

PRELIMINARY SITE ASSESSMENT
PARCEL 22, IVEY LITTLE PROPERTY
4019 US HIGHWAY 1
RICHMOND COUNTY, NORTH CAROLINA
NCDOT PROJECT: R-2502B
WBS ELEMENT: 34438.1.1

Prepared for:
NC Department of Transportation
Geotechnical Engineering Unit
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September 5, 2006

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1.0 INTRODUCTION

The North Carolina Department of Transportation (NCDOT) is widening the existing alignment of US Highway 1 near the towns of Marston and Hoffman, located in Richmond County, North Carolina. Acquisition of properties within the right-of-way is necessary prior to road construction. On July 19, 2006, Solutions-IES submitted a proposal (NC06554P) to conduct Preliminary Site Assessments (PSAs) on ten parcels of land located within the proposed right-of-way that are of concern to the NCDOT. This report summarizes the results of field activities conducted during the PSA for a portion of the property identified by NCDOT as Parcel 22, Ivey Little Property (**Figure 1**). The right-of-way portion of this site (Study Area) is more clearly identified on **Figure 2**. The scope of work executed at the site was performed in general accordance with Solutions-IES proposal NC06554P and was initiated based on a Notice to Proceed issued by the NCDOT Geotechnical Engineering Unit on July 20, 2006 under contract 7000007053, dated June 5, 2006.

2.0 BACKGROUND AND SITE DESCRIPTION

The subject property is located at 4019 US Highway 1 in Richmond County, North Carolina (site). According to Solutions-IES field observations, a small one story block building is located on the site, but outside of the proposed right-of-way. The surface of the site is covered with a mixture of gravel and grass. Evidence of an underground storage tank (UST) system (e.g. vent pipes and pump islands) was not observed during the site visit. Numerous utilities including buried storm sewer, water, and telecommunication lines, as well as overhead electric lines were present within the right-of-way. Photographs of the Study Area at the site are presented in **Appendix A**.

According to information provided in a Phase I Site Assessment prepared in 1999 by S&ME, Inc., the site operated as a gas station, adult nightclub, grocery store, and flea market. The report also indicated that two USTs were removed from the site in 1992 and 1993. Monitor wells were not observed at the site during the Phase I Site Assessment.

Since USTs had likely been removed from the site previously, petroleum constituents may have been released from the UST system to the subsurface in the vicinity of the proposed right-of-way. Based on this information, Solutions-IES elected to analyze soil samples collected within the right-of-way for total petroleum hydrocarbons (TPH).

3.0 FIELD ACTIVITIES

Prior to mobilizing to the site to conduct subsurface sampling, Solutions-IES contacted North Carolina One Call to locate underground utilities within the proposed right-of-way. Pyramid Environmental & Engineering, P.C. (Pyramid) was contracted to perform an electromagnetic survey of the subsurface in the proposed right-of-way and easement area. Pyramid surveyed the site on July 27 and July 28, 2006. The electromagnetic survey equipment (EM61) identified various magnetic anomalies within the study area. Pyramid returned to the site to perform a ground penetrating radar (GPR) survey utilizing a “Geophysical Survey Systems SIR 2000” instrument. Results of the surveys did not suggest the presence of buried metallic tanks such as USTs. The EM61 images are included in **Appendix B**, Figures 18 and 19. A GPR image was not included in the geophysical report for the site.

After reviewing the geophysical report, Solutions-IES mobilized to the site and obtained soil samples from locations within the proposed right-of-way. These activities were conducted on August 23, 2006. A total of 11 soil borings (borings P22-B1 through P22-B11) were advanced at the site in the locations depicted on **Figure 3**. These borings were labeled “P22” for Parcel 22. Each of these borings was advanced to a depth of 8 feet below ground surface (ft bgs) with a truck-mounted Geoprobe[®]. The borings were generally spaced 40 feet apart on the east-west axis of the site.

Soil samples were obtained from each boring using a MacroCore[®] sampler fitted with single-use, disposable polyvinyl chloride (PVC) liners. Each liner was 4 feet in length. Upon retrieval, a portion of each 2-foot interval was placed in separate resealable plastic bags. These bags were sealed and placed at ambient temperature for field screening with a flame ionization detector (FID). The remaining portion of each 2-foot interval was left in the PVC liner, wrapped in plastic and placed on ice for possible laboratory analysis.

Volatile organic compounds (VOCs) were allowed to accumulate in the headspace of each bag for approximately 20 minutes, after which time the headspace of each sealed bag was scanned with the FID. The FID readings were entered on the boring logs along with the soil description and indications of staining or odors, if present. Logs for each boring are presented in **Appendix C**. Soils collected from the borings within the Study Area of Parcel 22 generally consisted of silty sand (SM). The GPS coordinates for the boring locations are provided in **Appendix D**.

Headspace screening of the soil samples with the FID did not indicate the presence of volatile vapors in the samples. Concentrations ranged from not detected to 2.4 parts per million (P22-B7 at 4-6 ft bgs). These measurements are presented in **Table 1**. No distinguishable odors were noted in the samples.

Soil samples for laboratory analysis were obtained from each boring at the sample intervals identified in **Table 1**. These samples were selected for analysis as they presented the highest FID measurements within the borings, or, if no volatile vapors were present, were obtained from the 6 – 8 ft bgs depth interval. The samples were placed in laboratory-supplied containers and stored on ice pending shipment to Prism Laboratories, Inc. (Prism) in Charlotte, NC. Sample information was recorded on the chain-of-custody and the samples were submitted for chemical analysis of TPH gasoline range organics (GRO) by Modified EPA Method 5030/8015 and TPH diesel range organics (DRO) by Modified EPA Method 3545/8015.

4.0 SAMPLING RESULTS

Analytical data for the soil samples obtained from the site revealed no detections of TPH DRO or TPH GRO at concentrations above the laboratory reporting limits. These data are summarized in **Table 2**. Laboratory analytical reports associated with these samples are presented in **Appendix E**.

5.0 DISCUSSION AND CONCLUSIONS

The geophysical survey conducted at the site did not reveal buried metallic equipment such as USTs within the study area. The survey did suggest metallic anomalies in locations consistent with the presence of buried utilities (e.g., storm and sanitary sewer, buried water lines) or buried miscellaneous debris.

Solutions-IES advanced 11 soil borings at the site to determine the presence or absence of petroleum contamination within the Study Area at Parcel 22, as well as document soil conditions. Analytical data for soil samples submitted for chemical analysis showed that TPH GRO and TPH DRO were not detectable above the laboratory reporting limits. Based on current information, additional assessment is not recommended.

TABLES

TABLE 1
SUMMARY OF FIELD SCREENING RESULTS FOR SOIL
Parcel 22, Ivey Little Property
Richmond County, North Carolina
WBS Element: 34438.1.1; State Project: R-2502B
August 23, 2006

Sample Depth Below Ground Surface	Soil Boring										
	P22-B1	P22-B2	P22-B3	P22-B4	P22-B5	P22-B6	P22-B7	P22-B8	P22-B9	P22-B10	P22-B11
	FID Reading (ppm)										
0 - 2 feet	ND	ND	ND	ND	ND	ND	ND	ND	0.3	0.1	ND
2 - 4 feet	ND	ND	ND	ND	ND	ND	ND	ND	0.2	0.1	ND
4 - 6 feet	ND	ND	ND	ND	ND	ND	2.4	0.1	1.1	0.1	0.3
6 - 8 feet	ND	ND	ND	0.2	ND	ND	0.2	ND	0.7	0.2	1.8

Notes:

1. Samples denoted by shaded cells were submitted for laboratory analysis.
2. FID readings were obtained with a Photovac MicroFID Flame Ionization Detector.
3. ND - Not Detected
3. FID readings rounded to the nearest whole number on boring logs.
4. ppm = parts per million

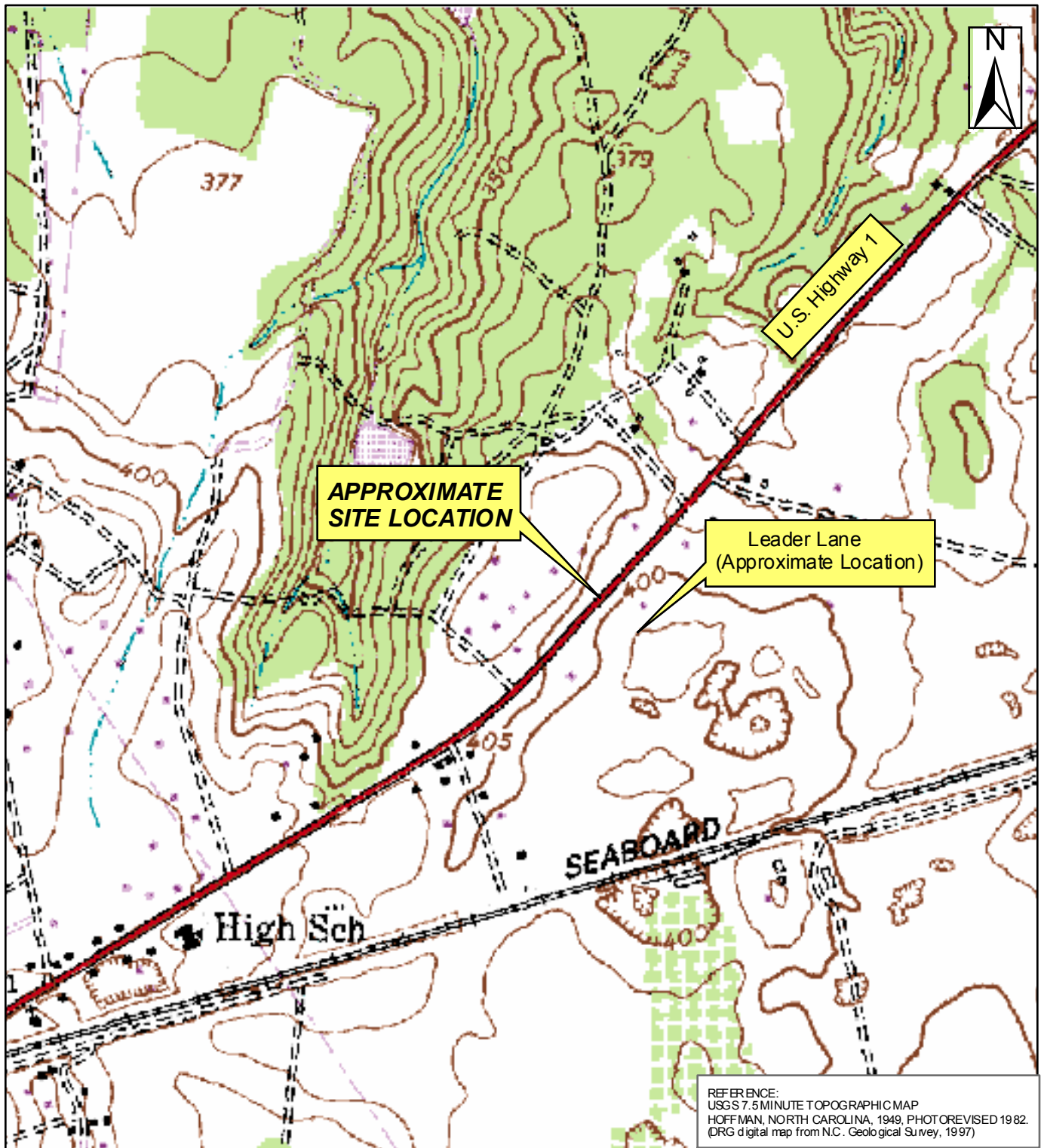
TABLE 2
SUMMARY OF SOIL ANALYTICAL RESULTS
Parcel 22, Ivey Little Property
Richmond County, North Carolina
WBS Element: 34438.1.1; State Project: R-2502B

Sample Information		Total Petroleum Hydrocarbons	
Boring Number	Depth (ft bgs)	Gasoline Range ¹ (mg/kg)	Diesel Range ² (mg/kg)
P22-B1	6 - 8	<8.4	<8.4
P22-B2	6 - 8	<7.2	<7.2
P22-B3	6 - 8	<8.5	<8.5
P22-B4	6 - 8	<8.5	<8.5
P22-B5	6 - 8	<8.6	<8.6
P22-B6	6 - 8	<8.3	<8.3
P22-B7	4 - 6	<8.6	<8.6
P22-B8	4 - 6	<7.1	<7.1
P22-B9	4 - 6	<7.2	<7.2
P22-B10	6 - 8	<7.2	<7.2
P22-B11	6 - 8	<8.7	<8.7

Notes:

1. ft bgs = feet below ground surface
2. mg/kg = milligrams per kilogram
3. Total Petroleum Hydrocarbons (TPH) Method 5030/8015MOD - Gasoline Range Hydrocarbons
4. Total Petroleum Hydrocarbons (TPH) Method 3545/8015MOD - Diesel Range Hydrocarbons

FIGURES



1:10,000

SITE LOCATION MAP
 PARCEL 22
 IVEY LITTLE PROPERTY
 RICHMOND COUNTY, NORTH CAROLINA
 STATE PROJECT NO. R-2502 B, WBS ELEMENT# 34438.1.1



1101 Nowell Road, Raleigh, NC 27609 Phone (919) 873-1060, Fax (919) 873-1074	
Created by: RT	Projed: 3260.06A3.NDOT
Checked by: SK	Date: SEPTEMBER 2006
File: Figure 1.mxd	
Software: ESRI ArcMap 9.1	FIGURE 1

PROJECT NUMBER 3256.06R3.0001
DRAFTER RT
CHECKED BY SK
PROJECT MANAGER SK
DATE AUGUST 2006
FILE FIG2.DGN

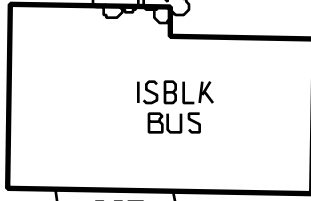
20

ANDREW WHITE
DB 1020 PG 361
DB 548 PG 307

279.33'
N46°03'00"W

22

IVEY LITTLE
DB 996 PG 521



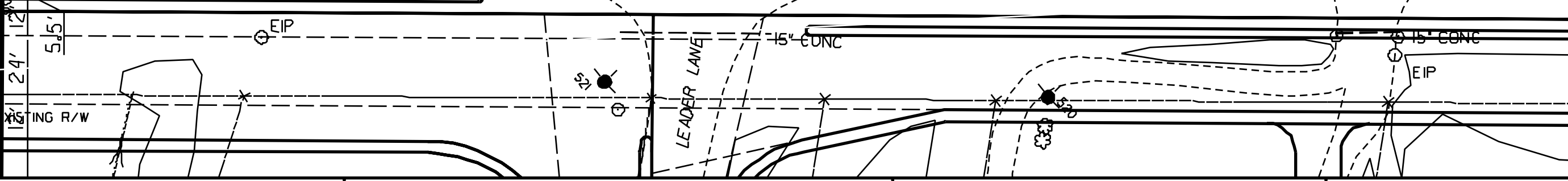
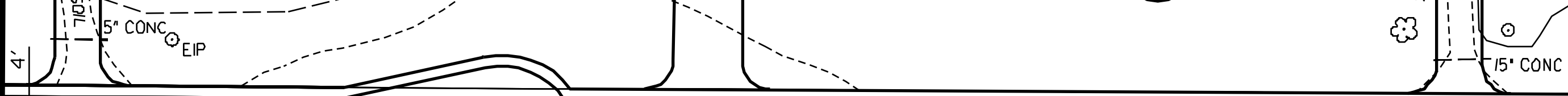
26

CURTIS MONROE
DB 433 PG 485

282.73'
N38°23'23"W

R
W

R
W



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NOTES:

SCALE IN FEET
NOTE: BASEMAP PROVIDED BY NCDOT

PARCEL 22
IVEY LITTLE PROPERTY
RICHMOND COUNTY, NORTH CAROLINA
STATE PROJECT NO. R-2502 B
WBS ELEMENT 34438.1.1

SITE MAP
FIGURE 2

PROJECT NUMBER
3260.0643.NDOT

DRAFTER
RT

CHECKED BY
SK

PROJECT MANAGER
SK

DATE
AUGUST 2006

FILE
FG3.DGN

20

ANDREW WHITE
DB 1020 PG 361
DB 548 PG 307

279.33'
N46°03'00"W

STA. 14+14.02 -Y19-
STA. 323+77.93 -L-

22

IVEY LITTLE
DB 996 PG 521

26

CURTIS MONROE
DB 433 PG 485

RUINS

W/LT

ISBLK
BUS

P22-B11

P22-B10

P22-B9

P22-B8

P22-B7

P22-B6

P22-B5

P22-B4

P22-B3

P22-B2

P22-B1

5' CONC
EIP

15' CONC

TO ROCKINGHAM
-L- UST24 BST

US HWY 1

EIP

15' CONC

15' CONC

LEADER LANE

LEGEND

P22-B1  SOIL BORING LOCATION



1101 NOVELL ROAD
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NOTES:



SCALE IN FEET

NOTE: BASEMAP PROVIDED BY NCDOT

PARCEL 22
IVEY LITTLE PROPERTY
RICHMOND COUNTY, NORTH CAROLINA
STATE PROJECT NO. R-2502 B
WBS ELEMENT# 34438.1.1

SOIL BORING LOCATIONS

FIGURE#

3

APPENDIX A
PHOTOGRAPHS



Photograph 1 – Looking west at Parcel 22. Borings locations are marked with pink flags.



Photograph 2 – Looking east at Parcel 22. Borings locations are marked with pink flags.

APPENDIX B
GEOPHYSICAL INVESTIGATION

GEOPHYSICAL INVESTIGATION REPORT

***GEOPHYSICAL SURVEYS FOR THE
DETECTION OF METALLIC USTS***

US 1 from SR 1001 to the Richmond County Line

Richmond, North Carolina

State Project Number U-3459

September 1, 2006

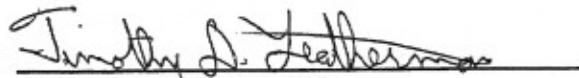
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Prepared by:



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Solutions IES
GEOPHYSICAL SURVEYS FOR THE DETECTION OF METALLIC USTS
US 1 from SR 1001 to the Richmond County Line
State Project Number U-3456

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FIGURES (continued)

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Figure 17 Parcel 70 – Delia Lassiter Property – EM61 Differential Results
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Figure 19 Parcel 22 – Ivey Little Property – EM61 Differential Results
Figure 20 Parcel 68 – James Pugh Property – EM61 Metal Detection Results

1.0 INTRODUCTION

Pyramid Environmental & Engineering, PC conducted geophysical investigations for Solutions IES during the period of July 26 through August 28, 2006, within the proposed Right-of-Way (ROW) areas at 10 sites located in Richmond County, North Carolina. The work was done as part of the North Carolina Department of Transportation (NCDOT) road-widening project under State Project number U-3459. The sites are located along the northern or western sides of US 1 from SR 1001 to the Richmond County Line. The geophysical surveys were conducted to determine if unknown metallic underground storage tanks (UST's) were present beneath the proposed ROW area of each site.

Solutions IES representative Ms. Sheri Knox, PE provided maps during the week of July 24, 2006 that outlined the geophysical survey area of each site. Ms. Knox also provided project management during the geophysical investigation of the sites. Geophysical surveys were conducted within the proposed ROW areas at the following 10 sites that are listed from the southern-most site to the northern-most site.

<u>Property Owner</u>	<u>Parcel</u>	<u>Present Use of Property</u>
Hillary McKay Property	(Parcel 6)	Grass-covered lot with garage
K.J. Lewis Property	(Parcel 9)	Vacant, wooded lot
James Brigman Property	(Parcel 21)	Vacant, grass-covered Lot
Roy Barry Bostick Property	(Parcel 48)	Grass-covered lot and garage
Pansy Ernest Property	(Parcel 50)	Grass-covered lot with vacant store
Church of Deliverance Prop.	(Parcel 51)	Asphalt lot with active church
Cooper & Brown Inc. Prop.	(Parcel 61)	Vacant lot and commercial building

Delia Lassiter Property	(Parcel 70)	Vacant lot and building
Ivey Little Property	(Parcel 22)	Vacant lot and building
James Pugh Property	(Parcel 68)	Vacant, wooded lot

Photographs of the above sites along with photographs of the geophysical equipment used for this project are presented in **Figure 1**.

2.0 FIELD METHODOLOGY

Prior to conducting the geophysical investigations, a 10-foot by 10-foot or 10-foot by 20-foot survey grid was established across the proposed ROW areas of the 10 sites using water-based marking paint or pin flags. 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 instrument 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 field and 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 USTs 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 48 scans per second. An 80 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 five feet, based on an estimated two-way travel time of 9 nanoseconds per foot.

The GPR data were downloaded to a field computer and later reviewed in the office using Radprint and Radan 5.0 software programs. The locations of GPR survey areas or individual GPR survey lines are shown as solid, purple polygons or solid purple lines, respectively, on the EM61 differential contour plots. The approximate perimeters of probable or possible USTs, based on the geophysical results, were marked and labeled in the field using orange, water-based marking paint and pin flags (when possible). The approximate locations of probable or possible USTs are shown as magenta-colored rectangles on the EM61 bottom coil and differential contour plots.

During the weeks of August 7, August 14, and August 28, preliminary contour plots of the EM61 bottom coil and the differential results were emailed to Ms. Knox.

3.0 DISCUSSION OF RESULTS

3.1 Parcel 6 – Hillary McKay Property

The Hillary McKay Property (Parcel 6) contains a former auto repair garage and a vacant wooden building. The ROW area consists of a flat-lying grass surface. The bottom coil results and the differential results are presented in **Figures 2 and 3**, respectively. GPR surveys conducted around the perimeter of the garage and wooden building, suggest that the EM61 anomalies surrounding the two buildings are in response to the structures and perhaps buried miscellaneous metal debris. The remaining EM61 anomalies are probably in response to buried miscellaneous metal debris. The geophysical results suggest that the proposed ROW area at Parcel 6 does not contain metallic UST's.

3.2 Parcel 9 – K.J. Lewis Property

The K.J. Lewis property (Parcel 9) is located immediately north of the Mercer Road and US 1 intersection, approximately 200 feet northeast of Parcel 6. The property consists of an abandoned building along the edge of US 1, which is surrounded by dense wooded terrain. A former pump island area is located in front of the building. The EM61 bottom coil results and the differential results are presented in **Figures 4 and 5**, respectively. Due to limited access to the site, the geophysical investigation was limited to the front portion of the property that is located along US 1.

The geophysical investigation detected the probable presence of two USTs located adjacent to the pump island area. The first UST is centered near grid coordinates X=84 Y=27, and buried approximately 1.5 feet below surface. The second UST is centered near grid coordinates X=103 Y=27, and is buried approximately 2.0 feet below surface. This latter UST appears to be partially beneath the former pump island area. The approximate locations of the USTs are shown as magenta-colored rectangles in Figures 4 and 5. Based on the GPR results, the probable USTs are approximately 10 feet long and 4 feet wide. A photograph showing the approximate locations of the two probable USTs and the image of GPR survey lines Y=27.5, which intersects the probable USTs, are presented in **Figure 6**.

The EM61 differential anomaly centered near grid coordinates X=118 Y=29, may possibly be in response to a UST or large metal object. However, GPR surveys could not be conducted across this EM anomaly due to the limited access caused by the dense wooded terrain. The approximate location of this possible UST is shown as a dashed, magenta-colored rectangle in Figures 4 and 5, and in the site photograph that is presented in Figure 6.

