

AECOM Technical Services of North Carolina, Inc.
701 Corporate Center Drive, Suite 475, Raleigh, North Carolina 27607
T 919.854.6200 F 919.854.6259 www.earthtech.aecom.com

June 25, 2010

Ms. Cheryl Youngblood North Carolina Department of Transportation Geotechnical Engineering Unit 1589 Mail Service Center Raleigh, North Carolina 27699-1589

Reference: Preliminary Site Assessment

Gary and Juadane Smith Property (Parcel #157)

1401 Union Cross Road

Kernersville, Forsyth County, North Carolina

NCDOT Tip No. U-4909 WBS Element 40278.1.1

AECOM Project No. 60155373

Dear Ms. Youngblood:

AECOM Technical Services of North Carolina, Inc., (AECOM) has completed the Preliminary Site Assessment conducted at the above-referenced property. The work was performed in accordance with the Technical and Cost proposal dated May 3, 2010, and the North Carolina Department of Transportation's (NCDOT's) Notice to Proceed dated May 5, 2010. Activities associated with the assessment consisted of conducting a geophysical investigation, collecting soil samples for laboratory analysis, and reviewing applicable North Carolina Department of Environment and Natural Resources (NCDENR) records. The purpose of this report is to document the field activities, present the laboratory analyses, and provide recommendations regarding the property.

Location and Description

The Gary and Juadane Property (Parcel #157) is located at 1401 Union Cross Road (SR 2643) in Kernersville, Forsyth County, North Carolina. The property is situated on the southeast quadrant at the intersection of Union Cross Road and Old Salem Road (SR 2632) (Figure 1). Based on information supplied by the NCDOT and the site visit, AECOM understands that the site is a former gas station that has been converted to a commercial business (G. Witts Car Sales). According to the NCDENR databases, five underground storage tanks (USTs) were removed from the property in 1988. No information regarding the actual location of the tanks is available for review. The structures on the property consist of one block building with an asphalt parking lot in front and on the north side. The east side of the building is gravel with a chain-link fence enclosing a shop area (Figure 2). The NCDOT has advised that the right-of-way/easement will affect most of the property. Because of the unknown location of the USTs, the NCDOT

requested a Preliminary Site Assessment. The scope of work as defined in the Request for Technical and Cost Proposal was to evaluate the site with respect to the presence of USTs and assess where contamination exists on the property. An estimate of the quantity of impacted soil was to be provided.

AECOM reviewed the on-line NCDENR Incident Management database and no Incident Number has been assigned to the property. AECOM also examined the UST registration database to obtain UST ownership information. According to the database, the former USTs on the property were operated under Facility Number 0-024320. The operator and owner of the tanks were listed as follows:

Owner
Dewitt Smith
898 Sedge Garden Road
Kernersville, NC 27284
(336) 993-4127

Operator
Dewitt Smith's Service Station and Garage
1401 Union Cross Road
Kernersville, NC 27284
No telephone

Geophysical Survey

Prior to AECOM's mobilization to the site, Pyramid Environmental conducted a geophysical survey as part of this project to evaluate if USTs were present on the proposed right-of-way/easement. The geophysical survey consisted of an electromagnetic survey using a Geonics EM61 time-domain electromagnetic induction meter to locate buried metallic objects, specifically USTs. A survey grid was laid out at the property with the X-axis oriented approximately parallel to Union Cross Road and the Y-axis oriented approximately perpendicular to Union Cross Road. The grid was located to cover the accessible portions of the proposed right-of-way. The survey lines were spaced 5 feet apart. Magnetic data was collected continuously along each survey line with a data logger. After collection, the data was reviewed in the field with graphical computer software. Following the electromagnetic survey, a ground penetrating radar (GPR) survey was conducted where needed to further evaluate any significant metallic anomalies.

Access was available to all areas of the proposed right-of-way/easement on the property and several anomalies were detected with the geophysical survey. All of these anomalies were attributed to buried utility lines or conduits, or vehicles. A detailed report of findings and interpretations is presented in Attachment A.

Site Assessment Activities

On May 25, 2010, AECOM mobilized to the site to conduct a Geoprobe[®] direct push investigation to evaluate soil conditions within the proposed right-of-way/easement. Continuous sampling using direct push technology (American Environmental Drilling of Aberdeen, North Carolina) resulted in generally good recovery of soil samples from the direct-push holes. Soil



samples were collected and contained in acetate sleeves inside the direct push sampler. Each of these sleeves was divided into 2-foot long sections for soil sample screening. Each 2-foot interval was placed in a resealable plastic bag and the bag was set aside for a sufficient amount of time to allow volatilization of organic compounds from the soil to the bag headspace. The probe of a flame ionization detector/photo ionization detector (FID/PID) was inserted into the bag and the reading was recorded. After terminating the sample hole, the soil sample from the depth interval with the highest FID/PID reading was submitted to Prism Laboratories in Charlotte, North Carolina, using standard chain-of-custody procedures. The laboratory analyzed the soil samples for total petroleum hydrocarbons (TPH) in the diesel range organics (DRO) and gasoline range organics (GRO).

Six direct-push holes (GS-1 through GS-6) were advanced within the proposed right-ofway/easement to a depth of 10 feet as shown in Figure 2 and Attachment B. The borings were located to evaluate the entire right-of-way/easement (Attachment C). Boring GS-1 was located to evaluate the soil conditions along the right-of-way/easement line and within the fenced area east of the building. Boring GS-2 was placed on the north side of the building and borings GS-3 through GS-5 were located to assess the west side of the property. Boring GS-6 was placed to evaluate the conditions within the proposed drainage easement. The lithology encountered by the direct-push samples was not consistent throughout the site. The ground surface was covered with about 3 inches of asphalt/gravel or gravel only. Below the surface covering, boring GS-1 encountered a medium to gold-brown silt and sand mix throughout the entire boring while boring GS-2 encountered medium brown soft clay the entire depth. The remaining borings revealed medium to reddish brown or tan silt/clay to a depth of about 5 to 8 feet. At this depth, the lithology becomes an olive brown silt clay to a depth of 9 feet, where it grades into a light brown silt/sand. All the borings were terminated at a depth of 10 feet where groundwater was encountered. Based on field screening, soil samples were submitted for laboratory analysis, which are summarized in Table 1. Following completion, each boring was backfilled in accordance with 15A NCAC 2C.

Analytical Results

Based on the laboratory reports, summarized in Table 1 and presented in Attachment D, petroleum hydrocarbon compounds identified as DRO were detected in one of the six soil samples collected from the site. The soil sample from boring GS-2 contained a DRO concentration above the method quantitation limit. According to the North Carolina Underground Storage Tank Section's Underground Storage Tank Closure Policy dated August 24, 1998, the action level for TPH analyses is 10 milligrams per kilogram (mg/kg) for both gasoline and diesel fuel. However, that agency's "Guidelines for Assessment and Corrective Action," dated December 2008, does not allow for use of TPH analyses for confirmation of the extent of petroleum contamination or its cleanup. As a result, while TPH concentrations are no longer applicable in determining if soil contamination is present, this analysis is a legitimate screening tool. Based on the TPH action level for UST closures, the assumed action level for



this report is 10 mg/kg. The DRO concentration (10 mg/kg) in the soil sample from boring GS-2 was present at concentrations at the 10 mg/kg assumed action level.

Conclusions and Recommendations

A Preliminary Site Assessment was conducted to evaluate the Gary and Juadane Smith Property (Parcel #157) located at 1401 Union Cross Road in Kernersville, Forsyth County, North Carolina. Six soil borings were advanced to evaluate the soil conditions throughout the right-of-way/easement. The laboratory reports of the soil samples from these borings suggest that a DRO concentration was present at the assumed action level in one of the six soil samples analyzed.

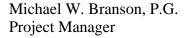
To evaluate the volume of soil requiring possible remediation, the soil samples with TPH concentrations above 10 mg/kg were considered. The analytical results of the soil samples suggest that the soil from boring GS-2 contained a TPH concentration identified as DRO at the assumed action level. A review of the field screening readings (Table 1) suggests that the potential contamination is likely present throughout the entire boring, which is 10 feet. Because the contamination was detected in only one boring and at a relative low concentration, AECOM assumed the potential contamination to be contained within a 5-foot radius around the boring. Using a cylinder volume equation, AECOM calculated the volume of potentially contaminated soil to be about 29 cubic yards. This volume is estimated from TPH analytical data, which are no longer valid for remediation of sites reported after January 2, 1998. After this date, MADEP EPH/VPH and EPA Method 8260/8270 analyses will likely be required to confirm cleanup. However, these analyses do not correlate exactly with TPH data and, as a result, the actual volume of contaminated soil may be higher or lower.

The attached Figure 2 shows that a fill section is proposed for the areas where the potentially contaminated soil is located. Because the area is in a fill section, the contaminated soil will likely not affect the project.



AECOM appreciates the opportunity to work with the NCDOT on this project. Because compounds were detected above the applicable action levels in the soil samples, AECOM recommends that a copy of this report be submitted to the Winston-Salem Regional Office UST Section. If you have any questions, please contact me at (919) 854-6238.

