

**PRELIMINARY SITE ASSESSMENT
CHURCH OF THE LIVING GOD PROPERTY
804 WILSON LEE BOULEVARD
STATESVILLE, NORTH CAROLINA
STATE PROJECT: B-2576
WBS ELEMENT: 32669.1.1**

Prepared for:
NC Department of Transportation
Geotechnical Engineering Unit
GeoEnvironmental Section
1589 Mail Service Center
Raleigh, North Carolina 27699-1589

Prepared by:
Solutions-IES
1101 Nowell Road
Raleigh, North Carolina 27607

Solutions-IES Project No. 3460.07A3.NDOT

Dottie Schmitt

Dottie R. Schmitt
Environmental Specialist



Sheri Lane Knox
Project Manager

April 30, 2007

TABLE OF CONTENTS

1.0 INTRODUCTION 2
2.0 BACKGROUND AND SITE DESCRIPTION 2
3.0 FIELD ACTIVITIES 2
4.0 LABORATORY RESULTS 3
5.0 DISCUSSION 3

TABLES

TABLE 1 – SUMMARY OF FIELD SCREENING RESULTS FOR SOIL

TABLE 2 – SUMMARY OF SOIL ANALYTICAL RESULTS

FIGURES

FIGURE 1 – SITE LOCATION MAP

FIGURE 2 – SITE MAP

FIGURE 3 – SOIL BORING LOCATIONS AND GEOPHYSICAL SURVEY

APPENDICES

APPENDIX A – PHOTOGRAPHS

APPENDIX B – GEOPHYSICAL REPORT

APPENDIX C – BORING LOGS

APPENDIX D – LABORATORY ANALYTICAL REPORTS

1.0 INTRODUCTION

The North Carolina Department of Transportation (NCDOT) is planning to replace Bridges 513 and 514 over the Norfolk Southern Railroad along Wilson Lee Boulevard in Statesville, Iredell County, North Carolina. The project will require the NCDOT to acquire additional property for new bridge construction. On March 20, 2007, Solutions-IES submitted a proposal to conduct a Preliminary Site Assessment (PSA) for a parcel of land that is an area of concern identified by NCDOT. This report summarizes the results of field and laboratory activities conducted during the PSA of the Church of the Living God property located on the northwest corner of the intersection of Wilson Lee Boulevard and Asheville Avenue in Statesville. The location of the parcel is shown on **Figures 1 and 2**. The scope of work was performed as outlined in Solutions-IES proposal NC07628P.

2.0 BACKGROUND AND SITE DESCRIPTION

The PSA was performed on the parcel that currently houses the Church of Living God property (subject property), at 804 Wilson Lee Boulevard in Statesville, Iredell County, North Carolina. The subject property is located in the northwest quadrant of the intersection of Wilson Lee Boulevard and Asheville Avenue in Statesville. The PSA was performed over the entire subject property site. Although no underground storage tanks (USTs) were observed by NCDOT during a field visit, the property resembles an old gas station; therefore the PSA focused on petroleum-related impacts. Photographs of the site are included in **Appendix A**.

3.0 FIELD ACTIVITIES

Prior to beginning subsurface sampling, Solutions-IES contacted the North Carolina One Call Center to locate underground utilities at the site. Pyramid Environmental & Engineering, P.C. (Pyramid) was contracted to perform a geophysical survey of the site. The EM61-MK1 survey performed on March 22, 2007, did not identify any metallic USTs on the subject property. Ground penetrating radar (GPR) was also used to evaluate the site for the presence of other metal or fiberglass USTs. Images of the EM61 and GPR findings are included in the geophysical report included as **Appendix B**. The outline of suspected anomalies was spray painted on the ground by Pyramid. After a review of the geophysical report, Solutions-IES mobilized to the site on March 28, 2007 to collect soil samples. Fifteen soil borings were advanced at the site to a depth of 8 feet below ground surface (ft bgs) using a Geoprobe[®]. The borings were spaced approximately 50 feet apart at the approximate locations displayed in **Figure 3**. The

geophysical results are also included in **Figure 3**, and explained in greater detail in the geophysical report included as **Appendix B**.

A MacroCore[®] sampler fitted with a dedicated polyvinyl chloride (PVC) liner was used to collect samples at 2-foot intervals. Each soil sample was split into two aliquots. Each aliquot was placed in a separate resealable plastic bag. One bag was placed on ice for possible laboratory analysis, while the other bag was sealed and placed at ambient temperature for field screening with a flame ionization detector (FID). After approximately 20 minutes to allow accumulation of volatile organic compounds (VOCs) in the headspace of the bag, each sealed bag was scanned with the FID. The FID measurements were entered on the boring logs along with the soil description and any indications of petroleum staining or odor. The boring logs are provided in **Appendix C** and the field screening results are summarized in **Table 1**.

The subsurface at the site consisted of red to tan and white silty clays and clayey silts (Unified Soil Classification ML/CL). Fine sand and gravel were also identified in some of the borings. Soils were dry and groundwater was not encountered in the borings to a depth of 8 ft bgs.

Headspace screening of the soils from the site ranged from 0.0 to 0.8 parts per million (ppm). The FID readings are summarized on **Table 1**. A sample from the 6 to 8 foot interval of each boring was placed in laboratory-supplied jars and stored on ice pending shipment to Pace Analytical Laboratories, Inc. (Pace) in Huntersville, NC using chain-of-custody procedures. The samples were submitted for analysis of gasoline range organics (GRO) and diesel range organics (DRO) total petroleum hydrocarbons (TPH) by EPA Modified Method 8015 with preparation methods 5030 and 3545, respectively.

4.0 LABORATORY RESULTS

According to the laboratory analytical results, concentrations of TPH (GRO and DRO) were detected in two of the soil samples above the laboratory method detection limits. Sample GP-1 contained a TPH GRO concentration of 7.3 mg/kg, and sample GP-13 contained a TPH DRO concentration of 11 mg/kg,. The analytical results are summarized in **Table 2**, and the laboratory reports for the soil samples are included in **Appendix D**.

5.0 DISCUSSION

To evaluate the site, Solutions-IES advanced 15 soil borings at the subject property to a depth of 8 ft bgs. The highest FID reading measured (0.8 ppm) was in the sample collected from boring GP-9 at a depth of 6 to 8 ft bgs; this sample did not contain concentrations of TPH GRO or TPH DRO above the laboratory reporting limit. Laboratory analytical data for the soil samples indicated concentrations of TPH (GRO or DRO) above the laboratory method detection limits in two samples. The concentration of 7.3 mg/kg TPH GRO in GP-1 was below the tank closure screening level of 10 mg/kg. Sample GP-13 contained TPH DRO at a concentration of 11 mg/kg, which slightly exceeds the UST closure screening level of 10 mg/kg provided in “Underground Storage Tank Section Guidelines for Site Checks, Tank Closure, and Initial Response and Abatement” (*State of North Carolina Department of Environment and Natural Resources [NCDENR], Division of Waste Management [DWM], Underground Storage Tank [UST] Division, March 1, 2007*) (*Closure Guidelines*). The screening levels provided in the *Closure Guidelines* are used to determine if a release has occurred and to guide response and abatement actions for UST releases. A release identified by an exceedance of the 10 mg/kg TPH screening level, may require further assessment as provided in the *Guidelines for Assessment and Corrective Action, North Carolina UST Section, NCDENR, July, 2001*(*Corrective Action Guidelines*). However, this result does not exceed the TPH action level provided in the *Corrective Action Guidelines*. This *Corrective Action Guidelines* action level is used as a clean up level, requiring soils from a confirmed release to be cleaned up to a level of 40 mg/kg TPH DRO.

Although the impacts identified at soil boring location GP-13, located in the existing right-of-way, may be the result of a historical UST release, the geophysical survey did not indicate the presence of metallic USTs. Additionally, a search of the regional UST database, which includes information on UST incidents, contained no historical information on the presence of USTs at the site location.

TABLES

Table 1
Summary of Field Screening Results
Church of the Living God
Statesville, Iredell County, NC
WBS Element: 32669.1.1
Solutions-IES Project No. 3460.07A3.NDOT
Sample Collection Date: 3/28/07-3/29/07

| Sample Depth ft bgs | Soil Boring Identification | | | | | | | |
|---------------------------|----------------------------|------|------|------|------|------|------|------|
| | GP-1 | GP-2 | GP-3 | GP-4 | GP-5 | GP-6 | GP-7 | GP-8 |
| | FID Reading (ppm) | | | | | | | |
| 0 - 2 feet | ND | ND | ND | ND | 0.5 | ND | ND | ND |
| 2 - 4 feet | ND | ND | ND | ND | ND | ND | ND | ND |
| 4 - 6 feet | ND | ND | ND | ND | ND | ND | ND | ND |
| 6 - 8 feet | ND | ND | ND | ND | ND | ND | 0.5 | 0.2 |

| Sample Depth ft bgs | Soil Boring Identification | | | | | | |
|---------------------------|----------------------------|-------|-------|-------|-------|-------|-------|
| | GP-9 | GP-10 | GP-11 | GP-12 | GP-13 | GP-14 | GP-15 |
| | FID Reading (ppm) | | | | | | |
| 0 - 2 feet | ND | ND | ND | ND | ND | ND | ND |
| 2 - 4 feet | ND | ND | ND | ND | ND | ND | ND |
| 4 - 6 feet | 0.2 | ND | ND | ND | ND | ND | ND |
| 6 - 8 feet | 0.8 | ND | ND | ND | ND | ND | ND |

NOTES:

FID = Flame Ionization Detector, FID readings were obtained with a Photovac MicroFID Flame Ionization Detector

ppm = parts per million

Samples denoted by shaded cells were submitted for laboratory analysis

ND = not detected

ft bgs = feet below ground surface

Table 2
Summary of Field Screening Results
Church of the Living God
Statesville, Iredell County, NC
WBS Element: 32669.1.1
Solutions-IES Project No. 3460.07A3.NDOT
Sample Collection Date: 3/28/07-3/29/07

| TPH DRO and TPH GRO (Method 8015B) | | | | | | | | | | |
|------------------------------------|-------------------------------|-------|------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Sample ID | | | GP-1 | GP-2 | GP-3 | GP-4 | GP-5 | GP-6 | GP-7 | GP-8 |
| Depth (ft bgs) | | | 6 - 8 | 6 - 8 | 6 - 8 | 6 - 8 | 6 - 8 | 6 - 8 | 6 - 8 | 6 - 8 |
| Date Collected | | | 3/28/2007 | 3/28/2007 | 3/28/2007 | 3/28/2007 | 3/28/2007 | 3/28/2007 | 3/28/2007 | 3/28/2007 |
| Parameter | Regulatory Limit ¹ | Units | | | | | | | | |
| TPH DRO | 10 | mg/kg | <6.4 | <6.8 | <6.0 | <5.9 | <5.9 | <5.9 | <5.8 | <6.2 |
| TPH GRO | 10 | mg/kg | 7.3 | <5.6 | <5.2 | <5.1 | <4.5 | <4.3 | <4.6 | <4.6 |

| TPH DRO and TPH GRO (Method 8015B) | | | | | | | | | |
|------------------------------------|-------------------------------|-------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Sample ID | | | GP-9 | GP-10 | GP-11 | GP-12 | GP-13 | GP-14 | GP-15 |
| Depth (ft bgs) | | | 6 - 8 | 6 - 8 | 6 - 8 | 6 - 8 | 6 - 8 | 6 - 8 | 6 - 8 |
| Date Collected | | | 3/28/2007 | 3/29/2007 | 3/29/2007 | 3/29/2007 | 3/29/2007 | 3/29/2007 | 3/29/2007 |
| Parameter | Regulatory Limit ¹ | Units | | | | | | | |
| TPH DRO | 40 | mg/kg | <6.4 | <6.5 | <6.2 | <6.3 | 11 | <6.4 | <6.8 |
| TPH GRO | 10 | mg/kg | <5.8 | <5.1 | <4.7 | <4.8 | <4.8 | <5.4 | <5.3 |

NOTES:

ft bgs = feet below ground surface

Bold values indicate detected concentrations above reporting limit

Shaded values indicate concentrations above the regulatory limit

TPH = Total Petroleum Hydrocarbons

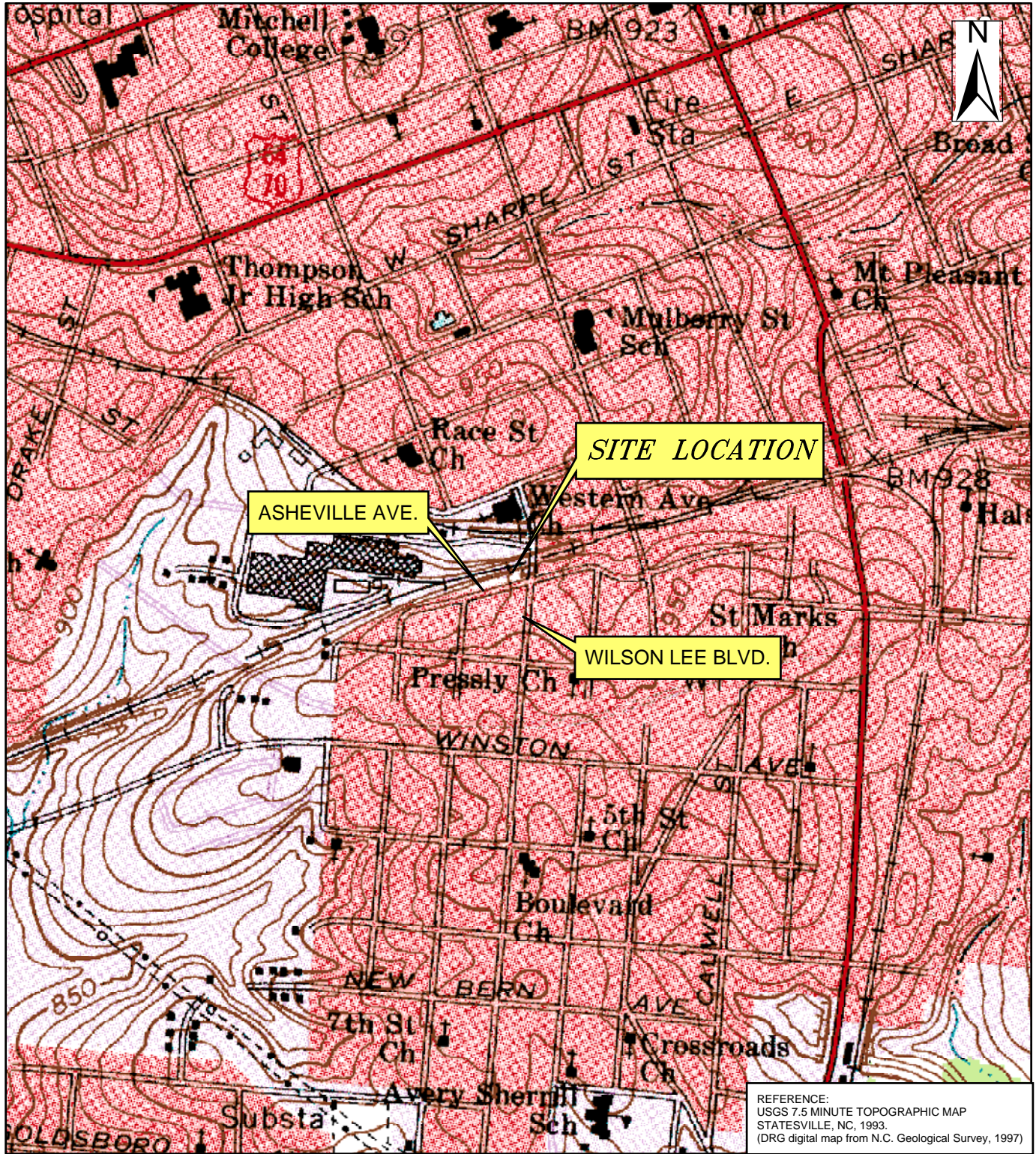
DRO = Diesel Range Organics

GRO = Gasoline Range Organics

mg/kg = milligrams per kilogram

¹ Regulatory Limits are the screening levels from NCDENR "Underground Storage Tank Section Guidelines for Site Checks, Tank Closure, and Initial Response and Abatement", March 2007.