The remaining portion of the geophysical survey area does not appear to contain significant, buried, metal objects.

3.3 Parcel 21 – James Brigman Property

The James Brigman property (Parcel 21) consists of an open, grass and asphalt-covered lot located along the western side of US 1. The EM61 bottom coil results and the differential results are presented in **Figures 7 and 8**, respectively.

GPR surveys conducted across the linear, EM61 bottom coil anomalies that intersect grid coordinates X=62 Y=70, X=66 Y=94, X=84 Y=94, and X=87.5 Y=75, suggest the anomalies are probably in response to buried utility lines or conduits. GPR data also suggest that the high amplitude anomalies centered near grid coordinates X=77 Y=84, and X=93 Y=66, are probably in response to buried miscellaneous metal objects or junction areas for the conduits or utility lines.

GPR surveys conducted across the large, high amplitude anomaly centered near X=45 Y=75, detected the probable presence of four metallic USTs. The four probable USTs are centered near grid coordinates X=43 Y=80, X=50 Y=80, X=42 Y=73, and X=48 Y=73. Based on the GPR data, the USTs appear to be approximately 9 feet long and 3.5 to 4 feet wide and buried approximately 1.5 to 2.0 feet below surface. The approximate locations of the probable USTs are shown as magenta-colored rectangles in Figures 7 and 8. A photograph showing the approximate locations of the four probable USTs and the image of GPR survey lines Y=80, which intersects the two probable USTs centered near X=43 Y=80, and X=50 Y=80, are presented in **Figure 9**.

The remaining EM61 anomalies recorded within the proposed ROW area are probably in response to miscellaneous metal debris.

3.4 Parcel 48 – Roy Barry Bostick Property

The Roy Barry Bostick property (Parcel 48) consists of a red, brick building surrounded by flat-lying grass-covered terrain. The parcel is located along the northwestern side of US 1 approximately 300 feet southwest of the US 1 and Tilley Street intersection. The EM61 bottom coil results and the differential results are presented in **Figure 10**.

GPR surveys conducted across the EM61 anomaly centered near grid coordinates X=295 Y=60, suggest that the anomaly is probably in response to one or more large diameter (12 or more inches) conduits buried approximately 1.0 feet below surface. There is a possibility (although unlikely) that the anomaly may be in response to a very small UST centered near grid coordinates X=290 Y=59. The location of the possible, but unlikely UST is shown as a magenta-colored square in Figure 10.

GPR surveys conducted along the edge of the brick building suggest that the EM61 anomalies recorded in this area are probably in response to the building and/or buried miscellaneous debris. The remaining EM61 anomalies recorded within the proposed ROW area at Parcel 48 are probably in response to known cultural features and/or buried miscellaneous debris.

3.5 Parcel 50 – Pansy Ernest Property

The Pansy Ernest property (Parcel 50) is located on the western corner of the Tilley Street and US1 intersection. The parcel contains the former Little Grace’s Variety store surrounded by a flat-lying grass-covered, terrain. An occupied house is located immediately west of the property. The EM61 bottom coil results and the differential results are presented in **Figures 11 and 12**, respectively. Please note that Figures 11 and 12 also contain the EM61 results for Church of Deliverance property (Parcel 51).

GPR surveys conducted across the backyard of Parcel 50 suggest the linear EM61 bottom coil anomalies intersecting grid coordinates X=570 Y=115, X=570 Y=126, X=580 Y=90, and X=586 Y=125, are probable in response to buried conduits or lines. Similarly, the locations of the linear EM61 anomalies intersecting grid coordinates X= 622 Y=80, X=622 Y=120, and X=640 Y=35, suggest these anomalies are probably in response to buried utility lines.

GPR surveys conduct across the high amplitude anomalies centered near grid coordinates X=575 Y=105, and X=590 Y=113, suggest the anomalies are probably in response to the “junction” of conduits and/or other miscellaneous objects. Although not confirmed by the GPR results, the EM61 anomaly located at X=575 Y=105, may be in response to a possible septic tank.

GPR surveys conducted across the EM61 anomaly centered near grid coordinates X=567 Y=55, detected the probably presence of two USTs buried approximately 0.75 feet below surface. The approximate locations of the probably USTs are shown as magenta-colored rectangles in Figures 11 and 12 and each UST appears to be approximately eight feet long and three feet wide. A photograph showing the approximate locations of the two probable USTs and the image of GPR survey line Y=55, which intersects the probable USTs, are presented in **Figure 13**.

The remaining EM61 anomalies recorded within the proposed ROW area at Parcel 50 are probably in response to known cultural features or buried miscellaneous metal debris.

3.6 Parcel 51 – Church of Deliverance Property

The Church of Deliverance property (Parcel 51) contains an active church building surrounded by a grass, gravel or asphalt-covered parking area. The property is located on the northern corner of the Tilley Street and US 1 intersection immediately across the street from the Pansy Ernest property (Parcel 50). The EM61 bottom coil results and the differential results for Parcel 51 are presented in **Figures 11 and 12**, respectively along with the EM61 results for Parcel 50.

The linear EM61 bottom coil anomalies intersecting grid coordinates X=670 Y=50, X=700 Y=30, and X=700 Y=65, are probably in response to buried utility lines or conduits. GPR surveys conducted across the EM61 differential anomaly centered near X=705 Y=105, and along the front edge of the church building suggest the anomalies are probably in response to miscellaneous debris and the building, respectively.

The remaining EM61 anomalies recorded within the proposed ROW area at Parcel 51 are probably in response to known cultural features or miscellaneous buried debris. The geophysical results also suggest that the proposed ROW area does not contain metallic USTs.

3.7 Parcel 61 – Cooper & Brown Inc. Property

The Cooper & Brown Inc. property (Parcel 61) is located on the western side of the US 1 and Little Road intersection. The proposed ROW area of Parcel 61 contains a vacant business building surrounded by flat-lying grass or asphalt surfaces. A concrete pad is located in front of the building and probably identifies the former pump island area. An occupied house lies to the northwest of the proposed ROW area.

The EM61 bottom coil results and the differential results are presented in **Figures 14 and 15**, respectively. The linear EM61 bottom coil anomalies intersecting grid coordinates X=130 Y=34, X=142 Y=105, X=186 Y=100, X=210 Y=42, and X=213 Y=83, are probably in response to buried utility lines or conduits. The high amplitude anomalies centered near grid coordinates X=75 Y=67, and X=80 Y=50, are probably in response to steel reinforced concrete. GPR surveys conducted across these two areas did not detect the presence of USTs.

GPR surveys conducted across the high amplitude anomaly centered near X=226 Y=116, suggest the anomaly is probably in response to steel reinforced concrete and/or to the metal conduits that are visible at the surface. GPR surveys conducted along the perimeter of the building suggest that the EM61 anomalies are probably in response to the building and/or to miscellaneous debris. The remaining EM61 anomalies are probably in response to known cultural features and/or to buried miscellaneous metal debris.

The geophysical results suggest that the proposed ROW area at Parcel 61 does not contain metallic USTs.

3.8 Parcel 70 – Delia Lassiter Property

The Delia Lassiter Property (Parcel 70) contains a vacant building surrounded primarily by grass yard and an asphalt driveway. An occupied house lies immediately north of the proposed ROW area. The EM61 bottom coil results and the differential results are presented in **Figures 16 and 17**, respectively.

The linear EM61 anomaly intersecting grid coordinates X=90 Y=110, is probably in response to a buried utility line or conduit. The remaining EM anomalies are probably in response to known cultural features or to buried miscellaneous debris. The geophysical results suggest that the proposed ROW area at the Delia Lassiter property does not contain metallic USTs.

3.9 Parcel 22 – Ivey Little Property

The Ivey Little property (Parcel 22) is located along the northwest side of US 1 and consists of a vacant building surrounded by a gravel-covered driveway and grass-covered fields. The EM61 bottom coil results and the differential results are presented in **Figures 18 and 19**, respectively.

The linear EM61 anomaly intersecting grid coordinates X=354 Y=35, is probably in response to a buried utility line or conduit. The remaining EM anomalies are probably in response to known cultural features or to buried miscellaneous debris. The geophysical results suggest that the proposed ROW area at the Ivey Little property does not contain metallic USTs.

3.10 Parcel 68 – James Pugh Property

The James Pugh Property (Parcel 68) is a former gas station site located on the northern side of US 1, approximately 0.25 miles west of the US 1 and Special Forces Way intersection. The site consists primarily of grass, trees and brush with a former pump island pad located near the edge of US 1. The EM61 bottom coil results and the differential results are presented in **Figure 20**.

GPR surveys conducted across the EM61 anomalies centered grid coordinates X=305 Y=35, and X=321 Y=37, suggest the anomalies are probably in response to the pump island pad and to the

buried pump island-related equipment. GPR surveys conducted across the EM61 anomaly centered near grid coordinates X=534 Y=92, suggest the anomaly is probably in response to buried miscellaneous debris or object. The remaining EM61 anomalies are probably in response to known cultural features and miscellaneous metal debris.

The geophysical investigation conducted at Parcel 68 suggests 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 areas at the 10 sites along US 1 in Richmond 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 surveyed portions of the proposed ROW areas of each site.
- GPR surveys were conducted across selected EM61 differential anomalies and across areas containing steel reinforced concrete.
- Linear EM61 anomalies at the 10 sites are probably in response to buried utility lines and/or conduits. The majority of non-linear anomalies are probably in response to known cultural features or miscellaneous metal objects.

- The geophysical results suggest the proposed ROW areas at the following properties do not contain metallic USTs:

Hillary McKay Property	(Parcel 6)
Church of Deliverance Property	(Parcel 51)
Cooper & Brown Inc. Property	(Parcel 61)
Delia Lassiter Property	(Parcel 70)
Ivey Little Property	(Parcel 22)
James Pugh Property	(Parcel 68)

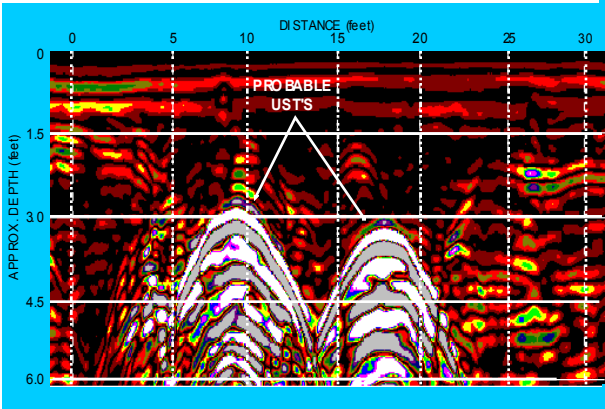
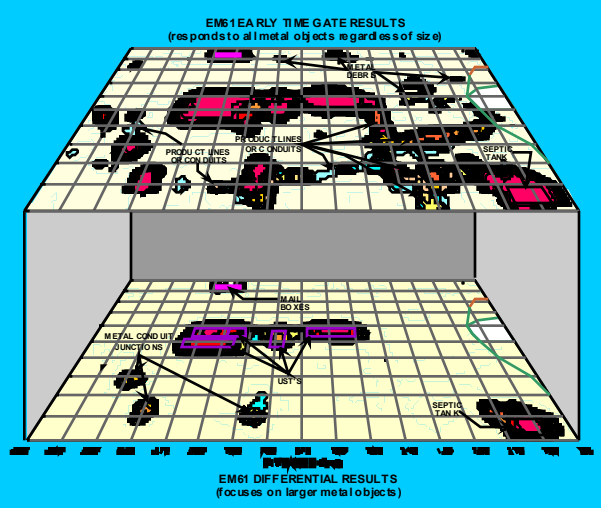
- K.J. Lewis Property (Parcel 9): Geophysical results suggest the probable presence of two USTs located adjacent to the pump island area. The first UST is centered near grid coordinates X=84 Y=27, and buried approximately 1.5 feet below surface. The second UST is centered near grid coordinates X=103 Y=27, and is buried approximately 2.0 feet below surface. The EM61 differential anomaly centered near grid coordinates X=118 Y=29, may possibly be in response to a UST or large metal object. However, GPR surveys could not be conducted across this EM anomaly due to the limited access caused by the dense wooded terrain.
- James Brigman Property (Parcel 21): Geophysical results detected the probable presence of four metallic USTs centered near grid coordinates X=43 Y=80, X=50 Y=80, X=42 Y=73, and X=48 Y=73. Based on the GPR data, the USTs appear to be approximately 9 feet long and 3.5 to 4 feet wide and buried approximately 1.5 to 2.0 feet below surface.

- Roy Barry Bostick Property (Parcel 48): GPR surveys conducted across the EM61 anomaly centered near grid coordinates X=295 Y=60, suggest that the anomaly is probably in response to one or more large diameter (12 or more inches) conduits buried approximately 1.0 feet below surface. There is a possibility (although unlikely) that the anomaly may be in response to a very small UST centered near grid coordinates X=290 Y=59.

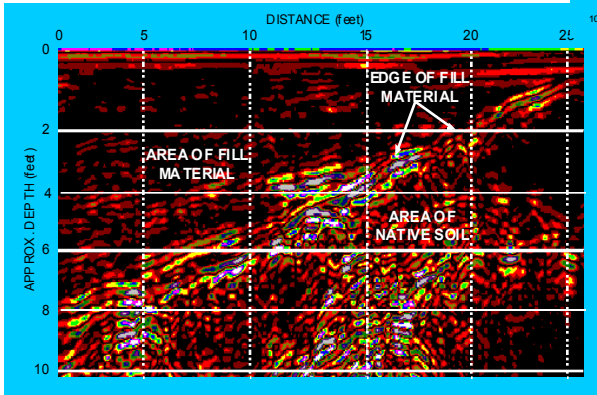
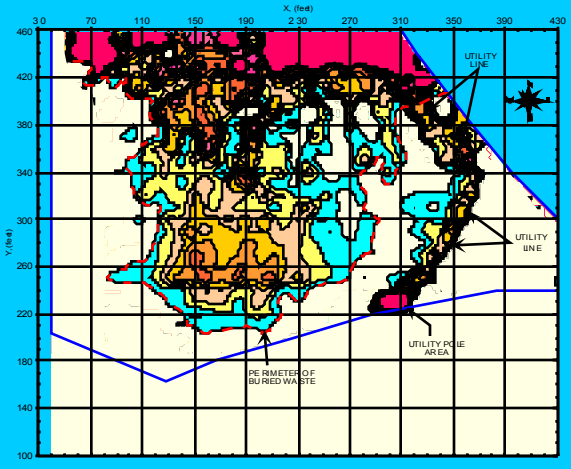
- Pansy Ernest Property (Parcel 50): Geophysical results suggest the probable presence of two USTs centered near grid coordinates X=567 Y=55, and buried approximately 0.75 feet below surface. The USTs appear to be approximately eight feet long and three feet wide.

5.0 LIMITATIONS

EM61 and GPR surveys have been performed and this report prepared for Solutions IES 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 USTs but only suggest where some of the metallic USTs may be present. The EM61 and GPR anomalies, interpreted as probable or possible USTs or tanks, may be attributed to other surface or subsurface conditions or cultural interference.



FIGURES





Parcel 6 - Hillary McKay Property



Parcel 9 - K.J. Lewis Property



Parcel 21 - James Brigman Property



Parcel 48 - Roy Barry Bostick Property



Parcel 50 - Pansy Earnest Property



Parcel 51 - Church of Deliverance Property



Parcel 61 - Cooper & Brown Property



Parcel 70 - Delia Lassiter Property



Parcel 22 - Ivey Little Property



Parcel 68 - James Pugh Property

GEOPHYSICAL EQUIPMENT



The photo shows the Geonics EM61 metal detector that was used to conduct the metal detection survey at the sites in Richmond County, North Carolina.



The photos show the SIR-2000 GPR system equipped with a 400 MHz antenna that was used to conduct the ground penetrating radar investigation at the sites in Richmond County, North Carolina.

SITE PHOTOGRAPHS

This figure shows the photographs of the ten sites located near Marston and Hoffman, North Carolina where geophysical investigations were conducted within the ROW areas for the detection of metallic USTs.

SITE PHOTOS

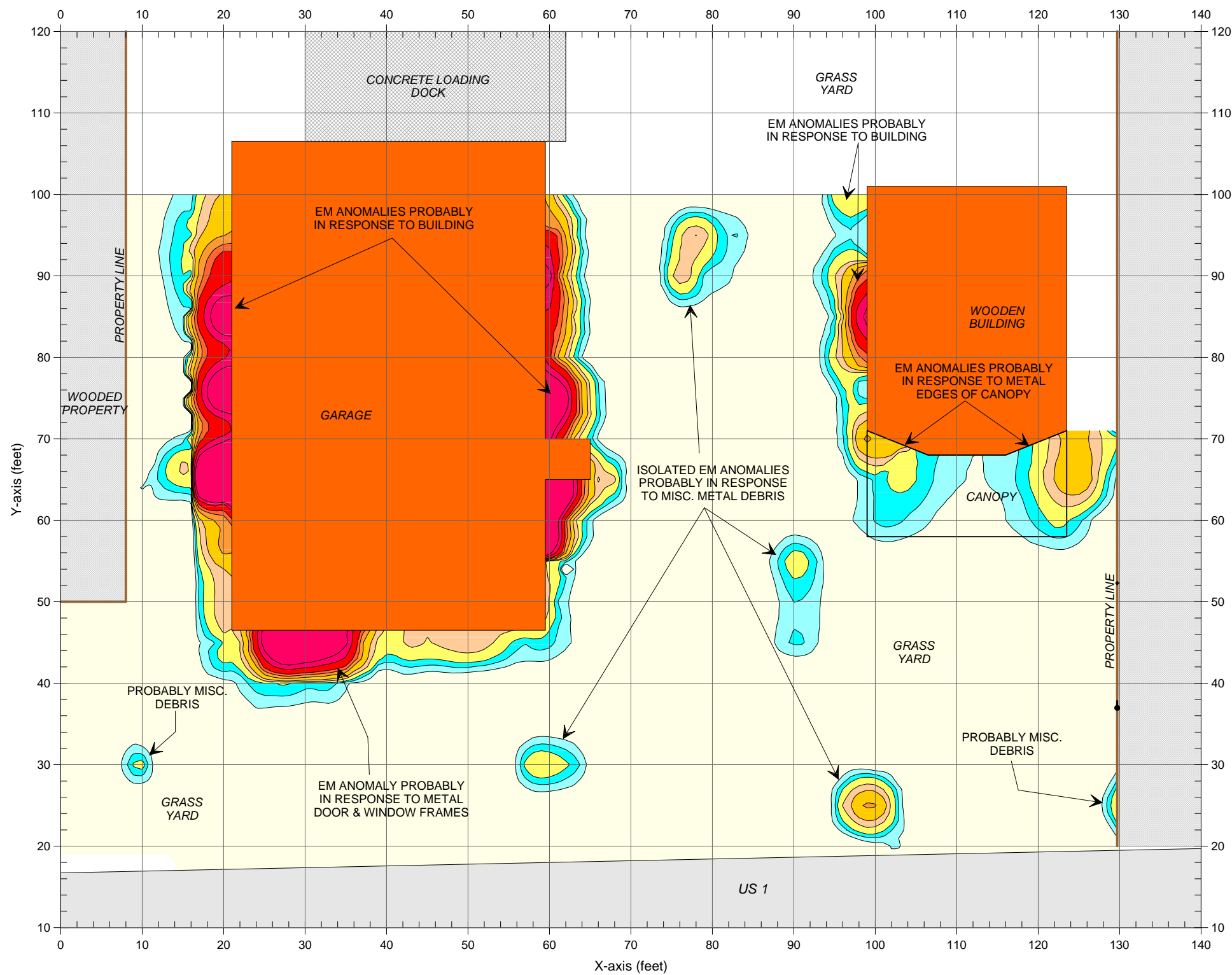
FIGURE 1

CLIENT	SITE	CITY	STATE	TITLE	
			MARSTON & HOFFMAN	NORTH CAROLINA	US 1 - RICHMOND COUNTY SITES
				GEOPHYSICAL RESULTS	

DATE	L.A.T.	DWG.	FIGURE	M.J.D.	
08/31/06			2006-200		

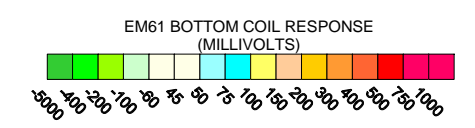
SOLUTIONS IES

PYRAMID
ENVIRONMENTAL & ENGINEERING, P.C.



LEGEND

- EM61 SURVEY AREA: EM DATA ACQUIRED ALONG NORTHEAST-SOUTHWEST TRENDING LINES SPACED 5 FEET APART
- PROPERTY LINE (APPROX.)
- GUY WIRE
- UTILITY POLE



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 EM metal detection data were collected on July 27, 2006 using a Geonics EM61 instrument. Ground penetrating radar (GPR) data were acquired on August 16, 2006 using a Geophysical Survey Systems SIR 2000 instrument with a 400 MHz antenna.

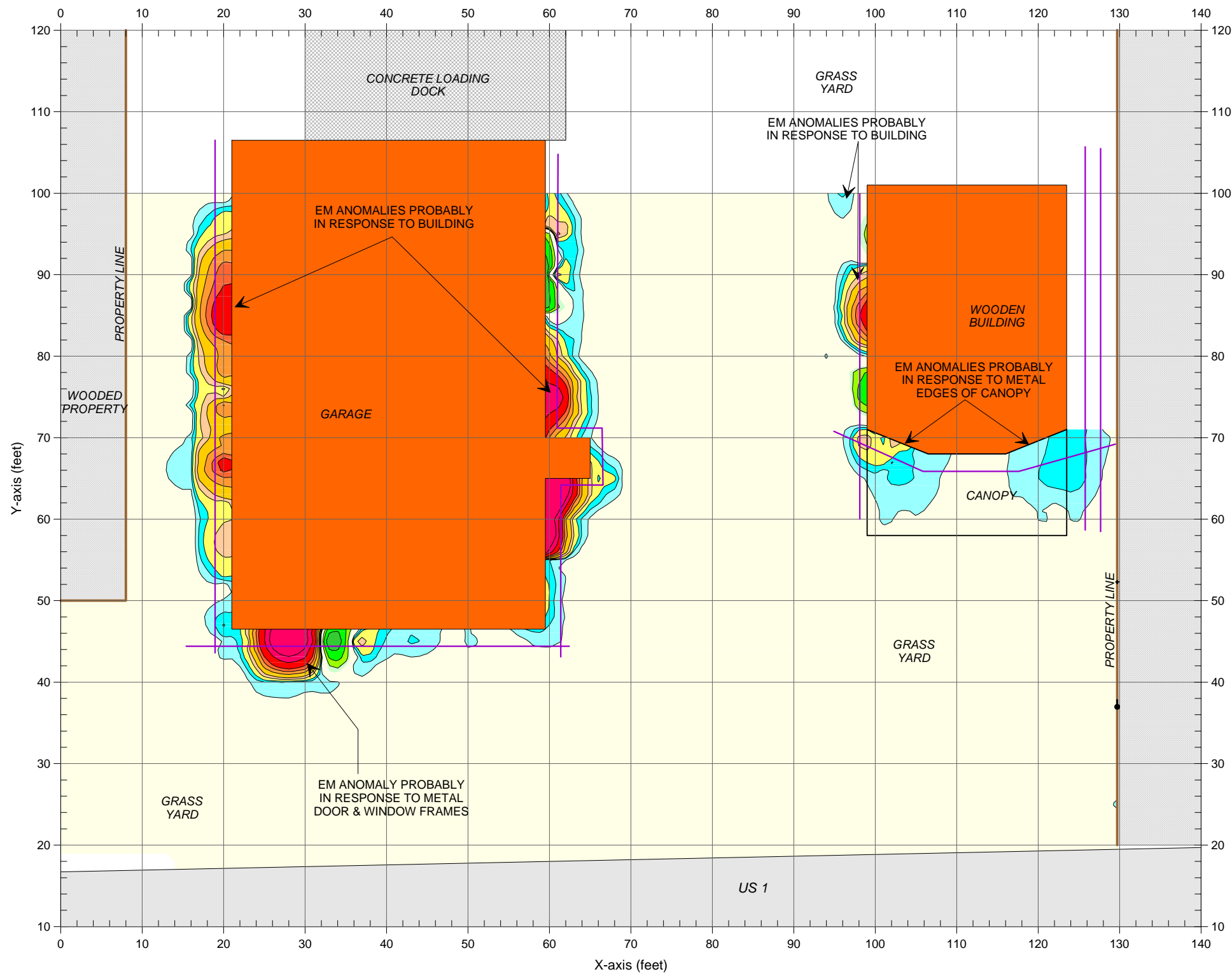
The geophysical investigation suggests that the survey area does not contain metallic USTs.



