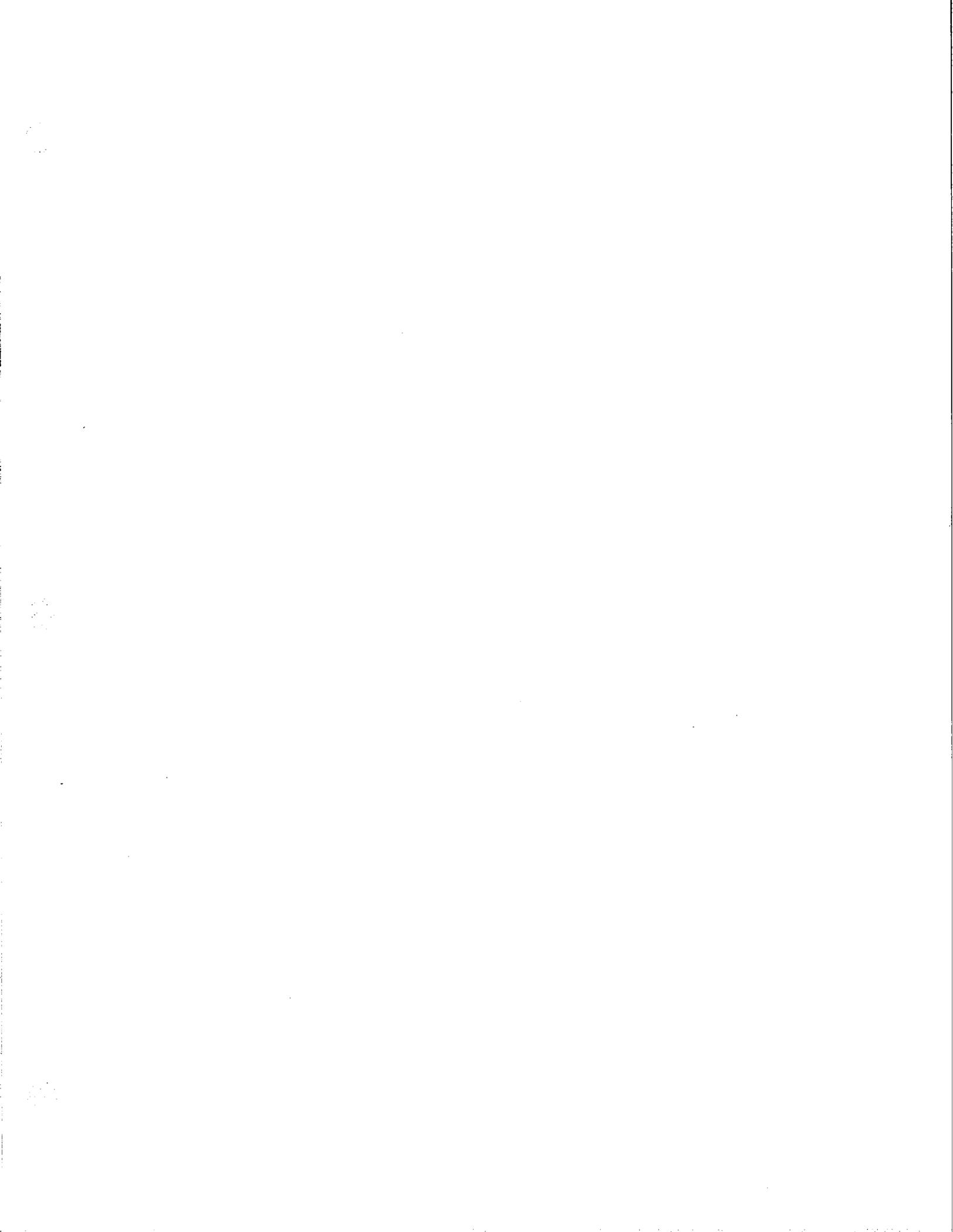
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- EM61 SURVEY AREA - EM DATA ACQUIRED ALONG NORTHERLY-SOUTHERLY OR EASTERLY-WESTERLY TRENCHING LINES SPACED 1.5 METERS APART
- BUILDING
- ↑ UTILITY POLE
- WATER METER COVER
- ⊕ GUY WIRE
- CABLE BOX
- STORM SEWER GATE
- ⊙ TRAFFIC SIGN

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 drains and pipes. The EM61 data shows smaller miscellaneous buried metal objects. The EM61 data was collected on April 13, 2005. King Geotech EM61 Infrared was used for geophysical data. GPR data were acquired on April 22, 2005 using a Geophysical Survey Systems SIR 2000 instrument with a 400 MHz antenna.

