REPORT OF PRELIMINARY ENVIRONMENTAL SITE ASSESSMENT

FORMER MCCARTY AUTOMOTIVE PROPERTY, PARCEL # 126
STATE PROJECT U-2412-B, TIP NO. 34802.1.1
4601 HIGH POINT ROAD
GREENSBORO, NORTH CAROLINA

Prepared for:

North Carolina Department of Transportation
Professional Services Management Unit
1592 Mail Service Center
Raleigh, North Carolina 27699

Prepared by:

MACTEC Engineering and Consulting, Inc.
3301 Atlantic Avenue
Raleigh, North Carolina 27604

MACTEC Project No. 6470-10-0244

December 10, 2010

MACTEC

MACTEC

engineering and constructing a better tomorrow

December 10, 2010

Mr. Cathy Houser, P.E.
NCDOT Professional Services Management Unit
1592 Mail Service Center
Raleigh, North Carolina 27699

Subject: **Report of Preliminary Environmental Site Assessment**
Former McCarty Automotive Property, Parcel #126
State Project U-2412-B, Tip No. 34802.1.1
4601 High Point Road
Greensboro, North Carolina
MACTEC Project No. 6470-10-0244

Dear Ms. Houser:

As authorized by your acceptance of MACTEC Proposal No. PROP 10-RAL-479 dated October 22, 2010, MACTEC Engineering and Consulting, Inc. (MACTEC) is pleased to submit the attached Report of Preliminary Environmental Site Assessment for the above-referenced site.

This report is intended for the use of NCDOT subject to contractual terms between NCDOT and MACTEC. Reliance on this document by any other party is not allowed without the expressed, written consent of MACTEC. Use of this report for purposes beyond those reasonably intended by NCDOT and MACTEC will be at the sole risk of the user.

This report presents project information and assessment activities conducted, along with our findings, conclusions and recommendations. We appreciate your selection of MACTEC for this project and look forward to assisting you further on this and other projects. If you have any questions, please do not hesitate to contact us.

Sincerely,

MACTEC ENGINEERING AND CONSULTING, INC.

Matthew J. Gillis
Staff Scientist

Robert M. Miller, P.E.
Senior Project Manager/Principal Engineer

MACTEC Engineering and Consulting, Inc.
3301 Atlantic Avenue, Raleigh, NC 27604 • Phone: 919.876.0416 • Fax:
License Number: NC Engineering F-0653 NC Geology C-247

www.mactec.com
Printed with Environmentally-Responsible Products
Please Recycle!

TABLE OF CONTENTS

1.0 INTRODUCTION

MACTEC Engineering and Consulting, Inc. (MACTEC) was contracted by North Carolina Department of Transportation (NCDOT) to perform a Preliminary Environmental Site Assessment of the property owned by McCarty Automotive Inc. located at 4601 High Point Road, Greensboro, Guilford County, North Carolina (Figure 1). This property was investigated by MACTEC in conjunction with State Project U-2412-B. MACTEC understands that NCDOT is planning road improvements to the area. The entire property is being acquired by NCDOT for this project. NCDOT requested that MACTEC assess the subject site to evaluate the extent (if any) of soil contamination related to activity (past or present) at this location and the impact (if any) on the proposed road improvements. This report presents MACTEC's assessment activities, findings, conclusions and recommendations.

1.1 Site Location

The Former McCarty Automotive (McCarty) property is located at 4601 High Point Road in Greensboro, Guilford County, North Carolina. The site consists of approximately 0.35 acres of land and is developed as Champion Automotive Service Center. The Guilford County Geographic Information Services (GIS) identifies the site as parcel identification number (PIN) 7843315798. The site is bound to the north by Jamison Place, across which is Sharon Walker Dentistry; to the east by Guilford Security Agency, Inc.; to the south by Sedgefield Shopping Center; and to the west by High Point Road, across which is DMS Building and Custom Caps (Figure 2).