CLIENT	SOLUTIONS IES		DATE	08/01/06	DRWN	MJD
SITE	PARCEL 6 - HILLARY MCKAY PROPERTY		LAY		CHKD	
CITY	MARSTON	STATE	NORTH CAROLINA	DWG		
TITLE	GEOPHYSICAL RESULTS		J-NO	2006-200	FIGURE	

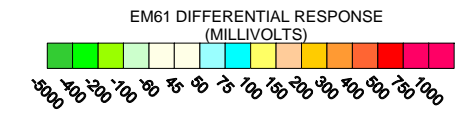
**EM61
BOTTOM COIL
RESULTS**

FIGURE 2



LEGEND

- EM61 SURVEY AREA: EM DATA ACQUIRED ALONG NORTHEAST-SOUTHWEST TRENDING LINES SPACED 5 FEET APART
- PROPERTY LINE (APPROX.)
- + GUY WIRE
- UTILITY POLE
- APPROX. LOCATION OF GPR SURVEY LINE



Note: The contour plot shows the differential results of the EM61 metal detection survey 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 EM metal detection data were collected on July 27, 2006 using a Geonics EM61 instrument. Ground penetrating radar (GPR) data were acquired on August 16, 2006 using a Geophysical Survey Systems SIR 2000 instrument with a 400 MHz antenna.

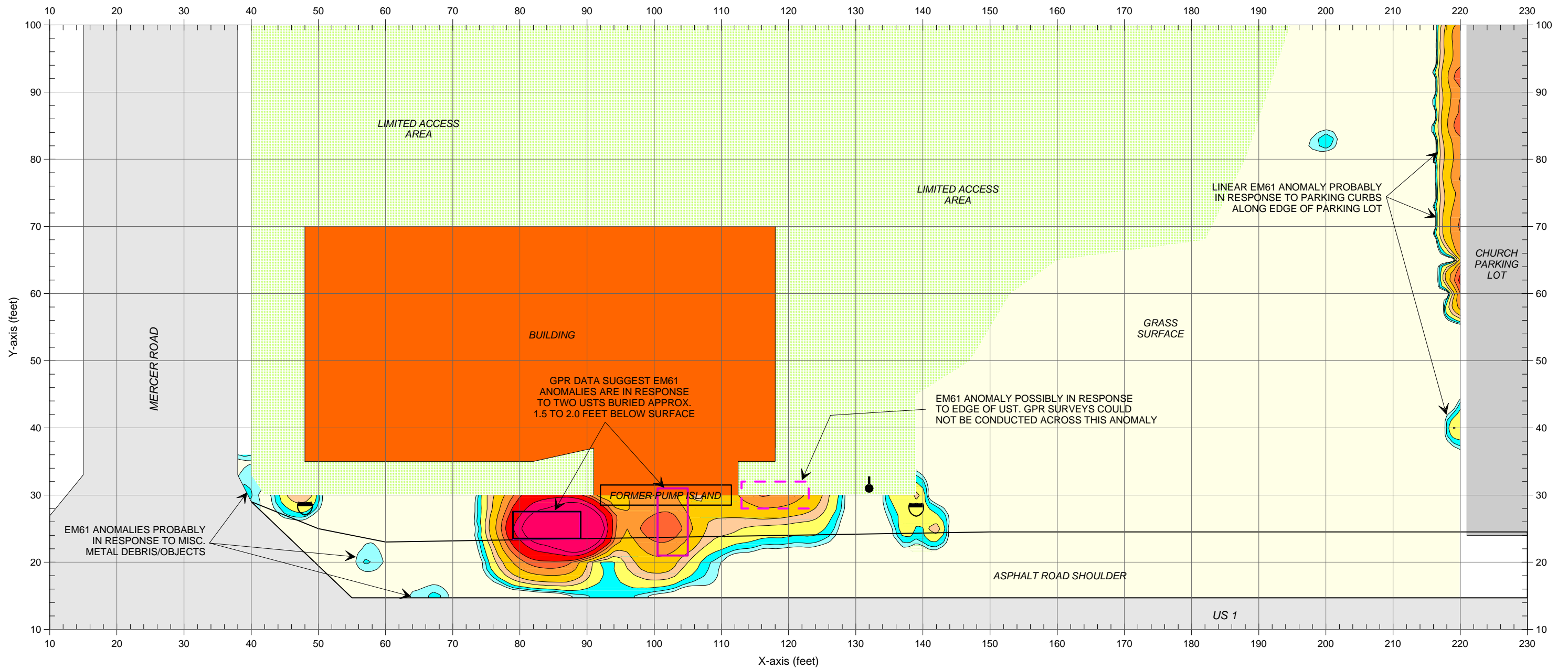
The geophysical investigation suggests that the survey area does not contain metallic USTs.



CLIENT	SOLUTIONS IES		DATE	08/01/06	DRWN	MJD
SITE	PARCEL 6 - HILLARY MCKAY PROPERTY		LAY		CHKD	
CITY	MARSTON	STATE	NORTH CAROLINA	DWG		
TITLE	GEOPHYSICAL RESULTS		J-NO.	2006-200	FIGURE	

**EM61
DIFFERENTIAL
RESULTS**

FIGURE 3

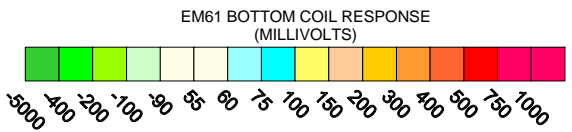


EM61 ANOMALIES PROBABLY IN RESPONSE TO MISC. METAL DEBRIS/OBJECTS

GPR DATA SUGGEST EM61 ANOMALIES ARE IN RESPONSE TO TWO USTS BURIED APPROX. 1.5 TO 2.0 FEET BELOW SURFACE

EM61 ANOMALY POSSIBLY IN RESPONSE TO EDGE OF UST. GPR SURVEYS COULD NOT BE CONDUCTED ACROSS THIS ANOMALY

LINEAR EM61 ANOMALY PROBABLY IN RESPONSE TO PARKING CURBS ALONG EDGE OF PARKING LOT



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 EM metal detection data were collected on August 15, 2006 using a Geonics EM61 instrument. Ground penetrating radar (GPR) data were acquired on August 16, 2006 using a Geophysical Survey Systems SIR 2000 instrument with a 400 MHz antenna.

GPR surveys suggest that the EM61 anomalies recorded adjacent to the former pump island area are probably in response to metallic USTs.

LEGEND

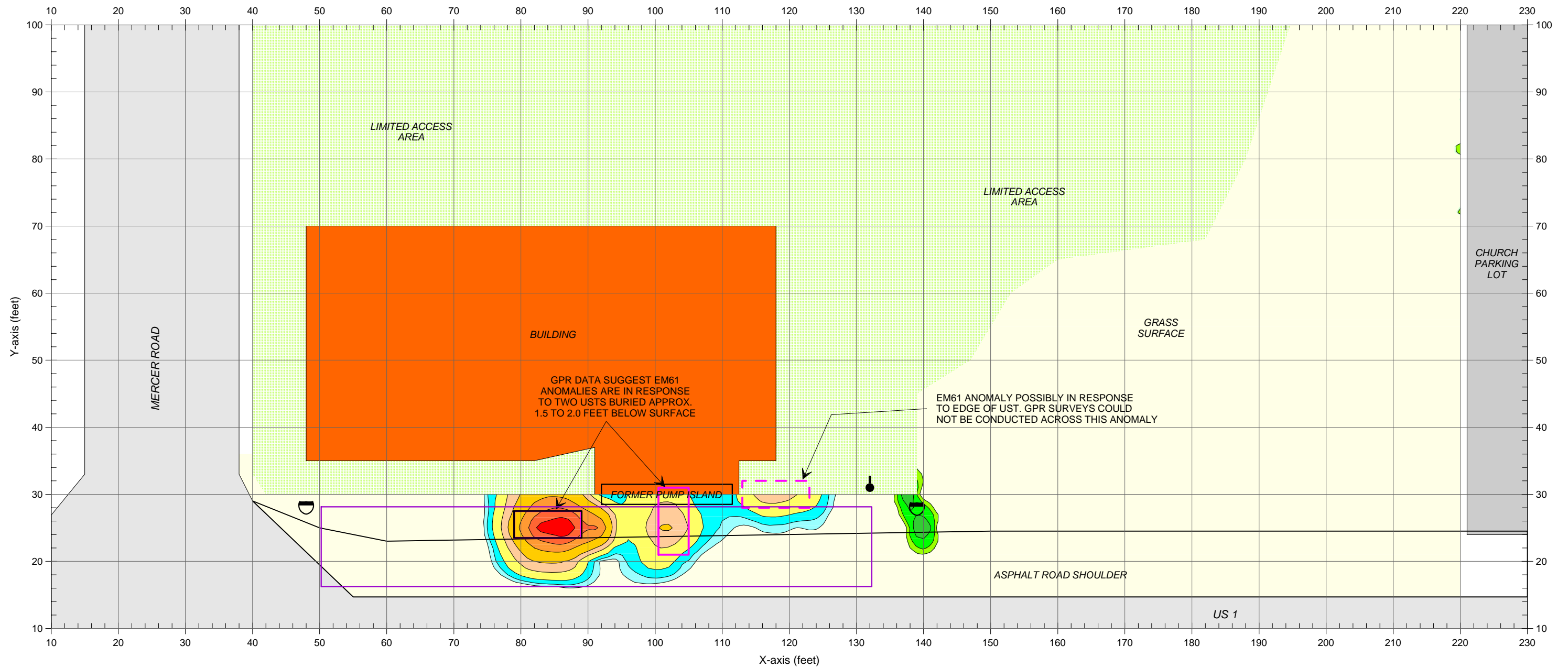
- EM61 SURVEY AREA: EM DATA ACQUIRED ALONG EASTERLY-WESTERLY OR NORTHERLY- SOUTHERLY TRENDING LINES SPACED 5 FEET APART
- UTILITY POLE
- TRAFFIC SIGN
- POSSIBLE UST, AS SUGGESTED BY EM61 ANOMALY
- PROBABLE UST, AS SUGGESTED BY GPR SURVEYS



CLIENT	SOLUTIONS IES		DATE	08/17/06	DRWN	MJD
SITE	PARCEL 9 - K. J. LEWIS PROPERTY		LAY		CHKD	
CITY	MARSTON	STATE	NORTH CAROLINA	DWG		
TITLE	GEOPHYSICAL RESULTS		J.NO.	2006-200	FIGURE	

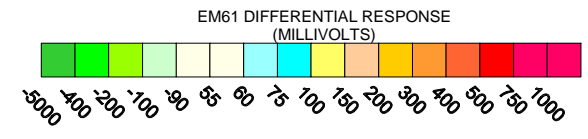
EM61
BOTTOM COIL
RESULTS

FIGURE 4



LEGEND

- EM61 SURVEY AREA: EM DATA ACQUIRED ALONG EASTERLY-WESTERLY OR NORTHERLY-SOUTHERLY TRENDING LINES SPACED 5 FEET APART
- UTILITY POLE
- TRAFFIC SIGN
- GPR SURVEY AREA
- POSSIBLE UST, AS SUGGESTED BY EM61 ANOMALY
- PROBABLE UST, AS SUGGESTED BY GPR SURVEYS



Note: The contour plot shows the differential results of the EM61 metal detection survey 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 EM metal detection data were collected on August 15, 2006 using a Geonics EM61 instrument. Ground penetrating radar (GPR) data were acquired on August 16, 2006 using a Geophysical Survey Systems SIR 2000 instrument with a 400 MHz antenna.

GPR surveys suggest that the EM61 anomalies recorded adjacent to the former pump island area are probably in response to metallic USTs.



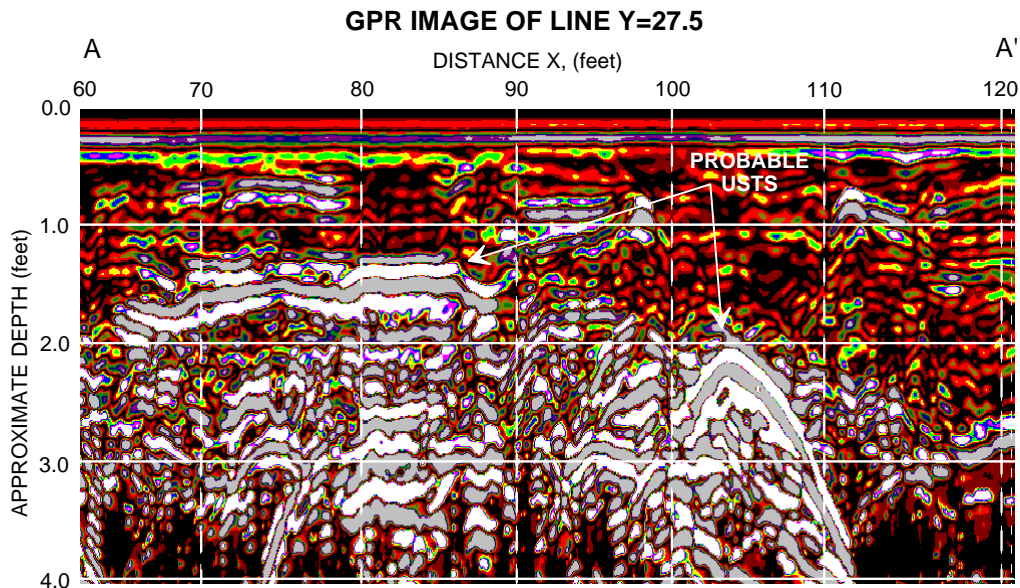
CLIENT	SOLUTIONS IES		DATE	08/17/06	DRAWN	MJD
SITE	PARCEL 9 - K. J. LEWIS PROPERTY		LAY		CHKD	
CITY	MARSTON	STATE	NORTH CAROLINA		DWG	
TITLE	GEOPHYSICAL RESULTS		J.NO.	2006-200	FIGURE	

**EM61
DIFFERENTIAL
RESULTS**

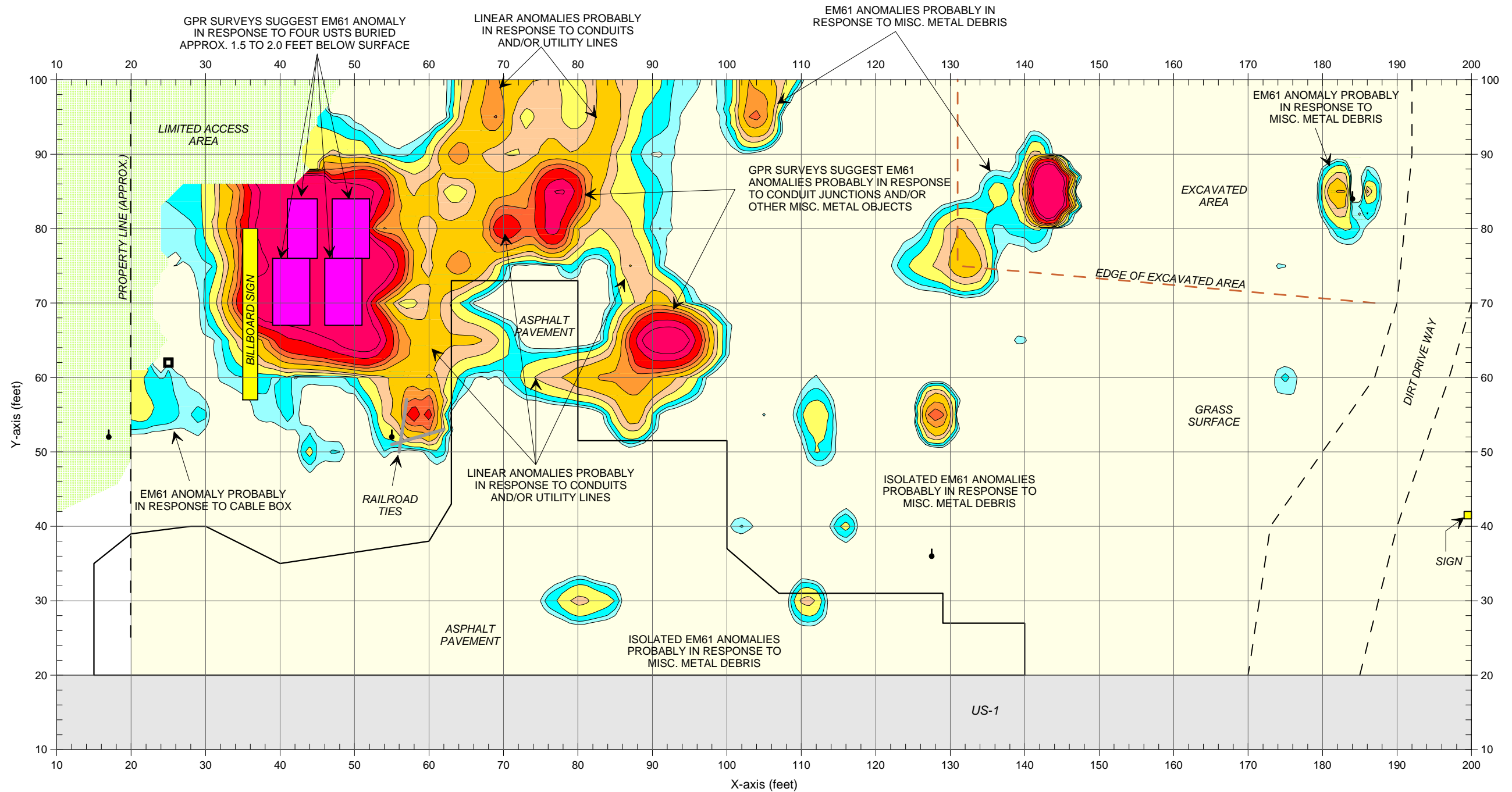
FIGURE 5



The photograph shows the locations of two probable USTs and one possible UST buried 1.5 to 2.0 feet below surface, as suggested by the geophysical results at Parcel 9.



The GPR image obtained along a portion of survey line Y=27.5, shows the anomalies that are probably in response to USTs near X=84 and X=103, and buried approximately 1.5 and 2.0 feet below surface, respectively. The location of this GPR image is shown with a solid purple line in the above photograph.

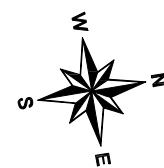


Note: The contour plot shows the bottom coil (most sensitive) response of the EM61 instrument in millivolts (mV). The bottom coil response shows buried metallic objects regardless of size. The EM metal detection data were collected on August 15, 2006 using a Geonics EM61 instrument. Ground penetrating radar (GPR) data were acquired on August 16, 2006 using a Geophysical Survey Systems SIR 2000 instrument with a 400 MHz antenna.

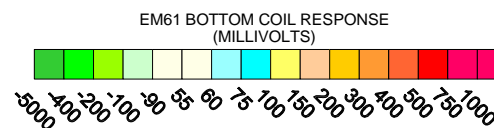
GPR surveys suggest that the large, high amplitude, EM61 anomaly in the southwest portion of the survey area is probably in response to four metallic USTs.