		EARTH TECH OF NORTH CAROLINA, INC.		DATE: 5/12/05
KING OUTREACH MINISTRIES PROPERTY (PARCEL 47)		STATE: NC	COUNTY:	PROJECT:
KING		NORTH CAROLINA		CLIENT:
EM61 GEOPHYSICAL RESULTS		SCALE: 2005-100	DRAWN BY:	CHECKED BY:

EM61 DIFFERENTIAL RESULTS



ATTACHMENT B

TEST BORING REPORT

PROJECT KING OUTREACH MINISTRIES PROPERTY (PARCEL #47)
CLIENT NCDOT (R-2201)
PROJECT NUMBER 85238
CONTRACTOR PROBE TECHNOLOGY
EQUIPMENT GEOPROBE

BORING NUMBER 47-1
PAGE 1
ELEVATION _____
DATE 5/11/05
DRILLER _____
PREPARED BY STEFFENS

DEPTH IN FEET	CASING BLOWS FOOT	BLOWS PER 6 INCHES	OVA (ppm)	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
5.0			0.1		6" TOPSOIL, BLACK TO GRAY SANDY CLAY, DRY, NO ODOR.
			0.1		AS ABOVE, DRY, NO ODOR.
			0.1		AS ABOVE, MOIST, NO ODOR.
10.0			15		AS ABOVE, MOIST TO WET, NO ODOR. SUBMIT TO LABORATORY FOR ANALYSIS.
			7.8		AS ABOVE, MOIST TO WET, NO ODOR.
					BORING TERMINATED AT 10 FEET. GROUNDWATER ENCOUNTERED AT 10 FEET.
15.0					
20.0					

TEST BORING REPORT

PROJECT KING OUTREACH MINISTRIES PROPERTY (PARCEL #47)

BORING NUMBER 47-2

CLIENT NCDOT (R-2201)

PAGE 1

PROJECT NUMBER 85238

ELEVATION _____

CONTRACTOR PROBE TECHNOLOGY

DATE 5/11/05

EQUIPMENT GEOPROBE

DRILLER _____

PREPARED BY STEFFENS

DEPTH IN FEET	CASING BLOWS FOOT	BLOWS PER 6 INCHES	OVA (ppm)	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
5.0			0.2		4" ASPHALT/GRAVEL, MEDIUM TO REDDISH BROWN CLAY, DRY, NO ODOR.
			0.2		AS ABOVE, DRY, NO ODOR.
			0.2		MEDIUM BROWN SANDY CLAY, DRY, NO ODOR.
10.0			0.3		AS ABOVE, DRY, NO ODOR. SUBMIT TO LABORATORY FOR ANALYSIS.
			0		AS ABOVE, MOIST TO WET, NO ODOR.
					BORING TERMINATED AT 10 FEET. GROUNDWATER ENCOUNTERED AT 10 FEET.
15.0					
20.0					

TEST BORING REPORT

PROJECT KING OUTREACH MINISTRIES PROPERTY (PARCEL #47)

BORING NUMBER 47-3

CLIENT NCDOT (R-2201)