Sincerely,



Attachments

c: Project File





TABLE 1

SOIL FIELD SCREENING AND ANALYTICAL RESULTS GARY AND JUADANE SMITH PROPERTY (PARCEL #157) KERNERSVILLE, FORSYTH COUNTY, NORTH CAROLINA NCDOT PROJECT NO. U-4909 WBS ELEMENT 40278.1.1 AECOM PROJECT NO. 60155373

| LOCATION | DEPTH (ft) | FID READING | SAMPLE ID | ANALYTICAL | ASSUMED |
|----------|------------|-------------|-----------|------------|--------------|
| | | (ppm) | | RESULTS | ACTION LEVEL |
| | | 41 | | (mg/kg) | (mg/kg) |
| GS-1 | 0 - 2 | 0.17 | | | |
| | 2 - 4 | 0.28 | | | |
| | 4 - 6 | 0.50 | | | |
| | 6 - 8 | 0.46 | | | |
| | 8 - 10 | 0.56 | GS-1 | DRO (BQL) | 10 |
| | | | | GRO (BQL) | 10 |
| GS-2 | 0 - 5 | 0.54 | | | |
| | 5 - 10 | 0.74 | GS-2 | DRO (10) | 10 |
| | | | | GRO (BQL) | 10 |
| GS-3 | 0 - 2 | 0.59 | | | |
| | 2 - 4 | 0.65 | | | |
| | 4 - 6 | 0.73 | GS-3 | DRO (BQL) | 10 |
| | | | | GRO (BQL) | 10 |
| | 6 - 8 | 0.39 | | | |
| | 8 - 10 | 0.58 | | | |
| GS-4 | 0 - 2 | 0.45 | | | |
| | 2 - 4 | 0.79 | | | |
| | 4 - 6 | 0.84 | GS-4 | DRO (BQL) | 10 |
| | | | | GRO (BQL) | 10 |
| | 6 - 8 | 0.34 | | | |
| | 8 - 10 | 0.60 | | | |
| GS-5 | 0 - 2 | 0.37 | | | |
| | 2 - 4 | 0.21 | | | |
| | 4 - 6 | 0.46 | | | |
| | 6 - 8 | 1.41 | | | |
| | 8 - 10 | 4.19 | GS-5 | DRO (BQL) | 10 |
| | | | | GRO (BQL) | 10 |
| GS-6 | 0 - 2 | 0.83 | | | |
| | 2 - 4 | 1.77 | | | |
| | 4 - 6 | 2.72 | | | |
| | 6 - 8 | 3.08 | | | |
| | 8 - 10 | 11.95 | GS-6 | DRO (BQL) | 10 |
| | | | | GRO (BQL) | 10 |

Soil samples were collected on May 25, 2010.

DRO - Diesel range organics.

GRO - Gasoline range organics.

 $\ensuremath{\mathsf{BQL}}$ - $\ensuremath{\mathsf{Below}}$ quantitation limit.

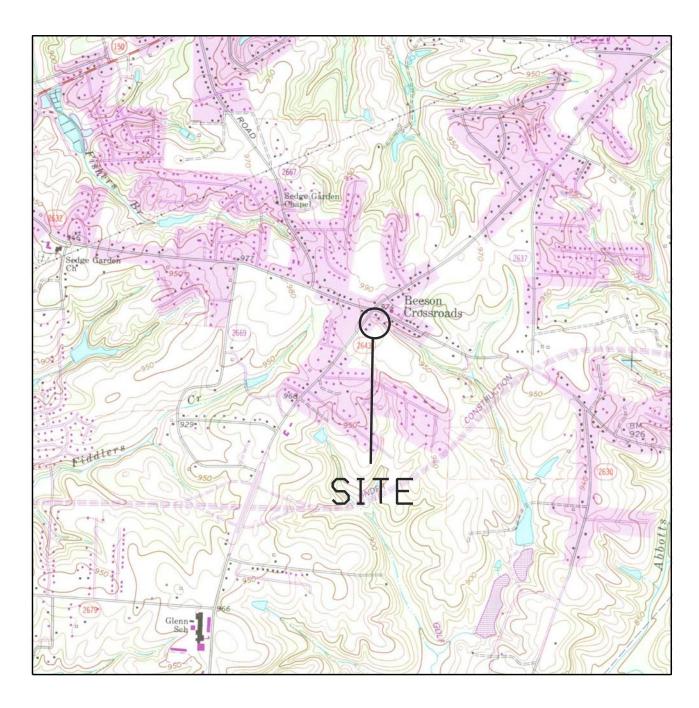
ppm - parts per million.

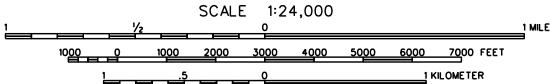
mg/kg - milligrams per kilogram.

BOLD values are present above the assumed action level.









SOURCE: U.S. GEOLOGICAL SURVEY 7.5 MIN QUADRANGLE: KERNERSVILLE, NC (REV 1994)



FIGURE 1

VICINITY MAP

GARY AND JUADANE SMITH PROPERTY (PARCEL *157) KERNERSVILLE, FORSYTH COUNTY NORTH CAROLINA

MAY 2010 60155373

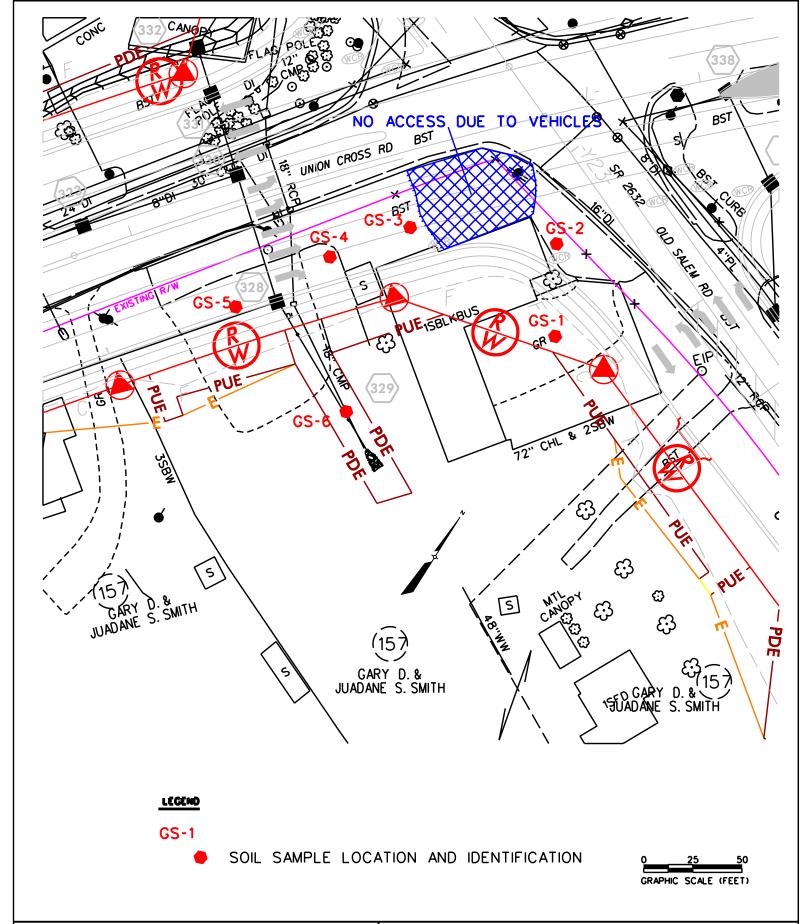




FIGURE 2

SITE MAP

GARY AND JUADANE SMITH PROPERTY (PARCEL •157)

KERNERSVILLE, FORSYTH COUNTY, NORTH CAROLINA

MAY 2010 60155373



GEOPHYSICAL INVESTIGATION REPORT

EM61 & GPR SURVEYS

GARY D. & JUADANE S. SMITH PROPERTY
PARCEL 157
Forsyth County, North Carolina

June 7, 2010

Report prepared for: Michael W. Branson, PG

AECOM Environment

701 Corporate Center Drive, Suite 475

Raleigh, North Carolina 27607

| Prepared by: | | |
|--------------|-----------------------|--|
| | Mika Trifunovic | |
| Reviewed by: | Douglas Canavalla, BC | |
| | Douglas Canavello, PG | |

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

AECOM Environment GEOPHYSICAL INVESTIGATION REPORT GARY D. & JUADANE S. SMITH PROPERTY PARCEL 157

Forsyth County, North Carolina

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1.0 INTRODUCTION

Pyramid Environmental conducted geophysical investigations for AECOM Environment across the proposed Right-of-Way (ROW) area of the Gary D. and Juadane S. Smith property (Parcel 157) located at the intersection of Union Cross Road and Old Salem Road in Forsyth County, North Carolina. The property consists of a one-story commercial building surrounded by an asphalt-covered parking area and a fenced-in "compound area" containing non-operating vehicles and equipment.

The geophysical investigation was conducted on May 11 and 19, 2010 to determine if unknown, metallic underground storage tanks (USTs) were present beneath the proposed ROW area. AECOM Environment representative Mr. Michael Branson, PG identified the geophysical survey area to Pyramid Environmental personnel prior to the investigation. The geophysical survey area has a maximum length and width of 220 feet and 110 feet respectively. Photographs of the geophysical equipment used in this investigation and the front portion of the Gary D. and Juadane S. Smith property (Parcel 157) are shown in **Figure 1**.

2.0 FIELD METHODOLOGY

Prior to conducting the geophysical investigation, a 10-foot by 10-foot survey grid was established across the geophysical survey area (property) using measuring tapes, pin flags and water-based marking paint. These grid marks were used as X-Y coordinates for location control when collecting the geophysical data and establishing base maps for the geophysical results.

The geophysical investigation consisted of electromagnetic (EM) induction-metal detection surveys and ground penetrating radar (GPR) surveys. The EM survey was performed on May 11, 2010 across the asphalt-covered parking area of the site and the grassy area along Old Salem Road using a Geonics EM61-MK1 metal detection instrument. According to the instrument specifications, the EM61 can detect a metal drum down to a maximum depth of approximately 8 feet. Smaller objects (1-foot or less in size) can be detected to a maximum depth of 4 to 5 feet. All of the EM61 data were

digitally collected at approximately 0.8 foot intervals along northerly-southerly, or easterly-westerly, parallel survey lines spaced five feet apart. All of the data were downloaded to a computer and reviewed in the field and office using the Geonics DAT61W and Surfer for Windows Version 7.0 software programs.