LEGEND

- EM61 SURVEY AREA: EM DATA ACQUIRED ALONG NORTHERLY-SOUTHERLY TRENDING LINES SPACED 5 FEET APART
- UTILITY POLE
- CABLE BOX
- PROBABLE UST, AS SUGGESTED BY GPR SURVEYS



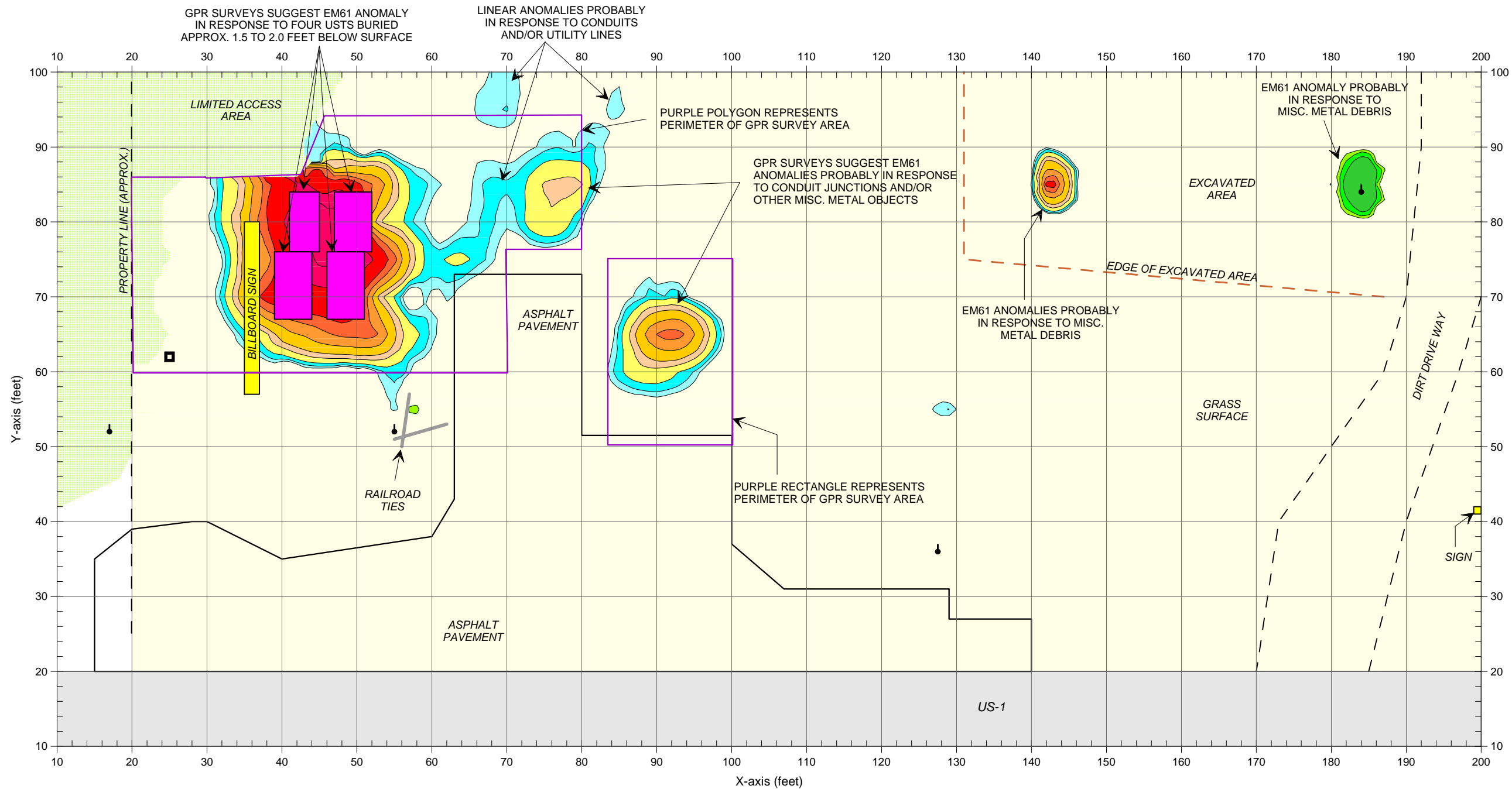
APPROXIMATE NORTH



CLIENT	SOLUTIONS IES		DATE	08/17/06	DRWN	MJD
SITE	PARCEL 21 - JAMES BRIGMAN PROPERTY		LAY		CHKD	
CITY	MARSTON	STATE	NORTH CAROLINA	DWG		
TITLE	GEOPHYSICAL RESULTS		J.NO.	2006-200	FIGURE	

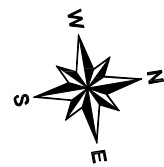
GRAPHIC SCALE IN FEET

**EM61
BOTTOM COIL
RESULTS**

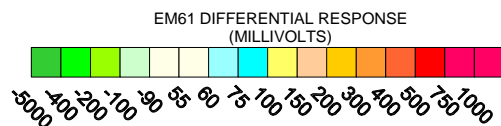


LEGEND

- EM61 SURVEY AREA: EM DATA ACQUIRED ALONG NORTHERLY- SOUTHERLY TRENDING LINES SPACED 5 FEET APART
- UTILITY POLE
- CABLE BOX
- PROBABLE UST, AS SUGGESTED BY GPR SURVEYS



APPROXIMATE NORTH



Note: The contour plot shows the differential results of the EM61 metal detection survey 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 EM metal detection data were collected on August 15, 2006 using a Geonics EM61 instrument. Ground penetrating radar (GPR) data were acquired on August 16, 2006 using a Geophysical Survey Systems SIR 2000 instrument with a 400 MHz antenna.

GPR surveys suggest that the large, high amplitude, EM61 anomaly in the southwest portion of the survey area is probably in response to four metallic USTs.



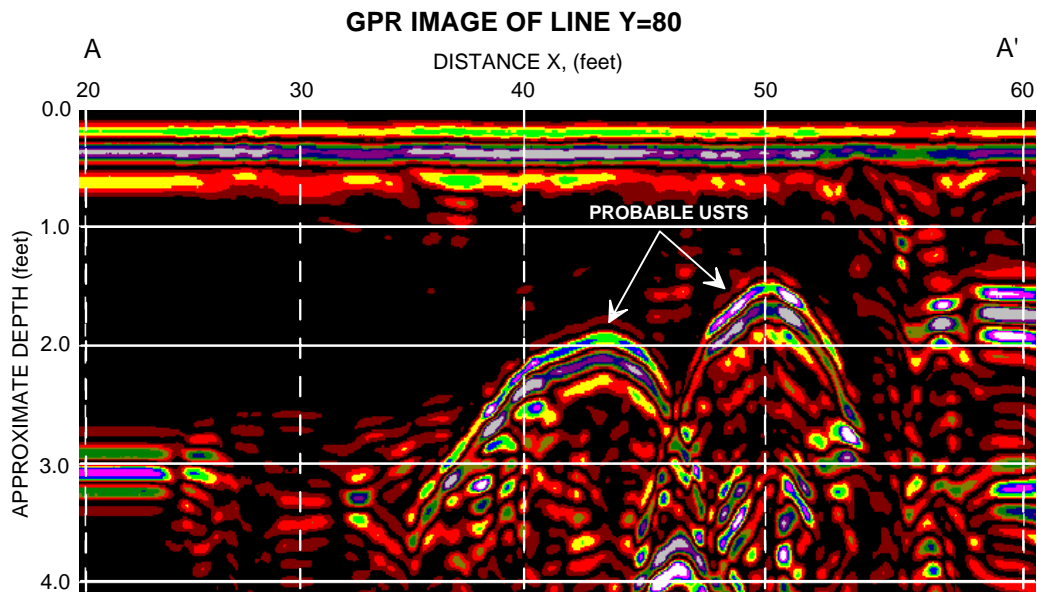
CLIENT	SOLUTIONS IES		DATE	08/17/06	DRWN	MJD
SITE	PARCEL 21 - JAMES BRIGMAN PROPERTY		LAY		CHKD	
CITY	MARSTON	STATE	NORTH CAROLINA	DWG		
TITLE	GEOPHYSICAL RESULTS		J-NO	2006-200	FIGURE	

EM61
DIFFERENTIAL
RESULTS

FIGURE 8



The photograph shows the location of four probable USTs buried 1.75 to 2.0 feet below surface, as suggested by the geophysical results at Parcel 21.



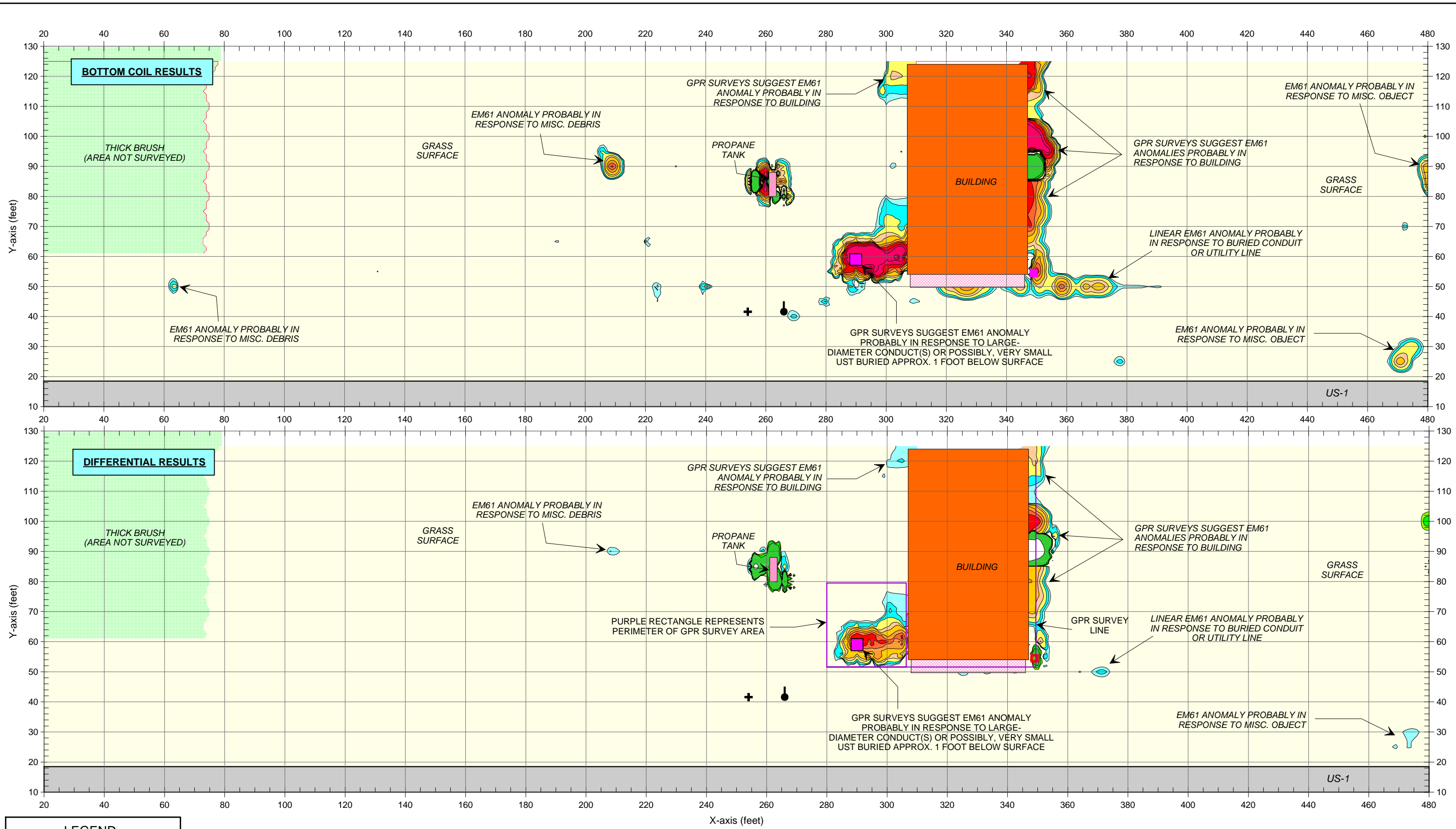
The GPR image obtained along a portion of survey line Y=80, shows the anomalies that are probably in response to USTs near X=43 and X=50, and buried approximately 2.0 and 1.5 feet below surface, respectively. The location of this GPR image is shown with a solid purple line in the above photograph.



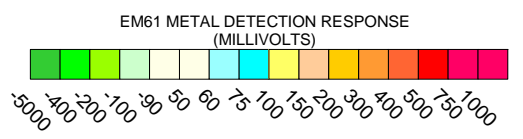
SUBJECT	SOLUTIONS IES		DATE	08/26/05	DOWN	
SITE	PARCEL 21 - JAMES BRIGMAN PROPERTY		LAY		CHPOD	
CITY	MARSTON	STATE	NORTH CAROLINA		DWG	
TITLE	GEOPHYSICAL RESULTS		JNO	2006-200	FOUR	

PHOTO & GPR IMAGE OF UST LOCATIONS

FIGURE 9



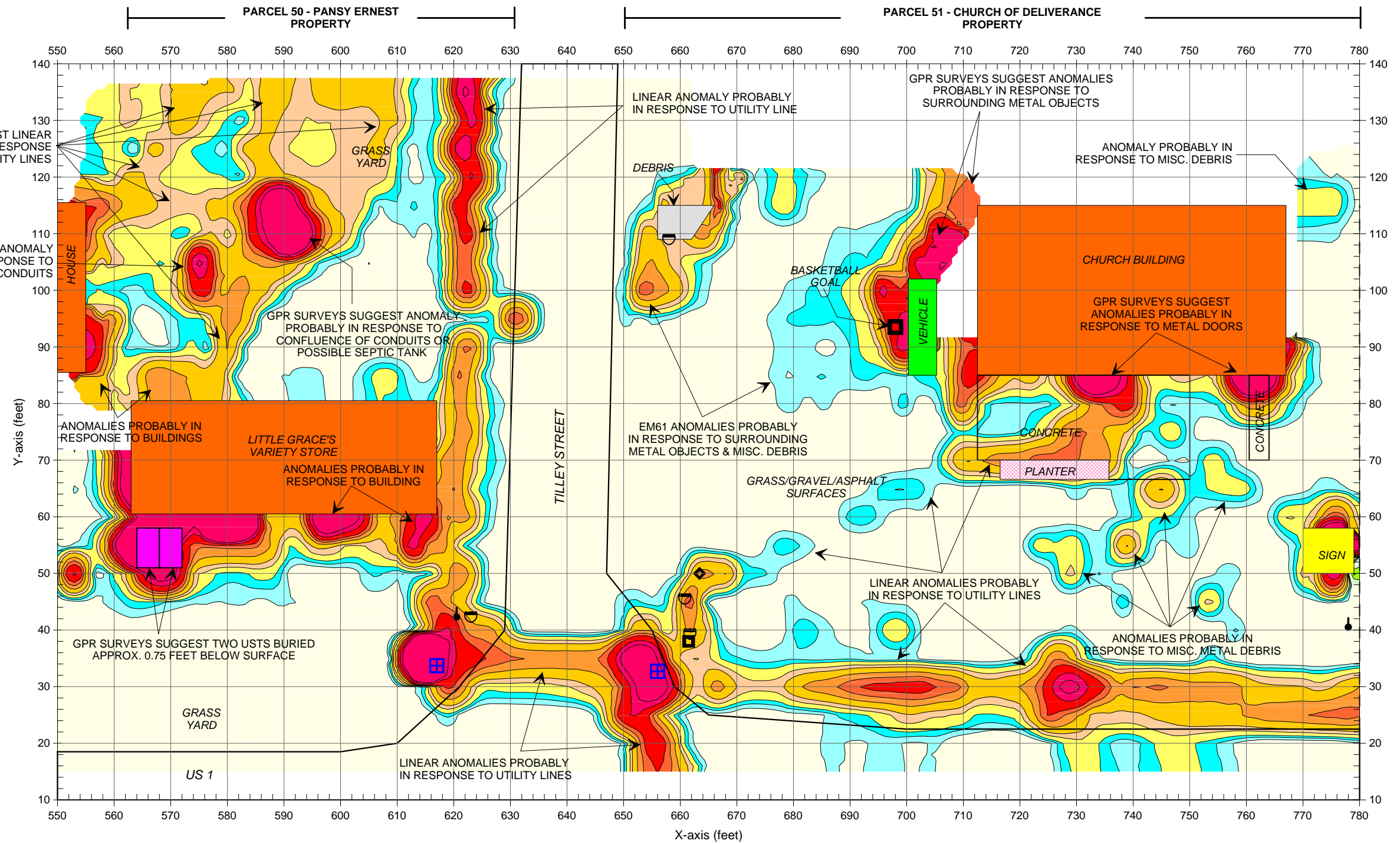
LEGEND	
	UTILITY CABLE BOX
	GUY WIRE
	UTILITY POLE
	PROBABLE CONDUIT OR POSSIBLE UST



CLIENT	SOLUTIONS IES	DATE	08/17/06	DRWN	MJD
SITE	PARCEL 48 - ROY BARRY BOSTICK PROPERTY	LAY		CHKD	
CITY	HOFFMAN	STATE	NORTH CAROLINA	DWG	
TITLE	GEOPHYSICAL RESULTS	J.N.O.	2006-200	FIGURE	

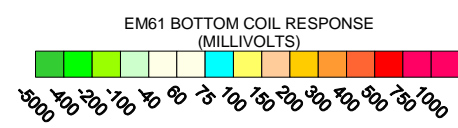
EM61
METAL DETECTION
RESULTS

FIGURE 10



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 EM metal detection data were collected on July 26, 2006 using a Geonics EM61 instrument. Ground penetrating radar (GPR) data were acquired on July 28, 2006 using a Geophysical Survey Systems SIR 2000 instrument with a 400 MHz antenna.

The majority of linear EM61 bottom coil anomalies shown above, are probably in response to buried utility lines or conduits. Negative EM anomalies (shaded in green) are probably in response to metallic surface objects. The geophysical investigation detected two probable USTs on Parcel 50.



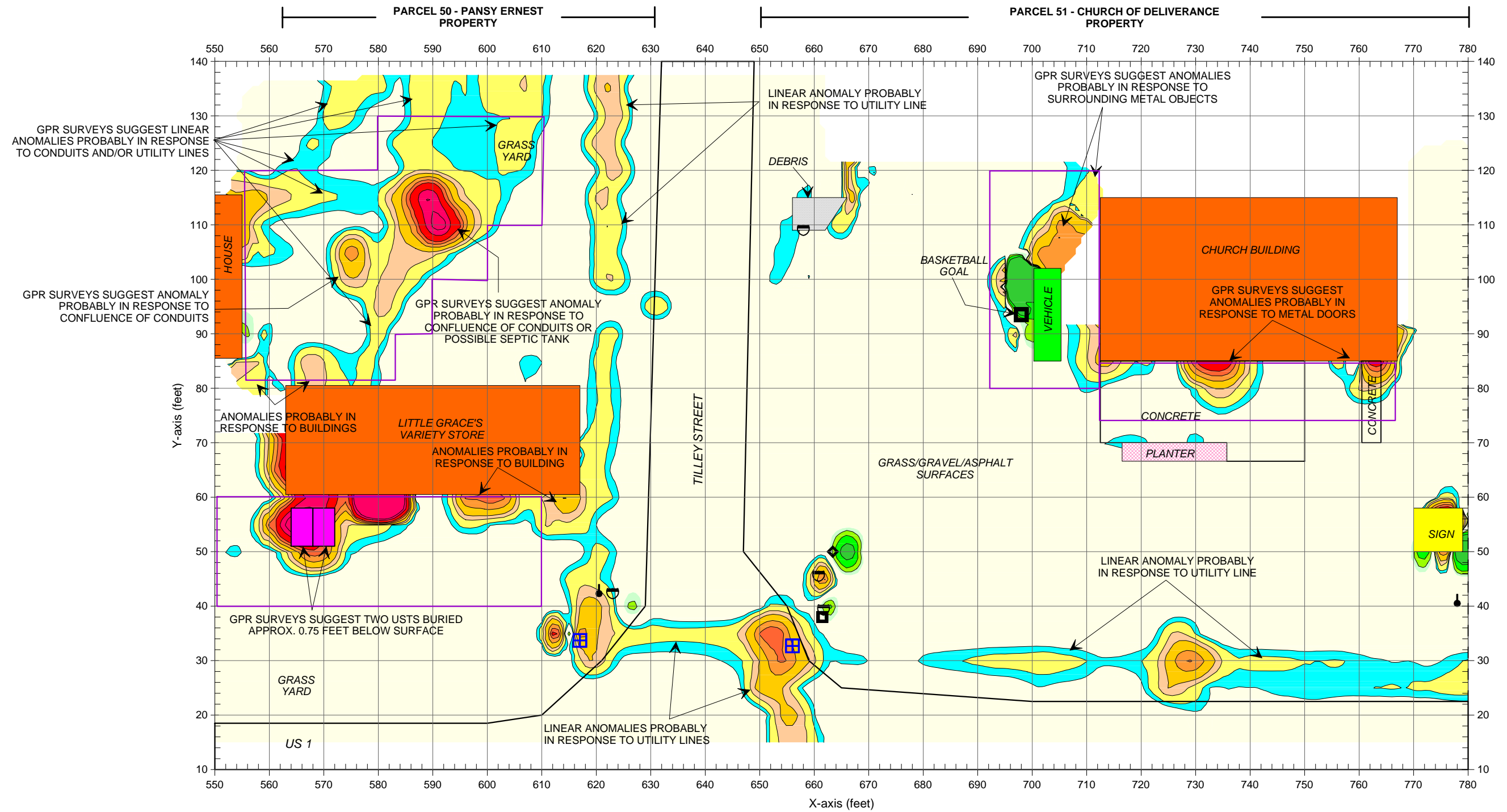
LEGEND	
	EM61 SURVEY AREA: EM DATA ACQUIRED ALONG NORTHEAST-SOUTHWEST TRENDING LINES SPACED 5 FEET APART
	STORM SEWER GRATE
	PHONE CABLE BOX
	GUY WIRE
	UTILITY POLE
	TRAFFIC SIGN
	STORM SEWER GRATE
	VENT/FILL PORT
	METAL POLE
	PROBABLE UST AS SUGGESTED BY THE GEOPHYSICAL RESULTS



CLIENT	SOLUTIONS IES		DATE	08/01/06	DRWN	MJD
SITE	PARCELS 50 & 51 (ERNEST & CHURCH PROPERTIES)		LAY		CHKD	
CITY	HOFFMAN	STATE	NORTH CAROLINA		DWG	
TITLE	GEOPHYSICAL RESULTS		J-NO.	2006-200	FIGURE	

EM61
BOTTOM COIL
RESULTS

FIGURE 11

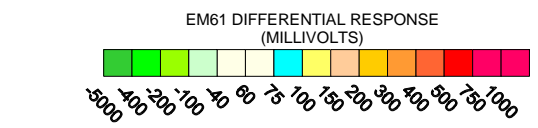


Note: The contour plot shows the differential results of the EM61 metal detection survey in millivolts (mV). The differential response focuses on larger, buried metallic objects such as drums and USTs and ignores smaller miscellaneous, buried, metal debris. The EM metal detection data were collected on July 26, 2006 using a Geonics EM61 instrument. Ground penetrating radar (GPR) data were acquired on July 28, 2006 using a Geophysical Survey Systems SIR 2000 instrument with a 400 MHz antenna.

The majority of linear EM61 bottom coil anomalies shown above, are probably in response to buried utility lines or conduits. Negative EM anomalies (shaded in green) are probably in response to metallic surface objects. The geophysical investigation detected two probable USTs on Parcel 50.