PAGE 1

PROJECT NUMBER 85238

ELEVATION _____

CONTRACTOR PROBE TECHNOLOGY

DATE 5/11/05

EQUIPMENT GEOPROBE

DRILLER _____

PREPARED BY STEFFENS

DEPTH IN FEET	CASING BLOWS FOOT	BLOWS PER 6 INCHES	OVA (ppm)	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
			0		6" ASPHALT/GRAVEL, REDDISH BROWN CLAY, DRY, NO ODOR.
			0		AS ABOVE, DRY, NO ODOR.
5.0			0		AS ABOVE, DRY, NO ODOR. SUBMIT TO LABORATORY FOR ANALYSIS.
			0		AS ABOVE, DRY, NO ODOR.
			0		AS ABOVE, MOIST TO WET, NO ODOR.
10.0					BORING TERMINATED AT 10 FEET. GROUNDWATER ENCOUNTERED AT 10 FEET.
15.0					
20.0					

TEST BORING REPORT

PROJECT KING OUTREACH MINISTRIES PROPERTY (PARCEL #47)

BORING NUMBER 47-4

CLIENT NCDOT (R-2201)

PAGE 1

PROJECT NUMBER 85238

ELEVATION _____

CONTRACTOR PROBE TECHNOLOGY

DATE 5/11/05

EQUIPMENT GEOPROBE

DRILLER _____

PREPARED BY STEFFENS

DEPTH IN FEET	CASING BLOWS FOOT	BLOWS PER 6 INCHES	OVA (ppm)	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
			0		6" ASPHALT/GRAVEL, MEDIUM TO REDDISH BROWN SANDY CLAY, DRY, NO ODOR.
			0		AS ABOVE, DRY, NO ODOR.
5.0			1		AS ABOVE, DRY, NO ODOR. SUBMIT TO LABORATORY FOR ANALYSIS.
			0.3		AS ABOVE, MOIST TO WET, NO ODOR.
10.0					BORING TERMINATED AT 8 FEET. GROUNDWATER ENCOUNTERED AT 8 FEET.
15.0					
20.0					

TEST BORING REPORT

PROJECT <u>KING OUTREACH MINISTRIES PROPERTY (PARCEL #47)</u>	BORING NUMBER <u>47-5</u>
CLIENT <u>NCDOT (R-2201)</u>	PAGE <u>1</u>
PROJECT NUMBER <u>85238</u>	ELEVATION _____
CONTRACTOR <u>PROBE TECHNOLOGY</u>	DATE <u>5/11/05</u>
EQUIPMENT <u>GEOPROBE</u>	DRILLER _____
	PREPARED BY <u>STEFFENS</u>

DEPTH IN FEET	CASING BLOWS FOOT	BLOWS PER 6 INCHES	OVA (ppm)	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
			0		6" CONCRETE/GRAVEL, REDDISH BROWN CLAY, DRY, NO ODOR.
			0.2		AS ABOVE, DRY, NO ODOR. SUBMIT TO LABORATORY FOR ANALYSIS.
5.0			0		TAN TO LIGHT GRAY SANDY CLAY, DRY, NO ODOR.
			0.1		AS ABOVE, MOIST TO WET, NO ODOR.
10.0					BORING TERMINATED AT 8 FEET. GROUNDWATER ENCOUNTERED AT 8 FEET.
15.0					
20.0					

TEST BORING REPORT

PROJECT KING OUTREACH MINISTRIES PROPERTY (PARCEL #47)

BORING NUMBER 47-6

CLIENT NCDOT (R-2201)