FIGURES



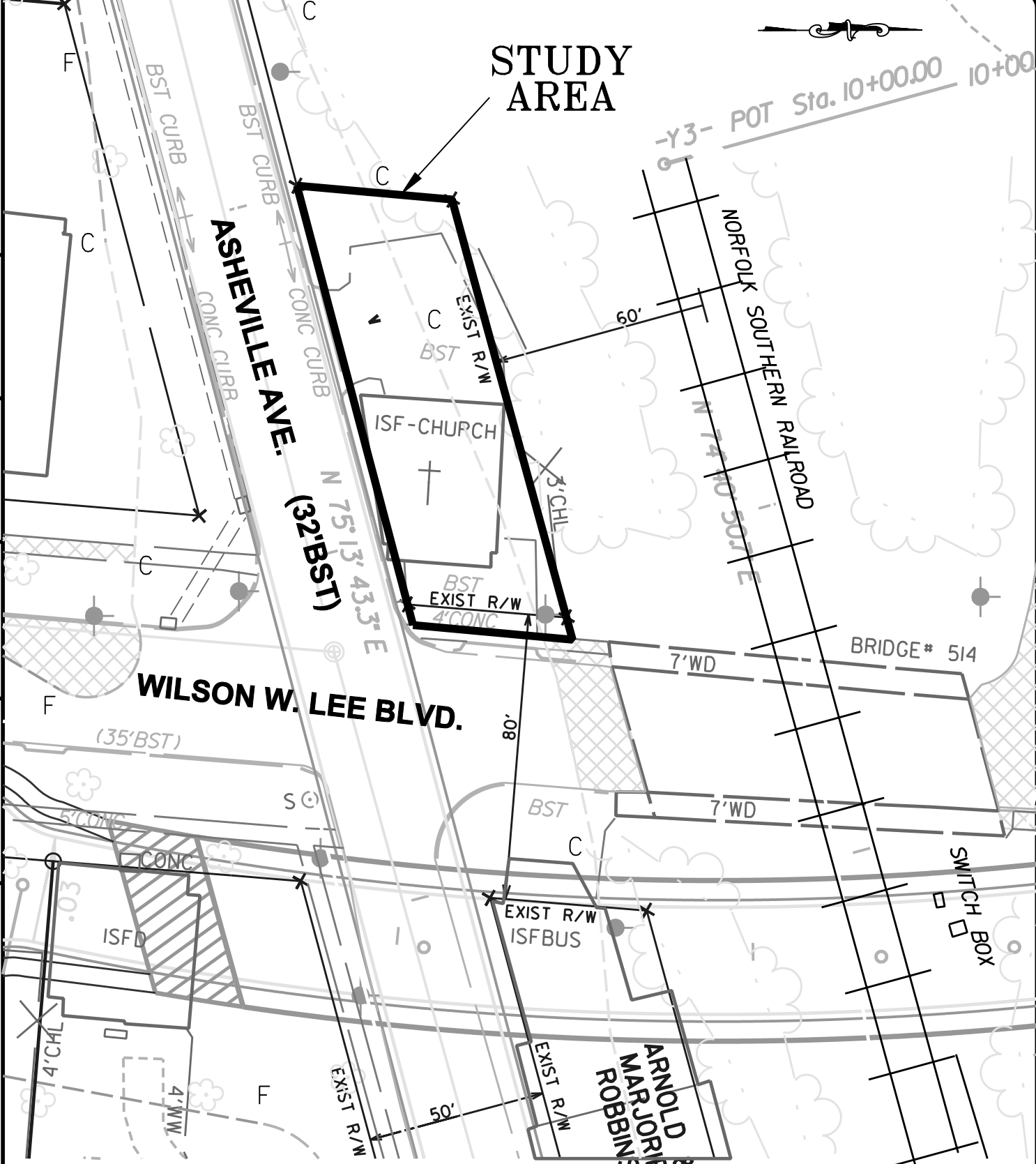
1:10,000

SITE LOCATION MAP
 CHURCH OF LIVING GOD PROPERTY
 804 WILSON LEE BLVD.
 STATESVILLE, NORTH CAROLINA
 WBS ELEMENT# 32669.1.1



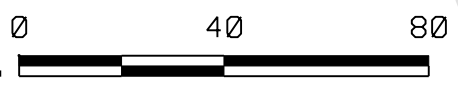
| | |
|---|-------------------------|
| 1101 Nowell Road, Raleigh, NC 27609 Phone (919) 873-1060, Fax (919) 873-1074 | |
| Created by: RT | Project: 3460.07A3.NDOT |
| Checked by: SK | Date: APRIL 2007 |
| File: Figure 1.mxd | |
| Software: ESRI ArcMap 9.2 | FIGURE 1 |

PROJECT NUMBER 3460.07A3.NDOT
 DRAFTER RT
 CHECKED BY JD
 PROJECT MANAGER SK
 DATE APRIL 2007
 FILE FIG2.DWG



NOTES:

1. BASEMAP PROVIDED BY NCDOT.
2. GEOPHYSICAL RESULTS FROM "GEOPHYSICAL INVESTIGATION REPORT," CHURCH OF THE LIVING GOD SITE, STATESVILLE, NC, PYRAMID ENVIRONMENTAL AND ENGINEERING, P.C., MARCH 28, 2007.

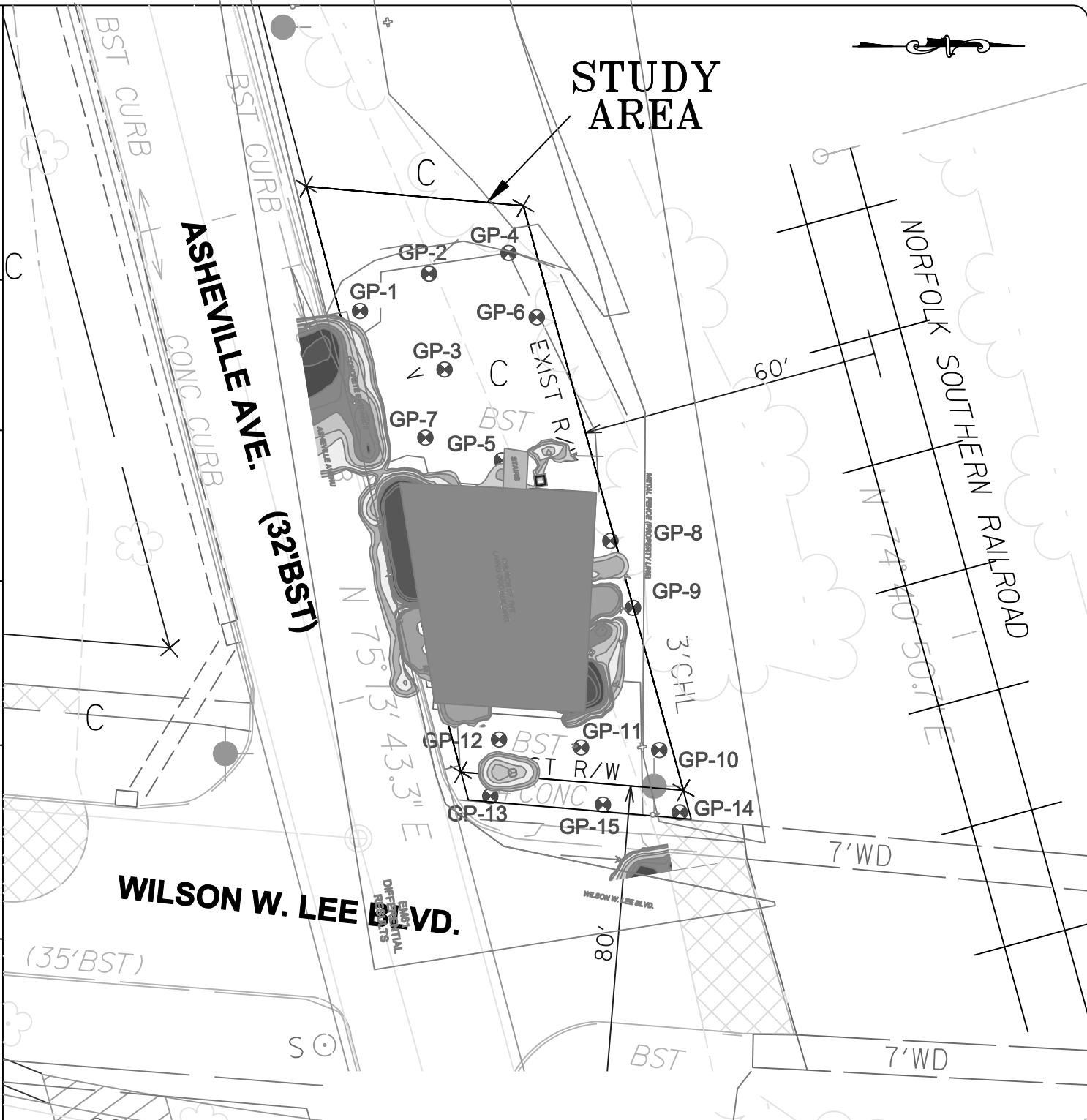


1101 NOWELL ROAD
 RALEIGH, NORTH CAROLINA 27607
 TEL.: (919) 873-1060 FAX.: (919) 873-1074

SITE MAP
 CHURCH OF LIVING GOD PROPERTY
 804 WILSON LEE BLVD
 STATESVILLE, NORTH CAROLINA
 WBS ELEMENT NO. 32669.1.1

FIGURE:
 2

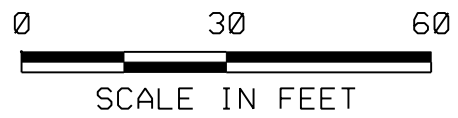
PROJECT NUMBER 3460.07A3.NDOT
 DRAFTER RT
 CHECKED BY JD
 PROJECT MANAGER SK
 DATE APRIL 2007
 FILE FIG3.DWG



LEGEND

GP-8
 ⊗ BORING LOCATIONS

- NOTES:**
1. BASEMAP PROVIDED BY NCDOT.
 2. GEOPHYSICAL RESULTS FROM "GEOPHYSICAL INVESTIGATION REPORT," CHURCH OF THE LIVING GOD SITE, STATESVILLE, NC, PYRAMID ENVIRONMENTAL AND ENGINEERING, P.C., MARCH 28, 2007.
 3. INFORMATION REGARDING THE GEOPHYSICAL SURVEY RESULTS ARE PROVIDED AS APPENDIX B.



Solutions-IES
 Industrial & Environmental Services

1101 NOWELL ROAD
 RALEIGH, NORTH CAROLINA 27607
 TEL.: (919) 873-1060 FAX.: (919) 873-1074

SOIL BORING LOCATIONS
 CHURCH OF LIVING GOD PROPERTY
 804 WILSON LEE BLVD
 STATESVILLE, NORTH CAROLINA
 WBS ELEMENT NO. 32669.1.1

FIGURE:
 3

APPENDIX A
PHOTOGRAPHS



Photograph 1 - Looking north at the property. Boring locations are marked with orange paint.



Photograph 2 - Looking southwest at property. Boring locations are marked with orange paint.

APPENDIX B
GEOPHYSICAL REPORT

GEOPHYSICAL INVESTIGATION REPORT

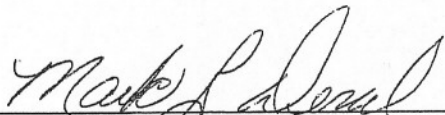
GEOPHYSICAL SURVEYS FOR THE DETECTION OF METALLIC USTS

**Church of the Living God Site
Statesville, North Carolina**

March 28, 2007

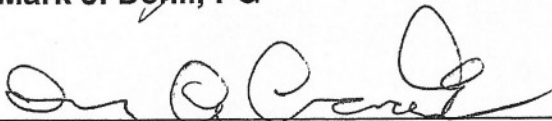
**Report prepared for: Dottie Schmitt
Solutions-IES
1101 Nowell Rd.
Raleigh, NC 27607**

Prepared by:



Mark J. Denil, PG

Reviewed by:



Doug Canavello, PG

**PYRAMID ENVIRONMENTAL & ENGINEERING, P.C.
700 NORTH EUGENE ST.
GREENSBORO, NC 27401
(336) 335-3174**

Solutions-IES
GEOPHYSICAL SURVEYS FOR THE DETECTION OF METALLIC USTS
Church of the Living God Site
Statesville, North Carolina

TABLE OF CONTENTS

| | |
|---------------------------------|---|
| 1.0 INTRODUCTION | 1 |
| 2.0 FIELD METHODOLOGY | 1 |
| 3.0 DISCUSSION OF RESULTS | 2 |
| 4.0 SUMMARY & CONCLUSIONS | 3 |
| 5.0 LIMITATIONS | 4 |

FIGURES

| | |
|----------|--|
| Figure 1 | Photographs of Geophysical Equipment & Survey Area |
| Figure 2 | EM61 & GPR Survey Line Locations |
| Figure 3 | EM61 Bottom Coil Results |
| Figure 4 | EM61 Differential Results |

1.0 INTRODUCTION

Pyramid Environmental & Engineering, PC conducted geophysical investigations for Solutions-IES on March 22, 2007, across the accessible portion of the Church of the Living God site. The site is located at 804 Wilson W. Lee Boulevard in Statesville, North Carolina. The work was done as part of a North Carolina Department of Transportation road-widening project (NCDOT State Project No. B-2576). The geophysical surveys were conducted to determine if unknown metallic underground storage tanks (USTs) are present beneath the accessible portion of the site.