LEGEND

EM61 SURVEY AREA: EM DATA ACQUIRED ALONG NORTHEAST-SOUTHWEST TRENDING LINES SPACED 5 FEET APART	TRAFFIC SIGN
STORM SEWER GRATE	STORM SEWER GRATE
PHONE CABLE BOX	VENT/FILL PORT
GUY WIRE	METAL POLE
UTILITY POLE	GPR SURVEY AREA
	PROBABLE UST AS SUGGESTED BY THE GEOPHYSICAL RESULTS



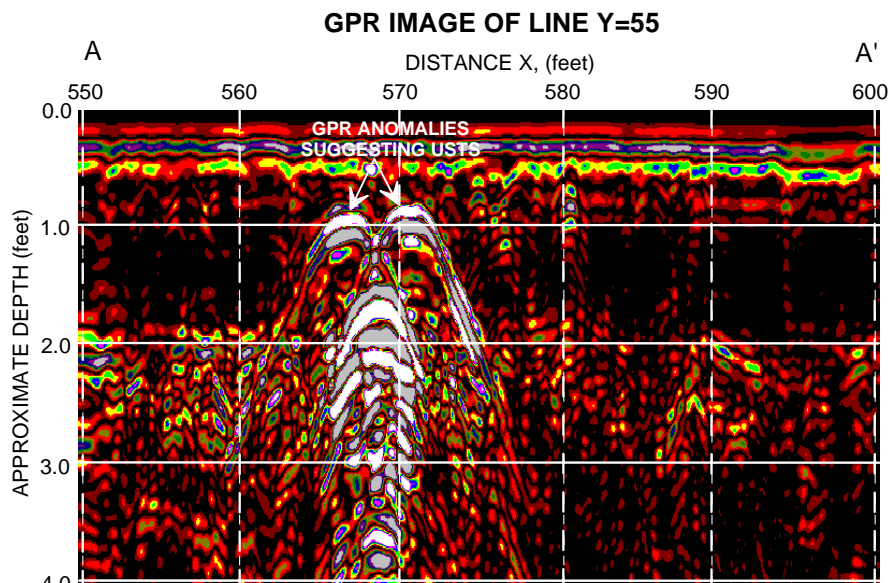
CLIENT	SOLUTIONS IES		DATE	08/01/06	DRWN	MJD
SITE	PARCELS 50 & 51 (ERNEST & CHURCH PROPERTIES)		LAY		CHKD	
CITY	HOFFMAN	STATE	NORTH CAROLINA		DWG	
TITLE	GEOPHYSICAL RESULTS		J-NO.	2006-200	FIGURE	

EM61 DIFFERENTIAL RESULTS

FIGURE 12

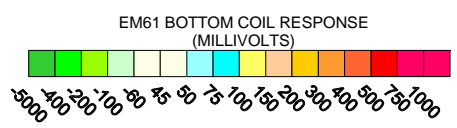
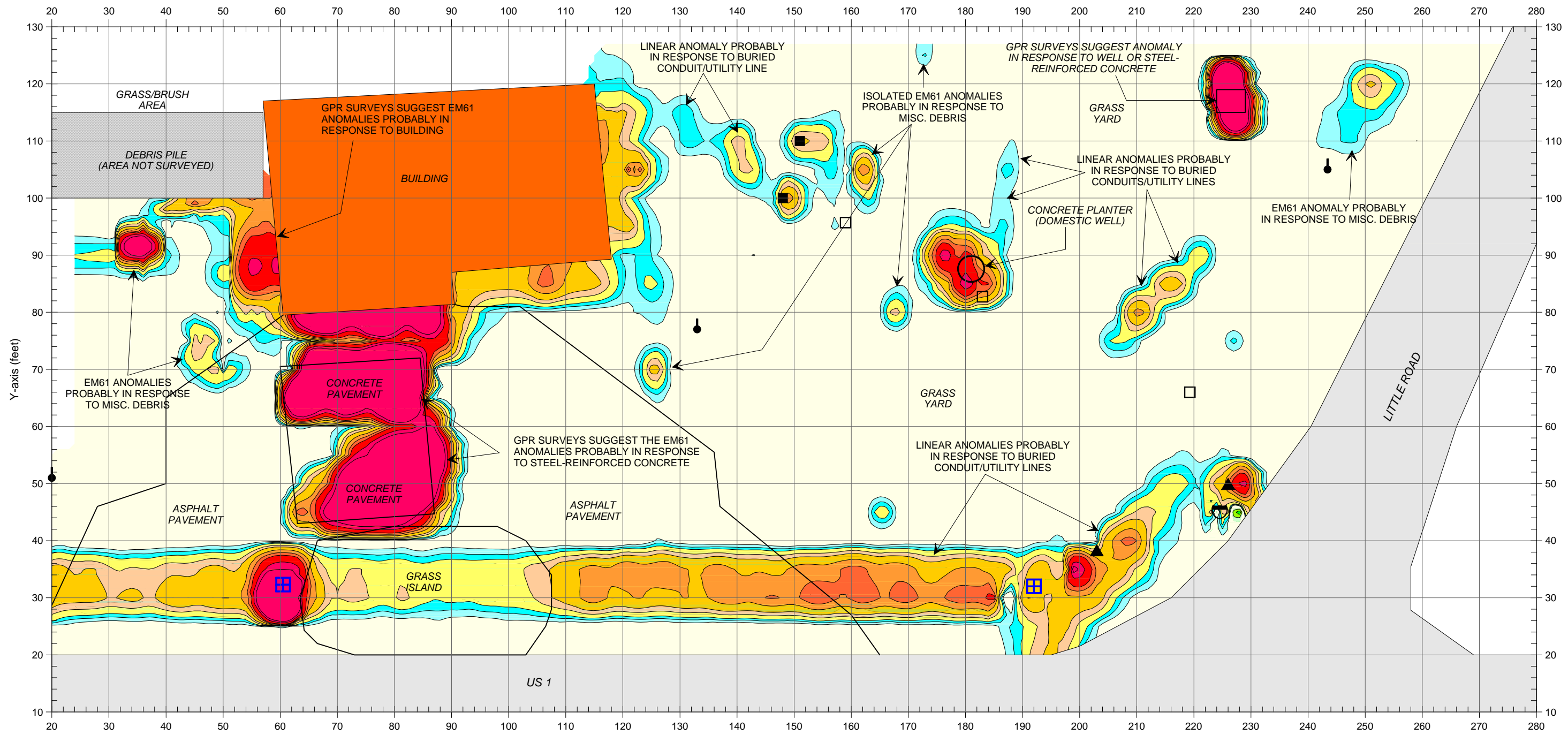


The photograph shows the location of two probable USTs buried approx. 0.75 feet below surface, as suggested by the geophysical results at Parcel 50.



The GPR image obtained along survey line Y=55 shows the anomalies that are probably in response to USTs near X=566 and X=570, and buried approximately 0.75 feet below surface. The location of this GPR image is shown with a solid purple line in the above photograph.

CLIENT	SOLUTIONS IES		DATE	08/26/05	DRAWN	
SITE	PARCEL 50 (PANSY ERNEST PROPERTY)		LAY		CPWD	
CITY	MARSTON	STATE	NORTH CAROLINA	DWG		
TITLE	GEOPHYSICAL RESULTS		JNO	2006-200	PROJECT	



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 EM metal detection data were collected on July 27, 2006 using a Geonics EM61 instrument. Ground penetrating radar (GPR) data were acquired on August 16, 2006 using a Geophysical Survey Systems SIR 2000 instrument with a 400 MHz antenna.

The geophysical results suggest that the proposed ROW area does not contain metallic USTs.

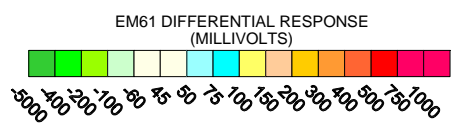
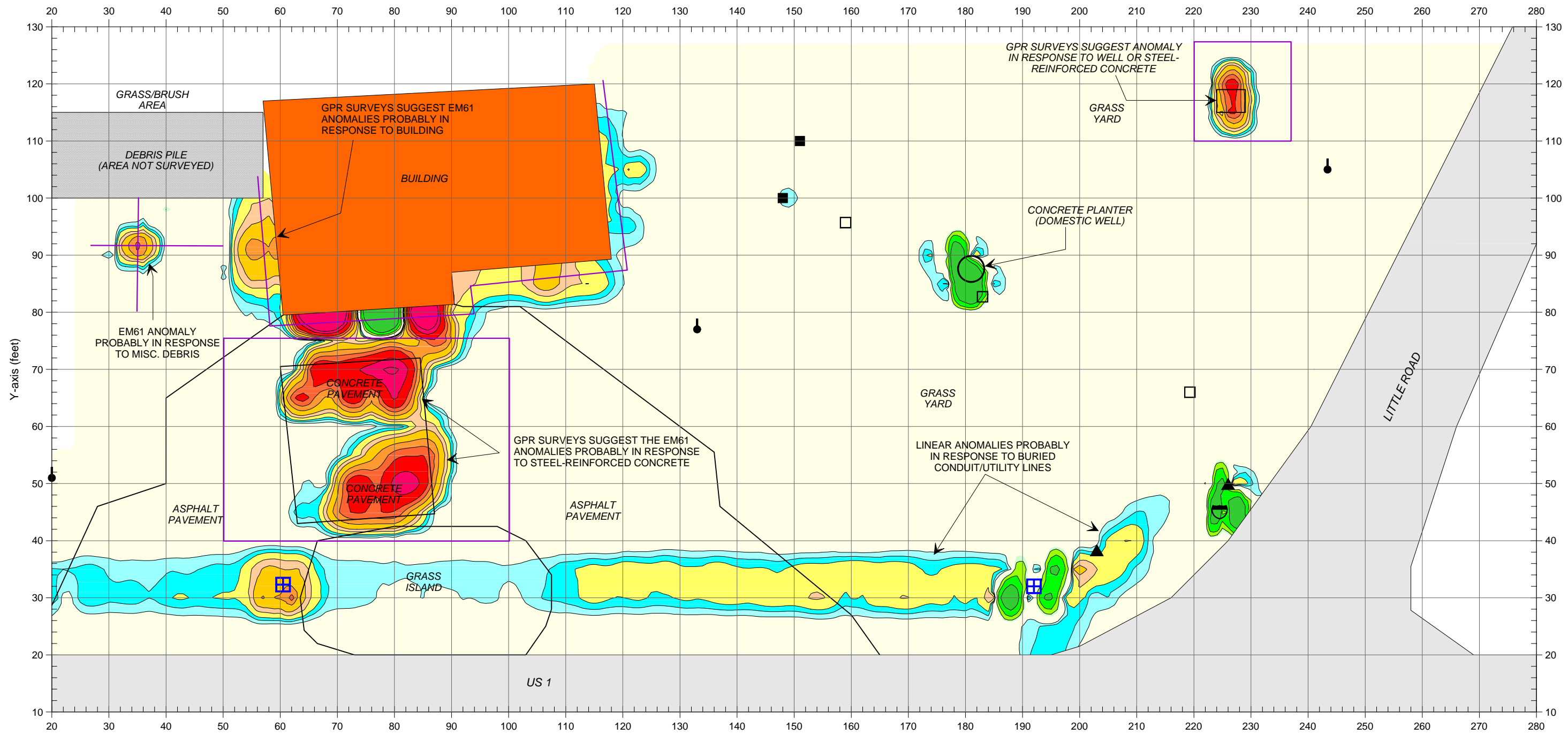
LEGEND	
	EM61 SURVEY AREA: EM DATA ACQUIRED ALONG NORTHEAST-SOUTHWEST TRENDING LINES SPACED 5 FEET APART
	STORM SEWER GRATE
	CONCRETE BLOCK
	GUY WIRE
	UTILITY POLE
	TRAFFIC SIGN
	EDGE OF CULVERT
	CONCRETE ABUTMENT



CLIENT	SOLUTIONS IES		DATE	08/01/06	DRWN	MJD
SITE	PARCEL 61 - COOPER & BROWN INC. PROPERTY		LAY		CHKD	
CITY	HOFFMAN	STATE	NORTH CAROLINA	DWG		
TITLE	GEOPHYSICAL RESULTS		JNO.	2006-200	FIGURE	

EM61
BOTTOM COIL
RESULTS

FIGURE 14



Note: The contour plot shows the differential results of the EM61 metal detection survey 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 EM metal detection data were collected on July 27, 2006 using a Geonics EM61 instrument. Ground penetrating radar (GPR) data were acquired on August 16, 2006 using a Geophysical Survey Systems SIR 2000 instrument with a 400 MHz antenna.

The geophysical results suggest the proposed ROW area does not contain metallic USTs.

LEGEND	
	EM61 SURVEY AREA: EM DATA ACQUIRED ALONG NORTHEAST-SOUTHWEST TRENDING LINES SPACED 5 FEET APART
	STORM SEWER GRATE
	CONCRETE BLOCK
	GUY WIRE
	UTILITY POLE
	TRAFFIC SIGN
	EDGE OF CULVERT
	CONCRETE ABUTMENT
	GPR SURVEY LINE
	GPR SURVEY AREA



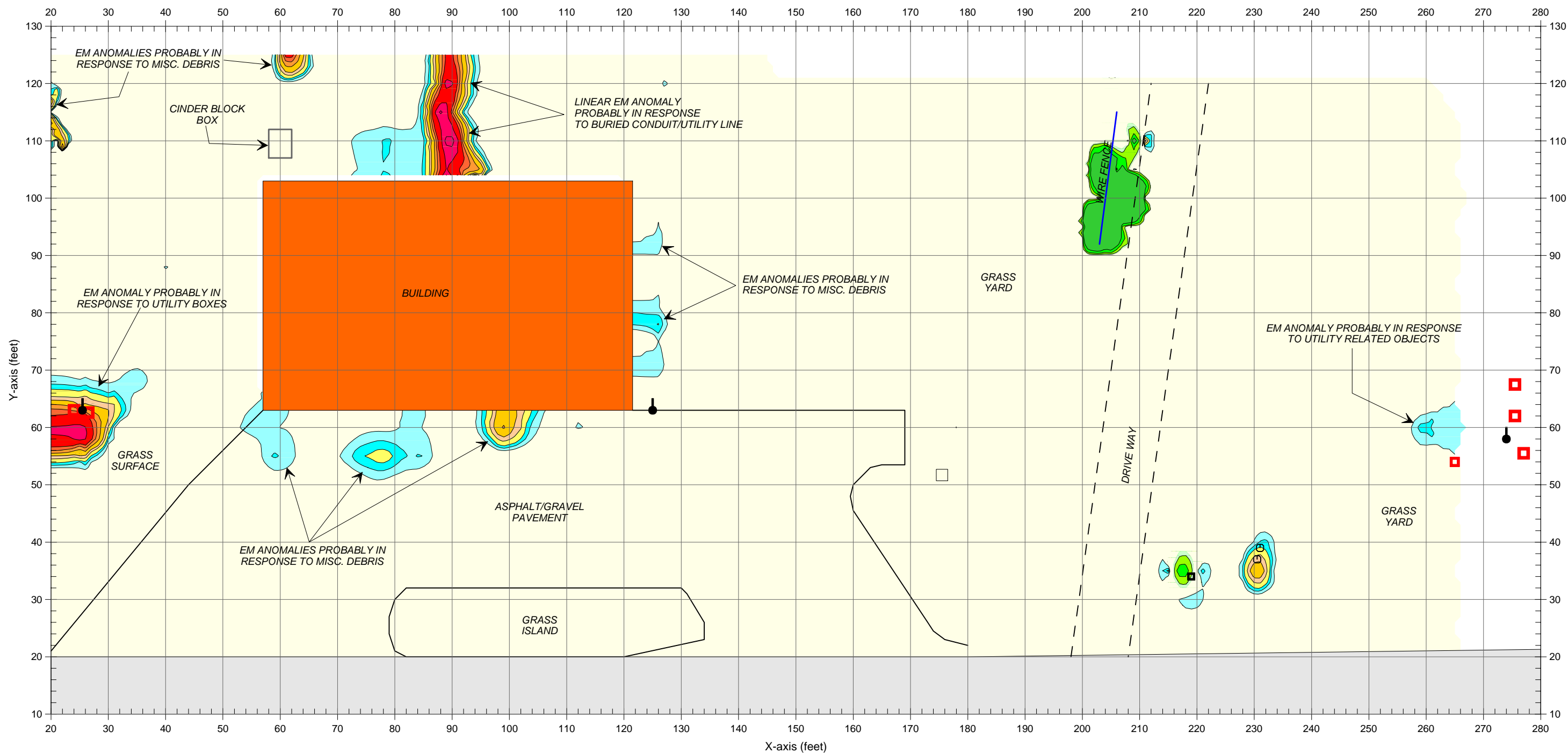
APPROXIMATE NORTH



CLIENT	SOLUTIONS IES		DATE	08/01/06	DRWN	MJD
SITE	PARCEL 61 - COOPER & BROWN INC. PROPERTY		LAY		CHKD	
CITY	HOFFMAN	STATE	NORTH CAROLINA		DWG	
TITLE	GEOPHYSICAL RESULTS		JNO.	2006-200	FIGURE	

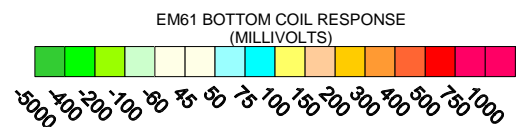
GRAPHIC SCALE IN METERS

EM61 DIFFERENTIAL RESULTS



LEGEND

- EM61 SURVEY AREA: EM DATA ACQUIRED ALONG NORTHERLY-SOUTHERLY TRENDING LINES SPACED 5 FEET APART
- ELECTRICAL OR UTILITY BOX
- WATER METER OR VALVE COVER
- GUY WIRE
- UTILITY POLE
- TRAFFIC SIGN
- MAIL BOX



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 EM metal detection data were collected on July 27 and August 14, 2006 using a Geonics EM61 instrument. Ground penetrating radar (GPR) data were acquired on July 28, 2006 using a Geophysical Survey Systems SIR 2000 instrument with a 400 MHz antenna.

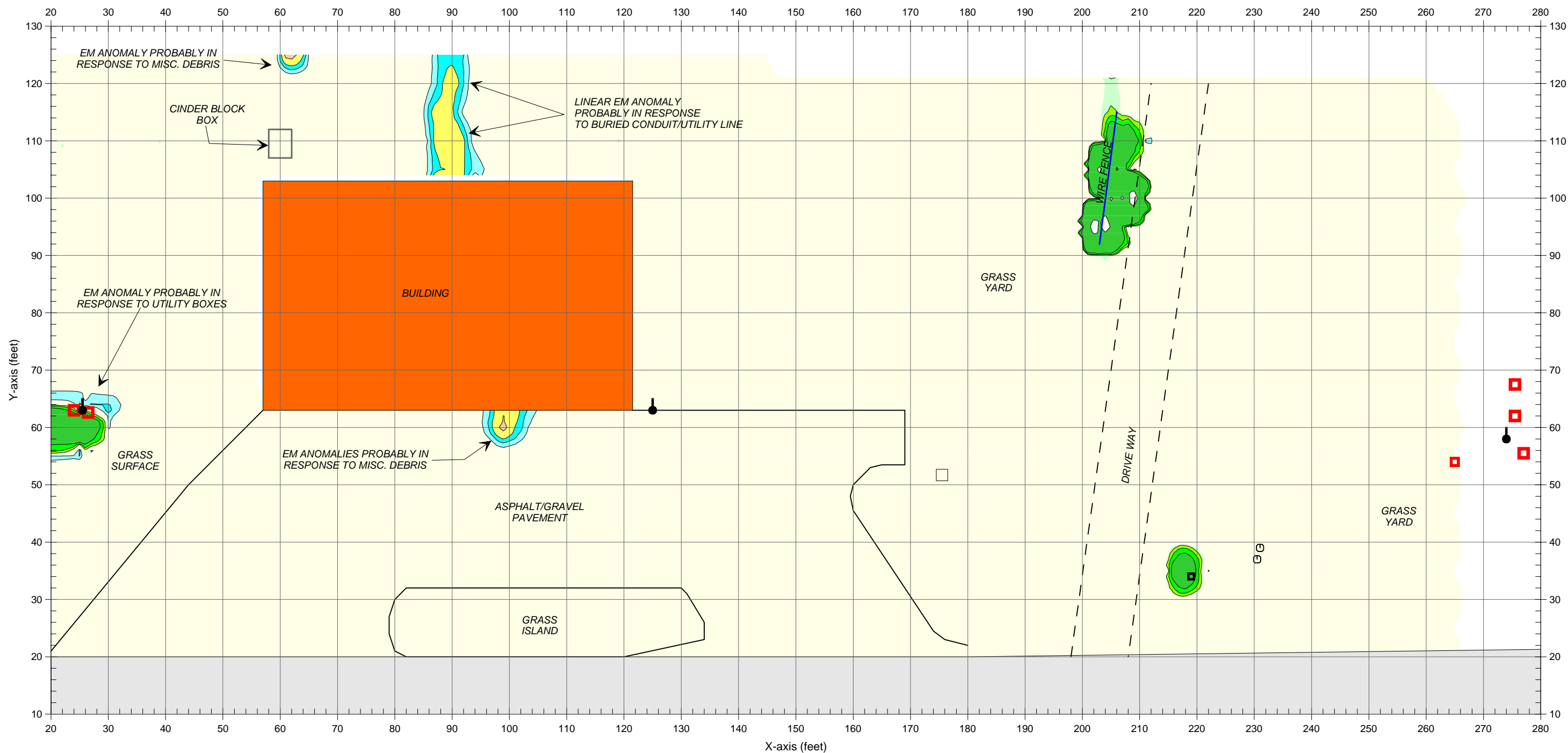
The geophysical investigation suggests that the survey area does not contain metallic USTs.



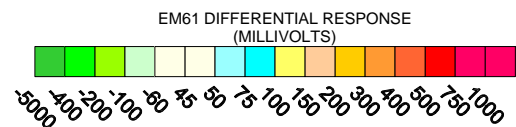
CLIENT	SOLUTIONS IES		DATE	08/17/06	DRWN	MJD
SITE	PARCEL 70 - DELIA LASSITER PROPERTY		LAY		CHKD	
CITY	HOFFMAN	STATE	NORTH CAROLINA	DWG		
TITLE	GEOPHYSICAL RESULTS		J-NO	2006-200	FIGURE	

**EM61
BOTTOM COIL
RESULTS**

FIGURE 16



LEGEND	
	EM61 SURVEY AREA: EM DATA ACQUIRED ALONG NORTHERLY-SOUTHERLY TRENDING LINES SPACED 5 FEET APART
	ELECTRICAL OR UTILITY BOX
	WATER METER OR VALVE COVER
	GUY WIRE
	UTILITY POLE
	TRAFFIC SIGN
	MAIL BOX



Note: The contour plot shows the differential results of the EM61 metal detection survey 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 EM metal detection data were collected on July 27 and August 14, 2006 using a Geonics EM61 instrument. Ground penetrating radar (GPR) data were acquired on July 28, 2006 using a Geophysical Survey Systems SIR 2000 instrument with a 400 MHz antenna.

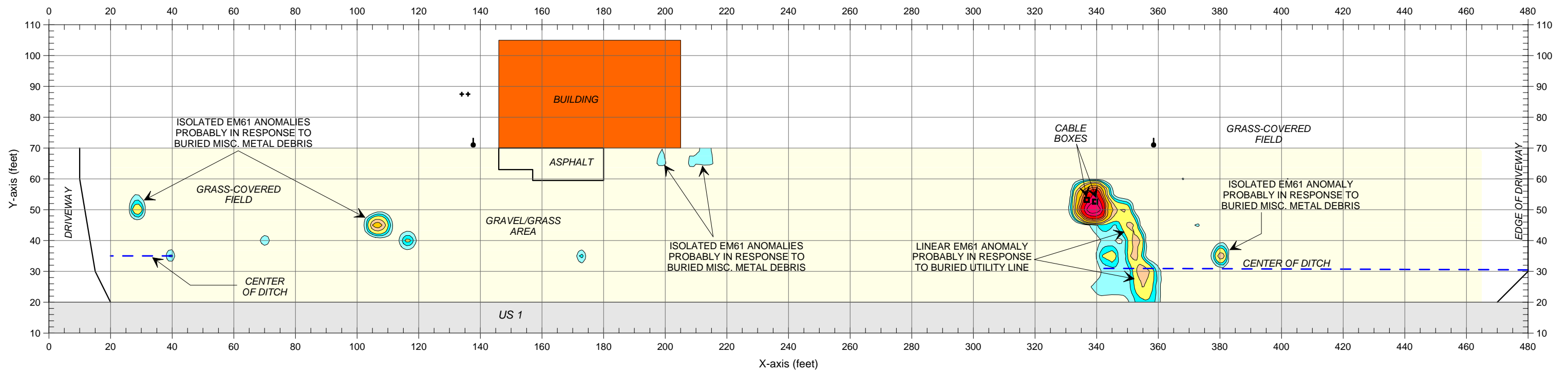
The geophysical investigation suggests that the survey area does not contain metallic USTs.