GPR surveys and reconnaissance were conducted on May 19, 2010 across selected EM61 differential anomalies and across the fenced-in "compound area" using a GSSI SIR-2000 unit equipped with a 400 MHz antenna. Data were digitally collected in a continuous mode along X-axis and/or Y-axis survey lines, spaced 2.5 to 5.0 feet apart using a vertical scan of 512 samples, at a rate of 48 scans per second. A 70 MHz high pass filter and an 800 MHz low pass filter were used during data acquisition with the 400 MHz antenna. GPR data were collected down to a maximum depth of approximately 5 feet, based on an estimated two-way travel time of 8 nanoseconds per foot. All of the GPR data were downloaded to a field computer and reviewed in the field and office using Radprint software.

Contour plots of the EM61 bottom coil and differential results are presented in **Figures 2 and 3**, respectively. The bottom coil results represent the most sensitive component of the EM61 instrument and detect metal objects regardless of size. The bottom coil response can be used to delineate metal conduits or utility lines, small, isolated metal objects, and areas containing insignificant metal debris. The differential results are obtained from the difference between the top and bottom coils of the EM61 instrument. The differential results focus on the larger metal objects such as drum and UST-size objects and ignore the smaller insignificant metal objects.

Preliminary geophysical results obtained from Parcel 157 were emailed to Mr. Branson during the week of May 17, 2010.

3.0 <u>DISCUSSION OF RESULTS</u>

The linear EM61 bottom coil anomaly intersecting grid lines X=110 Y=267 is probably in response to a buried utility line(s) that run along the southern edge of Old Salem Road. The series of low

amplitude bottom coils anomalies intersecting grid coordinates $X=12 \ Y=60 \ may$ be in response to a line or conduit that runs along the east side of Union Cross Road. The linear bottom coil anomalies intersecting grid coordinates $X=40 \ Y=190$, $X=55 \ Y=235$, $X=70 \ Y=102$, and $X=84 \ Y=240 \ are$ probably in response to buried lines or conduits. The high amplitude bottom coil anomalies centered near grid coordinates $X=15 \ Y=100$ and $X=55 \ Y=93$ are probably in response to known utility-related objects and a storm sewer drain, respectively.

GPR data suggest the high amplitude bottom coil anomalies (negative differential anomalies) centered near grid coordinates X=50 Y=160, X=70 Y=222, X=97 Y=240, and X=140 Y=254 are in response to the buildings and metallic fence line. GPR data suggest the high amplitude bottom coil anomaly (negative differential anomaly) centered near grid coordinates X=45 Y=210 is in response to the parked vehicle.

A GPR reconnaissance conducted across the accessible portions of the compound area centered near grid coordinates $X=125\ Y=210$ did not detect the presence of a buried metallic UST. However, a significant portion of the compound area contains non-operating vehicles and equipment. Furthermore, Mr. Gary Smith mentioned that a UST lies beneath the building and located approximately near grid coordinates $X=105\ Y=155$. This approximate location suggests the UST is located outside of the proposed ROW area.

Excluding the possible UST beneath the building, as suggested by Mr. Smith, the geophysical investigation suggests the accessible portions of the proposed ROW area at Parcel 157 do not contain buried metallic USTs.

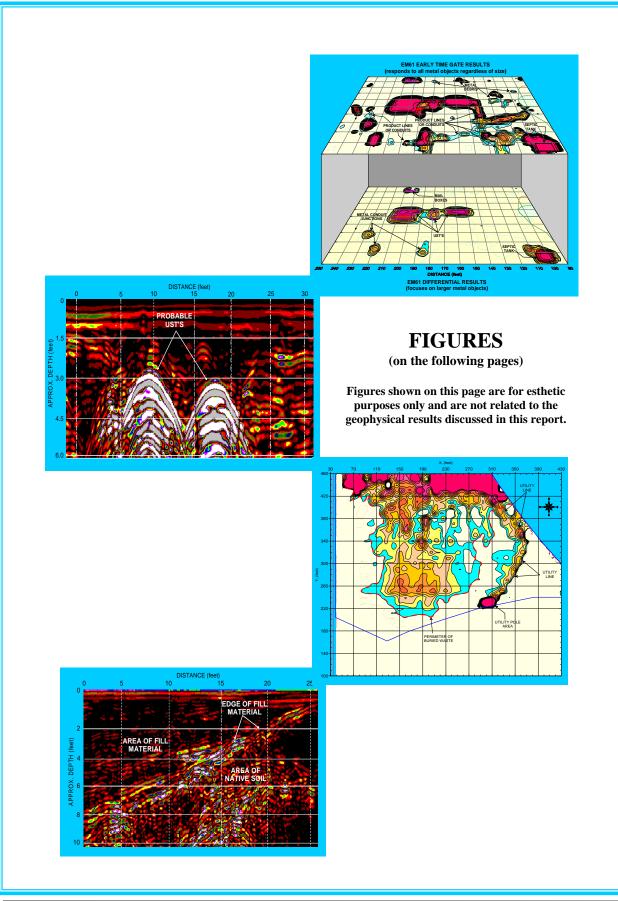
4.0 SUMMARY & CONCLUSIONS

Our evaluation of the EM61 and GPR data collected across the accessible portions of the proposed ROW area at the Gary D. and Juadane S. Smith property (Parcel 157) located at the intersection of Union Cross Road and Old Salem Road in Forsyth 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 site.
- The linear EM61 bottom coil anomaly intersecting grid lines X=110 Y=267 is probably in response to a buried utility line(s) that run along the southern edge of Old Salem Road. The series of low amplitude bottom coils anomalies intersecting grid coordinates X=12 Y=60 may be in response to a line or conduit that runs along the east side of Union Cross Road. The linear bottom coil anomalies intersecting grid coordinates X=40 Y=190, X=55 Y=235, X=70 Y=102, and X=84 Y=240 are probably in response to buried lines or conduits.
- A GPR reconnaissance conducted across the accessible portions of the compound area centered near grid coordinates X=125 Y=210 did not detect the presence of a buried metallic UST. However, a significant portion of the compound area contains vehicles and equipment.
- Excluding the possible UST beneath the building, as suggested by Mr. Gary Smith, the geophysical investigation suggests the accessible portions of the proposed ROW area at Parcel 157 do not contain buried metallic USTs.

5.0 LIMITATIONS

EM61 and GPR surveys have been performed and this report prepared for AECOM Environment in accordance with generally accepted guidelines for EM61 and GPR surveys. It is generally recognized that the results of the EM61 and GPR are non-unique and may not represent actual subsurface conditions. The EM61 and GPR results obtained for this project have not conclusively determined that the proposed ROW area does not contain unknown, buried metallic USTs, but that none were detected.

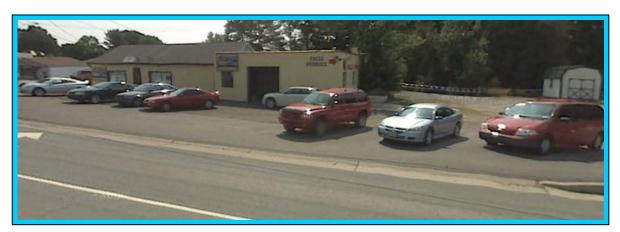




The photograph shows the Geonics EM61 metal detector that was used to conduct the metal detection survey across the proposed ROW area of Parcel 157 on May 11, 2010.



The photographs show the SIR-2000 GPR system equipped with a 400 MHz antenna that were used to conduct the ground penetrating radar investigation at Parcel 157 on May 19, 2010.