Solutions-IES representative Ms. Dottie Schmitt provided information and a site map during the week of March 12, 2007 that outlined the geophysical survey area. The geophysical survey area covered approximately 5,600 square feet (0.129 acres) of flat-lying, grass, asphalt or concrete covered property and had a maximum length and width of 160 feet and 55 feet, respectively.

2.0 FIELD METHODOLOGY

Prior to conducting the geophysical investigations, a 10-foot by 10-foot survey grid was established across the survey area using water-based marking paint. 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 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 to 10 feet. Objects less than one foot in size can only be detected to a maximum depth of 4 or 5 feet. All of the EM61 data were digitally collected along the Y-axis (easterly-westerly trending) survey lines spaced 5 feet apart. The EM61 data were downloaded to a computer and reviewed in the field and office using the Geonics DAT61W and Surfer for Windows Version 7.0 software programs.

GPR surveys were conducted across selected EM61 differential anomalies, steel-reinforced concrete and along the perimeter of the church using a Geophysical Survey Systems SIR-2000 unit equipped

with a 400 MHz antenna. GPR data were digitally collected in a continuous mode along the X-axis and/or Y-axis survey lines spaced 2.5 to 5 feet apart, using a vertical scan of 512 samples, at a sampling rate of 32 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 to a maximum investigating depth of approximately 6 feet based on an estimated two-way travel time of 9 nanoseconds per foot.

The GPR data were downloaded to a computer and viewed in the field in real time and reviewed in the office using the Radan 5.0 software program. Photographs of the geophysical equipment used for the investigation and the survey area are presented in **Figure 1**. The locations of the EM61 survey lines acquired across the area of interest are shown as red dots in **Figure 2**. Each individual red dot represents an EM61 data point. The locations of the GPR survey lines or areas where GPR scanning was conducted are shown in Figure 2 as solid purple lines and purple polygons, respectively.

3.0 DISCUSSION OF RESULTS

Contour plots of the EM61 bottom coil results and the EM61 differential results are presented in **Figures 3 and 4**, respectively. The bottom coil results represent the most sensitive component of the EM61 instrument and detect metal objects regardless of size. The bottom coil response can be used to delineate metal conduits or lines, small, isolated metal objects, and areas containing insignificant metal debris. The differential results are obtained from the difference between the top and bottom coils of the EM61 instrument. The differential results focus on the larger metal objects such as drum and UST-size objects, and ignore the smaller insignificant metal debris/objects.

GPR surveys suggest the high amplitude anomalies (contours shaded in red) centered near grid coordinates X=95 Y=20 X=105 Y=25, and X=130 Y=27 are probably in response to buried utility-related objects, steel reinforced concrete, and/or the church building, respectively. Similarly, GPR

data suggest the EM61 anomalies centered near grid coordinates X=150 Y=65, X=164 Y=62, X=175 Y=42, and X=198 Y=65 are probably in response to the building and/or utility-related objects. The EM61 bottom coil anomalies centered near grid coordinates X=71 Y=35, X=73 Y=45, and X=74 Y=60 are probably in response to the steel reinforced concrete parking curbs that lie along the edge of the asphalt-covered parking area. The bottom coil anomaly centered near X=95 Y=75 is probably in response to the metal fence line and other buried miscellaneous debris that lie along the edge of the railroad embankment.

GPR surveys conducted around the perimeter of the building suggest that the remaining EM61 anomalies are probably in response to known cultural objects, the building, and/or to buried miscellaneous debris. The geophysical investigation conducted at the Church of the Living God suggests that the surveyed portion of the site does not contain metallic USTs.

4.0 SUMMARY & CONCLUSIONS

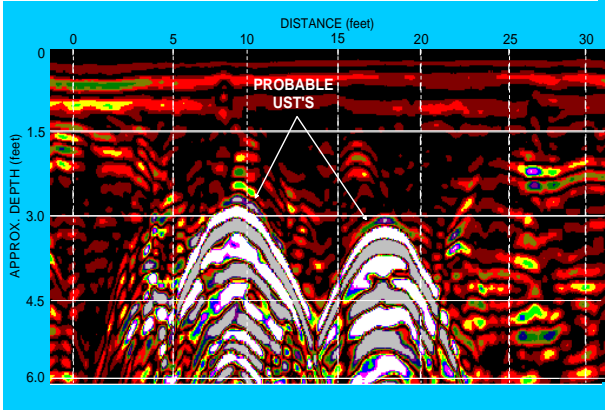
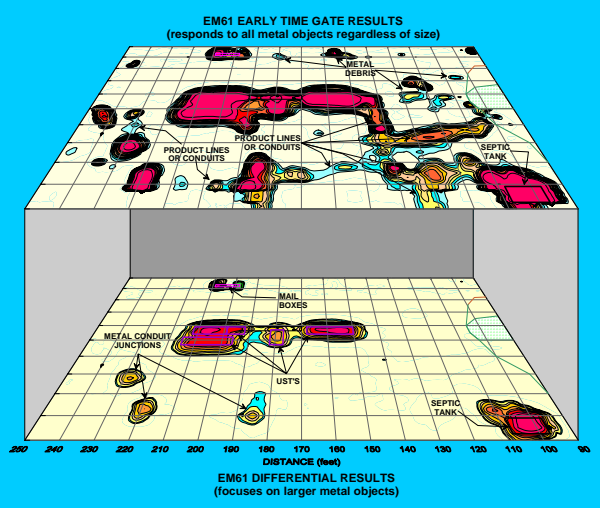
Our evaluation of the EM61 and GPR data collected across the surveyed portion of the Church of the Living God site located in Statesville, North Carolina, provides the following summary and conclusions:

- The combination of EM61 and GPR surveys provided reliable results for the detection of metallic USTs, drums and other buried metal objects within the depth interval of 0 to 10 feet.
- GPR surveys suggest the high amplitude anomalies (contours shaded in red) centered near grid coordinates X=95 Y=20 X=105 Y=25, X=130 Y=27, X=150 Y=65, X=164 Y=62, X=175 Y=42, and X=198 Y=65 are probably in response to buried utility-related objects, steel reinforced concrete, and/or the church building, respectively.

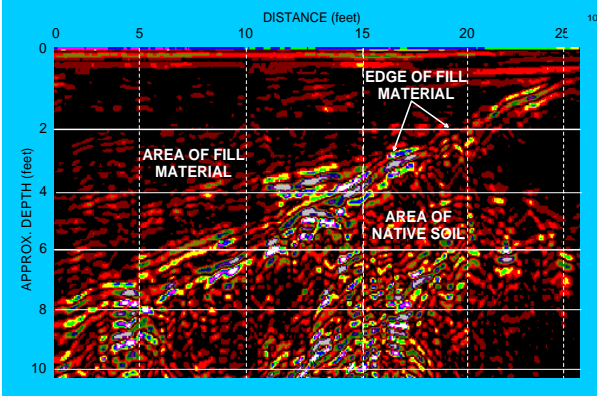
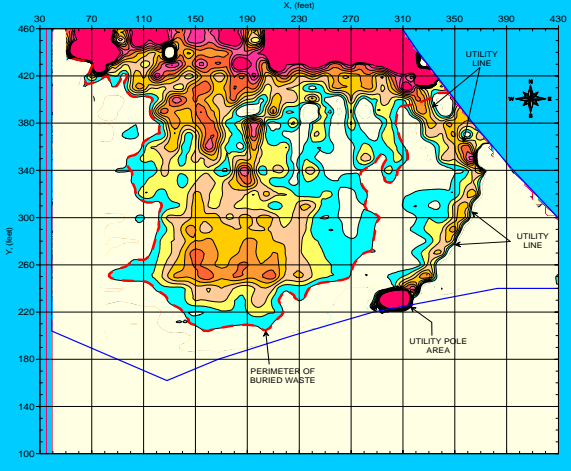
- GPR surveys conducted around the perimeter of the building suggest that the remaining EM61 anomalies are probably in response to known cultural objects, the building, and/or to buried miscellaneous debris.
- The geophysical investigation conducted at the Church of the Living God suggests that the surveyed portion of the site does not contain metallic USTs.

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 geophysical surveys are non-unique and may not represent actual subsurface conditions. The EM61 and GPR results obtained for this project do not conclusively determine that the surveyed portion of the site does not contain buried metallic USTs, drums or other large metallic objects, but that none were detected. Some of the EM61 and GPR anomalies interpreted as probable or possible small, miscellaneous, metal objects/debris may be attributed to other surface or subsurface features and/or interference from cultural features.



FIGURES



The photo shows the Geonics EM61 metal detector that was used to conduct the metal detection survey at the Church of the Living God site on March 22, 2007.

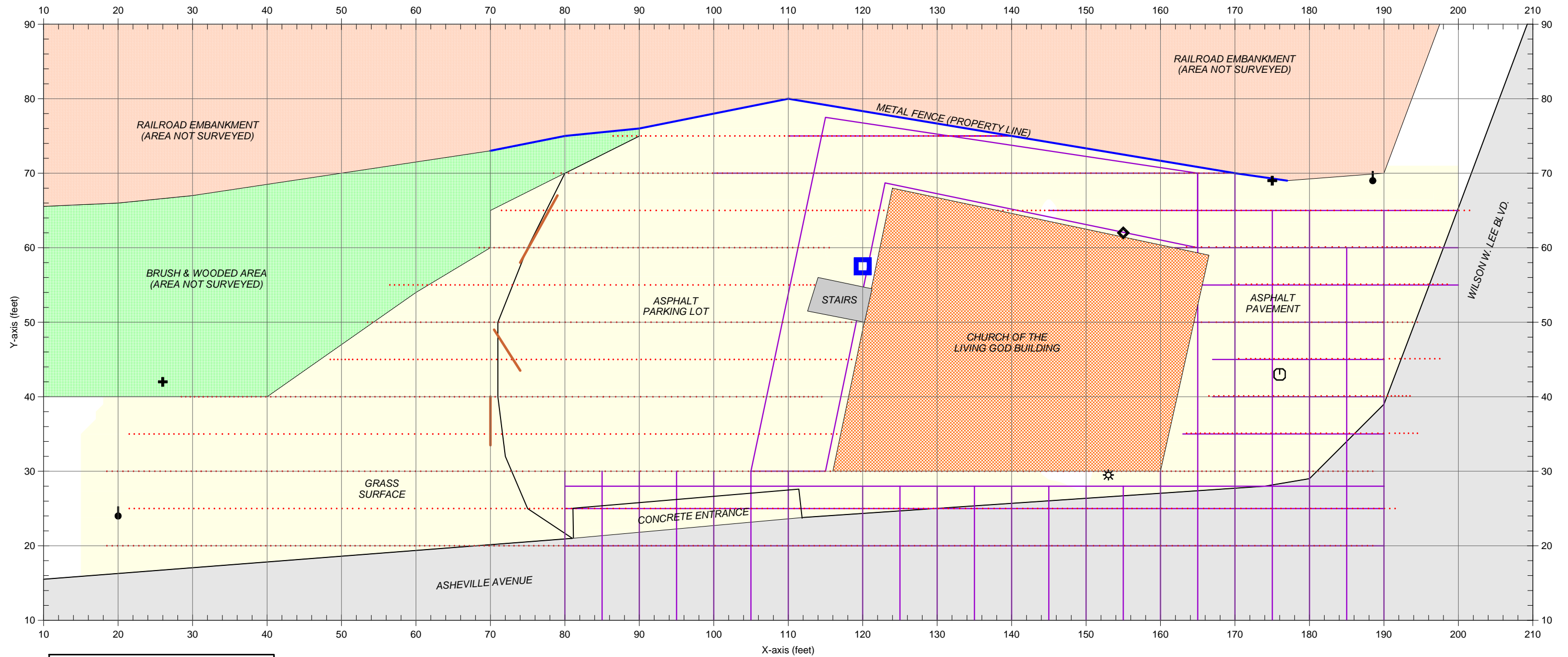


The photos show the SIR-2000 GPR system equipped with a 400 MHz antenna that were used to conduct the ground penetrating radar investigation at the Church of the Living God site on March 22, 2007.



The photo shows a portion of the geophysical survey area located at the Church of the Living God site. The photo is viewed in a westerly direction.

| | | | | | | |
|--------|-------------------------------|-------|----------------|----------|-------|-----|
| CLIENT | SOLUTIONS-IES | | DATE | 03/27/07 | BY | MJD |
| SITE | CHURCH OF THE LIVING GOD SITE | | LAY | | CHKD | |
| CITY | STATESVILLE | STATE | NORTH CAROLINA | ENG | | |
| TITLE | GEOPHYSICAL RESULTS | | PROJ | 2007-079 | PROJ# | |



LEGEND

- EM61 SURVEY AREA: EM DATA ACQUIRED ALONG EASTERLY-WESTERLY TRENDING LINES SPACED 5 FEET APART
- AIR CONDITIONING UNIT
- WATER METER OR VALVE COVER
- GUY WIRE
- UTILITY POLE
- SEWER VENT PIPE
- GAS METER
- PARKING CURB
- METAL FENCE LINE
- EM61 METAL DETECTION SURVEY LINE
- GPR SURVEY LINE
- AREA SCANNED BY GPR



Note: The map shows the geophysical survey area at the Church of the Living God site. The red dots represent the EM61 survey lines that were acquired on March 22, 2007 using a Geonics EM61 metal detection instrument. The purple lines represent the ground penetrating radar (GPR) survey lines that were also acquired on March 22, 2007 using a Geophysical Survey Systems SIR 2000 instrument with a 400 MHz antenna. The purple polygon represents the area that was scanned with the GPR instrument.