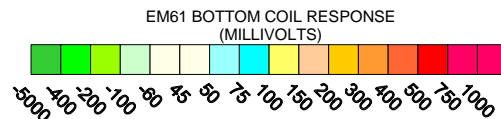
CLIENT	SOLUTIONS IES		DATE	08/17/06	DRWN	MJD
SITE	PARCEL 70 - DELIA LASSITER PROPERTY		LAY		CHKD	
CITY	HOFFMAN	STATE	NORTH CAROLINA		DWG	
TITLE	GEOPHYSICAL RESULTS		J-NO	2006-200	FIGURE	

GRAPHIC SCALE IN FEET

EM61
DIFFERENTIAL
RESULTS



LEGEND	
	EM61 SURVEY AREA: EM DATA ACQUIRED ALONG NORTHEAST-SOUTHWEST TRENDING LINES SPACED 5 FEET APART
	PHONE CABLE BOX
	GUY WIRE
	UTILITY POLE



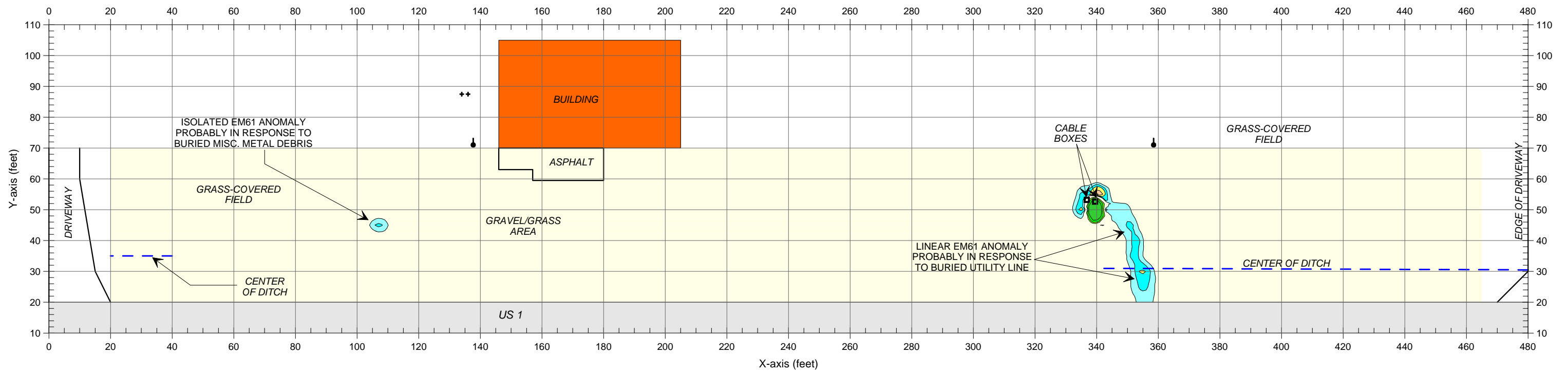
Note: The contour plot shows the bottom coil (most sensitive) response of the EM61 instrument in millivolts (mV). The bottom coil response shows buried metallic objects regardless of size. The EM metal detection data were collected on July 27, 2006 using a Geonics EM61 instrument. Ground penetrating radar (GPR) data were acquired on July 28, 2006 using a Geophysical Survey Systems SIR 2000 instrument with a 400 MHz antenna.

The geophysical investigation suggests that the survey area does not contain metallic USTs.



CLIENT	SOLUTIONS IES		DATE	08/01/06	DRWN	MJD
SITE	PARCEL 22 - IVEY LITTLE PROPERTY		LAY		CHKD	
CITY	HOFFMAN	STATE	NORTH CAROLINA	DWG		
TITLE	GEOPHYSICAL RESULTS		J-NO.	2006-200	FIGURE	

EM61 BOTTOM COIL RESULTS



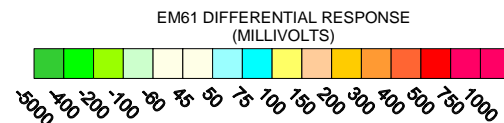
Note: The contour plot shows the differential results of the EM61 metal detection survey in millivolts (mV). The differential response focuses on larger, buried metallic objects such as drums and USTs and ignores smaller miscellaneous, buried, metal debris. The EM metal detection data were collected on July 27, 2006 using a Geonics EM61 instrument. Ground penetrating radar (GPR) data were acquired on July 28, 2006 using a Geophysical Survey Systems SIR 2000 instrument with a 400 MHz antenna.

The geophysical investigation suggests that the survey area does not contain metallic USTs.

LEGEND	
	EM61 SURVEY AREA: EM DATA ACQUIRED ALONG NORTHEAST-SOUTHWEST TRENDING LINES SPACED 5 FEET APART
	PHONE CABLE BOX
	GUY WIRE
	UTILITY POLE

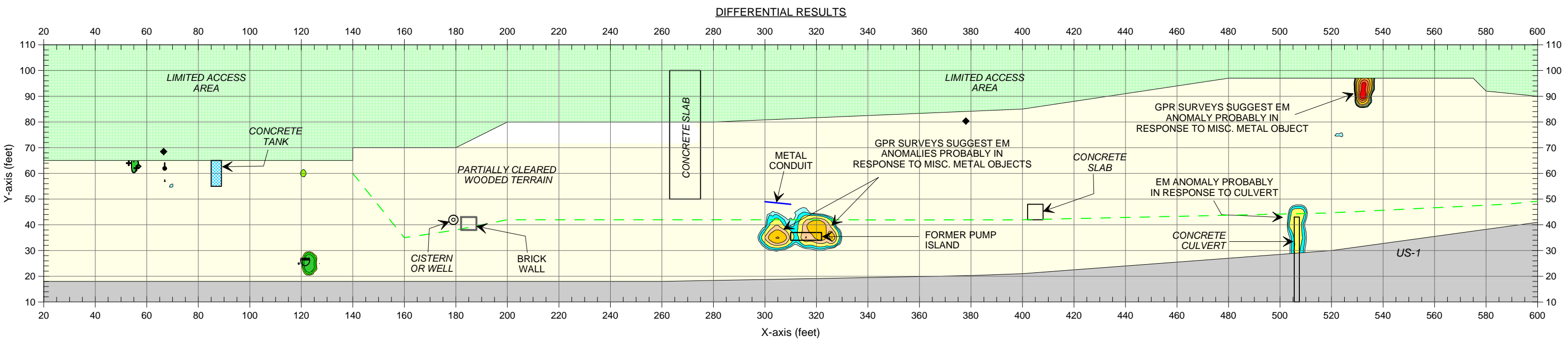
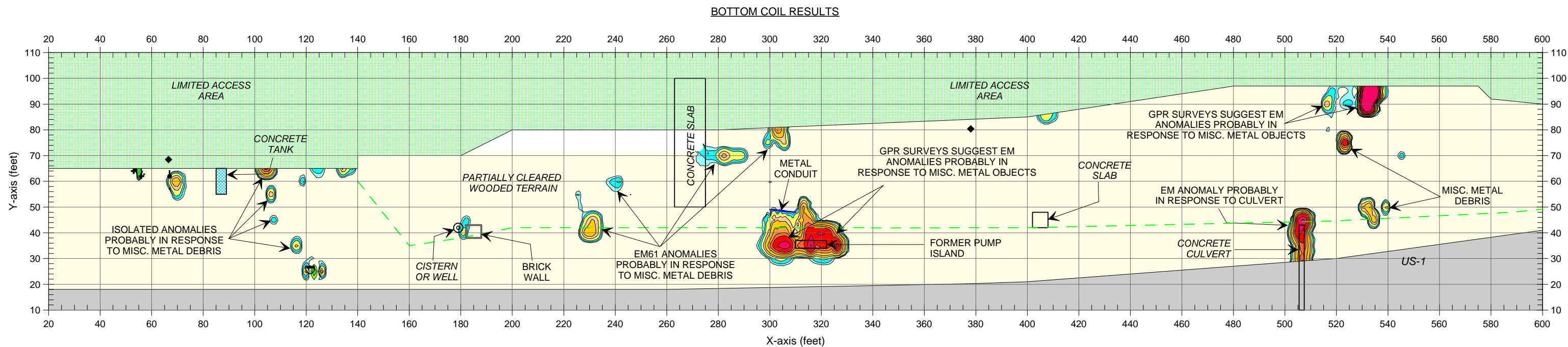


APPROXIMATE NORTH

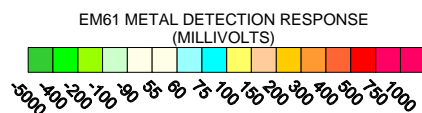


CLIENT	SOLUTIONS IES		DATE	08/01/06	DRWN	MJD
SITE	PARCEL 22 - IVEY LITTLE PROPERTY		LAY		CHKD	
CITY	HOFFMAN	STATE	NORTH CAROLINA	DWG		
TITLE	GEOPHYSICAL RESULTS		J-NO	2006-200	FIGURE	

EM61
DIFFERENTIAL
RESULTS



LEGEND	
	EM61 SURVEY AREA: EM DATA ACQUIRED ALONG EASTERLY-WESTERLY TRENDING LINES SPACED 5 FEET APART
	RIGHT-OF-WAY MARKER
	GUY WIRE
	UTILITY POLE
	TRAFFIC SIGN



Note: The contour plots show the bottom coil (most sensitive) response of the EM61 instrument and the differential response in millivolts (mV). The bottom coil response shows buried metallic objects regardless of size. The differential response focuses on larger, buried metallic objects such as drums and USTs and ignores smaller miscellaneous, buried, metal debris. The EM metal detection data were collected on August 14 & 28, 2006 using a Geonics EM61 instrument. Ground penetrating radar (GPR) data were acquired on August 15 & 28, 2006 using a Geophysical Survey Systems SIR 2000 instrument with a 400 MHz antenna.

The geophysical investigation suggests that the survey area does not contain metallic USTs.



CLIENT	SOLUTIONS IES	DATE	08/17/06	DRAWN	MJD
SITE	PARCEL 68 - JAMES PUGH PROPERTY	LAY		CHECK	
CITY	HOFFMAN	STATE	NORTH CAROLINA	DWG	
TITLE	GEOPHYSICAL RESULTS	J.NO.	2006-200	FIGURE	

EM61 METAL DETECTION RESULTS

APPENDIX C
BORING LOGS

Log of Soil Boring: P22-B1

Project: Richmond County PSA's
Client: NCDOT
WBS # 34438.1.1
State Project # R-2502B
Drilling Method: Direct Push
Sampler Type: Macro Core
Logged By: K.B

Solutions-IES Project No.: 3260.06A3.NDOT
County: Richmond
Boring Date: 08/23/06
Site: Parcel 22
Checked By: JD

Boring Number: 1
Initial Water Level: NA
Stabilized Water Level: NA
Cave In Depth: NA
Total Depth of Boring: 8' bgs

SUBSURFACE PROFILE			SAMPLE		PID Field Screen • ppm • 250 500 750	FID Field Screen ■ ppm ■ 250 500 750	Lab Sample Depth	Well Data
Depth ft. bgs	USCS Symbol	Description	Sample Interval	% Recovery				
0		Ground Surface						
1	SM	Dry, brown, fine silty sand	0-1	100	0			
2								
3	SM	Dry, orange, fine silty sand	2-3	100	0			
4								
5								
6								
7	SM	Moist, tan and orange, fine silty sand	6-7	100	0			
8								
9								
10								
11								
12								
13								
14								
15								
16								

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Log of Soil Boring: P22-B2

Project: Richmond County PSA's
 Client: NCDOT
 WBS # 34438.1.1
 State Project # R-2502B
 Drilling Method: Direct Push
 Sampler Type: Macro Core
 Logged By: K.B

Solutions-IES Project No.: 3260.06A3.NDOT
 County: Richmond
 Boring Date: 08/23/06
 Site: Parcel 22
 Checked By: JD

Boring Number: 2
 Initial Water Level: NA
 Stabilized Water Level: NA
 Cave In Depth: NA
 Total Depth of Boring: 8' bgs

SUBSURFACE PROFILE			SAMPLE		PID Field Screen ● ppm ● 250 500 750	FID Field Screen ■ ppm ■ 250 500 750	Lab Sample Depth	Well Data
Depth ft. bgs	USCS Symbol	Description	Sample Interval	% Recovery				
0		Ground Surface						
1	SM	Dry, brown, fine silty sand	0-1	100	0			
2	SM	Moist, brown and orange, fine silty sand	1-2					
3	SM	Moist, orange, fine silty sand	2-3	100	0			
4								
5				100	0			
6								
7	SM	Moist, tan and orange, fine silty sand	6-7	100	0			
8								
9								
10								
11								
12								
13								
14								
15								
16								

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Log of Soil Boring: P22-B3

Project: Richmond County PSA's
 Client: NCDOT
 WBS # 34438.1.1
 State Project # R-2502B
 Drilling Method: Direct Push
 Sampler Type: Macro Core
 Logged By: K.B

Solutions-IES Project No.: 3260.06A3.NDOT
 County: Richmond
 Boring Date: 08/23/06
 Site: Parcel 22
 Checked By: JD

Boring Number: 3
 Initial Water Level: NA
 Stabilized Water Level: NA
 Cave In Depth: NA
 Total Depth of Boring: 8' bgs

SUBSURFACE PROFILE			SAMPLE		PID Field Screen • ppm • 250 500 750	FID Field Screen ■ ppm ■ 250 500 750	Lab Sample Depth	Well Data
Depth ft. bgs	USCS Symbol	Description	Sample Interval	% Recovery				
0		Ground Surface						
0 - 1	SM	Dry, brown, fine silty sand		100	0			
1 - 2	SM	Moist, brown and orange, fine silty sand		100	0			
2 - 3	SM	Moist, orange, fine silty sand		100	0			
3 - 4	SM	Moist, orange, fine silty sand		100	0			
4 - 5	SM	Moist, orange, fine silty sand		100	0			
5 - 6	SM	Moist, tan and orange, fine silty sand		100	0			
6 - 7	SM	Moist, tan and orange, fine silty sand		100	0			
7 - 8								
8 - 9								
9 - 10								
10 - 11								
11 - 12								
12 - 13								
13 - 14								
14 - 15								
15 - 16								

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Log of Soil Boring: P22-B4

Project: Richmond County PSA's
 Client: NCDOT
 WBS # 34438.1.1
 State Project # R-2502B
 Drilling Method: Direct Push
 Sampler Type: Macro Core
 Logged By: K.B

Solutions-IES Project No.: 3260.06A3.NDOT
 County: Richmond
 Boring Date: 08/23/06
 Site: Parcel 22
 Checked By: JP

Boring Number: 4
 Initial Water Level: NA
 Stabilized Water Level: NA
 Cave In Depth: NA
 Total Depth of Boring: 8' bgs

SUBSURFACE PROFILE			SAMPLE		PID Field Screen • ppm • 250 500 750	FID Field Screen ■ ppm ■ 250 500 750	Lab Sample Depth	Well Data
Depth ft. bgs	USCS Symbol	Description	Sample Interval	% Recovery				
0		Ground Surface						
1	SM	Moist, brown, fine silty sand	0-1	100	0			
3	SM	Moist, tan and orange, fine silty sand	0-3	100	0			
5			0-5	100	0			
7			0-7	100	0			
8								
9								
10								
11								
12								
13								
14								
15								
16								

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Log of Soil Boring: P22-B5

Project: Richmond County PSA's
 Client: NCDOT
 WBS # 34438.1.1
 State Project # R-2502B
 Drilling Method: Direct Push
 Sampler Type: Macro Core
 Logged By: K.B

Solutions-IES Project No.: 3260.06A3.NDOT
 County: Richmond
 Boring Date: 08/23/06
 Site: Parcel 22
 Checked By: JD

Boring Number: 5

Initial Water Level: NA
 Stabilized Water Level: NA
 Cave In Depth: NA

Total Depth of Boring: 8' bgs

SUBSURFACE PROFILE			SAMPLE		PID Field Screen • ppm • 250 500 750	FID Field Screen ■ ppm ■ 250 500 750	Lab Sample Depth	Well Data
Depth ft. bgs	USCS Symbol	Description	Sample Interval	% Recovery				
0		Ground Surface						
1	SM	Moist, orange, fine silty sand	0-1	100	0			
2	SM	Moist, orange and brown, fine silty sand	1-2	100	0			
3	SM	Moist, tan and orange, fine silty sand	2-3	100	0			
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								

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Log of Soil Boring: P22-B6

Project: Richmond County PSA's
 Client: NCDOT
 WBS # 34438.1.1
 State Project # R-2502B
 Drilling Method: Direct Push
 Sampler Type: Macro Core
 Logged By: K.B

Solutions-IES Project No.: 3260.06A3.NDOT
 County: Richmond
 Boring Date: 08/23/06
 Site: Parcel 22
 Checked By: *JD*

Boring Number: 6
 Initial Water Level: NA
 Stabilized Water Level: NA
 Cave In Depth: NA
 Total Depth of Boring: 8' bgs

SUBSURFACE PROFILE			SAMPLE		PID Field Screen ppm 250 500 750	FID Field Screen ppm 250 500 750	Lab Sample Depth	Well Data
Depth ft. bgs	USCS Symbol	Description	Sample Interval	% Recovery				
0		Ground Surface						
1	<i>SM</i>	Moist, brown, fine silty sand	0-1	100	0			
2	<i>SM</i>	Moist, tan and brown, fine silty sand	1-2	100	0			
3	<i>SM</i>	Moist, orange, fine silty sand	2-3	100	0			
4								
5								
6								
7	<i>SM</i>	Moist, tan and orange, fine silty sand	6-7	100	0			
8								
9								
10								
11								
12								
13								
14								
15								
16								

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Log of Soil Boring: P22-B7

Project: Richmond County PSA's
 Client: NCDOT
 WBS # 34438.1.1
 State Project # R-2502B
 Drilling Method: Direct Push
 Sampler Type: Macro Core
 Logged By: K.B

Solutions-IES Project No.: 3260.06A3.NDOT
 County: Richmond
 Boring Date: 08/23/06
 Site: Parcel 22
 Checked By: *JD*

Boring Number: 7

Initial Water Level: NA
 Stabilized Water Level: NA
 Cave In Depth: NA

Total Depth of Boring: 8' bgs

SUBSURFACE PROFILE			SAMPLE		PID Field Screen • ppm • 250 500 750	FID Field Screen ■ ppm ■ 250 500 750	Lab Sample Depth	Well Data
Depth ft. bgs	USCS Symbol	Description	Sample Interval	% Recovery				
0		Ground Surface						
0 - 3	SM	Moist, dark brown, fine silty sand	0 - 3	100	0			
3 - 5	SM	Moist, orange, fine silty sand	3 - 5	100	0			
5 - 6	SM	Moist, tan and orange, fine silty sand	5 - 6	100	2			
6 - 8	SM	Moist, tan and orange, fine silty sand	6 - 8	100	0			
8 - 16								

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Log of Soil Boring: P22-B8

Project: Richmond County PSA's
 Client: NCDOT
 WBS # 34438.1.1
 State Project # R-2502B
 Drilling Method: Direct Push
 Sampler Type: Macro Core
 Logged By: K.B

Solutions-IES Project No.: 3260.06A3.NDOT
 County: Richmond
 Boring Date: 08/23/06
 Site: Parcel 22
 Checked By: *JD*

Boring Number: 8
 Initial Water Level: NA
 Stabilized Water Level: NA
 Cave In Depth: NA
 Total Depth of Boring: 8' bgs

SUBSURFACE PROFILE			SAMPLE		PID Field Screen • ppm • 250 500 750	FID Field Screen ■ ppm ■ 250 500 750	Lab Sample Depth	Well Data
Depth ft. bgs	USCS Symbol	Description	Sample Interval	% Recovery				
0		Ground Surface						
1	SM	Moist, brown, fine silty sand	0 - 1	100	0			
2	SM	Moist, orange, fine silty sand	1 - 2					
3	SM	Moist, black, fine silty sand	2 - 3	100	0			
4	SM	Moist, brown and orange, fine silty sand	3 - 4					
5	SM	Moist, orange, fine silty sand	4 - 5	100	0			
6	SM	Moist, tan and orange, fine silty sand	5 - 6					
7			6 - 7	100	0			
8								
9								
10								
11								
12								
13								
14								
15								
16								

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Log of Soil Boring: P22-B9

Project: Richmond County PSA's
 Client: NCDOT
 WBS # 34438.1.1
 State Project # R-2502B
 Drilling Method: Direct Push
 Sampler Type: Macro Core
 Logged By: K.B

Solutions-IES Project No.: 3260.06A3.NDOT
 County: Richmond
 Boring Date: 08/23/06
 Site: Parcel 22
 Checked By: JD

Boring Number: 9
 Initial Water Level: NA
 Stabilized Water Level: NA
 Cave In Depth: NA
 Total Depth of Boring: 8' bgs

SUBSURFACE PROFILE			SAMPLE		PID Field Screen • ppm • 250 500 750	FID Field Screen ■ ppm ■ 250 500 750	Lab Sample Depth	Well Data
Depth ft. bgs	USCS Symbol	Description	Sample Interval	% Recovery				
0		Ground Surface						
1	<i>SM</i>	Moist, dark brown, fine silty sand	0-1	100	0			
3	<i>SM</i>	Moist, brown and orange, fine silty sand	0-3	100	0			
5			3-5	100	1			
6	<i>SM</i>	Moist, orange, fine silty sand	0-6	100	1			
7			6-7	100	1			
8								
9								
10								
11								
12								
13								
14								
15								
16								

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Log of Soil Boring: P22-B10

Project: Richmond County PSA's
 Client: NCDOT
 WBS # 34438.1.1
 State Project # R-2502B
 Drilling Method: Direct Push
 Sampler Type: Macro Core
 Logged By: K.B

Solutions-IES Project No.: 3260.06A3.NDOT
 County: Richmond
 Boring Date: 08/23/06
 Site: Parcel 22
 Checked By: *JD*

Boring Number: 10
 Initial Water Level: NA
 Stabilized Water Level: NA
 Cave In Depth: NA
 Total Depth of Boring: 8' bgs

SUBSURFACE PROFILE			SAMPLE		PID Field Screen • ppm • 250 500 750	FID Field Screen ■ ppm ■ 250 500 750	Lab Sample Depth	Well Data
Depth ft. bgs	USCS Symbol	Description	Sample Interval	% Recovery				
0		Ground Surface						
0 - 1	SM	Moist, dark brown, fine silty sand (loam)		100	0			
1 - 3	SM	Moist, brown and orange, fine silty sand		100	0			
3 - 5				100	0			
5 - 7				100	0			
7 - 8				100	0			
8 - 16								

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Log of Soil Boring: P22-B11

Project: Richmond County PSA's
 Client: NCDOT
 WBS # 34438.1.1
 State Project # R-2502B
 Drilling Method: Direct Push
 Sampler Type: Macro Core
 Logged By: K.B

Solutions-IES Project No.: 3260.06A3.NDOT
 County: Richmond
 Boring Date: 08/23/06
 Site: Parcel 22
 Checked By: JD

Boring Number: 11

Initial Water Level: NA
 Stabilized Water Level: NA
 Cave In Depth: NA

Total Depth of Boring: 8' bgs

SUBSURFACE PROFILE			SAMPLE		PID Field Screen ● ppm ● 250 500 750	FID Field Screen ■ ppm ■ 250 500 750	Lab Sample Depth	Well Data
Depth ft. bgs	USCS Symbol	Description	Sample Interval	% Recovery				
0		Ground Surface						
0 - 3	SM	Moist, dark brown, fine silty sand (loam)		100	0			
3 - 6	SM	Moist, brown and orange, fine silty sand		100	0			
6 - 7				100	0			
7 - 8				100	1			
8 - 16								

Solutions-IES, Inc.
 1101 Nowell Road
 Raleigh, NC 27607
 (919) 873-1060



APPENDIX D

GPS COORDINATES OF BORING LOCATIONS

Appendix D

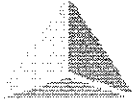
**GPS Coordinates of Boring Locations
Parcel 22, Ivey Little Property
Richmond County, North Carolina
WBS Element: 34438.1.1; NCDOT Project R-2502B**

Boring Identification	Northing	Easting
P22-B1	35.04534485	-79.52253378
P22-B2	35.0453456	-79.52255071
P22-B3	35.04523898	-79.52267585
P22-B4	35.04513882	-79.5227476
P22-B5	35.04505752	-79.52285078
P22-B6	35.0448768	-79.52302974
P22-B7	35.04480455	-79.5231242
P22-B8	35.04476189	-79.52322847
P22-B9	35.04466181	-79.52329393
P22-B10	35.04447103	-79.52347465
P22-B11	35.04446676	-79.52349368

Notes:

Coordinates referenced to North American Datum, 1983.