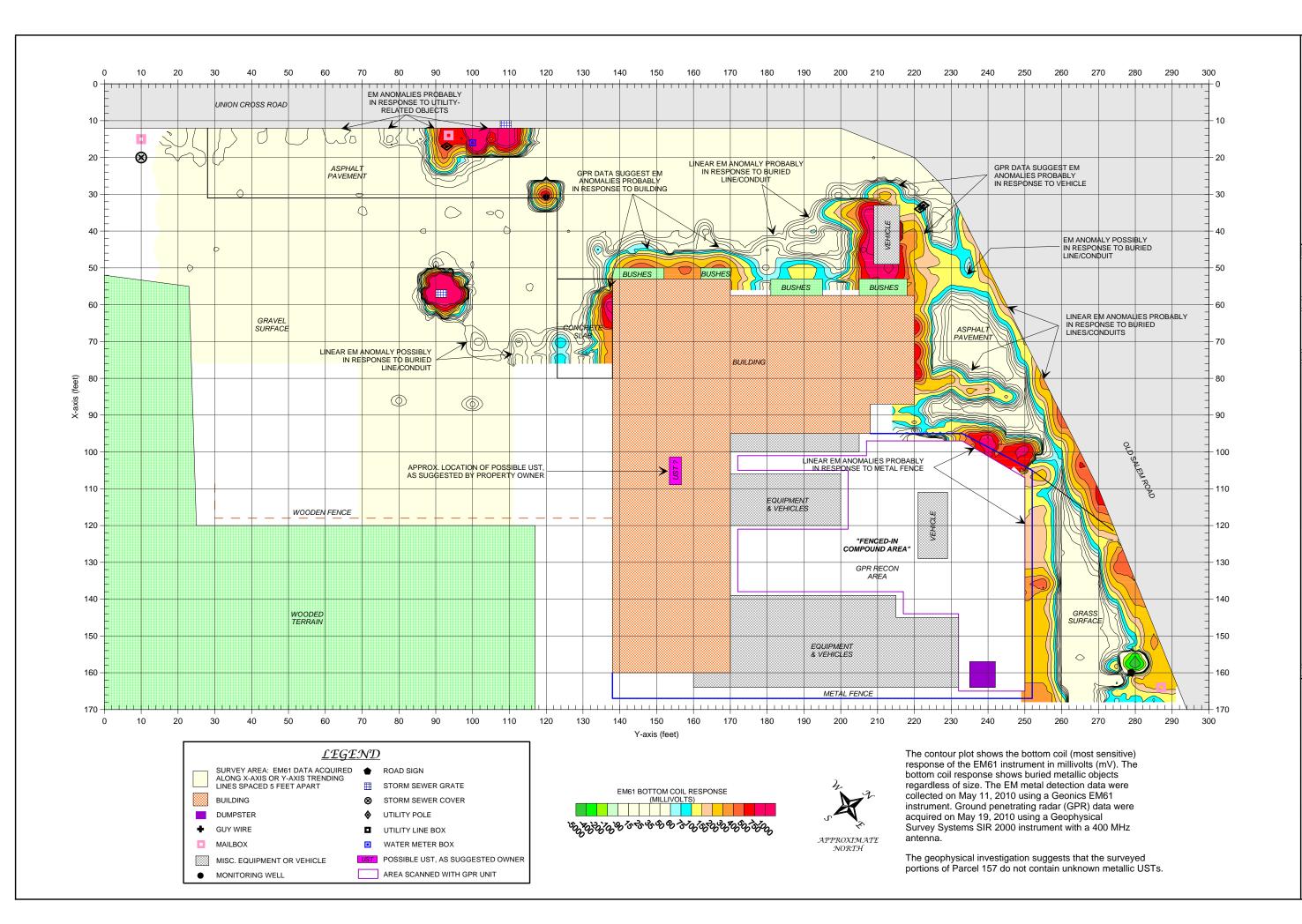


The photograph shows the front (western portion) of the Gary & Juadane Smith property (Parcel 157) located at the intersection of Union Cross Road and Old Salem Road in Forsyth County, North Carolina. The photograph is viewed in a northeasterly direction.



| CLIENT | AECOM ENVIRONMENT | 06/07/10 MJD MJD | | | | | | | | |
|--------|---|------------------|--|--|--|--|--|--|--|--|
| SITE | GARY D. & JUADANE SMITH PROPERTY (PARCEL 157) | GH'KO GH'KO | | | | | | | | |
| СПТ | FORSYTH COUNTY | DMG | | | | | | | | |
| этш | FORSYTH COUNTY NORTH CAROLINA | | | | | | | | | |

GEOPHYSICAL EQUIPMENT & SITE PHOTOGRAPHS



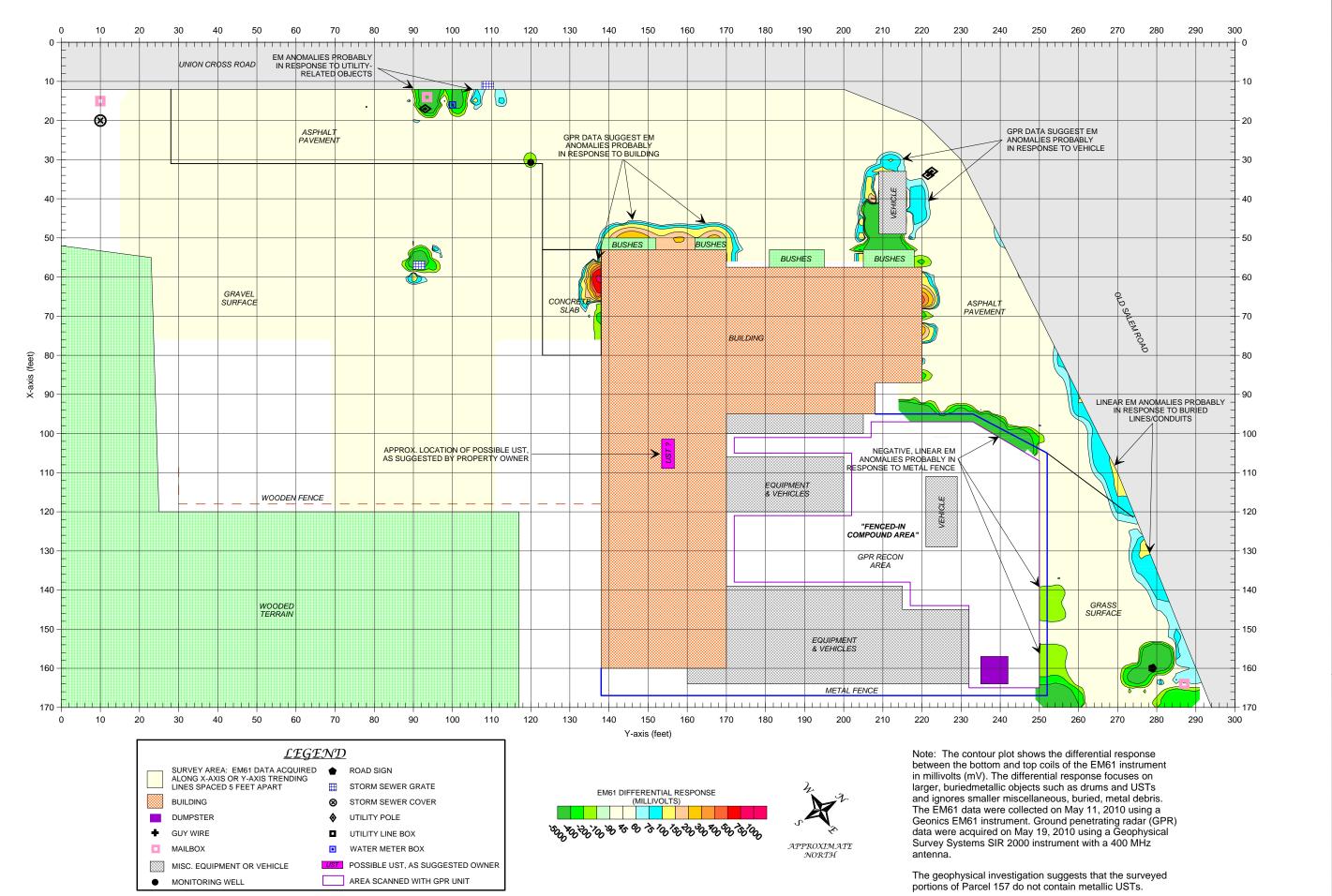
EM61 METAL DETECTION (BOTTOM COIL RESULTS)

GRAPHIC SCALE IN FEET DWG LAY DATE J-NO. 157) NORTH CAROLINA SMITH PROPERTY (PARCEL **AECOM ENVIRONMENT 3TAT2** တ် FORSYTH COUNTY & JUADANE



GARY

SITE CITY SITE



EM61 METAL DETECTION (DIFFERENTIAL RESULTS)

OM ENVIRONMENT

SMITH PROPERTY (PARCEL 157)