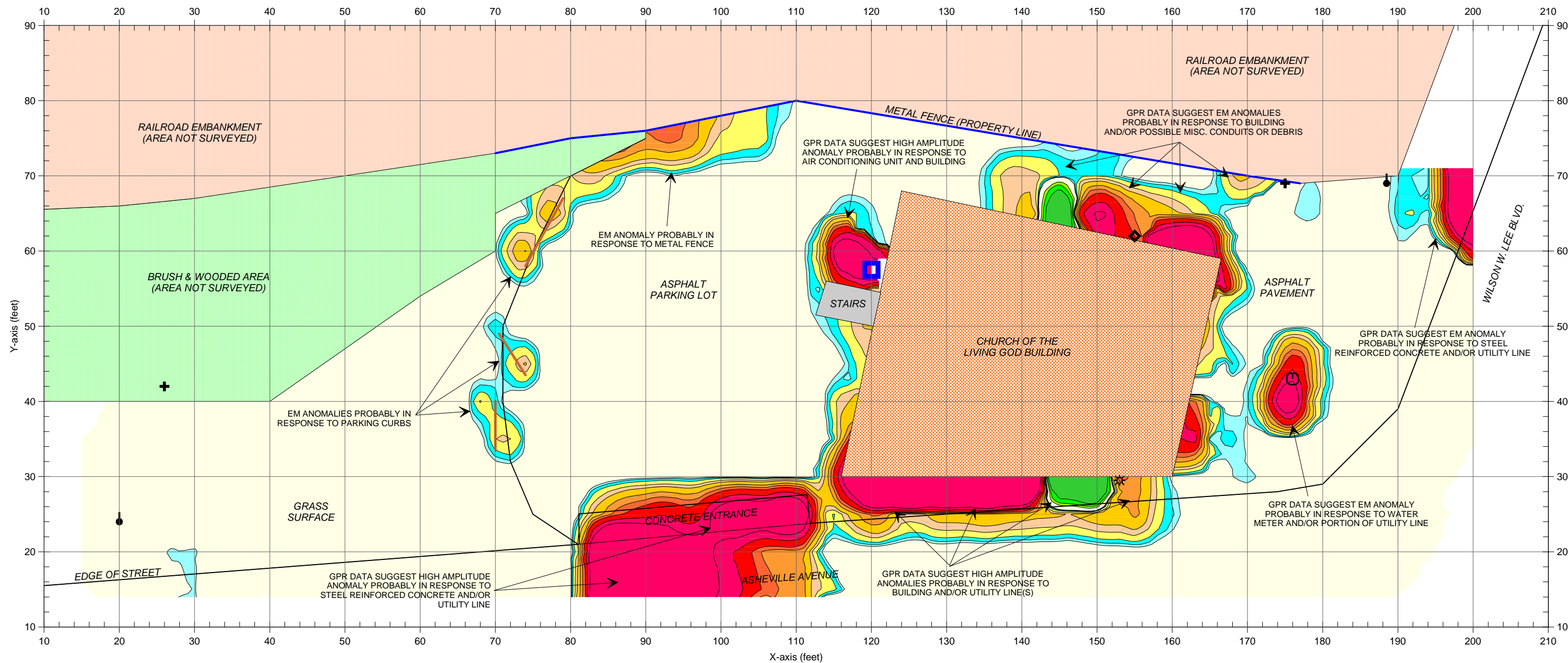


| | | | | | |
|--------|-------------------------------|-------|----------------|--------|-----|
| CLIENT | SOLUTIONS - IES | DATE | 03/27/07 | DRAWN | MJD |
| SITE | CHURCH OF THE LIVING GOD SITE | LAY | | CHKD | |
| CITY | STATESVILLE | STATE | NORTH CAROLINA | DWG | |
| TITLE | GEOPHYSICAL RESULTS | J-NO | 2007-079 | FIGURE | |

GRAPHIC SCALE IN FEET

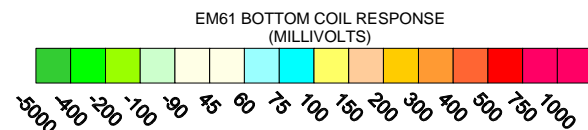
GEOPHYSICAL SURVEY LINE LOCATIONS

FIGURE 2



LEGEND

- EM61 SURVEY AREA: EM DATA ACQUIRED ALONG EASTERLY-WESTERLY TRENDING LINES SPACED 5 FEET APART
- AIR CONDITIONING UNIT
- WATER METER OR VALVE COVER
- + GUY WIRE
- UTILITY POLE
- SEWER VENT PIPE
- * GAS METER
- PARKING CURB
- METAL FENCE LINE



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 March 22, 2007 using a Geonics EM61 instrument. Ground penetrating radar (GPR) data were also acquired on March 22, 2007 using a Geophysical Survey Systems SIR 2000 instrument with a 400 MHz antenna.

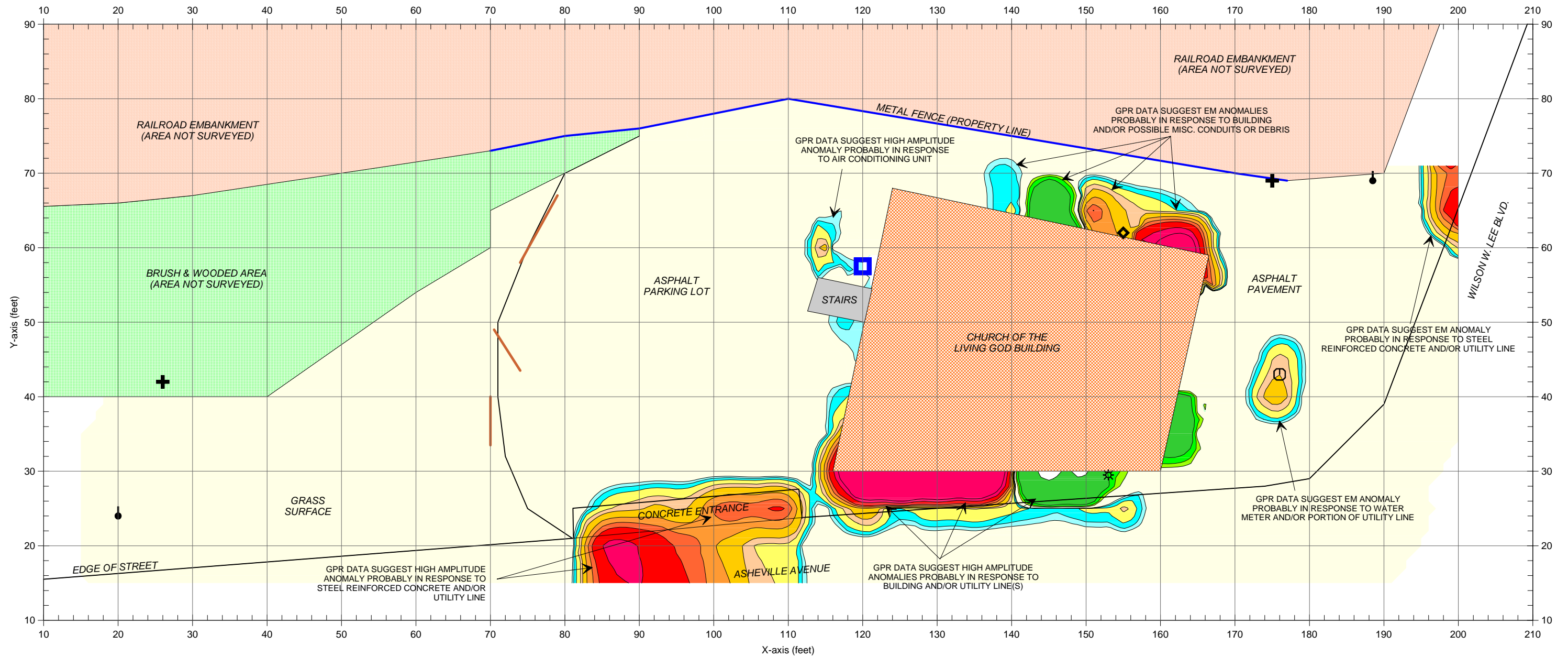
The geophysical investigation suggests that the surveyed portion of the site does not contain metallic USTs.



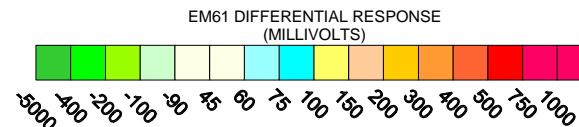
| | | | | | | |
|--------|-------------------------------|-------|----------------|----------|--------|-----|
| CLIENT | SOLUTIONS - IES | | DATE | 03/27/07 | DRAWN | MJD |
| SITE | CHURCH OF THE LIVING GOD SITE | | LAY | | CHECK | |
| CITY | STATESVILLE | STATE | NORTH CAROLINA | DWG | | |
| TITLE | GEOPHYSICAL RESULTS | | J.N.O. | 2007-079 | FIGURE | |

**EM61
BOTTOM COIL
RESULTS**

FIGURE 3



| LEGEND | |
|--------|---|
| | EM61 SURVEY AREA: EM DATA ACQUIRED ALONG EASTERLY-WESTERLY TRENDING LINES SPACED 5 FEET APART |
| | AIR CONDITIONING UNIT |
| | WATER METER OR VALVE COVER |
| | GUY WIRE |
| | UTILITY POLE |
| | SEWER VENT PIPE |
| | GAS METER |
| | PARKING CURB |
| | METAL FENCE 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 March 22, 2007 using a Geonics EM61 instrument. Ground penetrating radar (GPR) data were also acquired on March 22, 2007 using a Geophysical Survey Systems SIR 2000 instrument with a 400 MHz antenna.

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



| | | | | | | |
|--------|-------------------------------|-------|----------------|----------|--------|-----|
| CLIENT | SOLUTIONS - IES | | DATE | 03/27/07 | DRWN | MJD |
| SITE | CHURCH OF THE LIVING GOD SITE | | LAY | | CHKD | |
| CITY | STATESVILLE | STATE | NORTH CAROLINA | DWG | | |
| TITLE | GEOPHYSICAL RESULTS | | J-NO. | 2007-079 | FIGURE | |

EM61 DIFFERENTIAL RESULTS

FIGURE 4

APPENDIX C
BORING LOGS

Log of Soil Boring: GP-1

Project: Church of God

Solutions-IES Project No.: 3460.07A3.NCDOT

Boring Number: GP-1

Client: NC DOT

WBS # 32669.1.1

Initial Water Level: NA

State Project # B-2576

County: Iredell County

Stabilized Water Level: NA

Drilling Method: Geoprobe

Boring Date: 3/28/07

Cave In Depth: NA

Sampler Type: Macrocore

Logged By: Sean Jarvah

Checked By: JD

Total Depth of Boring: 8 ft bgs

| SUBSURFACE PROFILE | | | SAMPLE | | | | | Lab Sample Depth | Well Data |
|--------------------|-------------|--|-----------------|------------|--|--|--|------------------|-----------|
| Depth ft. bgs | USCS Symbol | Description | Sample Interval | % Recovery | PID Field Screen ppm 250 500 750 | | | | |
| | | | | | FID Field Screen ppm 250 500 750 | | | | |
| 0 | | Ground Surface | | | | | | | |
| | Asphalt | | | | | | | | |
| 1 | SW | Dry, dark brown fine SAND(some organic material) | | 0 | | | | | |
| 2 | ML | Dry, brown and tan clayey SILT | | 100 | | | | | |
| 3 | CL | Dry, red and orange silty CLAY | | 0 | | | | | |
| 4 | ML | Dry, orange, red, and yellow clayey SILT | | 0 | | | | | |
| 5 | | | | 0 | | | | | |
| 6 | | | | 100 | | | | | |
| 7 | | | | 0 | | | | | |
| 8 | | 8 ft | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |

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

Note: 0=Not detected



Log of Soil Boring: GP-2

Project: Church of God

Solutions-IES Project No.: 3460.07A3.NCDOT

Boring Number: GP-2

Client: NC DOT

WBS # 32669.1.1

Initial Water Level: NA

State Project # B-2576

County: Iredell County

Stabilized Water Level: NA

Drilling Method: Geoprobe

Boring Date: 3/28/07

Cave In Depth: NA

Sampler Type: Macrocore

Logged By: Sean Jarvah

Checked By: JD

Total Depth of Boring: 8 ft bgs

| SUBSURFACE PROFILE | | | SAMPLE | | | | | Lab Sample Depth | Well Data |
|--------------------|----------------|--|-----------------|------------|--|--|--|------------------|-----------|
| Depth ft. bgs | USCS Symbol | Description | Sample Interval | % Recovery | PID Field Screen ppm 250 500 750 | | | | |
| | | | | | FID Field Screen ppm 250 500 750 | | | | |
| 0 | | Ground Surface | | | | | | | |
| | Asphalt | | | | | | | | |
| | CL | | | | | | | | |
| 1 | | Dry, brown and tan sandy CLAY | | 0 | | | | | |
| | ML | | | | | | | | |
| 2 | | Dry, brown and tan clayey SILT | | 100 | | | | | |
| 3 | | | | 0 | | | | | |
| | ML | | | | | | | | |
| 4 | | Dry, red and orange clayey SILT | | 0 | | | | | |
| | ML | | | | | | | | |
| 5 | | Dry, red and orange clayey SILT with some gravel | | 0 | | | | | |
| | ML | | | | | | | | |
| 6 | | Dry, yellow and orange clayey SILT | | 100 | | | | | |
| 7 | | | | 0 | | | | | |
| 8 | | 8 ft | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |

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

Note: 0=Not detected



Log of Soil Boring: GP-3

Project: Church of God

Solutions-IES Project No.: 3460.07A3.NCDOT

Boring Number: GP-3

Client: NC DOT

WBS # 32669.1.1

Initial Water Level: NA

State Project # B-2576

County: Iredell County

Stabilized Water Level: NA

Drilling Method: Geoprobe

Boring Date: 3/28/07

Cave In Depth: NA

Sampler Type: Macrocore

Logged By: Sean Jarvah

Checked By: JD

Total Depth of Boring: 8 ft bgs

| SUBSURFACE PROFILE | | | SAMPLE | | | | | Lab Sample Depth | Well Data |
|--------------------|----------------|---------------------------------------|-----------------|------------|--|--|--|------------------|-----------|
| Depth ft. bgs | USCS Symbol | Description | Sample Interval | % Recovery | PID Field Screen • ppm • 250 500 750 | | | | |
| | | | | | FID Field Screen ■ ppm ■ 250 500 750 | | | | |
| 0 | | Ground Surface | | | | | | | |
| | Asphalt | | | | | | | | |
| 1 | ML | Dry, red clayey SILT | | 0 | | | | | |
| | ML | Dry, brown, sandy clayey SILT | | 100 | | | | | |
| 2 | | | | 0 | | | | | |
| | ML | Dry, red with some orange clayey SILT | | 100 | | | | | |
| 3 | | | | 0 | | | | | |
| | CL | Dry, tan to red and white silty CLAY | | 100 | | | | | |
| 4 | | | | 0 | | | | | |
| | | | | 100 | | | | | |
| 5 | | | | 0 | | | | | |
| | | | | 100 | | | | | |
| 6 | | | | 0 | | | | | |
| | | | | 100 | | | | | |
| 7 | | | | 0 | | | | | |
| | | | | 100 | | | | | |
| 8 | | 8 ft | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |

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

Note: 0=Not detected



Log of Soil Boring: GP-4

Project: Church of God

Solutions-IES Project No.: 3460.07A3.NCDOT

Boring Number: GP-4

Client: NC DOT

WBS # 32669.1.1

Initial Water Level: NA

State Project # B-2576

County: Iredell County

Stabilized Water Level: NA

Drilling Method: Geoprobe

Boring Date: 3/28/07

Cave In Depth: NA

Sampler Type: Macrocore

Logged By: Sean Jarvah

Checked By: JD

Total Depth of Boring: 8 ft bgs

| SUBSURFACE PROFILE | | | SAMPLE | | | | | Lab Sample Depth | Well Data |
|--------------------|----------------|--|-----------------|------------|--|--|--|------------------|-----------|
| Depth ft. bgs | USCS Symbol | Description | Sample Interval | % Recovery | PID Field Screen ppm 250 500 750 | | | | |
| | | | | | FID Field Screen ppm 250 500 750 | | | | |
| 0 | | Ground Surface | | | | | | | |
| | Asphalt | | | | | | | | |
| | CL | | | | | | | | |
| 1 | | Dry, red and yellow silty CLAY | | 0 | | | | | |
| | ML | | | | | | | | |
| 2 | | Dry, red and orange clayey SILT | | 60 | | | | | |
| 3 | | | | 0 | | | | | |
| 4 | | | | | | | | | |
| 5 | | | | 0 | | | | | |
| | ML | | | | | | | | |
| 6 | | Dry, tan, orange and white clayey SILT | | 100 | | | | | |
| 7 | | | | 0 | | | | | |
| 8 | | 8 ft | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |

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

Note: 0=Not detected



Log of Soil Boring: GP-5

Project: Church of God

Solutions-IES Project No.: 3460.07A3.NCDOT

Boring Number: GP-5

Client: NC DOT

WBS # 32669.1.1

Initial Water Level: NA

State Project # B-2576

County: Iredell County

Stabilized Water Level: NA

Drilling Method: Geoprobe

Boring Date: 3/28/07

Cave In Depth: NA

Sampler Type: Macrocore

Logged By: Sean Jarvah

Checked By: JD

Total Depth of Boring: 8 ft bgs

| SUBSURFACE PROFILE | | | SAMPLE | | | | | Lab Sample Depth | Well Data |
|--------------------|----------------|---|-----------------|------------|--|--|--|------------------|-----------|
| Depth ft. bgs | USCS Symbol | Description | Sample Interval | % Recovery | PID Field Screen ppm 250 500 750 | | | | |
| | | | | | FID Field Screen ppm 250 500 750 | | | | |
| 0 | | Ground Surface | | | | | | | |
| | Asphalt | | | | | | | | |
| | SW | | | | | | | | |
| 1 | | Damp, dark brown fine SAND | | 5 | | | | | |
| | SM | | | | | | | | |
| 2 | | Damp, brown fine silty SAND | | 100 | | | | | |
| | ML | | | | | | | | |
| 3 | | Dry, orange, tan, white and red clayey SILT | | 0 | | | | | |
| 4 | | | | | | | | | |
| 5 | | | | 0 | | | | | |
| 6 | | | | 100 | | | | | |
| 7 | | | | 0 | | | | | |
| 8 | | | | | | | | | |
| | | Boring terminated at 8 ft bgs | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |

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

Note: 0=Not detected



Log of Soil Boring: GP-6

Project: Church of God

Solutions-IES Project No.: 3460.07A3.NCDOT

Boring Number: GP-6

Client: NC DOT

WBS # 32669.1.1

Initial Water Level: NA

State Project # B-2576

County: Iredell County

Stabilized Water Level: NA

Drilling Method: Geoprobe

Boring Date: 3/28/07

Cave In Depth: NA

Sampler Type: Macrocore

Logged By: Sean Jarvah

Checked By: JD

Total Depth of Boring: 8 ft bgs

| SUBSURFACE PROFILE | | | SAMPLE | | | | | Lab Sample Depth | Well Data |
|--------------------|----------------|---|-----------------|------------|--|--|--|------------------|-----------|
| Depth ft. bgs | USCS Symbol | Description | Sample Interval | % Recovery | PID Field Screen ppm 250 500 750 | | | | |
| | | | | | FID Field Screen ppm 250 500 750 | | | | |
| 0 | | Ground Surface | | | | | | | |
| | Asphalt | | | | | | | | |
| | SW | | | | | | | | |
| 1 | | Dry, dark brown fine silty SAND | | 0 | | | | | |
| | ML | | | | | | | | |
| 2 | | Dry, brown and tan clayey SILT | | 100 | | | | | |
| | ML | | | | | | | | |
| 3 | | Dry, red, orange and yellow clayey SILT | | 0 | | | | | |
| | ML | | | | | | | | |
| 4 | | Dry, orange, tan and white clayey SILT | | 0 | | | | | |
| | ML | | | | | | | | |
| 5 | | Dry, tan and orange sandy SILT | | 100 | | | | | |
| | ML | | | | | | | | |
| 6 | | Dry, tan orange and white sandy SILT | | 0 | | | | | |
| | ML | | | | | | | | |
| 7 | | Dry, tan orange and white sandy SILT | | 0 | | | | | |
| | ML | | | | | | | | |
| 8 | | Dry, tan orange and white sandy SILT | | 0 | | | | | |
| | ML | | | | | | | | |
| 9 | | 8 ft | | | | | | | |
| 10 | | | | | | | | | |

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

Note: 0=Not detected



Log of Soil Boring: GP-7

Project: Church of God

Solutions-IES Project No.: 3460.07A3.NCDOT

Boring Number: GP-7

Client: NC DOT

WBS # 32669.1.1

Initial Water Level: NA

State Project # B-2576

County: Iredell County

Stabilized Water Level: NA

Drilling Method: Geoprobe

Boring Date: 3/28/07

Cave In Depth: NA

Sampler Type: Macrocore

Logged By: Sean Jarvah

Checked By: JD

Total Depth of Boring: 8 ft bgs

| SUBSURFACE PROFILE | | | SAMPLE | | | | | Lab Sample Depth | Well Data |
|--------------------|-----------------------------|--|-----------------|------------|--|--|--|------------------|-----------|
| Depth ft. bgs | USCS Symbol | Description | Sample Interval | % Recovery | PID Field Screen • ppm • 250 500 750 | | | | |
| | | | | | FID Field Screen ■ ppm ■ 250 500 750 | | | | |
| 0 | | Ground Surface | | | | | | | |
| | Asphalt SW | | | | | | | | |
| 1 | | Dry, dark brown fine silty SAND with some gravel | | 0 | | | | | |
| 2 | | | | 50 | | | | | |
| | CL | | | | | | | | |
| 3 | | Damp, light brown sandy CLAY | | 0 | | | | | |
| 4 | | | | | | | | | |
| | CL | | | | | | | | |
| 5 | | Dry, tan and orange silty CLAY | | 0 | | | | | |
| 6 | | | | 100 | | | | | |
| | ML | | | | | | | | |
| 7 | | Dry, tan, orange and white clayey SILT | | .5 | | | | | |
| 8 | | 8 ft | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |

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

Note: 0=Not detected



Log of Soil Boring: GP-8

Project: Church of God

Solutions-IES Project No.: 3460.07A3.NCDOT

Boring Number: GP-8

Client: NC DOT

WBS # 32669.1.1

Initial Water Level: NA

State Project # B-2576

County: Iredell County

Stabilized Water Level: NA

Drilling Method: Geoprobe

Boring Date: 3/28/07

Cave In Depth: NA

Sampler Type: Macrocore

Logged By: Sean Jarvah

Checked By: JD

Total Depth of Boring: 8 ft bgs

| SUBSURFACE PROFILE | | | SAMPLE | | | | | Lab Sample Depth | Well Data |
|--------------------|-------------|--|-----------------|------------|--|--|--|------------------|-----------|
| Depth ft. bgs | USCS Symbol | Description | Sample Interval | % Recovery | PID Field Screen ppm 250 500 750 | | | | |
| | | | | | FID Field Screen ppm 250 500 750 | | | | |
| 0 | | Ground Surface | | | | | | | |
| | Asphalt | | | | | | | | |
| | CL | Dry, red silty CLAY | | | 0 | | | | |
| 1 | | | | | | | | | |
| | CL | Dry, brown and red silty CLAY | | 50 | 0 | | | | |
| 2 | | | | | | | | | |
| | CL | Dry, red and yellow silty CLAY | | | 0 | | | | |
| 3 | | | | | | | | | |
| | ML | Dry, tan, yellow and white clayey SILT | | 100 | 0 | | | | |
| 4 | | | | | | | | | |
| | | | | | 2 | | | | |
| 5 | | | | | | | | | |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8 | | 8 ft | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |

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

Note: 0=Not detected



Log of Soil Boring: GP-9

Project: Church of God

Solutions-IES Project No.: 3460.07A3.NCDOT

Boring Number: GP-9

Client: NC DOT

WBS # 32669.1.1

Initial Water Level: NA

State Project # B-2576

County: Iredell County

Stabilized Water Level: NA

Drilling Method: Geoprobe

Boring Date: 3/28/07

Cave In Depth: NA

Sampler Type: Macrocore

Logged By: Sean Jarvah

Checked By: JD

Total Depth of Boring: 8 ft bgs

| SUBSURFACE PROFILE | | | SAMPLE | | | | | Lab Sample Depth | Well Data |
|--------------------|----------------|--|-----------------|------------|--|--|--|------------------|-----------|
| Depth ft. bgs | USCS Symbol | Description | Sample Interval | % Recovery | PID Field Screen • ppm • 250 500 750 | | | | |
| | | | | | FID Field Screen ■ ppm ■ 250 500 750 | | | | |
| 0 | | Ground Surface | | | | | | | |
| | Asphalt | | | | | | | | |
| | ML | Dry, red and orange clayey SILT with some gravel | | | 0 | | | | |
| 1 | | | | | | | | | |
| 2 | | | | 75 | | | | | |
| 3 | | | | | 0 | | | | |
| 4 | | | | | | | | | |
| | SW | Dry, brown silty SAND | | | | | | | |
| 5 | | | | | 2 | | | | |
| | CL | Dry, brown and orange silty CLAY | | | | | | | |
| 6 | | | | | 100 | | | | |
| | CL | Dry, orange and yellow silty CLAY | | | | | | | |
| 7 | | | | | 8 | | | | |
| | ML | Dry, orange, yellow and red clayey SILT | | | | | | | |
| 8 | | 8 ft | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |

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

Note: 0=Not detected



Log of Soil Boring: GP-10

Project: Church of God

Solutions-IES Project No.: 3460.07A3.NCDOT

Boring Number: GP-10

Client: NC DOT

WBS # 32669.1.1

Initial Water Level: NA

State Project # B-2576

County: Iredell County

Stabilized Water Level: NA

Drilling Method: Geoprobe

Boring Date: 3/29/07

Cave In Depth: NA

Sampler Type: Macrocore

Logged By: Sean Jarvah

Checked By: JD

Total Depth of Boring: 8 ft bgs

| SUBSURFACE PROFILE | | | SAMPLE | | | | | Lab Sample Depth | Well Data |
|--------------------|-------------|---|-----------------|------------|--|--|--|------------------|-----------|
| Depth ft. bgs | USCS Symbol | Description | Sample Interval | % Recovery | PID Field Screen • ppm • 250 500 750 | | | | |
| | | | | | FID Field Screen ■ ppm ■ 250 500 750 | | | | |
| 0 | | Ground Surface | | | | | | | |
| | | Asphalt | | | | | | | |
| | | ML Dry, brown and yellow sandy SILT | | | 0 | | | | |
| 1 | | | | | | | | | |
| | | ML Dry, red and brown clayey SILT | | 100 | 0 | | | | |
| 2 | | | | | | | | | |
| | | ML Dry, red and brown clayey SILT | | | 0 | | | | |
| 3 | | | | | | | | | |
| | | ML Dry, red and brown clayey SILT | | | 0 | | | | |
| 4 | | | | | | | | | |
| | | ML Dry, red and brown clayey SILT with some quartz gravel | | | 0 | | | | |
| 5 | | | | | | | | | |
| | | ML Dry, red and yellow clayey SILT | | | 0 | | | | |
| 6 | | | | | | | | | |
| | | | | | | | | | |
| 7 | | | | | | | | | |
| | | | | | | | | | |
| 8 | | 8 ft | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |

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

Note: 0=Not detected



Log of Soil Boring: GP-11

Project: Church of God

Solutions-IES Project No.: 3460.07A3.NCDOT

Boring Number: GP-11

Client: NC DOT

WBS # 32669.1.1

Initial Water Level: NA

State Project # B-2576

County: Iredell County

Stabilized Water Level: NA

Drilling Method: Geoprobe

Boring Date: 3/29/07

Cave In Depth: NA

Sampler Type: Macrocore

Logged By: Sean Jarvah

Checked By: JD

Total Depth of Boring: 8 ft bgs

| SUBSURFACE PROFILE | | | SAMPLE | | | | | Lab Sample Depth | Well Data |
|--------------------|----------------|------------------------------------|-----------------|------------|--|--|--|------------------|-----------|
| Depth ft. bgs | USCS Symbol | Description | Sample Interval | % Recovery | PID Field Screen ppm 250 500 750 | | | | |
| | | | | | FID Field Screen ppm 250 500 750 | | | | |
| 0 | | Ground Surface | | | | | | | |
| | Asphalt | | | | | | | | |
| | CL | | | | | | | | |
| 1 | | Damp, brown sandy CLAY | | | 0 | | | | |
| | CL | | | | | | | | |
| | | Damp, brown and red silty CLAY | | | | | | | |
| 2 | | | | 100 | | | | | |
| 3 | | | | | 0 | | | | |
| | ML | | | | | | | | |
| | | Damp, brown and tan sandy SILT | | | | | | | |
| 4 | | | | | | | | | |
| | ML | | | | | | | | |
| | | Dry, brown and orange sandy SILT | | | | | | | |
| 5 | | | | | 0 | | | | |
| | ML | | | | | | | | |
| | | Dry, orange and yellow clayey SILT | | | | | | | |
| 6 | | | | 100 | | | | | |
| 7 | | | | | 0 | | | | |
| 8 | | 8 ft | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |

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

Note: 0=Not detected



Log of Soil Boring: GP-12

Project: Church of God

Solutions-IES Project No.: 3460.07A3.NCDOT

Boring Number: GP-12

Client: NC DOT

WBS # 32669.1.1

Initial Water Level: NA

State Project # B-2576

County: Iredell County

Stabilized Water Level: NA

Drilling Method: Geoprobe

Boring Date: 3/29/07

Cave In Depth: NA

Sampler Type: Macrocore

Logged By: Sean Jarvah

Checked By: JD

Total Depth of Boring: 8 ft bgs

| SUBSURFACE PROFILE | | | SAMPLE | | | | | Lab Sample Depth | Well Data |
|--------------------|-------------|--|-----------------|------------|--|--|--|------------------|-----------|
| Depth ft. bgs | USCS Symbol | Description | Sample Interval | % Recovery | PID Field Screen • ppm • 250 500 750 | | | | |
| | | | | | FID Field Screen ■ ppm ■ 250 500 750 | | | | |
| 0 | | Ground Surface | | | | | | | |
| | Asphalt | | | | | | | | |
| | ML | | | | | | | | |
| 1 | | Dry, brown, yellow and white clayey SILT | | 0 | | | | | |
| | ML | | | | | | | | |
| 2 | | Dry, red and brown clayey SILT | | 100 | | | | | |
| | ML | | | | | | | | |
| 3 | | Dry, red clayey SILT with some gravel | | 0 | | | | | |
| | ML | | | | | | | | |
| 4 | | Dry, brown clayey SILT | | 0 | | | | | |
| | ML | | | | | | | | |
| 5 | | Dry, brown and red clayey SILT | | 0 | | | | | |
| | ML | | | | | | | | |
| 6 | | Dry, red silty CLAY | | 100 | | | | | |
| | CL | | | | | | | | |
| 7 | | | | 0 | | | | | |
| 8 | | 8 ft | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |

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

Note: 0=Not detected



Log of Soil Boring: GP-13

Project: Church of God

Solutions-IES Project No.: 3460.07A3.NCDOT

Boring Number: GP-13

Client: NC DOT

WBS # 32669.1.1

Initial Water Level: NA

State Project # B-2576

County: Iredell County

Stabilized Water Level: NA

Drilling Method: Geoprobe

Boring Date: 3/29/07

Cave In Depth: NA

Sampler Type: Macrocore

Logged By: Sean Jarvah

Checked By: JD

Total Depth of Boring: 8 ft bgs

| SUBSURFACE PROFILE | | | SAMPLE | | PID Field Screen | | | Lab Sample Depth | Well Data |
|--------------------|-------------|---|-----------------|------------|------------------|-----|-----|------------------|-----------|
| Depth ft. bgs | USCS Symbol | Description | Sample Interval | % Recovery | 250 | 500 | 750 | | |
| 0 | | Ground Surface | | | | | | | |
| | | Asphalt | | | | | | | |
| | | ML Dry, brown and red clayey SILT | | | 0 | | | | |
| 1 | | ML Dry, red, yellow and white clayey SILT | | | 0 | | | | |
| 2 | | | | 100 | | | | | |
| 3 | | ML Dry, brown and tan clayey SILT | | | 0 | | | | |
| 4 | | ML Dry, red and tan clayey SILT | | | 0 | | | | |
| 5 | | ML Dry, red with some yellow clayey SILT | | | 0 | | | | |
| 6 | | | | 100 | | | | | |
| 7 | | | | | 0 | | | | |
| 8 | | 8 ft | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |

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

Note: 0=Not detected



Log of Soil Boring: GP-14

Project: Church of God

Solutions-IES Project No.: 3460.07A3.NCDOT

Boring Number: GP-14

Client: NC DOT

WBS # 32669.1.1

Initial Water Level: NA

State Project # B-2576

County: Iredell County

Stabilized Water Level: NA

Drilling Method: Geoprobe

Boring Date: 3/29/07

Cave In Depth: NA

Sampler Type: Macrocore

Logged By: Sean Jarvah

Checked By: JD

Total Depth of Boring: 8 ft bgs

| SUBSURFACE PROFILE | | | SAMPLE | | | | | Lab Sample Depth | Well Data |
|--------------------|----------------|---|-----------------|------------|--|--|--|------------------|-----------|
| Depth ft. bgs | USCS Symbol | Description | Sample Interval | % Recovery | PID Field Screen ppm 250 500 750 | | | | |
| | | | | | FID Field Screen ppm 250 500 750 | | | | |
| 0 | | Ground Surface | | | | | | | |
| | Asphalt | | | | | | | | |
| | ML | | | | | | | | |
| 1 | | Dry, red clayey SILT | | | 0 | | | | |
| | ML | | | | | | | | |
| | | Dry, light brown sandy, clayey SILT | | | | | | | |
| 2 | | Dry, yellow and white clayey SILT | | 100 | | | | | |
| | ML | | | | | | | | |
| | | Dry, brown and red clayey SILT | | | 0 | | | | |
| 3 | | Dry, brown sandy SILT | | | | | | | |
| | ML | | | | | | | | |
| 4 | | Dry, red and orange clayey SILT | | | | | | | |
| | ML | | | | | | | | |
| 5 | | Dry, red, orange and yellow clayey SILT | | | 0 | | | | |
| | ML | | | | | | | | |
| 6 | | | | 100 | | | | | |
| | | | | | | | | | |
| 7 | | | | | 0 | | | | |
| | | | | | | | | | |
| 8 | | 8 ft | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |

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

Note: 0=Not detected



Log of Soil Boring: GP-15

Project: Church of God

Solutions-IES Project No.: 3460.07A3.NCDOT

Boring Number: GP-15

Client: NC DOT

WBS # 32669.1.1

Initial Water Level: NA

State Project # B-2576

County: Iredell County

Stabilized Water Level: NA

Drilling Method: Geoprobe

Boring Date: 3/29/07

Cave In Depth: NA

Sampler Type: Macrocore

Logged By: Sean Jarvah

Checked By: JD

Total Depth of Boring: 8 ft bgs

| SUBSURFACE PROFILE | | | SAMPLE | | | | | Lab Sample Depth | Well Data |
|--------------------|-------------|--|-----------------|------------|--|--|--|------------------|-----------|
| Depth ft. bgs | USCS Symbol | Description | Sample Interval | % Recovery | PID Field Screen • ppm • 250 500 750 | | | | |
| | | | | | FID Field Screen ■ ppm ■ 250 500 750 | | | | |
| 0 | | Ground Surface | | | | | | | |
| | | Asphalt | | | | | | | |
| | ML | Dry, brown and red sandy, clayey SILT | | | 0 | | | | |
| 1 | | | | | ■ | | | | |
| | ML | Dry, red and orange clayey SILT | | | | | | | |
| 2 | | | | 100 | | | | | |
| 3 | | | | | 0 | | | | |
| | ML | Dry, brown, tan and orange clayey SILT | | | ■ | | | | |
| 4 | | | | | | | | | |
| | ML | Dry, red and light brown clayey SILT | | | 0 | | | | |
| 5 | | | | | ■ | | | | |
| 6 | | | | 100 | | | | | |
| | ML | Dry, red and tan clayey SILT | | | 0 | | | | |
| 7 | | | | | ■ | | | | |
| 8 | | 8 ft | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |

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

Note: 0=Not detected



APPENDIX D

LABORATORY ANALYTICAL REPORTS

April 06, 2007

Mr. Christopher A. Peoples
NC DOT
Materials & Test Unit
1801 Blue Ridge Road
Raleigh, NC 27607

RE: Lab Project Number: 92141341
Client Project ID: NCDOT 32669.1.1 Church of God

Dear Mr. Peoples:

Enclosed are the analytical results for sample(s) received by the laboratory on March 30, 2007. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

Inorganic Wet Chemistry and Metals Analyses were performed at our Pace Asheville laboratory and Organic testing was performed at our Pace Charlotte laboratory unless otherwise footnoted.

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

Sincerely,



Bonnie McKee
bonnie.mckee@pacelabs.com
(704) 875-9092 ext. 234
Project Manager

Enclosures

Asheville Certification IDs
NC Wastewater 40
NC Drinking Water 37712
SC Environmental 99030
FL NELAP E87648

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.



Charlotte Certification IDs
NC Wastewater 12
NC Drinking Water 37706
SC 99006
FL NELAP E87627

Lab Project Number: 92141341

Client Project ID: NCDOT 32669.1.1 Church of God

Solid results are reported on a dry weight basis

Lab Sample No: 928201078 Project Sample Number: 92141341-001 Date Collected: 03/28/07 12:00
Client Sample ID: GP-1 Matrix: Soil Date Received: 03/30/07 15:33

| Parameters | Results | Units | Report Limit | Analyzed | By | CAS No. | Qual | RegLmt |
|------------|---------|-------|--------------|----------|----|---------|------|--------|
|------------|---------|-------|--------------|----------|----|---------|------|--------|

Wet Chemistry

| | | | | | | | | |
|------------------|--------------------|---|--|----------------|-----|--|--|--|
| Percent Moisture | Method: % Moisture | | | | | | | |
| Percent Moisture | 21.4 | % | | 04/02/07 14:39 | KDF | | | |

GC Semivolatiles

| | | | | | | | | |
|--------------------------|----------------------------------|-------|-----|----------------|------|------------|--|--|
| TPH in Soil by 3545/8015 | Prep/Method: EPA 3545 / EPA 8015 | | | | | | | |
| Diesel Fuel | ND | mg/kg | 6.4 | 04/03/07 15:18 | RCS1 | 68334-30-5 | | |
| n-Pentacosane (S) | 57 | % | | 04/03/07 15:18 | RCS1 | 629-99-2 | | |
| Date Extracted | 04/02/07 | | | 04/02/07 | | | | |

GC Volatiles

| | | | | | | | | |
|---------------------------|------------------|-------|-----|----------------|-----|----------|--|--|
| GAS, Soil, North Carolina | Method: EPA 8015 | | | | | | | |
| Gasoline | 7.3 | mg/kg | 5.2 | 04/04/07 16:56 | DHW | | | |
| 4-Bromofluorobenzene (S) | 84 | % | | 04/04/07 16:56 | DHW | 460-00-4 | | |

Date: 04/06/07

Page: 1 of 21

Lab Project Number: 92141341

Client Project ID: NCDOT 32669.1.1 Church of God

Lab Sample No: 928201094 Project Sample Number: 92141341-002 Date Collected: 03/28/07 12:20
Client Sample ID: GP-2 Matrix: Soil Date Received: 03/30/07 15:33

| Parameters | Results | Units | Report Limit | Analyzed | By | CAS No. | Qual | ReqLmt |
|---------------------------|----------------------------------|-------|--------------|----------------|------|------------|------|--------|
| Wet Chemistry | | | | | | | | |
| Percent Moisture | Method: % Moisture | | | | | | | |
| Percent Moisture | 26.7 | % | | 04/02/07 14:39 | KDF | | | |
| GC Semivolatiles | | | | | | | | |
| TPH in Soil by 3545/8015 | Prep/Method: EPA 3545 / EPA 8015 | | | | | | | |
| Diesel Fuel | ND | mg/kg | 6.8 | 04/03/07 15:46 | RCS1 | 68334-30-5 | | |
| n-Pentacosane (S) | 68 | % | | 04/03/07 15:46 | RCS1 | 629-99-2 | | |
| Date Extracted | 04/02/07 | | | 04/02/07 | | | | |
| GC Volatiles | | | | | | | | |
| GAS, Soil, North Carolina | Method: EPA 8015 | | | | | | | |
| Gasoline | ND | mg/kg | 5.6 | 04/04/07 17:48 | DHW | | | |
| 4-Bromofluorobenzene (S) | 86 | % | | 04/04/07 17:48 | DHW | 460-00-4 | | |

Date: 04/06/07

Page: 2 of 21

Asheville Certification IDs
NC Wastewater 40
NC Drinking Water 37712
SC Environmental 99030
FL NELAP E87648

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.



Charlotte Certification IDs
NC Wastewater 12
NC Drinking Water 37706
SC 99006
FL NELAP E87627

Lab Project Number: 92141341
Client Project ID: NCDOT 32669.1.1 Church of God

Lab Sample No: 928201110 Project Sample Number: 92141341-003 Date Collected: 03/28/07 12:50
Client Sample ID: GP-3 Matrix: Soil Date Received: 03/30/07 15:33

| Parameters | Results | Units | Report Limit | Analyzed | By | CAS No. | Qual | ReqLmt |
|---------------------------|----------------------------------|-------|--------------|----------------|------|------------|------|--------|
| Wet Chemistry | | | | | | | | |
| Percent Moisture | Method: % Moisture | | | | | | | |
| Percent Moisture | 17.0 | % | | 04/02/07 14:39 | KDF | | | |
| GC Semivolatiles | | | | | | | | |
| TPH in Soil by 3545/8015 | Prep/Method: EPA 3545 / EPA 8015 | | | | | | | |
| Diesel Fuel | ND | mg/kg | 6.0 | 04/03/07 15:46 | RCS1 | 68334-30-5 | | |
| n-Pentacosane (S) | 85 | % | | 04/03/07 15:46 | RCS1 | 629-99-2 | | |
| Date Extracted | 04/02/07 | | | 04/02/07 | | | | |
| GC Volatiles | | | | | | | | |
| GAS, Soil, North Carolina | Method: EPA 8015 | | | | | | | |
| Gasoline | ND | mg/kg | 5.2 | 04/04/07 18:39 | DHW | | | |
| 4-Bromofluorobenzene (S) | 85 | % | | 04/04/07 18:39 | DHW | 460-00-4 | | |

Date: 04/06/07

Page: 3 of 21

Asheville Certification IDs
NC Wastewater 40
NC Drinking Water 37712
SC Environmental 99030
FL NELAP E87648

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.