PAGE 1

PROJECT NUMBER 85238

ELEVATION _____

CONTRACTOR PROBE TECHNOLOGY

DATE 5/11/05

EQUIPMENT GEOPROBE

DRILLER _____

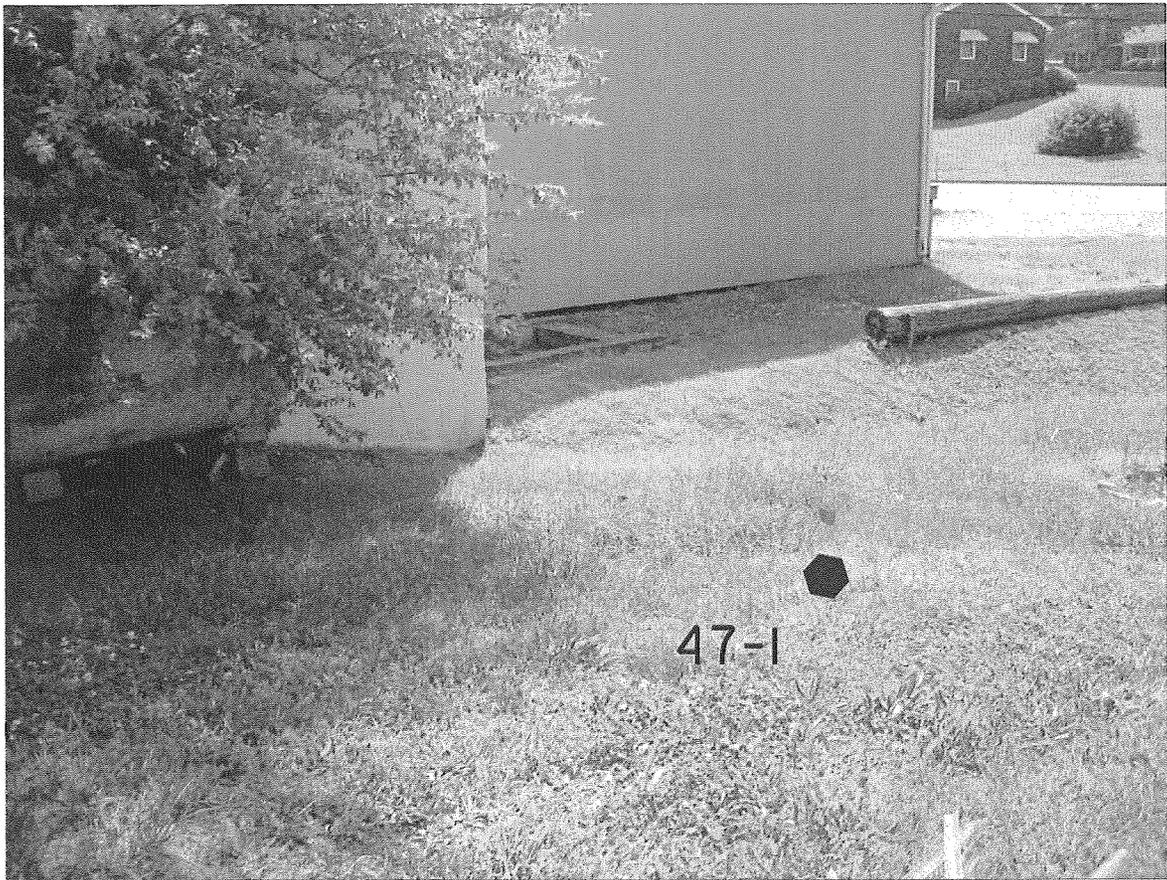
PREPARED BY STEFFENS

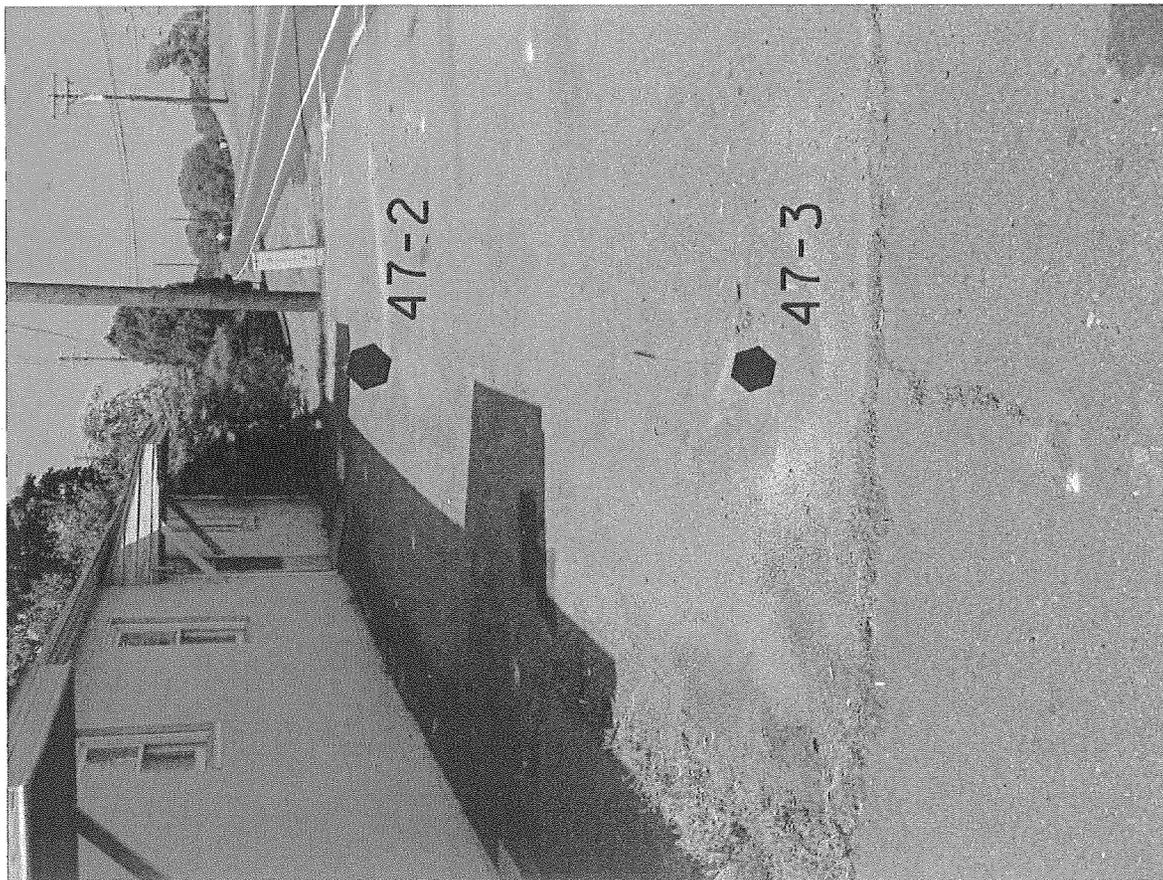
DEPTH IN FEET	CASING BLOWS FOOT	BLOWS PER 6 INCHES	OVA (ppm)	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
			0		6" CONCRETE/GRAVEL, REDDISH BROWN SANDY CLAY, DRY, NO ODOR.
			.01		AS ABOVE, DRY, NO ODOR.
5.0			1.2		AS ABOVE, DRY, NO ODOR. SUBMIT TO LABORATORY FOR ANALYSIS.
			0.2		AS ABOVE, MOIST TO WET, NO ODOR.
10.0					BORING TERMINATED AT 8 FEET. GROUNDWATER ENCOUNTERED AT 8 FEET.
15.0					
20.0					

8

8

ATTACHMENT C





5

5

ATTACHMENT D

PARADIGM ANALYTICAL LABORATORIES, INC.

5500 Business Drive
Wilmington, North Carolina 28405
(910) 350-1903
Fax (910) 350-1557

Mr. Mike Branson
Earth Tech
701 Corporate Dr. Suite 475
Raleigh NC 27607

Report Number: G204-458

Client Project: Parcel #47 King-NCDOT

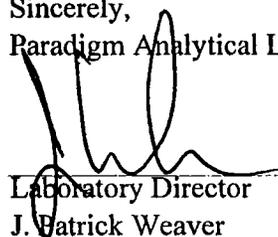
Dear Mr. Branson:

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

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

Thank you for using Paradigm Analytical Labs for your analytical services. We look forward to working with you again on any additional analytical needs which you may have.

Sincerely,
Paradigm Analytical Laboratories, Inc.