AECOM ENVIRONMENT

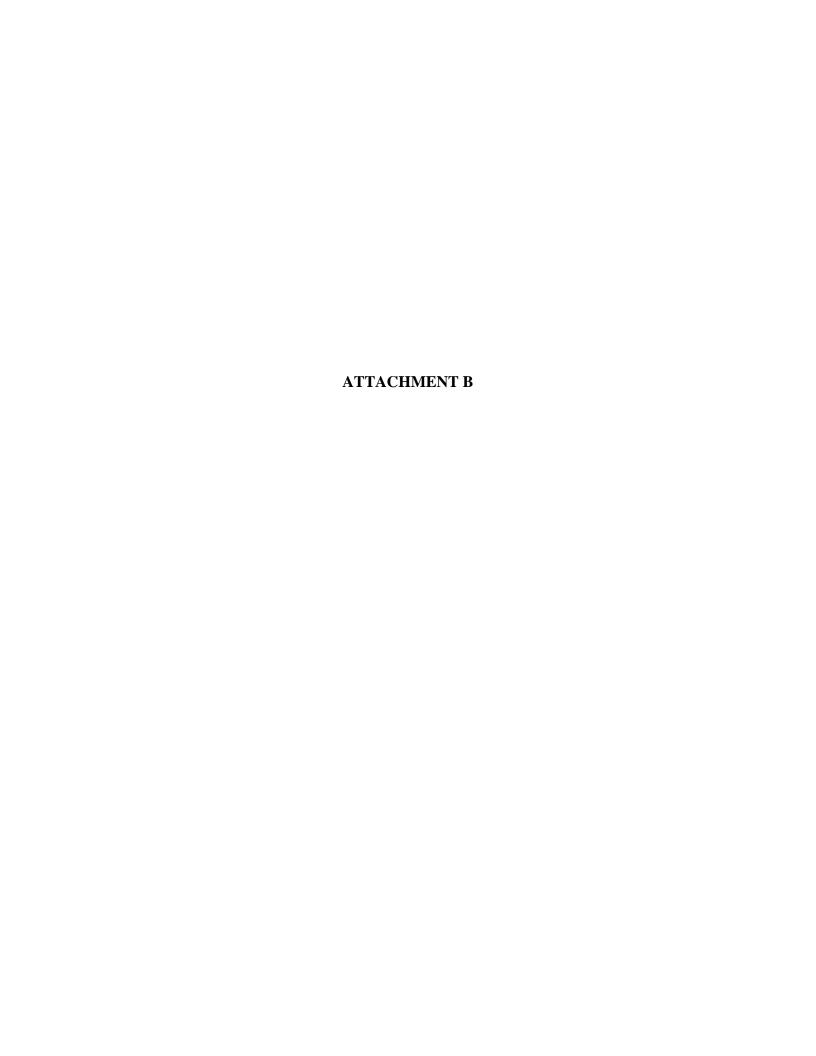
ELE GARY D. & JUADANE S. SMITH PROPERTY

ELE FORSYTH COUNTY

F. P.C.

GEOPHYSICAL RESULTS

PYRAMID ENVIRONMENTAL & ENGINEERING, P



| PROJE | CT GARY | SMITH P | ROPERTY | (PARCEL | BORING NUMBER GS-1 |
|--------------------|-----------------|--------------|--------------|-----------------|---|
| CLIEN | T NCDOT | (WBS 402 | 278.1.1) | | PAGE 1 |
| PROJE | CT NUM | BER 6015 | 55373 (U-4 | 909) | ELEVATION |
| CONTI | RACTOR | AED | | | DATE 5/25/2010 |
| EQUIPMENT GEOPROBE | | | | | DRILLER KELLY |
| | | | | | PREPARED BY BRANSON |
| | | | | | |
| DEPTH IN | CASING BLOWS | BLOWS PER | OVA (ppm) | SAMPLE DEPTH | |
| FEET | FOOT | 6 INCHES | (FF) | RANGE | FIELD CLASSIFICATION AND REMARKS |
| | | | 0.17 | | MEDIUM TO GOLD-BROWN SILT/SAND, DRY, NO ODOR. |
| | | | | | |
| | | | | | |
| | | | 0.28 | | AS ABOVE, DRY, NO ODOR. |
| | | | | | |
| | | | | | |
| | | | 0.50 | | AS ABOVE, DRY, NO ODOR. |
| 5.0 | | | | | |
| | | | | | |
| | | | 0.46 | | AS ABOVE, DRY, NO ODOR. |
| | | | | | |
| | | | | | |
| | | | 0.56 | | AS ADOVE WET AT 10 FEET NO ODOD |
| | | | 0.50 | | AS ABOVE, WET AT 10 FEET, NO ODOR. |
| | | | | | |
| 10.0 | | | | | |
| | | | | | BORING TERMINATED AT 10 FEET. GROUNDWATER ENCOUNTERED AT 10 FEET. |
| | | | | | AT TOTELT. |
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| PROJE | CT GARY | Y SMITH P | ROPERTY | (PARCEL | BORING NUMBER GS-2 |
|------------|---------------|-----------------|------------|----------------|---|
| CLIEN | T NCDOT | Γ (WBS 402 | 278.1.1) | | PAGE 1 |
| PROJE | CT NUM | BER 6015 | 55373 (U-4 | 909) | ELEVATION |
| CONTI | RACTOR | AED | | | DATE 5/25/2010 |
| | | EOPROBE | | | DRILLER KELLY |
| | _ | | | | PREPARED BY BRANSON |
| | | | | | |
| DEPTH | CASING | BLOWS | OVA | SAMPLE | |
| IN FEET | BLOWS FOOT | PER 6 INCHES | (ppm) | DEPTH RANGE | FIELD CLASSIFICATION AND REMARKS |
| | | | 0.54 | | 3" ASPHALT/GRAVEL, POOR RECOVERY THROUGHOUT, MEDIUM |
| | | | 0.0 | | BROWN SOFT, SILTY CLAY, DRY, NO ODOR. |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| - 0 | | | | | |
| 5.0 | | | | | |
| | | | | | |
| | | | 0.74 | | AS ABOVE, WET AT 10 FEET, NO ODOR. SUBMIT TO LABORATORY |
| | | | | | FOR ANALYSIS. |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| 10.0 | | | | | BORING TERMINATED AT 10 FEET. GROUNDWATER ENCOUNTERED |
| | | | | | AT 10 FEET. |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| 15.0 | | | | | |
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| PROJE | CT GARY | Y SMITH P | ROPERTY | (PARCEL | BORING NUMBER GS-3 |
|---------------------|-------------------------|--------------------------|--------------|--------------------------|--|
| | | T (WBS 402 | | | PAGE 1 |
| PROJE | CT NUM | BER 6015 | 55373 (U-4 | 909) | ELEVATION |
| CONTI | RACTOR | AED | | | DATE 5/25/2010 |
| EQUIPMENT GEOPROBE | | | | | DRILLER KELLY |
| | | | | | PREPARED BY BRANSON |
| | | | | | |
| DEPTH IN FEET | CASING BLOWS FOOT | BLOWS PER 6 INCHES | OVA (ppm) | SAMPLE DEPTH RANGE | FIELD CLASSIFICATION AND REMARKS |
| | | | 0.59 | | 3" ASPHALT/GRAVEL, MOTTLED MEDIUM BROWN, REDDISH BROWN, AND TAN SILT/CLAY, DRY, NO ODOR. |
| | | | 0.65 | | AS ABOVE, DRY, NO ODOR. |
| 5.0 | | | 0.73 | | AS ABOVE, DRY, NO ODOR. SUBMIT TO LABORATORY FOR ANALYSIS. |
| | | | 0.39 | | AS ABOVE, DRY, NO ODOR. |
| | | | 0.58 | | AS ABOVE TO 9 FEET. BECOMES LIGHT BROWN SILT/SAND, WET AT 10 FEET, NO ODOR. |
| 10.0 | | | | | BORING TERMINATED AT 10 FEET. GROUNDWATER ENCOUNTERED AT 10 FEET. |
| | | | | | AT TOTEET. |
| | | | | | |
| 15.0 | | | | | |
| | | | | | |
| | | | | | |



| PROJE | CT GARY | Y SMITH P | ROPERTY | (PARCEL | BORING NUMBER GS-4 | | | | | | | |
|-------------|-----------------|--------------|--------------|-----------------|--|--|--|--|--|--|--|--|
| CLIEN | T NCDOT | Γ (WBS 402 | .78.1.1) | | PAGE 1 | | | | | | | |
| PROJE | CT NUM | BER 6015 | 55373 (U-4 | 909) | ELEVATION | | | | | | | |
| CONTI | RACTOR | AED | | | DATE 5/25/2010 | | | | | | | |
| EQUIP | MENT G | EOPROBE | ; | | DRILLER KELLY | | | | | | | |
| | _ | | | | PREPARED BY BRANSON | | | | | | | |
| | | | | | | | | | | | | |
| DEPTH IN | CASING BLOWS | BLOWS PER | OVA (ppm) | SAMPLE DEPTH | | | | | | | | |
| FEET | FOOT | 6 INCHES | 41 | RANGE | FIELD CLASSIFICATION AND REMARKS | | | | | | | |
| | | | 0.45 | | MEDIUM TO REDDISH BROWN SILT/CLAY, DRY, NO ODOR. | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | 0.79 | | AS ABOVE, DRY, NO ODOR. | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | 0.84 | | AS ABOVE TO 5 FEET. BECOMES OLIVE BROWN SILT/CLAY, DRY, NO | | | | | | | |
| 5.0 | | | | | ODOR. SUBMIT TO LABORATORY FOR ANALYSIS. | | | | | | | |
| | | | | | | | | | | | | |
| | | | 0.34 | | AS ABOVE, DRY, NO ODOR. | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | 0.60 | | AS ABOVE TO 9 FEET. BECOMES LIGHT BROWN SILT/SAND, WET AT | | | | | | | |
| | | | | | 9 FEET, NO ODOR. | | | | | | | |
| | | | | | | | | | | | | |
| 10.0 | | | | | BORING TERMINATED AT 10 FEET. GROUNDWATER ENCOUNTERED | | | | | | | |
| | | | | | AT 9 FEET. | | | | | | | |
| | | | | | | | | | | | | |
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| 15.0 | | | | | | | | | | | | |
| 15.0 | | | | | | | | | | | | |
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| PROJE | CT GARY | Y SMITH P | ROPERTY | (PARCEL | BORING NUMBER GS-5 |
|-------------|-----------------|--------------|--------------|-----------------|--|
| CLIEN | T NCDOT | Γ (WBS 402 | 278.1.1) | | PAGE 1 |
| PROJE | CT NUM | BER 6015 | 55373 (U-4 | 909) | ELEVATION |
| CONTI | RACTOR | AED | | | DATE 5/25/2010 |
| EQUIP | MENT G | EOPROBE | ; | | DRILLER KELLY |
| | | | | | PREPARED BY BRANSON |
| | | | | | |
| DEPTH IN | CASING BLOWS | BLOWS PER | OVA (ppm) | SAMPLE DEPTH | |
| FEET | FOOT | 6 INCHES | | RANGE | FIELD CLASSIFICATION AND REMARKS |
| | | | 0.37 | | MEDIUM TO REDDISH BROWN SILT/CLAY, DRY, NO ODOR. |
| | | | | | |
| | | | | | |
| | | | 0.21 | | AS ABOVE, DRY, NO ODOR. |
| | | | | | |
| | | | | | |
| | | | 0.46 | | AS ABOVE, DRY, NO ODOR. |
| 5.0 | | | | | |
| | | | | | |
| | | | 1.41 | | AS ABOVE, DRY, NO ODOR. |
| | | | | | |
| | | | | | |
| | | | 4.19 | | OLIVE BROWN SILT/CLAY, WET AT 9 FEET, NO ODOR. SUBMIT TO |
| | | | | | LABORATORY FOR ANALYSIS. |
| | | | | | |
| 10.0 | | | | | BORING TERMINATED AT 10 FEET. GROUNDWATER ENCOUNTERED |
| | | | | | AT 9 FEET. |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| 15.0 | | | | | |
| | | | | | |
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| | | | | | |
| | | | | | |