Charlotte Certification IDs
NC Wastewater 12
NC Drinking Water 37706
SC 99006
FL NELAP E87627

Lab Project Number: 92141341

Client Project ID: NCDOT 32669.1.1 Church of God

Lab Sample No: 928201136
Client Sample ID: GP-4

Project Sample Number: 92141341-004
Matrix: Soil

Date Collected: 03/28/07 13:25
Date Received: 03/30/07 15:33

| Parameters | Results | Units | Report Limit | Analyzed | By | CAS No. | Qual | ReqLmt |
|---------------------------|----------------------------------|-------|--------------|----------------|------|------------|------|--------|
| Wet Chemistry | | | | | | | | |
| Percent Moisture | Method: % Moisture | | | | | | | |
| Percent Moisture | 15.0 | % | | 04/02/07 14:40 | KDF | | | |
| GC Semivolatiles | | | | | | | | |
| TPH in Soil by 3545/8015 | Prep/Method: EPA 3545 / EPA 8015 | | | | | | | |
| Diesel Fuel | ND | mg/kg | 5.9 | 04/03/07 16:12 | RCS1 | 68334-30-5 | | |
| n-Pentacosane (S) | 80 | % | | 04/03/07 16:12 | RCS1 | 629-99-2 | | |
| Date Extracted | 04/02/07 | | | 04/02/07 | | | | |
| GC Volatiles | | | | | | | | |
| GAS, Soil, North Carolina | Method: EPA 8015 | | | | | | | |
| Gasoline | ND | mg/kg | 5.1 | 04/04/07 19:05 | DHW | | | |
| 4-Bromofluorobenzene (S) | 94 | % | | 04/04/07 19:05 | DHW | 460-00-4 | | |

Date: 04/06/07

Page: 4 of 21

Asheville Certification IDs
NC Wastewater 40
NC Drinking Water 37712
SC Environmental 99030
FL NELAP E87648

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.



Charlotte Certification IDs
NC Wastewater 12
NC Drinking Water 37706
SC 99006
FL NELAP E87627

Lab Project Number: 92141341
Client Project ID: NCDOT 32669.1.1 Church of God

Lab Sample No: 928201144 Project Sample Number: 92141341-005 Date Collected: 03/28/07 14:00
Client Sample ID: GP-5 Matrix: Soil Date Received: 03/30/07 15:33

| Parameters | Results | Units | Report Limit | Analyzed | By | CAS No. | Qual | ReqLmt |
|---------------------------|----------------------------------|-------|--------------|----------------|------|------------|------|--------|
| Wet Chemistry | | | | | | | | |
| Percent Moisture | Method: % Moisture | | | | | | | |
| Percent Moisture | 16.0 | % | | 04/02/07 14:40 | KDF | | | |
| GC Semivolatiles | | | | | | | | |
| TPH in Soil by 3545/8015 | Prep/Method: EPA 3545 / EPA 8015 | | | | | | | |
| Diesel Fuel | ND | mg/kg | 5.9 | 04/03/07 16:12 | RCS1 | 68334-30-5 | | |
| n-Pentacosane (S) | 83 | % | | 04/03/07 16:12 | RCS1 | 629-99-2 | | |
| Date Extracted | 04/02/07 | | | 04/02/07 | | | | |
| GC Volatiles | | | | | | | | |
| GAS, Soil, North Carolina | Method: EPA 8015 | | | | | | | |
| Gasoline | ND | mg/kg | 4.5 | 04/04/07 19:31 | DHW | | | |
| 4-Bromofluorobenzene (S) | 96 | % | | 04/04/07 19:31 | DHW | 460-00-4 | | |

Date: 04/06/07

Page: 5 of 21

Asheville Certification IDs
NC Wastewater 40
NC Drinking Water 37712
SC Environmental 99030
FL NELAP E87648

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.



Charlotte Certification IDs
NC Wastewater 12
NC Drinking Water 37706
SC 99006
FL NELAP E87627

Lab Project Number: 92141341

Client Project ID: NCDOT 32669.1.1 Church of God

Lab Sample No: 928201151 Project Sample Number: 92141341-006 Date Collected: 03/28/07 14:35
Client Sample ID: GP-6 Matrix: Soil Date Received: 03/30/07 15:33

| Parameters | Results | Units | Report Limit | Analyzed | By | CAS No. | Qual | ReqLmt |
|---------------------------|----------------------------------|-------|--------------|----------------|------|------------|------|--------|
| Wet Chemistry | | | | | | | | |
| Percent Moisture | Method: % Moisture | | | | | | | |
| Percent Moisture | 15.2 | % | | 04/02/07 14:41 | KDF | | | |
| GC Semivolatiles | | | | | | | | |
| TPH in Soil by 3545/8015 | Prep/Method: EPA 3545 / EPA 8015 | | | | | | | |
| Diesel Fuel | ND | mg/kg | 5.9 | 04/03/07 16:39 | RCS1 | 68334-30-5 | | |
| n-Pentacosane (S) | 69 | % | | 04/03/07 16:39 | RCS1 | 629-99-2 | | |
| Date Extracted | 04/02/07 | | | 04/02/07 | | | | |
| GC Volatiles | | | | | | | | |
| GAS, Soil, North Carolina | Method: EPA 8015 | | | | | | | |
| Gasoline | ND | mg/kg | 4.3 | 04/04/07 19:56 | DHW | | | |
| 4-Bromofluorobenzene (S) | 94 | % | | 04/04/07 19:56 | DHW | 460-00-4 | | |

Date: 04/06/07

Page: 6 of 21

Asheville Certification IDs
NC Wastewater 40
NC Drinking Water 37712
SC Environmental 99030
FL NELAP E87648

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.



Charlotte Certification IDs
NC Wastewater 12
NC Drinking Water 37706
SC 99006
FL NELAP E87627

Lab Project Number: 92141341

Client Project ID: NCDOT 32669.1.1 Church of God

Lab Sample No: 928201169 Project Sample Number: 92141341-007 Date Collected: 03/28/07 15:05
Client Sample ID: GP-7 Matrix: Soil Date Received: 03/30/07 15:33

| Parameters | Results | Units | Report Limit | Analyzed | By | CAS No. | Qual | ReqLmt |
|---------------------------|----------------------------------|-------|--------------|----------------|------|------------|------|--------|
| Wet Chemistry | | | | | | | | |
| Percent Moisture | Method: % Moisture | | | | | | | |
| Percent Moisture | 14.3 | % | | 04/02/07 14:41 | KDF | | | |
| GC Semivolatiles | | | | | | | | |
| TPH in Soil by 3545/8015 | Prep/Method: EPA 3545 / EPA 8015 | | | | | | | |
| Diesel Fuel | ND | mg/kg | 5.8 | 04/03/07 16:39 | RCS1 | 68334-30-5 | | |
| n-Pentacosane (S) | 64 | % | | 04/03/07 16:39 | RCS1 | 629-99-2 | | |
| Date Extracted | 04/02/07 | | | 04/02/07 | | | | |
| GC Volatiles | | | | | | | | |
| GAS, Soil, North Carolina | Method: EPA 8015 | | | | | | | |
| Gasoline | ND | mg/kg | 4.6 | 04/04/07 20:22 | DHW | | | |
| 4-Bromofluorobenzene (S) | 89 | % | | 04/04/07 20:22 | DHW | 460-00-4 | | |

Date: 04/06/07

Page: 7 of 21

Lab Project Number: 92141341
Client Project ID: NCDOT 32669.1.1 Church of God

Lab Sample No: 928201177 Project Sample Number: 92141341-008 Date Collected: 03/28/07 15:25
Client Sample ID: GP-8 Matrix: Soil Date Received: 03/30/07 15:33

| Parameters | Results | Units | Report Limit | Analyzed | By | CAS No. | Qual | ReqLmt |
|---------------------------|----------------------------------|-------|--------------|----------------|------|------------|------|--------|
| Wet Chemistry | | | | | | | | |
| Percent Moisture | Method: % Moisture | | | | | | | |
| Percent Moisture | 18.9 | % | | 04/02/07 14:41 | KDF | | | |
| GC Semivolatiles | | | | | | | | |
| TPH in Soil by 3545/8015 | Prep/Method: EPA 3545 / EPA 8015 | | | | | | | |
| Diesel Fuel | ND | mg/kg | 6.2 | 04/03/07 17:06 | RCS1 | 68334-30-5 | | |
| n-Pentacosane (S) | 74 | % | | 04/03/07 17:06 | RCS1 | 629-99-2 | | |
| Date Extracted | 04/02/07 | | | 04/02/07 | | | | |
| GC Volatiles | | | | | | | | |
| GAS, Soil, North Carolina | Method: EPA 8015 | | | | | | | |
| Gasoline | ND | mg/kg | 4.6 | 04/04/07 20:47 | DHW | | | |
| 4-Bromofluorobenzene (S) | 92 | % | | 04/04/07 20:47 | DHW | 460-00-4 | | |

Date: 04/06/07

Page: 8 of 21

Asheville Certification IDs
NC Wastewater 40
NC Drinking Water 37712
SC Environmental 99030
FL NELAP E87648

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.



Charlotte Certification IDs
NC Wastewater 12
NC Drinking Water 37706
SC 99006
FL NELAP E87627

Lab Project Number: 92141341
Client Project ID: NCDOT 32669.1.1 Church of God

Lab Sample No: 928201193 Project Sample Number: 92141341-009 Date Collected: 03/28/07 15:50
Client Sample ID: GP-9 Matrix: Soil Date Received: 03/30/07 15:33

| Parameters | Results | Units | Report Limit | Analyzed | By | CAS No. | Qual | ReqLmt |
|---------------------------|----------------------------------|-------|--------------|----------------|------|------------|------|--------|
| Wet Chemistry | | | | | | | | |
| Percent Moisture | Method: % Moisture | | | | | | | |
| Percent Moisture | 22.3 | % | | 04/02/07 14:42 | KDF | | | |
| GC Semivolatiles | | | | | | | | |
| TPH in Soil by 3545/8015 | Prep/Method: EPA 3545 / EPA 8015 | | | | | | | |
| Diesel Fuel | ND | mg/kg | 6.4 | 04/03/07 18:27 | RCS1 | 68334-30-5 | | |
| n-Pentacosane (S) | 80 | % | | 04/03/07 18:27 | RCS1 | 629-99-2 | | |
| Date Extracted | 04/02/07 | | | 04/02/07 | | | | |
| GC Volatiles | | | | | | | | |
| GAS, Soil, North Carolina | Method: EPA 8015 | | | | | | | |
| Gasoline | ND | mg/kg | 5.8 | 04/04/07 21:13 | DHW | | | |
| 4-Bromofluorobenzene (S) | 91 | % | | 04/04/07 21:13 | DHW | 460-00-4 | | |

Lab Project Number: 92141341

Client Project ID: NCDOT 32669.1.1 Church of God

Lab Sample No: 928201201 Project Sample Number: 92141341-010 Date Collected: 03/29/07 08:15
Client Sample ID: GP-10 Matrix: Soil Date Received: 03/30/07 15:33

| Parameters | Results | Units | Report Limit | Analyzed | By | CAS No. | Qual | ReqLmt |
|---------------------------|----------------------------------|-------|--------------|----------------|------|------------|------|--------|
| Wet Chemistry | | | | | | | | |
| Percent Moisture | Method: % Moisture | | | | | | | |
| Percent Moisture | 23.2 | % | | 04/02/07 14:42 | KDF | | | |
| GC Semivolatiles | | | | | | | | |
| TPH in Soil by 3545/8015 | Prep/Method: EPA 3545 / EPA 8015 | | | | | | | |
| Diesel Fuel | ND | mg/kg | 6.5 | 04/03/07 18:54 | RCS1 | 68334-30-5 | | |
| n-Pentacosane (S) | 67 | % | | 04/03/07 18:54 | RCS1 | 629-99-2 | | |
| Date Extracted | 04/02/07 | | | 04/02/07 | | | | |
| GC Volatiles | | | | | | | | |
| GAS, Soil, North Carolina | Method: EPA 8015 | | | | | | | |
| Gasoline | ND | mg/kg | 5.1 | 04/04/07 21:39 | DHW | | | |
| 4-Bromofluorobenzene (S) | 91 | % | | 04/04/07 21:39 | DHW | 460-00-4 | | |

Date: 04/06/07

Page: 10 of 21

Asheville Certification IDs
NC Wastewater 40
NC Drinking Water 37712
SC Environmental 99030
FL NELAP E87648

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.



Charlotte Certification IDs
NC Wastewater 12
NC Drinking Water 37706
SC 99006
FL NELAP E87627

Lab Project Number: 92141341
Client Project ID: NCDOT 32669.1.1 Church of God

Lab Sample No: 928201219 Project Sample Number: 92141341-011 Date Collected: 03/29/07 08:40
Client Sample ID: GP-11 Matrix: Soil Date Received: 03/30/07 15:33

| Parameters | Results | Units | Report Limit | Analyzed | By | CAS No. | Qual | ReqLmt |
|---------------------------|----------------------------------|-------|--------------|----------------|------|------------|------|--------|
| Wet Chemistry | | | | | | | | |
| Percent Moisture | Method: % Moisture | | | | | | | |
| Percent Moisture | 19.7 | % | | 04/02/07 14:43 | KDF | | | |
| GC Semivolatiles | | | | | | | | |
| TPH in Soil by 3545/8015 | Prep/Method: EPA 3545 / EPA 8015 | | | | | | | |
| Diesel Fuel | ND | mg/kg | 6.2 | 04/03/07 18:54 | RCS1 | 68334-30-5 | | |
| n-Pentacosane (S) | 73 | % | | 04/03/07 18:54 | RCS1 | 629-99-2 | | |
| Date Extracted | 04/02/07 | | | 04/02/07 | | | | |
| GC Volatiles | | | | | | | | |
| GAS, Soil, North Carolina | Method: EPA 8015 | | | | | | | |
| Gasoline | ND | mg/kg | 4.7 | 04/04/07 22:55 | DHW | | | |
| 4-Bromofluorobenzene (S) | 83 | % | | 04/04/07 22:55 | DHW | 460-00-4 | | |

Lab Project Number: 92141341

Client Project ID: NCDOT 32669.1.1 Church of God

Lab Sample No: 928201227 Project Sample Number: 92141341-012 Date Collected: 03/29/07 09:00
Client Sample ID: GP-12 Matrix: Soil Date Received: 03/30/07 15:33

| Parameters | Results | Units | Report Limit | Analyzed | By | CAS No. | Qual | ReqLmt |
|---------------------------|----------------------------------|-------|--------------|----------------|------|------------|------|--------|
| Wet Chemistry | | | | | | | | |
| Percent Moisture | Method: % Moisture | | | | | | | |
| Percent Moisture | 21.2 | % | | 04/02/07 14:43 | KDF | | | |
| GC Semivolatiles | | | | | | | | |
| TPH in Soil by 3545/8015 | Prep/Method: EPA 3545 / EPA 8015 | | | | | | | |
| Diesel Fuel | ND | mg/kg | 6.3 | 04/03/07 19:21 | RCS1 | 68334-30-5 | | |
| n-Pentacosane (S) | 71 | % | | 04/03/07 19:21 | RCS1 | 629-99-2 | | |
| Date Extracted | 04/02/07 | | | 04/02/07 | | | | |
| GC Volatiles | | | | | | | | |
| GAS, Soil, North Carolina | Method: EPA 8015 | | | | | | | |
| Gasoline | ND | mg/kg | 4.8 | 04/04/07 23:21 | DHW | | | |
| 4-Bromofluorobenzene (S) | 84 | % | | 04/04/07 23:21 | DHW | 460-00-4 | | |

Date: 04/06/07

Page: 12 of 21

Asheville Certification IDs
NC Wastewater 40
NC Drinking Water 37712
SC Environmental 99030
FL NELAP E87648

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.