Laboratory Director
J. Patrick Weaver

5/23/05
Date

Results for Total Petroleum Hydrocarbons
by GC/FID 8015

Client Sample ID: 47-1-6-8

Analyzed By: DCS

Client Project ID: Parcel #47 King-NCDOT

Date Collected: 5/11/05 10:15

Lab Sample ID: G204-458-1

Date Received: 5/12/05

Lab Project ID: G204-458

Matrix: Soil

Report Basis: Dry Weight

Solids 81.53

Analyte	Result MG/KG	Report Limit MG/KG	Prep Method	Dilution Factor	Date Analyzed
Gasoline Range Organics	46.4	7.36	5030	1	05/21/05
Diesel Range Organics	2480	150	3545	20	05/23/05

Reviewed By: PN
TPH_LIMS_v1.71.XLS

Results for Total Petroleum Hydrocarbons
by GC/FID 8015

Client Sample ID: 47-2-6-8
 Client Project ID: Parcel #47 King-NCDOT
 Lab Sample ID: G204-458-2
 Lab Project ID: G204-458
 Report Basis: Dry Weight

Analyzed By: DCS
 Date Collected: 5/11/05 10:30
 Date Received: 5/12/05
 Matrix: Soil
 Solids 81.94

Analyte	Result MG/KG	Report Limit MG/KG	Prep Method	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	7.32	5030	1	05/20/05
Diesel Range Organics	9.77	7.49	3545	1	05/21/05

Results for Total Petroleum Hydrocarbons
by GC/FID 8015

Client Sample ID: 47-3-4-6
Client Project ID: Parcel #47 King-NCDOT
Lab Sample ID: G204-458-3
Lab Project ID: G204-458
Report Basis: Dry Weight

Analyzed By: DCS
Date Collected: 5/11/05 10:45
Date Received: 5/12/05
Matrix: Soil
Solids 86.79

Analyte	Result MG/KG	Report Limit MG/KG	Prep Method	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	6.91	5030	1	05/20/05
Diesel Range Organics	7.25	6.88	3545	1	05/21/05

Reviewed By: SW
TPH_LIMS_v1.71.XLS
4 of 9

Results for Total Petroleum Hydrocarbons

by GC/FID 8015

Client Sample ID: 47-4-4-6
Client Project ID: Parcel #47 King-NCDOT
Lab Sample ID: G204-458-4
Lab Project ID: G204-458
Report Basis: Dry Weight

Analyzed By: DCS
Date Collected: 5/11/05 11:15
Date Received: 5/12/05
Matrix: Soil
Solids 80.99

Analyte	Result MG/KG	Report Limit MG/KG	Prep Method	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	7.41	5030	1	05/20/05
Diesel Range Organics	BQL	7.54	3545	1	05/21/05

Reviewed By:
TPH_LIMS_v1.71.XLS
5 of 9

Results for Total Petroleum Hydrocarbons
by GC/FID 8015

Client Sample ID: 47-5-2-4
Client Project ID: Parcel #47 King-NCDOT
Lab Sample ID: G204-458-5
Lab Project ID: G204-458
Report Basis: Dry Weight

Analyzed By: DCS
Date Collected: 5/11/05 11:30
Date Received: 5/12/05
Matrix: Soil
Solids 83.22

Analyte	Result MG/KG	Report Limit MG/KG	Prep Method	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	7.21	5030	1	05/20/05
Diesel Range Organics	7.9	7.1	3545	1	05/21/05

Reviewed By: PN
TPH_LIMS_v1.71.XLS
6 of 9

Results for Total Petroleum Hydrocarbons
by GC/FID 8015

Client Sample ID: 47-6-4-6
Client Project ID: Parcel #47 King-NCDOT
Lab Sample ID: G204-458-6
Lab Project ID: G204-458
Report Basis: Dry Weight

Analyzed By: DCS
Date Collected: 5/11/05 11:45
Date Received: 5/12/05
Matrix: Soil
Solids 79.06

Analyte	Result MG/KG	Report Limit MG/KG	Prep Method	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	7.59	5030	1	05/20/05
Diesel Range Organics	BQL	7.6	3545	1	05/21/05

Reviewed By: PNV
TPH_LIMS_v1.71 XLS
7 of 9

List of Reporting Abbreviations
and Data Qualifiers

B = Compound also detected in batch blank

BQL = Below Quantitation Limit

DF = Dilution Factor

Dup = Duplicate

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 = Reporting Limit

RPD = Relative Percent Difference

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

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

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

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

% Rec = Percent Recovery

% solids = Percent Solids

Special Notes:

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

MI34.011404.1