| PROJE | CT GAR | Y SMITH P | ROPERTY | (PARCEL | BORING NUMBER GS-6 | | | | | | |
|-----------------------------------|-----------------|--------------|--------------|-----------------|--|--|--|--|--|--|--|
| CLIEN | T NCDO | Γ (WBS 402 | 278.1.1) | | PAGE 1 | | | | | | |
| PROJE | CT NUM | BER 6015 | 55373 (U-4 | 909) | ELEVATION | | | | | | |
| CONTI | RACTOR | AED | | | DATE 5/25/2010 | | | | | | |
| CONTRACTOR AED EQUIPMENT GEOPROBE | | | | | DRILLER KELLY | | | | | | |
| | | | | | PREPARED BY BRANSON | | | | | | |
| | | | | | | | | | | | |
| DEPTH IN | CASING BLOWS | BLOWS PER | OVA (ppm) | SAMPLE DEPTH | THE D OF A CONTROL TWO I AND DELICA DATA | | | | | | |
| FEET | FOOT | 6 INCHES | | RANGE | FIELD CLASSIFICATION AND REMARKS | | | | | | |
| | | | 0.83 | | MEDIUM TO LIGHT BROWN SILT/CLAY, DRY, NO ODOR. | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | 1.77 | | AS ABOVE, DRY, NO ODOR. | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | 2.72 | | AS ABOVE, DRY, NO ODOR. | | | | | | |
| 5.0 | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | 3.08 | | OLIVE BROWN SILT/SAND, WET AT 9 FEET, NO ODOR. | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | 11.95 | | AS ABOVE, WET AT 9 FEET, NO ODOR. SUBMIT TO LABORATORY | | | | | | |
| | | | | | FOR ANALYSIS. | | | | | | |
| 10.0 | | | | | | | | | | | |
| 10.0 | | | | | | | | | | | |
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| | | | | | | | | | | | |
| 15.0 | | | | | | | | | | | |
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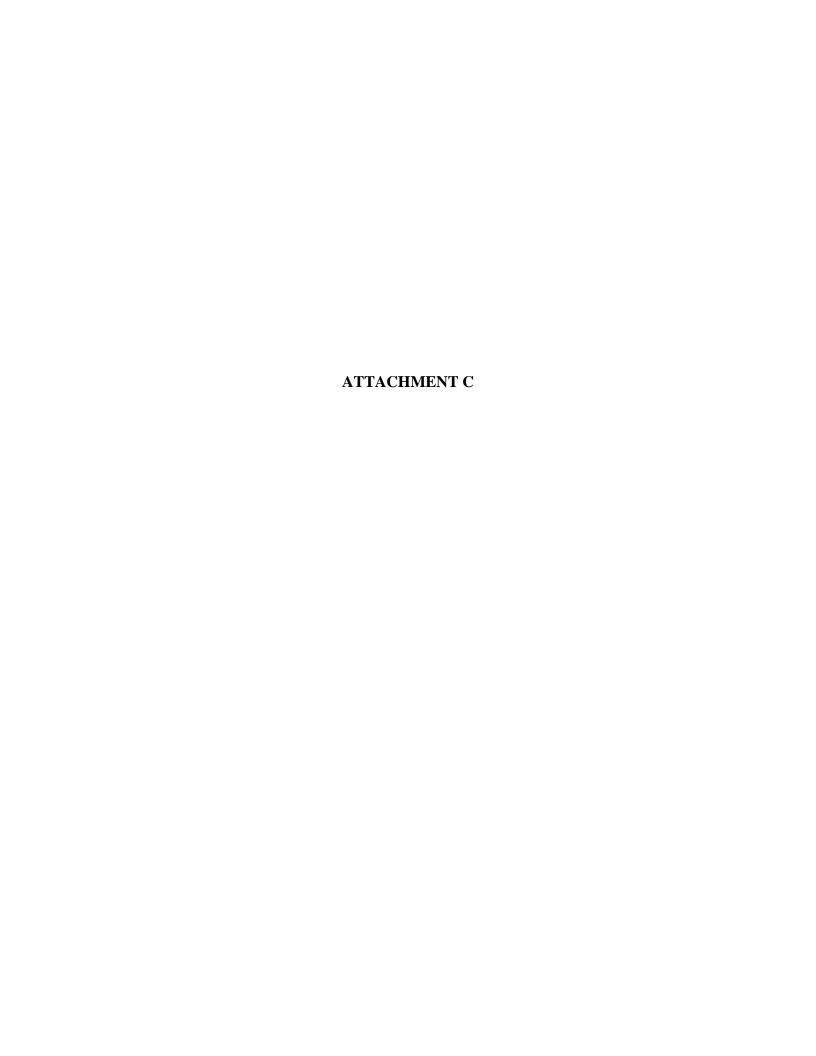




PHOTO 1 - BORING IN PROPOSED R/W LOOKING SOUTHEAST



PHOTO 2 - BORING IN PROPOSED R/W LOOKING SOUTH



PHOTO 3 - BORING WITHIN PROPOSED R/W LOOKING EAST



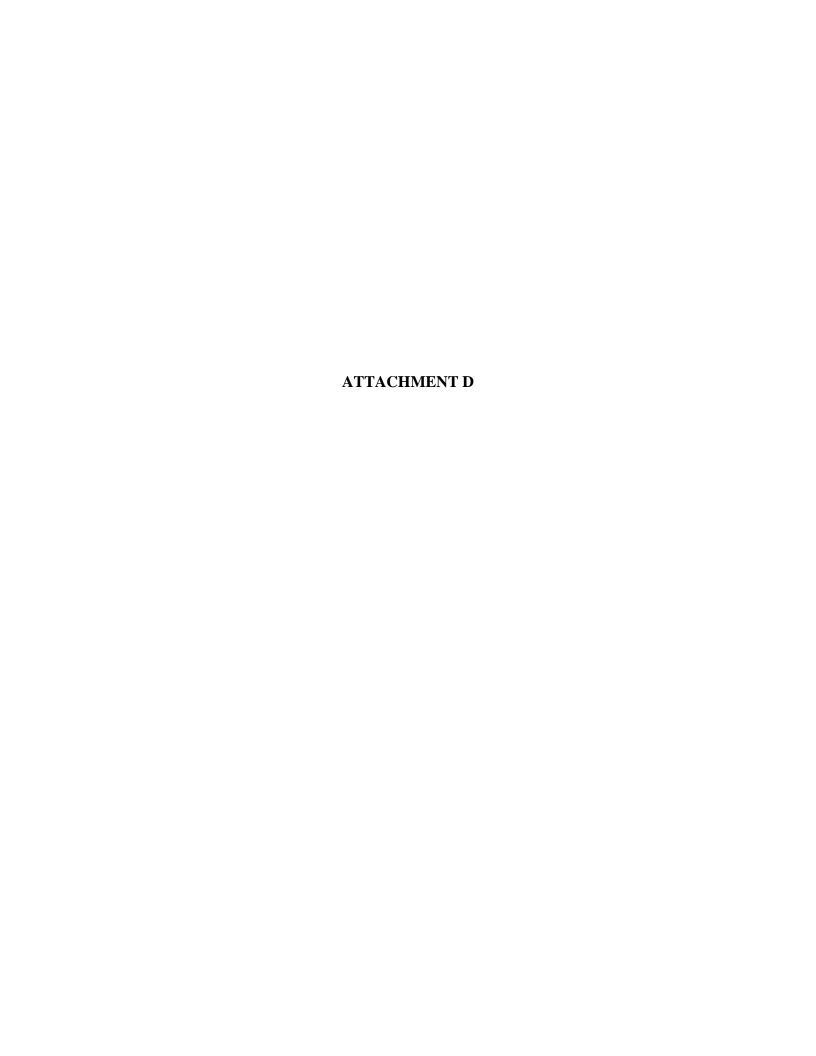
PHOTO 4 - BORING WITHIN PROPOSED R/W LOOKING NORTHEAST



PHOTO 5 - BORING WITHIN PROPOSED R/W LOOKING NORTHEAST



PHOTO 6 - BORING WITHIN PROPOSED R/W LOOKING SOUTHEAST





NC Certification No. 402 SC Certification No. 99012 NC Drinking Water Cert No. 37735 **Case Narrative**

06/14/2010

AECOM (Earth Tech) NCDOT Proj. Mike Branson Suite 475, 701 Corporate Center Dr. Raleigh, NC 27607 Project: NCDOT - Gary Smith Property

Project No.: WBS#40278.1.1 Lab Submittal Date: 05/28/2010 Prism Work Order: 0050752

This data package contains the analytical results for the project identified above and includes a Case Narrative, Sample Results and Chain of Custody. Unless otherwise noted, all samples were received in acceptable condition and processed according to the referenced methods.

Data qualifiers are flagged individually on each sample. A key reference for the data qualifiers appears at the end of this case narrative.

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

Respectfully,

PRISM LABORATORIES, INC.

President/Project Manager

Reviewed By

Korti a. S

Data Qualifiers Key Reference:

BRL Below Reporting Limit
MDL Method Detection Limit
RPD Relative Percent Difference

* Results reported to the reporting limit. All other results are reported to the MDL with values between MDL and

reporting limit indicated with a J.



Sample Receipt Summary

06/14/2010

Prism Work Order: 0050752

| Client Sample ID | Lab Sample ID | Matrix | Date Sampled | Date Received | |
|------------------|---------------|--------|--------------|---------------|--|
| GS-1 | 0050752-01 | Solid | 05/25/10 | 05/28/10 | |
| GS-2 | 0050752-02 | Solid | 05/25/10 | 05/28/10 | |
| GS-3 | 0050752-03 | Solid | 05/25/10 | 05/28/10 | |
| GS-4 | 0050752-04 | Solid | 05/25/10 | 05/28/10 | |
| GS-5 | 0050752-05 | Solid | 05/25/10 | 05/28/10 | |
| GS-6 | 0050752-06 | Solid | 05/25/10 | 05/28/10 | |

Samples received in good condition at 5.3 degrees C unless otherwise noted.







Attn: Mike Branson

Suite 475, 701 Corporate Center Dr.