Charlotte Certification IDs
NC Wastewater 12
NC Drinking Water 37706
SC 99006
FL NELAP E87627

Lab Project Number: 92141341

Client Project ID: NCDOT 32669.1.1 Church of God

Lab Sample No: 928201235 Project Sample Number: 92141341-013 Date Collected: 03/29/07 09:40
Client Sample ID: GP-13 Matrix: Soil Date Received: 03/30/07 15:33

| Parameters | Results | Units | Report Limit | Analyzed | By | CAS No. | Qual | ReqLmt |
|---------------------------|----------------------------------|-------|--------------|----------------|-----|------------|------|--------|
| Wet Chemistry | | | | | | | | |
| Percent Moisture | Method: % Moisture | | | | | | | |
| Percent Moisture | 22.7 | % | | 04/02/07 14:43 | KDF | | | |
| GC Semivolatiles | | | | | | | | |
| TPH in Soil by 3545/8015 | Prep/Method: EPA 3545 / EPA 8015 | | | | | | | |
| Diesel Fuel | 11. | mg/kg | 6.5 | 04/05/07 14:35 | JEM | 68334-30-5 | | |
| n-Pentacosane (S) | 73 | % | | 04/05/07 14:35 | JEM | 629-99-2 | | |
| Date Extracted | 04/02/07 | | | 04/02/07 | | | | |
| GC Volatiles | | | | | | | | |
| GAS, Soil, North Carolina | Method: EPA 8015 | | | | | | | |
| Gasoline | ND | mg/kg | 4.8 | 04/04/07 23:46 | DHW | | | |
| 4-Bromofluorobenzene (S) | 92 | % | | 04/04/07 23:46 | DHW | 460-00-4 | | |

Date: 04/06/07

Page: 13 of 21

Asheville Certification IDs
NC Wastewater 40
NC Drinking Water 37712
SC Environmental 99030
FL NELAP E87648

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.



Charlotte Certification IDs
NC Wastewater 12
NC Drinking Water 37706
SC 99006
FL NELAP E87627

Lab Project Number: 92141341

Client Project ID: NCDOT 32669.1.1 Church of God

Lab Sample No: 928201243 Project Sample Number: 92141341-014 Date Collected: 03/29/07 10:00
Client Sample ID: GP-14 Matrix: Soil Date Received: 03/30/07 15:33

| Parameters | Results | Units | Report Limit | Analyzed | By | CAS No. | Qual | ReqLmt |
|---------------------------|----------------------------------|-------|--------------|----------------|------|------------|------|--------|
| Wet Chemistry | | | | | | | | |
| Percent Moisture | Method: % Moisture | | | | | | | |
| Percent Moisture | 22.0 | % | | 04/02/07 14:44 | KDF | | | |
| GC Semivolatiles | | | | | | | | |
| TPH in Soil by 3545/8015 | Prep/Method: EPA 3545 / EPA 8015 | | | | | | | |
| Diesel Fuel | ND | mg/kg | 6.4 | 04/03/07 19:48 | RCS1 | 68334-30-5 | | |
| n-Pentacosane (S) | 77 | % | | 04/03/07 19:48 | RCS1 | 629-99-2 | | |
| Date Extracted | 04/02/07 | | | 04/02/07 | | | | |
| GC Volatiles | | | | | | | | |
| GAS, Soil, North Carolina | Method: EPA 8015 | | | | | | | |
| Gasoline | ND | mg/kg | 5.4 | 04/05/07 00:12 | DHW | | | |
| 4-Bromofluorobenzene (S) | 92 | % | | 04/05/07 00:12 | DHW | 460-00-4 | | |

Date: 04/06/07

Page: 14 of 21

Asheville Certification IDs
NC Wastewater 40
NC Drinking Water 37712
SC Environmental 99030
FL NELAP E87648

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.



Charlotte Certification IDs
NC Wastewater 12
NC Drinking Water 37706
SC 99006
FL NELAP E87627

Lab Project Number: 92141341
Client Project ID: NCDOT 32669.1.1 Church of God

Lab Sample No: 928201250 Project Sample Number: 92141341-015 Date Collected: 03/29/07 10:30
Client Sample ID: GP-15 Matrix: Soil Date Received: 03/30/07 15:33

| Parameters | Results | Units | Report Limit | Analyzed | By | CAS No. | Qual | ReqLmt |
|---------------------------|----------------------------------|-------|--------------|----------------|------|------------|------|--------|
| Wet Chemistry | | | | | | | | |
| Percent Moisture | Method: % Moisture | | | | | | | |
| Percent Moisture | 26.1 | % | | 04/02/07 14:44 | KDF | | | |
| GC Semivolatiles | | | | | | | | |
| TPH in Soil by 3545/8015 | Prep/Method: EPA 3545 / EPA 8015 | | | | | | | |
| Diesel Fuel | ND | mg/kg | 6.8 | 04/03/07 19:48 | RCS1 | 68334-30-5 | | |
| n-Pentacosane (S) | 52 | % | | 04/03/07 19:48 | RCS1 | 629-99-2 | | |
| Date Extracted | 04/02/07 | | | 04/02/07 | | | | |
| GC Volatiles | | | | | | | | |
| GAS, Soil, North Carolina | Method: EPA 8015 | | | | | | | |
| Gasoline | ND | mg/kg | 5.3 | 04/05/07 00:37 | DHW | | | |
| 4-Bromofluorobenzene (S) | 91 | % | | 04/05/07 00:37 | DHW | 460-00-4 | | |

Lab Project Number: 92141341

Client Project ID: NCDOT 32669.1.1 Church of God

PARAMETER FOOTNOTES

Method 9071B modified to use ASE.

All pH, Free Chlorine, Total Chlorine and Ferrous Iron analyses conducted outside of EPA recommended immediate hold time.

Depending on the moisture content the PRLs can be elevated for all soil samples reported on a dry weight basis.

2-Chloroethyl vinyl ether has been shown to degrade in the presence of acid.

ND Not detected at or above adjusted reporting limit
NC Not Calculable
J Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit
MDL Adjusted Method Detection Limit
(S) Surrogate

QUALITY CONTROL DATA

Lab Project Number: 92141341

Client Project ID: NCDOT 32669.1.1 Church of God

| | | | | | |
|---------------------------|--|-----------|-----------|-----------|-----------|
| QC Batch: 184809 | Analysis Method: EPA 8015 | | | | |
| QC Batch Method: EPA 3545 | Analysis Description: TPH in Soil by 3545/8015 | | | | |
| Associated Lab Samples: | 928201078 | 928201094 | 928201110 | 928201136 | 928201144 |
| | 928201151 | 928201169 | 928201177 | | |

METHOD BLANK: 928204403

| | | | | | | | |
|-------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Associated Lab Samples: | 928201078 | 928201094 | 928201110 | 928201136 | 928201144 | 928201151 | 928201169 |
| | 928201177 | | | | | | |

| <u>Parameter</u> | <u>Units</u> | <u>Blank Result</u> | <u>Reporting Limit</u> | <u>Footnotes</u> |
|-------------------|--------------|---------------------|------------------------|------------------|
| Diesel Fuel | mg/kg | ND | 5.0 | |
| n-Pentacosane (S) | % | 66 | | |

LABORATORY CONTROL SAMPLE: 928204411

| <u>Parameter</u> | <u>Units</u> | <u>Spike Conc.</u> | <u>LCS Result</u> | <u>LCS % Rec</u> | <u>Footnotes</u> |
|-------------------|--------------|--------------------|-------------------|------------------|------------------|
| Diesel Fuel | mg/kg | 166.70 | 116.0 | 70 | |
| n-Pentacosane (S) | | | | 97 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 928204429 928204437

| <u>Parameter</u> | <u>Units</u> | <u>928201151 Result</u> | <u>Spike Conc.</u> | <u>MS Result</u> | <u>MSD Result</u> | <u>MS % Rec</u> | <u>MSD % Rec</u> | <u>RPD</u> | <u>Footnotes</u> |
|-------------------|--------------|-------------------------|--------------------|------------------|-------------------|-----------------|------------------|------------|------------------|
| Diesel Fuel | mg/kg | 0.7009 | 196.70 | 124.8 | 137.9 | 63 | 70 | 10 | |
| n-Pentacosane (S) | | | | | | 83 | 87 | | |

QUALITY CONTROL DATA

Lab Project Number: 92141341

Client Project ID: NCDOT 32669.1.1 Church of God

| | | | | | |
|---------------------------|--|-----------|-----------|-----------|-----------|
| QC Batch: 184833 | Analysis Method: EPA 8015 | | | | |
| QC Batch Method: EPA 3545 | Analysis Description: TPH in Soil by 3545/8015 | | | | |
| Associated Lab Samples: | 928201193 | 928201201 | 928201219 | 928201227 | 928201235 |
| | 928201243 | 928201250 | | | |

METHOD BLANK: 928205392

Associated Lab Samples: 928201193 928201201 928201219 928201227 928201235 928201243 928201250

| <u>Parameter</u> | <u>Units</u> | <u>Blank Result</u> | <u>Reporting Limit</u> | <u>Footnotes</u> |
|-------------------|--------------|---------------------|------------------------|------------------|
| Diesel Fuel | mg/kg | ND | 5.0 | |
| n-Pentacosane (S) | % | 86 | | |

LABORATORY CONTROL SAMPLE: 928205400

| <u>Parameter</u> | <u>Units</u> | <u>Spike Conc.</u> | <u>LCS Result</u> | <u>LCS % Rec</u> | <u>Footnotes</u> |
|-------------------|--------------|--------------------|-------------------|------------------|------------------|
| Diesel Fuel | mg/kg | 166.70 | 132.5 | 80 | |
| n-Pentacosane (S) | | | | 100 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 928205418 928205426

| <u>Parameter</u> | <u>Units</u> | <u>928198498 Result</u> | <u>Spike Conc.</u> | <u>MS Result</u> | <u>MSD Result</u> | <u>MS % Rec</u> | <u>MSD % Rec</u> | <u>RPD</u> | <u>Footnotes</u> |
|-------------------|--------------|-------------------------|--------------------|------------------|-------------------|-----------------|------------------|------------|------------------|
| Diesel Fuel | mg/kg | 0.5947 | 195.50 | 120.1 | 114.4 | 61 | 58 | 5 | |
| n-Pentacosane (S) | | | | | | 78 | 77 | | |

QUALITY CONTROL DATA

Lab Project Number: 92141341

Client Project ID: NCDOT 32669.1.1 Church of God

| QC Batch: 185047 | | Analysis Method: EPA 8015 | | | | |
|---------------------------|-----------|---|-----------|-----------|-----------|--|
| QC Batch Method: EPA 8015 | | Analysis Description: GAS, Soil, North Carolina | | | | |
| Associated Lab Samples: | 928201078 | 928201094 | 928201110 | 928201136 | 928201144 | |
| | 928201151 | 928201169 | 928201177 | 928201193 | 928201201 | |
| | 928201219 | 928201227 | 928201235 | 928201243 | 928201250 | |

METHOD BLANK: 928217728

| | | | | | | | |
|-------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Associated Lab Samples: | 928201078 | 928201094 | 928201110 | 928201136 | 928201144 | 928201151 | 928201169 |
| | 928201177 | 928201193 | 928201201 | 928201219 | 928201227 | 928201235 | 928201243 |
| | 928201250 | | | | | | |

| Parameter | Units | Blank Result | Reporting Limit | Footnotes |
|--------------------------|-------|--------------|-----------------|-----------|
| Gasoline | mg/kg | ND | 5.0 | |
| 4-Bromofluorobenzene (S) | % | 91 | | |

LABORATORY CONTROL SAMPLE: 928217736

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | Footnotes |
|--------------------------|-------|-------------|------------|-----------|-----------|
| Gasoline | mg/kg | 25.00 | 28.14 | 113 | |
| 4-Bromofluorobenzene (S) | | | | 91 | |

MATRIX SPIKE: 928217744

| Parameter | Units | 928201078 Result | Spike Conc. | MS Result | MS % Rec | Footnotes |
|--------------------------|-------|------------------|-------------|-----------|----------|-----------|
| Gasoline | mg/kg | 7.322 | 26.24 | 30.47 | 88 | |
| 4-Bromofluorobenzene (S) | | | | | 92 | |

SAMPLE DUPLICATE: 928217751

| Parameter | Units | 928201094 Result | DUP Result | RPD | Footnotes |
|--------------------------|-------|------------------|------------|-----|-----------|
| Gasoline | mg/kg | ND | ND | NC | |
| 4-Bromofluorobenzene (S) | % | 86 | 89 | | |

Date: 04/06/07

Page: 19 of 21

QUALITY CONTROL DATA

Lab Project Number: 92141341

Client Project ID: NCDOT 32669.1.1 Church of God

| QC Batch: 184795 | Analysis Method: % Moisture | | | | |
|-------------------------|--|-----------|-----------|-----------|-----------|
| QC Batch Method: | Analysis Description: Percent Moisture | | | | |
| Associated Lab Samples: | 928201078 | 928201094 | 928201110 | 928201136 | 928201144 |
| | 928201151 | 928201169 | 928201177 | 928201193 | 928201201 |
| | 928201219 | 928201227 | 928201235 | 928201243 | 928201250 |

SAMPLE DUPLICATE: 928204940

| <u>Parameter</u> | <u>Units</u> | 928201714 | DUP | <u>RPD</u> | <u>Footnotes</u> |
|------------------|--------------|---------------|---------------|------------|------------------|
| | | <u>Result</u> | <u>Result</u> | | |
| Percent Moisture | % | 32.60 | 32.80 | 1 | |

Lab Project Number: 92141341

Client Project ID: NCDOT 32669.1.1 Church of God

QUALITY CONTROL DATA PARAMETER FOOTNOTES

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

LCS(D) Laboratory Control Sample (Duplicate)
MS(D) Matrix Spike (Duplicate)
DUP Sample Duplicate
ND Not detected at or above adjusted reporting limit
NC Not Calculable
J Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit
MDL Adjusted Method Detection Limit
RPD Relative Percent Difference
(S) Surrogate