APPENDIX E
LABORATORY ANALYTICAL REPORTS



PRISM
LABORATORIES, INC.

Case Narrative

Date: 09/01/06
Company: N. C. Department of Transportation
Contact: Sheri Knox
Address: c/o Solution - IES
 1101 Nowell Road
 Raleigh, NC 27607

Client Project ID: NCDOT Parcel 22
Prism COC Group No: G0806788
Collection Date(s): 08/23/06
Lab Submittal Date(s): 08/25/06

Client Project Name Or No: Richmond Co. WBS# 34438.1.1

This data package contains the analytical results for the project identified above and includes a Case Narrative, Laboratory Report and Quality Control Data totaling 16 pages. A chain-of-custody is also attached for the samples submitted to Prism for this project.

Data qualifiers are flagged individually on each sample. A key reference for the data qualifiers appears at the end of this case narrative. Quality control statements and/or sample specific remarks are included in the sample comments section of the laboratory report for each sample affected.

Semi Volatile Analysis

No Anomalies Reported

Volatile Analysis

No Anomalies Reported

Metals Analysis

N/A

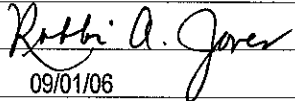
Wet Lab and Micro Analysis

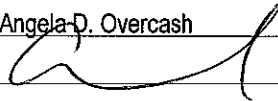
N/A

Please call if you have any questions relating to this analytical report.

Date Reviewed by: Robbi A. Jones

Project Manager: Angela D. Overcash

Signature: 

Signature: 

Review Date: 09/01/06

Approval Date: 09/01/06

Data Qualifiers Key Reference:

- B: Compound also detected in the method blank.
- #: Result outside of the QC limits.
- DO: Compound diluted out.
- E: Estimated concentration, calibration range exceeded.
- J: The analyte was positively identified but the value is estimated below the reporting limit.
- H: Estimated concentration with a high bias.
- L: Estimated concentration with a low bias.
- M: A matrix effect is present.

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

Laboratory Report

09/01/06

N. C. Department of Transportation
 Attn: Sheri Knox
 c/o Solution - IES
 1101 Nowell Road
 Raleigh, NC 27607

Project Name: Richmond Co.
 Project ID: NCDOT Parcel 22
 Project No.: WBS# 34438.1.1
 Sample Matrix: Soil

Client Sample ID: P22.B1 6-8
 Prism Sample ID: 159490
 COC Group: G0806788
 Time Collected: 08/23/06 13:20
 Time Submitted: 08/25/06 15:35

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
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Percent Solids Determination

Percent Solids	83.6	%			1	SM2540 G	08/29/06 14:30	lbrown	
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Diesel Range Organics (DRO) by GC-FID

Diesel Range Organics (DRO)	BRL	mg/kg	8.4	2.0	1	8015B	08/28/06 15:08	lvogel	Q17363
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Sample Preparation:			50.23 g	/	2 mL	3550B	08/28/06 9:00	dpope	P16217
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Surrogate	% Recovery	Control Limits
o-Terphenyl	91	48 - 130

Sample Weight Determination

Weight 1	5.19	g			1	GRO	08/28/06 0:00	lbrown	
Weight 2	4.81	g			1	GRO	08/28/06 0:00	lbrown	

Gasoline Range Organics (GRO) by GC-FID

Gasoline Range Organics (GRO)	BRL	mg/kg	8.4	3.3	50	8015B	08/30/06 6:14	grappaccioli	Q17375
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One surrogate recovery was outside the control limits. No target compounds were detected in this sample. No further action was taken.

Surrogate	% Recovery	Control Limits
aaa-TFT	130 #	55 - 129

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

Laboratory Report

09/01/06

N. C. Department of Transportation
 Attn: Sheri Knox
 c/o Solution - IES
 1101 Nowell Road
 Raleigh, NC 27607

Project Name: Richmond Co.
 Project ID: NCDOT Parcel 22
 Project No.: WBS# 34438.1.1
 Sample Matrix: Soil

Client Sample ID: P22.B1 6-8
 Prism Sample ID: 159490
 COC Group: G0806788
 Time Collected: 08/23/06 13:20
 Time Submitted: 08/25/06 15:35

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
-----------	--------	-------	--------------	-----	-----------------	--------	--------------------	---------	----------

Sample Comment(s):

BRL = Below Reporting Limit

J = Estimated value between the Reporting Limit and the MDL

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

All results are reported on a dry-weight basis

Angela D. Overcash, V.P. Laboratory Services



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

Laboratory Report

09/01/06

N. C. Department of Transportation
 Attn: Sheri Knox
 c/o Solution - IES
 1101 Nowell Road
 Raleigh, NC 27607

Project Name: Richmond Co.
 Project ID: NCDOT Parcel 22
 Project No.: WBS# 34438.1.1
 Sample Matrix: Soil

Client Sample ID: P22.B2 6-8
 Prism Sample ID: 159491
 COC Group: G0806788
 Time Collected: 08/23/06 13:25
 Time Submitted: 08/25/06 15:35

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
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Percent Solids Determination

Percent Solids	96.8	%			1	SM2540 G	08/29/06 14:30	lbrown	
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Diesel Range Organics (DRO) by GC-FID

Diesel Range Organics (DRO)	BRL	mg/kg	7.2	1.8	1	8015B	08/28/06 15:45	lvogel	Q17363
-----------------------------	-----	-------	-----	-----	---	-------	----------------	--------	--------

Sample Preparation:			49.72 g	/	2 mL	3550B	08/28/06 9:00	dpope	P16217
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Surrogate	% Recovery	Control Limits
o-Terphenyl	118	48 - 130

Sample Weight Determination

Weight 1	4.68	g			1	GRO	08/28/06 0:00	lbrown	
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Weight 2	5.35	g			1	GRO	08/28/06 0:00	lbrown	
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Gasoline Range Organics (GRO) by GC-FID

Gasoline Range Organics (GRO)	BRL	mg/kg	7.2	2.8	50	8015B	08/30/06 6:55	grappaccioli	Q17375
-------------------------------	-----	-------	-----	-----	----	-------	---------------	--------------	--------

Surrogate	% Recovery	Control Limits
aaa-TFT	109	55 - 129

Sample Comment(s):

BRL = Below Reporting Limit

J = Estimated value between the Reporting Limit and the MDL

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Angela D. Overcash, V.P. Laboratory Services

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

Laboratory Report

09/01/06

N. C. Department of Transportation
 Attn: Sheri Knox
 c/o Solution - IES
 1101 Nowell Road
 Raleigh, NC 27607

Project Name: Richmond Co.
 Project ID: NCDOT Parcel 22
 Project No.: WBS# 34438.1.1
 Sample Matrix: Soil

Client Sample ID: P22.B3 6-8
 Prism Sample ID: 159492
 COC Group: G0806788
 Time Collected: 08/23/06 13:30
 Time Submitted: 08/25/06 15:35

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
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Percent Solids Determination

Percent Solids	82.4	%			1	SM2540 G	08/29/06 14:30	lbrown	
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Diesel Range Organics (DRO) by GC-FID

Diesel Range Organics (DRO)	BRL	mg/kg	8.5	2.1	1	8015B	08/28/06 16:22	jvogel	Q17363
-----------------------------	-----	-------	-----	-----	---	-------	----------------	--------	--------

Sample Preparation:			50.21 g	/	2 mL	3550B	08/28/06 9:00	dpope	P16217
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Surrogate	% Recovery	Control Limits
o-Terphenyl	108	48 - 130

Sample Weight Determination

Weight 1	4.56	g			1	GRO	08/28/06 0:00	lbrown	
----------	------	---	--	--	---	-----	---------------	--------	--

Weight 2	4.99	g			1	GRO	08/28/06 0:00	lbrown	
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Gasoline Range Organics (GRO) by GC-FID

Gasoline Range Organics (GRO)	BRL	mg/kg	8.5	3.3	50	8015B	08/30/06 7:37	grappaccioli	Q17375
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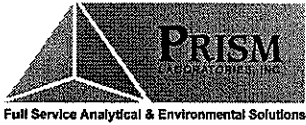
One surrogate recovery was outside the control limits. No target compounds were detected in this sample. No further action was taken.

Surrogate	% Recovery	Control Limits
aaa-TFT	132 #	55 - 129

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NC Drinking Water Cert. No. 37735

Laboratory Report

09/01/06

N. C. Department of Transportation
Attn: Sheri Knox
c/o Solution - IES
1101 Nowell Road
Raleigh, NC 27607

Project Name: Richmond Co.
Project ID: NCDOT Parcel 22
Project No.: WBS# 34438.1.1
Sample Matrix: Soil

Client Sample ID: P22.B3 6-8
Prism Sample ID: 159492
COC Group: G0806788
Time Collected: 08/23/06 13:30
Time Submitted: 08/25/06 15:35

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
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Sample Comment(s):

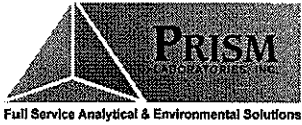
BRL = Below Reporting Limit

J = Estimated value between the Reporting Limit and the MDL

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All results are reported on a dry-weight basis

Angela D. Overcash, V.P. Laboratory Services



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 NC Drinking Water Cert. No. 37735

Laboratory Report

09/01/06

N. C. Department of Transportation
 Attn: Sheri Knox
 c/o Solution - IES
 1101 Nowell Road
 Raleigh, NC 27607

Project Name: Richmond Co.
 Project ID: NCDOT Parcel 22
 Project No.: WBS# 34438.1.1
 Sample Matrix: Soil

Client Sample ID: P22.B4 6-8
 Prism Sample ID: 159493
 COC Group: G0806788
 Time Collected: 08/23/06 13:40
 Time Submitted: 08/25/06 15:35

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
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Percent Solids Determination

Percent Solids	82.7	%			1	SM2540 G	08/29/06 14:30	lbrown	
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Diesel Range Organics (DRO) by GC-FID

Diesel Range Organics (DRO)	BRL	mg/kg	8.5	2.1	1	8015B	08/28/06 16:59	jvogel	Q17363
-----------------------------	-----	-------	-----	-----	---	-------	----------------	--------	--------

Sample Preparation:			49.76 g	/	2 mL	3550B	08/28/06 9:00	dpope	P16217
---------------------	--	--	---------	---	------	-------	---------------	-------	--------

Surrogate	% Recovery	Control Limits
o-Terphenyl	109	48 - 130

Sample Weight Determination

Weight 1	4.08	g			1	GRO	08/28/06 0:00	lbrown	
Weight 2	5.56	g			1	GRO	08/28/06 0:00	lbrown	

Gasoline Range Organics (GRO) by GC-FID

Gasoline Range Organics (GRO)	BRL	mg/kg	8.5	3.3	50	8015B	08/30/06 8:18	grappaccioli	Q17375
-------------------------------	-----	-------	-----	-----	----	-------	---------------	--------------	--------

Surrogate	% Recovery	Control Limits
aaa-TFT	113	55 - 129

Sample Comment(s):

BRL = Below Reporting Limit

J = Estimated value between the Reporting Limit and the MDL

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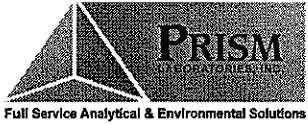
All results are reported on a dry-weight basis

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Laboratory Report

09/01/06

N. C. Department of Transportation
 Attn: Sheri Knox
 c/o Solution - IES
 1101 Nowell Road
 Raleigh, NC 27607

Project Name: Richmond Co.
 Project ID: NCDOT Parcel 22
 Project No.: WBS# 34438.1.1
 Sample Matrix: Soil

Client Sample ID: P22.B5 6-8
 Prism Sample ID: 159494
 COC Group: G0806788
 Time Collected: 08/23/06 13:50
 Time Submitted: 08/25/06 15:35

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
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Percent Solids Determination

Percent Solids	81.4	%			1	SM2540 G	08/29/06 14:30	lbrown	
----------------	------	---	--	--	---	----------	----------------	--------	--

Diesel Range Organics (DRO) by GC-FID

Diesel Range Organics (DRO)	BRL	mg/kg	8.6	2.1	1	8015B	08/28/06 17:36	jvogel	Q17363
-----------------------------	-----	-------	-----	-----	---	-------	----------------	--------	--------

Sample Preparation: 49.81 g / 2 mL 3550B 08/28/06 9:00 dpope P16217

Surrogate	% Recovery	Control Limits
o-Terphenyl	102	48 - 130

Sample Weight Determination

Weight 1	5.69	g			1	GRO	08/28/06 0:00	lbrown	
Weight 2	5.60	g			1	GRO	08/28/06 0:00	lbrown	

Gasoline Range Organics (GRO) by GC-FID

Gasoline Range Organics (GRO)	BRL	mg/kg	8.6	3.3	50	8015B	08/30/06 9:00	grappaccioli	Q17375
-------------------------------	-----	-------	-----	-----	----	-------	---------------	--------------	--------

Surrogate	% Recovery	Control Limits
aaa-TFT	109	55 - 129

Sample Comment(s):

BRL = Below Reporting Limit

J = Estimated value between the Reporting Limit and the MDL

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

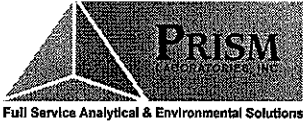
All results are reported on a dry-weight basis

Angela D. Overcash, V.P. Laboratory Services

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 NC Drinking Water Cert. No. 37735

Laboratory Report

09/01/06

N. C. Department of Transportation
 Attn: Sheri Knox
 c/o Solution - IES
 1101 Nowell Road
 Raleigh, NC 27607

Project Name: Richmond Co.
 Project ID: NCDOT Parcel 22
 Project No.: WBS# 34438.1.1
 Sample Matrix: Soil

Client Sample ID: P22.B6 6-8
 Prism Sample ID: 159495
 COC Group: G0806788
 Time Collected: 08/23/06 13:55
 Time Submitted: 08/25/06 15:35

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
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Percent Solids Determination

Percent Solids	84.1	%			1	SM2540 G	08/29/06 14:30	lbrown	
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Diesel Range Organics (DRO) by GC-FID

Diesel Range Organics (DRO)	BRL	mg/kg	8.3	2.0	1	8015B	08/28/06 18:14	jvogel	Q17363
-----------------------------	-----	-------	-----	-----	---	-------	----------------	--------	--------

Sample Preparation:			49.66 g	/	2 mL	3550B	08/28/06 9:00	dpope	P16217
---------------------	--	--	---------	---	------	-------	---------------	-------	--------

Surrogate	% Recovery	Control Limits
o-Terphenyl	114	48 - 130

Sample Weight Determination

Weight 1	5.23	g			1	GRO	08/28/06 0:00	lbrown	
Weight 2	5.04	g			1	GRO	08/28/06 0:00	lbrown	

Gasoline Range Organics (GRO) by GC-FID

Gasoline Range Organics (GRO)	BRL	mg/kg	8.3	3.2	50	8015B	08/30/06 9:40	grappaccioli	Q17375
-------------------------------	-----	-------	-----	-----	----	-------	---------------	--------------	--------

Surrogate	% Recovery	Control Limits
aaa-TFT	106	55 - 129

Sample Comment(s):

BRL = Below Reporting Limit

J = Estimated value between the Reporting Limit and the MDL

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

All results are reported on a dry-weight basis

Angela D. Overcash, V.P. Laboratory Services

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

Laboratory Report

09/01/06

N. C. Department of Transportation
 Attn: Sheri Knox
 c/o Solution - IES
 1101 Nowell Road
 Raleigh, NC 27607

Project Name: Richmond Co.
 Project ID: NCDOT Parcel 22
 Project No.: WBS# 34438.1.1
 Sample Matrix: Soil

Client Sample ID: P22.B7 4-6
 Prism Sample ID: 159496
 COC Group: G0806788
 Time Collected: 08/23/06 14:05
 Time Submitted: 08/25/06 15:35

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
-----------	--------	-------	--------------	-----	-----------------	--------	--------------------	---------	----------

Percent Solids Determination

Percent Solids	81.3	%			1	SM2540 G	08/29/06 14:30	lbrown	
----------------	------	---	--	--	---	----------	----------------	--------	--

Diesel Range Organics (DRO) by GC-FID

Diesel Range Organics (DRO)	BRL	mg/kg	8.6	2.1	1	8015B	08/28/06 18:52	jvogel	Q17363
-----------------------------	-----	-------	-----	-----	---	-------	----------------	--------	--------

Sample Preparation: 49.89 g / 2 mL 3550B 08/28/06 9:00 dpope P16217

Surrogate	% Recovery	Control Limits
o-Terphenyl	107	48 - 130

Sample Weight Determination

Weight 1	5.21	g			1	GRO	08/28/06 0:00	lbrown	
Weight 2	4.91	g			1	GRO	08/28/06 0:00	lbrown	

Gasoline Range Organics (GRO) by GC-FID

Gasoline Range Organics (GRO)	BRL	mg/kg	8.6	3.3	50	8015B	08/30/06 10:22	grappaccioli	Q17375
-------------------------------	-----	-------	-----	-----	----	-------	----------------	--------------	--------

Surrogate	% Recovery	Control Limits
aaa-TFT	103	55 - 129

Sample Comment(s):

BRL = Below Reporting Limit

J = Estimated value between the Reporting Limit and the MDL

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

All results are reported on a dry-weight basis

Angela D. Overcash, V.P. Laboratory Services

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Laboratory Report

09/01/06

N. C. Department of Transportation
 Attn: Sheri Knox
 c/o Solution - IES
 1101 Nowell Road
 Raleigh, NC 27607

Project Name: Richmond Co.
 Project ID: NCDOT Parcel 22
 Project No.: WBS# 34438.1.1
 Sample Matrix: Soil

Client Sample ID: P22.B8 4-6
 Prism Sample ID: 159497
 COC Group: G0806788
 Time Collected: 08/23/06 14:15
 Time Submitted: 08/25/06 15:35

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
-----------	--------	-------	--------------	-----	-----------------	--------	--------------------	---------	----------

Percent Solids Determination

Percent Solids	98.7	%			1	SM2540 G	08/29/06 14:30	lbrown	
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Diesel Range Organics (DRO) by GC-FID

Diesel Range Organics (DRO)	BRL	mg/kg	7.1	1.7	1	8015B	08/28/06 19:29	lvogel	Q17363
-----------------------------	-----	-------	-----	-----	---	-------	----------------	--------	--------

Sample Preparation:			49.76 g	/	2 mL	3550B	08/28/06 9:00	dpope	P16217
---------------------	--	--	---------	---	------	-------	---------------	-------	--------

Surrogate	% Recovery	Control Limits
o-Terphenyl	108	48 - 130

Sample Weight Determination

Weight 1	4.62	g			1	GRO	08/28/06 0:00	lbrown	
----------	------	---	--	--	---	-----	---------------	--------	--

Weight 2	5.04	g			1	GRO	08/28/06 0:00	lbrown	
----------	------	---	--	--	---	-----	---------------	--------	--

Gasoline Range Organics (GRO) by GC-FID

Gasoline Range Organics (GRO)	BRL	mg/kg	7.1	2.8	50	8015B	08/30/06 17:40	grappaccioli	Q17406
-------------------------------	-----	-------	-----	-----	----	-------	----------------	--------------	--------

Surrogate	% Recovery	Control Limits
aaa-TFT	125	55 - 129

Sample Comment(s):

BRL = Below Reporting Limit

J = Estimated value between the Reporting Limit and the MDL

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

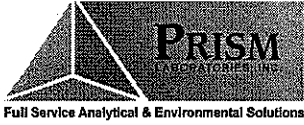
All results are reported on a dry-weight basis

Angela D. Overcash, V.P. Laboratory Services

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449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543

Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409



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

Laboratory Report

09/01/06

N. C. Department of Transportation
 Attn: Sheri Knox
 c/o Solution - IES
 1101 Nowell Road
 Raleigh, NC 27607

Project Name: Richmond Co.
 Project ID: NCDOT Parcel 22
 Project No.: WBS# 34438.1.1
 Sample Matrix: Soil

Client Sample ID: P22.B9 4-6
 Prism Sample ID: 159498
 COC Group: G0806788
 Time Collected: 08/23/06 14:25
 Time Submitted: 08/25/06 15:35

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
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Percent Solids Determination

Percent Solids	96.9	%			1	SM2540 G	08/29/06 14:30	lbrown	
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Diesel Range Organics (DRO) by GC-FID

Diesel Range Organics (DRO)	BRL	mg/kg	7.2	1.8	1	8015B	08/28/06 20:07	lvogel	Q17363
-----------------------------	-----	-------	-----	-----	---	-------	----------------	--------	--------

Sample Preparation:			50.15 g	/	2 mL	3550B	08/28/06 9:00	dpope	P16217
---------------------	--	--	---------	---	------	-------	---------------	-------	--------

Surrogate	% Recovery	Control Limits
o-Terphenyl	103	48 - 130

Sample Weight Determination

Weight 1	5.21	g			1	GRO	08/28/06 0:00	lbrown	
Weight 2	5.27	g			1	GRO	08/28/06 0:00	lbrown	

Gasoline Range Organics (GRO) by GC-FID

Gasoline Range Organics (GRO)	BRL	mg/kg	7.2	2.8	50	8015B	08/30/06 18:26	grappaccioli	Q17406
-------------------------------	-----	-------	-----	-----	----	-------	----------------	--------------	--------

Surrogate	% Recovery	Control Limits
aaa-TFT	115	55 - 129

Sample Comment(s):

BRL = Below Reporting Limit

J = Estimated value between the Reporting Limit and the MDL

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

All results are reported on a dry-weight basis

Angela D. Overcash, V.P. Laboratory Services

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

Laboratory Report

09/01/06

N. C. Department of Transportation
 Attn: Sheri Knox
 c/o Solution - IES
 1101 Nowell Road
 Raleigh, NC 27607

Project Name: Richmond Co.
 Project ID: NCDOT Parcel 22
 Project No.: WBS# 34438.1.1
 Sample Matrix: Soil

Client Sample ID: P22.B10 6-8
 Prism Sample ID: 159499
 COC Group: G0806788
 Time Collected: 08/23/06 14:30
 Time Submitted: 08/25/06 15:35

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
-----------	--------	-------	--------------	-----	-----------------	--------	--------------------	---------	----------