Raleigh, NC 27607

Project: NCDOT - Gary Smith

Property

Project No.: WBS#40278.1.1

Sample Matrix: Solid

Client Sample ID: GS-1

Prism Sample ID: 0050752-01 Prism Work Order: 0050752 Time Collected: 05/25/10 15:30 Time Submitted: 05/28/10 08:15

| Parameter | Result | Units | Report Limit | MDL | Dilution Factor | Method | Analysis Date/Time | Analyst | Batch ID |
|-------------------------------------|--------|----------------|-----------------|-----------|--------------------|-----------|-----------------------|---------|-------------|
| Diesel Range Organics by GC/FID | | | | | | | | | |
| Diesel Range Organics | BRL | mg/kg dry | 11 | 1.8 | 1 | 8015C | 6/5/10 0:10 | JMV | P0F0102 |
| | | | Surrogate | | | Recov | very | Control | Limits |
| | | | o-Terphenyl | | | 81 | 1 % | 49-124 | |
| Gasoline Range Organics by GC/FID |) | | | | | | | | |
| Gasoline Range Organics | BRL | mg/kg dry | 7.2 | 0.93 | 50 | 8015C | 6/4/10 22:11 | HPE | P0F0131 |
| | | | Surrogate | | | Recov | very | Control | Limits |
| | | | a,a,a-Trifluoi | rotoluene | | 79 | 9 % | 55-129 | |
| General Chemistry Parameters | | | | | | | | | |
| % Solids | 64.5 | % by Weight | 0.100 | 0.100 | 1 | *SM2540 G | 6/1/10 12:30 | JAB | P0F0033 |



06/14/2010



AECOM (Earth Tech) NCDOT Proj.

Attn: Mike Branson

Suite 475, 701 Corporate Center Dr.

Raleigh, NC 27607

Project: NCDOT - Gary Smith

Property

Project No.: WBS#40278.1.1

Sample Matrix: Solid

Client Sample ID: GS-2 Prism Sample ID: 0050752-02 Prism Work Order: 0050752

Time Collected: 05/25/10 15:45 Time Submitted: 05/28/10 08:15

| Parameter | Result | Units | Report Limit | MDL | Dilution Factor | Method | Analysis Date/Time | Analyst | Batch ID |
|----------------------------------|--------|----------------|-----------------|-----------|--------------------|-----------|-----------------------|---------|-------------|
| Diesel Range Organics by GC/FID | | | | | | | | | |
| Diesel Range Organics | 10 | mg/kg dry | 10 | 1.7 | 1 | 8015C | 6/5/10 0:45 | JMV | P0F0102 |
| | | | Surrogate | | | Recov | very | Control | Limits |
| | | | o-Terphenyl | | | 81 | 1 % | 49-124 | |
| Gasoline Range Organics by GC/FI | D | | | | | | | | |
| Gasoline Range Organics | BRL | mg/kg dry | 7.0 | 0.90 | 50 | 8015C | 6/4/10 22:43 | HPE | P0F0131 |
| | | | Surrogate | | | Recov | very | Control | Limits |
| | | | a,a,a-Trifluo | rotoluene | | 92 | 2 % | 55-129 | |
| General Chemistry Parameters | | | | | | | | | |
| % Solids | 67.4 | % by Weight | 0.100 | 0.100 | 1 | *SM2540 G | 6/1/10 12:30 | JAB | P0F0033 |







Attn: Mike Branson

Suite 475, 701 Corporate Center Dr.

Raleigh, NC 27607

Project: NCDOT - Gary Smith

Property

Project No.: WBS#40278.1.1

Sample Matrix: Solid

Client Sample ID: GS-3 Prism Sample ID: 0050752-03 Prism Work Order: 0050752 Time Collected: 05/25/10 16:00

Time Submitted: 05/28/10 08:15

| Parameter | Result | Units | Report Limit | MDL | Dilution Factor | Method | Analysis Date/Time | Analyst | Batch ID |
|-----------------------------------|--------|----------------|-----------------|-----------|--------------------|-----------|-----------------------|---------|-------------|
| Diesel Range Organics by GC/FID | | | | | | | | | |
| Diesel Range Organics | BRL | mg/kg dry | 9.1 | 1.5 | 1 | 8015C | 6/5/10 1:21 | JMV | P0F0102 |
| | | | Surrogate | | | Recov | very | Control | Limits |
| | | | o-Terphenyl | | | 87 | 7 % | 49-124 | |
| Gasoline Range Organics by GC/FID | | | | | | | | | |
| Gasoline Range Organics | BRL | mg/kg dry | 4.8 | 0.62 | 50 | 8015C | 6/4/10 23:14 | HPE | P0F0131 |
| | | | Surrogate | | | Recov | very | Control | Limits |
| | | | a,a,a-Trifluoi | rotoluene | | 11 | 8 % | 55-129 | |
| General Chemistry Parameters | | | | | | | | | |
| % Solids | 76.7 | % by Weight | 0.100 | 0.100 | 1 | *SM2540 G | 6/1/10 12:30 | JAB | P0F0033 |



06/14/2010



AECOM (Earth Tech) NCDOT Proj.

Attn: Mike Branson

Suite 475, 701 Corporate Center Dr.

Raleigh, NC 27607

Project: NCDOT - Gary Smith

Property

Project No.: WBS#40278.1.1

Sample Matrix: Solid

Client Sample ID: GS-4 Prism Sample ID: 0050752-04 Prism Work Order: 0050752

Time Collected: 05/25/10 16:10 Time Submitted: 05/28/10 08:15

| Parameter | Result | Llaita | Denent | MDI | Dilution | Method | Analysis | Analyst | Batch |
|-----------------------------------|--------|----------------|-----------------|-----------|----------|-----------|--------------|----------|---------|
| Parameter | Result | Units | Report Limit | MDL | Factor | Wethod | Date/Time | Tildiyot | ID |
| Diesel Range Organics by GC/FID | | | | | | | | | |
| Diesel Range Organics | BRL | mg/kg dry | 9.4 | 1.5 | 1 | 8015C | 6/5/10 2:32 | JMV | P0F0102 |
| | | | Surrogate | | | Reco | very | Control | Limits |
| | | | o-Terphenyl | | | 68 | 3 % | 49-124 | |
| Gasoline Range Organics by GC/FID | | | | | | | | | |
| Gasoline Range Organics | BRL | mg/kg dry | 5.1 | 0.67 | 50 | 8015C | 6/4/10 23:46 | HPE | P0F0131 |
| | | | Surrogate | | | Reco | very | Control | Limits |
| | | | a,a,a-Trifluoi | rotoluene | | 11 | 8 % | 55-129 | |
| General Chemistry Parameters | | | | | | | | | |
| % Solids | 74.3 | % by Weight | 0.100 | 0.100 | 1 | *SM2540 G | 6/1/10 12:30 | JAB | P0F0033 |



06/14/2010



AECOM (Earth Tech) NCDOT Proj.

Attn: Mike Branson

Suite 475, 701 Corporate Center Dr.

Raleigh, NC 27607

Project: NCDOT - Gary Smith

Property

Project No.: WBS#40278.1.1

Sample Matrix: Solid

Client Sample ID: GS-5

Prism Sample ID: 0050752-05 Prism Work Order: 0050752 Time Collected: 05/25/10 16:20

Time Submitted: 05/28/10 08:15

| Parameter | Result | Units | Report Limit | MDL | Dilution Factor | Method | Analysis Date/Time | Analyst | Batch ID |
|-----------------------------------|--------|----------------|-----------------|-----------|--------------------|-----------|-----------------------|---------|-------------|
| Diesel Range Organics by GC/FID | | | | | | | | | |
| Diesel Range Organics | BRL | mg/kg dry | 8.2 | 1.3 | 1 | 8015C | 6/5/10 3:08 | JMV | P0F0102 |
| | | | Surrogate | | | Recov | very | Control | Limits |
| | | | o-Terphenyl | | | 68 | 3 % | 49-124 | |
| Gasoline Range Organics by GC/FID |) | | | | | | | | |
| Gasoline Range Organics | BRL | mg/kg dry | 3.9 | 0.51 | 50 | 8015C | 6/5/10 0:18 | HPE | P0F0131 |
| | | | Surrogate | | | Recov | very | Control | Limits |
| | | | a,a,a-Trifluo | rotoluene | | 97 | 7 % | 55-129 | |
| General Chemistry Parameters | | | | | | | | | |
| % Solids | 85.1 | % by Weight | 0.100 | 0.100 | 1 | *SM2540 G | 6/1/10 12:30 | JAB | P0F0033 |







Attn: Mike Branson

Suite 475, 701 Corporate Center Dr.

Raleigh, NC 27607

Project: NCDOT - Gary Smith

Property

Project No.: WBS#40278.1.1

Sample Matrix: Solid

Client Sample ID: GS-6
Prism Sample ID: 0050752-06
Prism Work Order: 0050752

Time Collected: 05/25/10 16:30 Time Submitted: 05/28/10 08:15

| Parameter | Result | Units | Report | MDL | Dilution | Method | Analysis | Analyst | Batch |
|-----------------------------------|--------|----------------|----------------|-----------|----------|-----------|--------------|---------|---------|
| | | | Limit | | Factor | | Date/Time | | ID |
| Diesel Range Organics by GC/FID | | | | | | | | | |
| Diesel Range Organics | BRL | mg/kg dry | 8.2 | 1.3 | 1 | 8015C | 6/5/10 3:43 | JMV | P0F0102 |
| | | | Surrogate | | | Reco | very | Control | Limits |
| | | | o-Terphenyl | | | 81 | 1 % | 49-124 | |
| Gasoline Range Organics by GC/FID | | | | | | | | | |
| Gasoline Range Organics | BRL | mg/kg dry | 4.2 | 0.54 | 50 | 8015C | 6/5/10 0:49 | HPE | P0F0131 |
| | | | Surrogate | | | Reco | very | Control | Limits |
| | | | a,a,a-Trifluoi | rotoluene | | 99 | 9 % | 55-129 | |
| General Chemistry Parameters | | | | | | | | | |
| % Solids | 85.3 | % by Weight | 0.100 | 0.100 | 1 | *SM2540 G | 6/1/10 12:30 | JAB | P0F0033 |



Attn: Mike Branson

Suite 475, 701 Corporate Center Dr.