Percent Solids Determination

Percent Solids	97.0	%			1	SM2540 G	08/29/06 14:30	lbrown	
----------------	------	---	--	--	---	----------	----------------	--------	--

Diesel Range Organics (DRO) by GC-FID

Diesel Range Organics (DRO)	BRL	mg/kg	7.2	1.8	1	8015B	08/28/06 20:44	jvogel	Q17363
-----------------------------	-----	-------	-----	-----	---	-------	----------------	--------	--------

Sample Preparation: 50.09 g / 2 mL 3550B 08/28/06 9:00 dpope P16217

Surrogate	% Recovery	Control Limits
o-Terphenyl	111	48 - 130

Sample Weight Determination

Weight 1	5.32	g			1	GRO	08/28/06 0:00	lbrown	
Weight 2	5.25	g			1	GRO	08/28/06 0:00	lbrown	

Gasoline Range Organics (GRO) by GC-FID

Gasoline Range Organics (GRO)	BRL	mg/kg	7.2	2.8	50	8015B	08/30/06 17:01	grappaccioli	Q17406
-------------------------------	-----	-------	-----	-----	----	-------	----------------	--------------	--------

Surrogate	% Recovery	Control Limits
aaa-TFT	104	55 - 129

Sample Comment(s):

BRL = Below Reporting Limit

J = Estimated value between the Reporting Limit and the MDL

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

All results are reported on a dry-weight basis

Angela D. Overcash, V.P. Laboratory Services

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

Laboratory Report

09/01/06

N. C. Department of Transportation
 Attn: Sheri Knox
 c/o Solution - IES
 1101 Nowell Road
 Raleigh, NC 27607

Project Name: Richmond Co.
 Project ID: NCDOT Parcel 22
 Project No.: WBS# 34438.1.1
 Sample Matrix: Soil

Client Sample ID: P22.B11 6-8
 Prism Sample ID: 159500
 COC Group: G0806788
 Time Collected: 08/23/06 14:40
 Time Submitted: 08/25/06 15:35

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
-----------	--------	-------	--------------	-----	-----------------	--------	--------------------	---------	----------

Percent Solids Determination

Percent Solids	80.8	%			1	SM2540 G	08/29/06 14:30	lbrown	
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Diesel Range Organics (DRO) by GC-FID

Diesel Range Organics (DRO)	BRL	mg/kg	8.7	2.1	1	8015B	08/29/06 2:20	jvogel	Q17363
-----------------------------	-----	-------	-----	-----	---	-------	---------------	--------	--------

Sample Preparation:			49.7 g	/	2 mL	3550B	08/28/06 9:00	dpope	P16217
---------------------	--	--	--------	---	------	-------	---------------	-------	--------

Surrogate	% Recovery	Control Limits
o-Terphenyl	107	48 - 130

Sample Weight Determination

Weight 1	5.07	g			1	GRO	08/28/06 0:00	lbrown	
Weight 2	5.07	g			1	GRO	08/28/06 0:00	lbrown	

Gasoline Range Organics (GRO) by GC-FID

Gasoline Range Organics (GRO)	BRL	mg/kg	8.7	3.4	50	8015B	08/30/06 19:08	grappaccioli	Q17406
-------------------------------	-----	-------	-----	-----	----	-------	----------------	--------------	--------

Surrogate	% Recovery	Control Limits
aaa-TFT	101	55 - 129

Sample Comment(s):

BRL = Below Reporting Limit

J = Estimated value between the Reporting Limit and the MDL

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

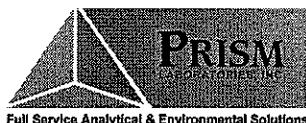
All results are reported on a dry-weight basis

Angela D. Overcash, V.P. Laboratory Services

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

Level II QC Report

9/1/2006

N. C. Department of Transportation
 Attn: Sheri Knox
 c/o Solution - IES
 1101 Nowell Road
 Raleigh, NC 27607

Project Name: Richmond Co.
 Project ID: NCDOT Parcel 22
 Project No.: WBS# 34438.1.1

COC Group Number: G0806788
 Date/Time Submitted: 8/25/2006 15:35

Diesel Range Organics (DRO) by GC-FID, method 8015B

Method Blank									
	Result	RL	Control Limit	Units		QC Batch ID			
Diesel Range Organics (DRO)	ND	7	<3.5	mg/kg		Q17363			

Laboratory Control Sample									
	Result	Spike Amount	Units	Recovery %	Recovery Range %	QC Batch ID			
Diesel Range Organics (DRO)	42.43	40	mg/kg	106	53 - 118	Q17363			

Matrix Spike									
Sample ID:	Result	Spike Amount	Units	Recovery %	Recovery Range %	QC Batch ID			
159518 Diesel Range Organics (DRO)	38.73	40	mg/kg	97	52 - 119	Q17363			

Matrix Spike Duplicate									
Sample ID:	Result	Spike Amount	Units	Recovery %	Recovery Range %	RPD %	RPD Range %	QC Batch ID	
159518 Diesel Range Organics (DRO)	36.69	40	mg/kg	92	52 - 119	5	0 - 25	Q17363	

Gasoline Range Organics (GRO) by GC-FID, method 8015B

Method Blank									
	Result	RL	Control Limit	Units		QC Batch ID			
Gasoline Range Organics (GRO)	ND	7	<3.5	mg/kg		Q17375			

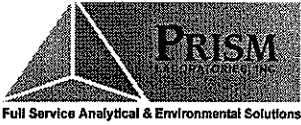
Laboratory Control Sample									
	Result	Spike Amount	Units	Recovery %	Recovery Range %	QC Batch ID			
Gasoline Range Organics (GRO)	48.3	50	mg/kg	97	67 - 116	Q17375			

Matrix Spike									
Sample ID:	Result	Spike Amount	Units	Recovery %	Recovery Range %	QC Batch ID			
159245 Gasoline Range Organics (GRO)	53.45	50	mg/kg	107	57 - 113	Q17375			

Matrix Spike Duplicate									
Sample ID:	Result	Spike Amount	Units	Recovery %	Recovery Range %	RPD %	RPD Range %	QC Batch ID	
159245 Gasoline Range Organics (GRO)	53.65	50	mg/kg	107	57 - 113	0	0 - 23	Q17375	

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

Level II QC Report

9/1/2006

N. C. Department of Transportation
 Attn: Sheri Knox
 c/o Solution - IES
 1101 Nowell Road
 Raleigh, NC 27607

Project Name: Richmond Co.
 Project ID: NCDOT Parcel 22
 Project No.: WBS# 34438.1.1

COC Group Number: G0806788
 Date/Time Submitted: 8/25/2006 15:35

Gasoline Range Organics (GRO) by GC-FID, method 8015B

Method Blank

	Result	RL	Control Limit	Units	QC Batch ID
Gasoline Range Organics (GRO)	ND	7	<3.5	mg/kg	Q17406

Laboratory Control Sample

	Result	Spike Amount	Units	Recovery %	Recovery Range %	QC Batch ID
Gasoline Range Organics (GRO)	45	50	mg/kg	90	67 - 116	Q17406

Matrix Spike

Sample ID:		Result	Spike Amount	Units	Recovery %	Recovery Range %	QC Batch ID
159499	Gasoline Range Organics (GRO)	51.7	50	mg/kg	103	57 - 113	Q17406

Matrix Spike Duplicate

Sample ID:		Result	Spike Amount	Units	Recovery %	Recovery Range %	RPD %	RPD Range %	QC Batch ID
159499	Gasoline Range Organics (GRO)	51.85	50	mg/kg	104	57 - 113	0	0 - 23	Q17406

#-See Case Narrative



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CHAIN OF CUSTODY RECORD

PAGE 1 OF 2 QUOTE # TO ENSURE PROPER BILLING: _____

Project Name: NC DOT PARCEL 22 - RICHMOND CO.

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

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

Invoice To: NC DOT - WBS # 34438.1.1

Address: STATE PROJECT U-2502 A9B

LAB USE ONLY			
	YES	NO	N/A
Samples INTACT upon arrival?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Received ON WET ICE? Temp <u>3.6</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PROPER PRESERVATIVES indicated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Received WITHIN HOLDING TIMES?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CUSTODY SEALS INTACT?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
VOLATILES rec'd W/OUT HEADSPACE?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
PROPER CONTAINERS used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Client Company Name: SOLUTIONS-IES

Report To/Contact Name: SHERRI KNOX

Reporting Address: 1101 NOWELL RD

RALEIGH NC 27607

Phone: 9198731060 Fax (Yes) (No): 9198731074

Email (Yes) (No) Email Address: SKNOX@SOLUTIONS-IES

EDD Type: PDF Excel Other

Site Location Name: NC DOT PARCEL 22

Site Location Physical Address: RICHMOND CO, NC

Purchase Order No./Billing Reference 3260, 06A3, NDOT

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

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

Samples received after 15:00 will be processed next business day.

Turnaround time is based on business days, excluding weekends and holidays.

(SEE REVERSE FOR TERMS & CONDITIONS REGARDING SERVICES RENDERED BY PRISM LABORATORIES, INC. TO CLIENT)

TO BE FILLED IN BY CLIENT/SAMPLING PERSONNEL

Certification: NELAC USACE FL NC

SC OTHER N/A

Water Chlorinated: YES NO

Sample Iced Upon Collection: YES NO

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER			PRESERVATIVES	ANALYSES REQUESTED				REMARKS	PRISM LAB ID NO.	
				*TYPE SEE BELOW	NO.	SIZE		6/20	D/D					
P22.B1.6.8	8/23/06	1320	SOIL	G	3	40ml 802	METHANOL NONE	X	X					159490
P22.B2.6.8	8/23/06	1325		G	3			X	X					159491
P22.B3.6.8	8/23/06	1330		G	3			X	X					159492
P22.B4.6.8	8/23/06	1340		G	3			X	X					159493
P22.B5.6.8	8/23/06	1350		G	3			X	X					159494
P22.B6.6.8	8/23/06	1355		G	3			X	X					159495
P22.B7.4.6	8/23/06	1405		G	3			X	X					159496
P22.B8.4.6	8/23/06	1415		G	3			X	X					159497
P22.B9.4.6	8/23/06	1425		G	3			X	X					159498
P22.B10.6.8	8/23/06	1430		G	3			X	X					159499

Sampler's Signature: Kevin Buchanan

Sampled By (Print Name): KEVIN BUCHANAN

Affiliation: SOLUTIONS-IES

PRESS DOWN FIRMLY - 3 COPIES

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

Relinquished By: (Signature) <u>B-A</u>	Received By: (Signature) <u>Kevin Buchanan</u>	Date	Military/Hours
Relinquished By: (Signature) <u>John Wong</u>	Received By: (Signature) <u>[Signature]</u>	8-25-06	1130
Relinquished By: (Signature) <u>[Signature]</u>	Received For Prism Laboratories By: <u>[Signature]</u>	8/25/06	1535
Method of Shipment: <input type="checkbox"/> Fed Ex <input type="checkbox"/> UPS <input type="checkbox"/> Hand-delivered <input checked="" type="checkbox"/> Prism Field Service <input type="checkbox"/> Other	NOTE: ALL SAMPLE COOLERS SHOULD BE TAPED SHUT WITH CUSTODY SEALS FOR TRANSPORTATION TO THE LABORATORY. SAMPLES ARE NOT ACCEPTED AND VERIFIED AGAINST COC UNTIL RECEIVED AT THE LABORATORY.	Date	Military/Hours
		8/25/06	1535
		COC Group No.	64806788

Additional Comments:

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

SEE REVERSE FOR TERMS & CONDITIONS

*CONTAINER TYPE CODES: A - Amber G - Clear G - Glass B - Plastic T - Teflon Lined Can VOA - Volatile Organic Analytes



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

CHAIN OF CUSTODY RECORD

PAGE 2 OF 2 QUOTE # TO ENSURE PROPER BILLING: _____

Project Name: NC DOT - PARCEL 22 - RICHMOND CO.
Short Hold Analysis: (Yes) (No) UST Project: (Yes) (No)
*Please ATTACH any project specific reporting (QC LEVEL I II III IV) provisions and/or QC Requirements
Invoice To: NC DOT WBS# 34438.1.1
Address: STATE PROJECT U-2502 A&B

LAB USE ONLY			
	YES	NO	N/A
Samples INTACT upon arrival?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Received ON WET ICE? Temp <u>3-6</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PROPER PRESERVATIVES indicated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Received WITHIN HOLDING TIMES?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CUSTODY SEALS INTACT?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
VOLATILES rec'd W/OUT HEADSPACE?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
PROPER CONTAINERS used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Client Company Name: SOLUTIONS-1ES
Report To/Contact Name: Sheri Knox
Reporting Address: 1101 Nowell Road
Raleigh NC 27607

Phone: 919 873 1060 Fax (Yes) (No): 919 873 1074

Email (Yes) (No) Email Address _____

EDD Type: PDF _____ Excel _____ Other _____

Site Location Name: NC DOT PARCEL 22

Site Location Physical Address: Richmond Co, NC

Purchase Order No./Billing Reference 3260.06A3, N DOT
Requested Due Date 1 Day 2 Days 3 Days 4 Days 5 Days
"Working Days" 6-9 Days Standard 10 days Rush Work Must Be Pre-Approved
Samples received after 15:00 will be processed next business day.
Turnaround time is based on business days, excluding weekends and holidays.
(SEE REVERSE FOR TERMS & CONDITIONS REGARDING SERVICES RENDERED BY PRISM LABORATORIES, INC. TO CLIENT)

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

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER			PRESERVATIVES	ANALYSES REQUESTED				REMARKS	PRISM LAB ID NO.	
				*TYPE SEE BELOW	NO.	SIZE								
<u>P22-B11.6.8</u>	<u>8/23/06</u>	<u>1440</u>	<u>SOIL</u>	<u>G</u>	<u>3</u>	<u>40ml 802</u>	<u>Methanal None</u>	<u>GLD</u>	<u>DLD</u>					<u>159504</u>

Sampler's Signature Kevin Buchanan Sampled By (Print Name) Kevin Buchanan Affiliation SOLUTIONS-1ES

PRESS DOWN FIRMLY - 3 COPIES

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

Relinquished By: (Signature) <u>[Signature]</u>	Received By: (Signature) <u>[Signature]</u>	Date <u>8-25-06</u>	Military/Hours <u>1130</u>
Relinquished By: (Signature) <u>[Signature]</u>	Received By: (Signature) <u>[Signature]</u>	Date <u>8/25/06</u>	Military/Hours <u>1435</u>
Relinquished By: (Signature) <u>[Signature]</u>	Received For Prism Laboratories By: <u>[Signature]</u>	Date <u>8/25/06</u>	Military/Hours <u>1535</u>

Method of Shipment: Fed Ex UPS Hand-delivered Prism Field Service Other _____
NOTE: ALL SAMPLE COOLERS SHOULD BE TAPED SHUT WITH CUSTODY SEALS FOR TRANSPORTATION TO THE LABORATORY. SAMPLES ARE NOT ACCEPTED AND VERIFIED AGAINST COC UNTIL RECEIVED AT THE LABORATORY.
COC Group No. G4846783

Additional Comments:

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

NPDES: NC SC _____
UST: NC SC _____
GROUNDWATER: NC SC _____
DRINKING WATER: NC SC _____
SOLID WASTE: NC SC _____
RCRA: NC SC _____
CERCLA: NC SC _____
LANDFILL: NC SC _____
OTHER: NC SC _____

SEE REVERSE FOR TERMS & CONDITIONS



Full Service Analytical & Environmental Solutions

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

Client Company Name: SOLUTIONS-1ES
Report To/Contact Name: SHERRI KNOX
Reporting Address: 1101 Nowell Rd
RALEIGH NC 27607

Phone: 9198731060 Fax (Yes) (No): 9198731074

Email (Yes) (No) Email Address: SKNOX@SOLUTIONS-1ES

EDD Type: PDF Excel Other

Site Location Name: NC DOT PARCEL 22

Site Location Physical Address: RICHMOND CO, NC

CHAIN OF CUSTODY RECORD

PAGE 1 OF 2 QUOTE # TO ENSURE PROPER BILLING: _____

Project Name: NC DOT PARCEL 22 - RICHMOND CO.

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

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

Invoice To: NC DOT - WRS# 34438,1,1

Address: STATE PROJECT U-2502 A4B

Purchase Order No./Billing Reference 3260, 06A3, NDOT

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

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

Samples received after 15:00 will be processed next business day.

Turnaround time is based on business days, excluding weekends and holidays.

(SEE REVERSE FOR TERMS & CONDITIONS REGARDING SERVICES RENDERED BY PRISM LABORATORIES, INC. TO CLIENT)

LAB USE ONLY			
	YES	NO	N/A
Samples INTACT upon arrival?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Received ON WET ICE? Temp <u>3.6</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PROPER PRESERVATIVES indicated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Received WITHIN HOLDING TIMES?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CUSTODY SEALS INTACT?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
VOLATILES rec'd W/OUT HEADSPACE?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
PROPER CONTAINERS used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

TO BE FILLED IN BY CLIENT/SAMPLING PERSONNEL

Certification: NELAC USACE FL NC

SC OTHER N/A

Water Chlorinated: YES NO

Sample Iced Upon Collection: YES NO

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER			PRESERVATIVES	ANALYSES REQUESTED				REMARKS	PRISM LAB ID NO.	
				*TYPE SEE BELOW	NO.	SIZE		GRD	DRD					
P22.B1.6.8	8/23/06	1320	SOIL	G	3	40ml 802	METHANOL NDEE	X	X					159494
P22.B2.6.8	8/23/06	1325		G	3			X	X					159491
P22.B3.6.8	8/23/06	1330		G	3			X	X					159492
P22.B4.6.8	8/23/06	1340		G	3			X	X					159493
P22.B5.6.8	8/23/06	1350		G	3			X	X					159494
P22.B6.6.8	8/23/06	1355		G	3			X	X					159495
P22.B7.4.6	8/23/06	1405		G	3			X	X					159496
P22.B8.4.6	8/23/06	1415		G	3			X	X					159497
P22.B9.4.6	8/23/06	1425		G	3			X	X					159498
P22.B10.6.8	8/23/06	1430		G	3			X	X					159499

Sampler's Signature Kevin Buchanan

Sampled By (Print Name) KEVIN BUCHANAN

Affiliation SOLUTIONS-1ES

PRESS DOWN FIRMLY - 3 COPIES

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

Relinquished By: (Signature) <u>[Signature]</u>	Received By: (Signature) <u>[Signature]</u>	Date <u>8-25-06</u>	Military/Hours <u>1130</u>
Relinquished By: (Signature) <u>[Signature]</u>	Received By: (Signature) <u>[Signature]</u>	Date <u>8/23/06</u>	Military/Hours <u>1535</u>
Relinquished By: (Signature) <u>[Signature]</u>	Received For Prism Laboratories By: <u>[Signature]</u>	Date <u>8/23/06</u>	Military/Hours <u>1535</u>

Additional Comments:

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

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

COC Group No. G4846788

NPDES: <input type="checkbox"/> NC <input type="checkbox"/> SC	UST: <input type="checkbox"/> NC <input type="checkbox"/> SC	GROUNDWATER: <input type="checkbox"/> NC <input type="checkbox"/> SC	DRINKING WATER: <input type="checkbox"/> NC <input type="checkbox"/> SC	SOLID WASTE: <input type="checkbox"/> NC <input type="checkbox"/> SC	RCRA: <input type="checkbox"/> NC <input type="checkbox"/> SC	CERCLA: <input type="checkbox"/> NC <input type="checkbox"/> SC	LANDFILL: <input type="checkbox"/> NC <input type="checkbox"/> SC	OTHER: <input type="checkbox"/> NC <input type="checkbox"/> SC
--	--	--	---	--	---	---	---	--

SEE REVERSE FOR TERMS & CONDITIONS

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

ORIGINAL



Full Service Analytical & Environmental Solutions

449 Springbrook Road • P.O. Box 240543 • Charlotte, NC 28224-0543
Phone: 704/529-8364 • Fax: 704/525-0409

Client Company Name: SOLUTIONS-1ES

Report To/Contact Name: Shari Knox

Reporting Address: 1101 Nowell Road
Raleigh NC 27607

Phone: 9198731060 Fax (Yes) (No): 9198731074

Email (Yes) (No) Email Address _____

EDD Type: PDF Excel Other

Site Location Name: NC DOT PARCEL 22

Site Location Physical Address: Richmond Co, NC

CHAIN OF CUSTODY RECORD

PAGE 2 OF 2 QUOTE # TO ENSURE PROPER BILLING: _____

Project Name: NC DOT - PARCEL 22 - RICHMOND CO.

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

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

Invoice To: NC DOT WBS# 34438.1.1

Address: STATE PROJECT U-2502 A4B

Purchase Order No./Billing Reference 3260.06A3, NDOT

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

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

Samples received after 15:00 will be processed next business day.

Turnaround time is based on business days, excluding weekends and holidays.

(SEE REVERSE FOR TERMS & CONDITIONS REGARDING SERVICES RENDERED BY PRISM LABORATORIES, INC. TO CLIENT)

LAB USE ONLY			
	YES	NO	N/A
Samples INTACT upon arrival?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Received ON WET ICE? Temp <u>3-6</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PROPER PRESERVATIVES indicated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Received WITHIN HOLDING TIMES?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CUSTODY SEALS INTACT?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
VOLATILES rec'd W/OUT HEADSPACE?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
PROPER CONTAINERS used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

TO BE FILLED IN BY CLIENT/SAMPLING PERSONNEL

Certification: NELAC USACE FL NC

SC OTHER N/A

Water Chlorinated: YES NO

Sample Iced Upon Collection: YES NO

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER			PRESERVATIVES	ANALYSES REQUESTED				REMARKS	PRISM LAB ID NO.	
				*TYPE SEE BELOW	NO.	SIZE								
P22-B11.6.8	8/23/06	1440	Soil	G	3	40ml 802	Metanol None	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					159500

Sampler's Signature Kevin Buchanan Sampled By (Print Name) KEVIN BUCHANAN Affiliation SOLUTIONS-1ES

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

Relinquished By: (Signature) <u>B-R</u>	Received By: (Signature) <u>Jol Ward</u>	Date <u>8-25-06</u>	Military/Hours <u>1130</u>
Relinquished By: (Signature) <u>Jol Ward</u>	Received By: (Signature) <u>[Signature]</u>	Date <u>8/25/06</u>	Military/Hours <u>1455</u>
Relinquished By: (Signature) <u>[Signature]</u>	Received For Prism Laboratories By: <u>[Signature]</u>	Date <u>8/25/06</u>	Military/Hours <u>1535</u>
Method of Shipment: NOTE: ALL SAMPLE COOLERS SHOULD BE TAPED SHUT WITH CUSTODY SEALS FOR TRANSPORTATION TO THE LABORATORY. SAMPLES ARE NOT ACCEPTED AND VERIFIED AGAINST COC UNTIL RECEIVED AT THE LABORATORY.			COC Group No. <u>64826788</u>

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

Fed Ex UPS Hand-delivered Prism Field Service Other

NPDES: NC SC UST: NC SC GROUNDWATER: NC SC DRINKING WATER: NC SC SOLID WASTE: NC SC RCRA: NC SC CERCLA: NC SC LANDFILL: NC SC OTHER: NC SC

SEE REVERSE FOR TERMS & CONDITIONS

ORIGINAL

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)