Raleigh, NC 27607

Project: NCDOT - Gary Smith Property

Prism Work Order: 0050752

Time Submitted: 5/28/10 8:15:00AM

Project No: WBS#40278.1.1

Gasoline Range Organics by GC/FID - Quality Control

| | | Reporting | | Spike | Source | | %REC | | RPD | |
|-----------------------------------|--------|-----------|-----------|----------|-----------|-------------|--------|-----|-------|-------|
| Analyte | Result | Limit | Units | Level | Result | %REC | Limits | RPD | Limit | Notes |
| Batch P0F0131 - 5035 | | | | | | | | | | |
| Blank (P0F0131-BLK1) | | | F | Prepared | & Analyze | ed: 06/04/1 | 0 | | | |
| Gasoline Range Organics | BRL | 5.0 | mg/kg wet | | | | | | | |
| Surrogate: a,a,a-Trifluorotoluene | 4.85 | | mg/kg wet | 5.00 | | 97 | 55-129 | | | |
| LCS (P0F0131-BS1) | | | F | Prepared | & Analyze | d: 06/04/1 | 0 | | | |
| Gasoline Range Organics | 48.6 | 5.0 | mg/kg wet | 50.0 | | 97 | 67-116 | | | |
| Surrogate: a,a,a-Trifluorotoluene | 5.30 | | mg/kg wet | 5.00 | | 106 | 55-129 | | | |
| LCS Dup (P0F0131-BSD1) | | | F | Prepared | & Analyze | d: 06/04/1 | 0 | | | |
| Gasoline Range Organics | 50.5 | 5.0 | mg/kg wet | 50.0 | | 101 | 67-116 | 4 | 200 | |
| Surrogate: a,a,a-Trifluorotoluene | 5.45 | | mg/kg wet | 5.00 | | 109 | 55-129 | | | |



Attn: Mike Branson

Suite 475, 701 Corporate Center Dr.

Raleigh, NC 27607

Project: NCDOT - Gary Smith Property

Prism Work Order: 0050752

Time Submitted: 5/28/10 8:15:00AM

Project No: WBS#40278.1.1

Diesel Range Organics by GC/FID - Quality Control

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|------------------------|--------|--------------------|-----------|----------------|------------------|----------|----------------|-----|--------------|--------|
| Tulayee | result | Lilling | OTIILO | LCVCI | rtosuit | 7011120 | Liiiilo | ППВ | Liiiit | 110103 |
| Batch P0F0102 - 3545A | | | | | | | | | | |
| Blank (P0F0102-BLK1) | | | ı | Prepared: | 06/03/10 | Analyzed | : 06/04/10 | | | |
| Diesel Range Organics | BRL | 7.0 | mg/kg wet | | | | | | | |
| Surrogate: o-Terphenyl | 1.25 | | mg/kg wet | 1.60 | | 78 | 49-124 | | | |
| LCS (P0F0102-BS1) | | | ı | Prepared | 06/03/10 | Analyzed | : 06/04/10 | | | |
| Diesel Range Organics | 60.1 | 7.0 | mg/kg wet | 79.9 | | 75 | 55-109 | | | |
| Surrogate: o-Terphenyl | 1.66 | | mg/kg wet | 1.60 | | 104 | 49-124 | | | |
| LCS Dup (P0F0102-BSD1) | | | ı | Prepared | 06/03/10 | Analyzed | : 06/04/10 | | | |
| Diesel Range Organics | 72.4 | 7.0 | mg/kg wet | 80.0 | | 91 | 55-109 | 19 | 200 | |
| Surrogate: o-Terphenyl | 1.98 | | mg/kg wet | 1.60 | | 124 | 49-124 | | | |



Attn: Mike Branson

Suite 475, 701 Corporate Center Dr.

Raleigh, NC 27607

Project: NCDOT - Gary Smith Property

Prism Work Order: 0050752

Time Submitted: 5/28/10 8:15:00AM

Project No: WBS#40278.1.1

General Chemistry Parameters - Quality Control

| | Г | Reporting | | Spike | Source | | 70KEU | | KPD | |
|---------|--------|-----------|-------|-------|--------|------|--------|-----|-------|-------|
| Analyte | Result | Limit | Units | Level | Result | %REC | Limits | RPD | Limit | Notes |

| Patch | DUEUUSS | - NO PRF | D |
|-------|---------|----------|---|
| | | | |

| Duplicate (P0F0033-DUP5) | Source | : 0050752-06 | Prepared & Analyzed: 06/01/10 | | | |
|--------------------------|--------|-----------------|-------------------------------|---|----|--|
| % Solids | 85.3 | 0.100 % by Weig | | 0 | 20 | |

Sample Extraction Data

Prep Method: 3545A

| Lab Number | Batch | Initial | Final | Date |
|------------|---------|---------|-------|----------|
| 0050752-01 | P0F0102 | 25.02 g | 1 mL | 06/03/10 |
| 0050752-02 | P0F0102 | 25.04 g | 1 mL | 06/03/10 |
| 0050752-03 | P0F0102 | 25.02 g | 1 mL | 06/03/10 |
| 0050752-04 | P0F0102 | 25.06 g | 1 mL | 06/03/10 |
| 0050752-05 | P0F0102 | 25.18 g | 1 mL | 06/03/10 |
| 0050752-06 | P0F0102 | 25.02 g | 1 mL | 06/03/10 |

Prep Method: 5035

| Lab Number | Batch | Initial | Final | Date | |
|------------|---------|---------|-------|----------|--|
| 0050752-01 | P0F0131 | 5.42 g | 5 mL | 06/04/10 | |
| 0050752-02 | P0F0131 | 5.33 g | 5 mL | 06/04/10 | |
| 0050752-03 | P0F0131 | 6.85 g | 5 mL | 06/04/10 | |
| 0050752-04 | P0F0131 | 6.54 g | 5 mL | 06/04/10 | |
| 0050752-05 | P0F0131 | 7.47 g | 5 mL | 06/04/10 | |
| 0050752-06 | P0F0131 | 7.01 g | 5 mL | 06/04/10 | |

NO PREP

| Lab Number | Batch | Initial | Final | Date |
|------------|---------|---------|-------|----------|
| 0050752-01 | P0F0033 | 30 g | 30 mL | 06/01/10 |
| 0050752-02 | P0F0033 | 30 g | 30 mL | 06/01/10 |
| 0050752-03 | P0F0033 | 30 g | 30 mL | 06/01/10 |
| 0050752-04 | P0F0033 | 30 g | 30 mL | 06/01/10 |
| 0050752-05 | P0F0033 | 30 g | 30 mL | 06/01/10 |
| 0050752-06 | P0F0033 | 30 g | 30 mL | 06/01/10 |

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|---|-----------------------------------|
| PRISM | ZERNICK STREET LABOHATORIES, INC. |

449 Springbrook Road • P.O. Box 240543 • Charlotte, NC 28224-0543 Phone: 704/529-6364 • Fax: 704/526-0409 Hone: A ECON

Str Fe Report To/Contact Name: _ Client Company Name: _

919 8646239 Fax (63) (NO): 9198546259 いかったの 3 Reporting Address: 701 Email (Site Loca EDD Typ Site Loca Phone: _

SAMPLE

CHAIN OF CUSTODY RECORD

QUOTE # TO ENSURE PROPER BILLING

LAB USE ONLY

Received ON WET ICE? Temp 56

Samples INTACT upon arrival?

PROPER PRESERVATIVES indicated

<u>§</u> Ø UST Project: NCERT Smith Short Hold Analysis: (Yes) (Mg) Project Name: __ *Please ATT provisions a Invoice To: Address: _

ES rec'd W/OUT HEADSPACE

| Received WITHIN HOLDING TIMES? CUSTODY: SEALS INTACT? VOLATILES rec'd W/OUT HEADSPA | PROPER CONTAINERS used? | TO BE FILLED IN BY CLIENT/SA | Certification: NELACUSA | SCOTHER_ | Water Chlorinated: YES NO | Sample Iced Upon Collection: YE |
|--|-------------------------|--|-------------------------|--|--|---|
| TACH any project specific reporting (QC LEVEL I II III IV) and/or QC Requirements んしゃってん | | Order No./Billing Reference LIPS # 40278.1.1 | ate | ys" □ 6-9 Days □ Standard 10 days □ nusi won wildst be sived after 15:00 will be processed next hijsiness day | me is based on business days, excluding weekends and holidays. | VERSE FOR TERMS & CONDITIONS REGARDING SERVICES RED BY PRISM LABORATORIES, INC. TO CLIENT) |

Page 12 of 12 OF 12 SEE REVERSE FOR TERMS & CONDITION Site Departure Time: Site Arrival Time: Field Tech Fee: Mileage: NUSER DON Additional Comments: WAY BLANKA 0 CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Tefton-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space) ONC OSC ONC OSC ONC OSC OKZ7 0 1100 50 OTHER: 805575Z 377/16 182 LANDFILL CERCLA NOTE: ALL SAMPLE COOLERS SHOULD BE TAPED SHUT WITH CUSTODY SEARS FOR TRANSPORTATION TO THE LABORATORY. SAMPLES ARE NOT ACCEPTED AND VERIFIED AGAINST COC UNITE RECEIVED AT THE LABORATORY. RCRA: SOLID WASTE: DRINKING WATER: ONC OSC Other. W Prism Field Service GROUNDWATER: ONC DSC 1884 ☐ Hand-delivered ONC OSC ONC OSC UST: ☐ Fed Ex ☐ UPS Method of Shipme Upon relissubmitted NPDES: Sampler