1.2 Background Information

The McCarty property building is 3,576 square feet in area and is constructed with a concrete slab foundation and brick exterior. The building was used as a gas station and automotive repair center in the past. MACTEC observed a gas station canopy and a former dispenser island along the front of the building. MACTEC also observed a paint shop along the rear of the building. The asphalt parking lot provides access to High Point Road.

According to the North Carolina Department of Environment and Natural Resources (NCDENR) Underground Storage Tank (UST) Registry, five USTs were removed in 1990. Groundwater contamination was identified at the time the USTs were removed. NCDENR designated the site as incident number 06278.

2.0 ASSESSMENT ACTIVITIES

Prior to field activities, MACTEC prepared a site health and safety plan in accordance with OSHA 1910.120 requirements. MACTEC contacted ULOCO and contracted Bateman Civil Service to mark the locations of underground utilities at the site. NCDOT contracted with Schnabel Engineering (Schnabel) to perform a geophysical survey to identify suspected USTs on the property and to identify buried utilities at the site. Schnabel provided paint mark outs of buried utilities and suspected UST locations to MACTEC prior to our assessment activities. Schnabel did not identify anomalies that may be USTs. Schnabel's Geophysics Report is included in Appendix A.

2.1 Soil Assessment

On November 10, 2010, Troxler Geologic Services, Inc. (Troxler), under contract to MACTEC, advanced 10 soil borings (Nos. SB-1 through SB-10) at the subject site using a Geoprobe™ direct-push technology. Soil boring locations were selected based on the results of the geophysical investigation and field observations. Figure 2 shows a site layout and the locations of the soil borings. Coordinates of the soil boring locations were recorded using a hand-held GPS.

MACTEC collected soil samples from each boring using the procedures outlined in Appendix B. Copies of soil boring records are included in Appendix C.

MACTEC instructed Troxler to advance each soil boring to approximately eight feet below ground surface (bgs). MACTEC screened soil samples from each boring at one-foot intervals for volatile organic vapors using a photoionization detector (PID) and selected one soil sample from each boring for laboratory testing. MACTEC selected the soil sample that exhibited the highest PID measurement or the deepest, unsaturated soil sample if the PID did not detect organic vapors. Soil borings SB-1 through SB-10 were backfilled with the excess soil cuttings and bentonite chips.

2.2 Soil Analysis

MACTEC submitted the soil samples to Prism Laboratories, Inc. (Prism) of Charlotte, North Carolina for analysis for total petroleum hydrocarbons (TPH) diesel range organics (DRO) according to EPA Preparation/Test Methods 3550/8015, and TPH gasoline range organics (GRO) according to EPA Preparation/Testing Methods 5035/8015.

3.0 LABORATORY RESULTS

The laboratory test results are summarized on Table 1. The laboratory test reports and chain-of-custody records are included in Appendix D.

3.1 Soil Sample Analytical Results

The laboratory detected TPH DRO in the soil samples collected from soil borings SB-1, SB-3, SB-8, SB-9, and SB-10 at concentrations that exceed the laboratory reporting limit. The laboratory detected TPH DRO in the soil samples collected from soil borings SB-2 and SB-7 at concentrations that exceed NCDENR's Action Level of 10 mg/Kg. The laboratory detected TPH GRO in the soil samples collected from soil borings SB-1 and SB-2 at concentrations that exceed the NCDENR Action Level of 10 mg/Kg.

4.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the Preliminary Environmental Site Assessment, MACTEC offers the following conclusions and recommendations:

- The laboratory detected TPH DRO in two soil samples (SB-2 and SB-7) and TPH GRO in two soil samples (SB-1 and SB-2) at concentrations which exceed NCDENR's Action Level of 10 mg/Kg.

- Soil borings SB-1 and SB-2 are contiguous. If all soil between these borings is considered impacted to a depth of five vertical feet, and for a width of five feet on either side of the boring extending five feet beyond each boring, a total of approximately 47 cubic yards of soil is impacted in this area. Figure 2 shows the extent of impacted soil.

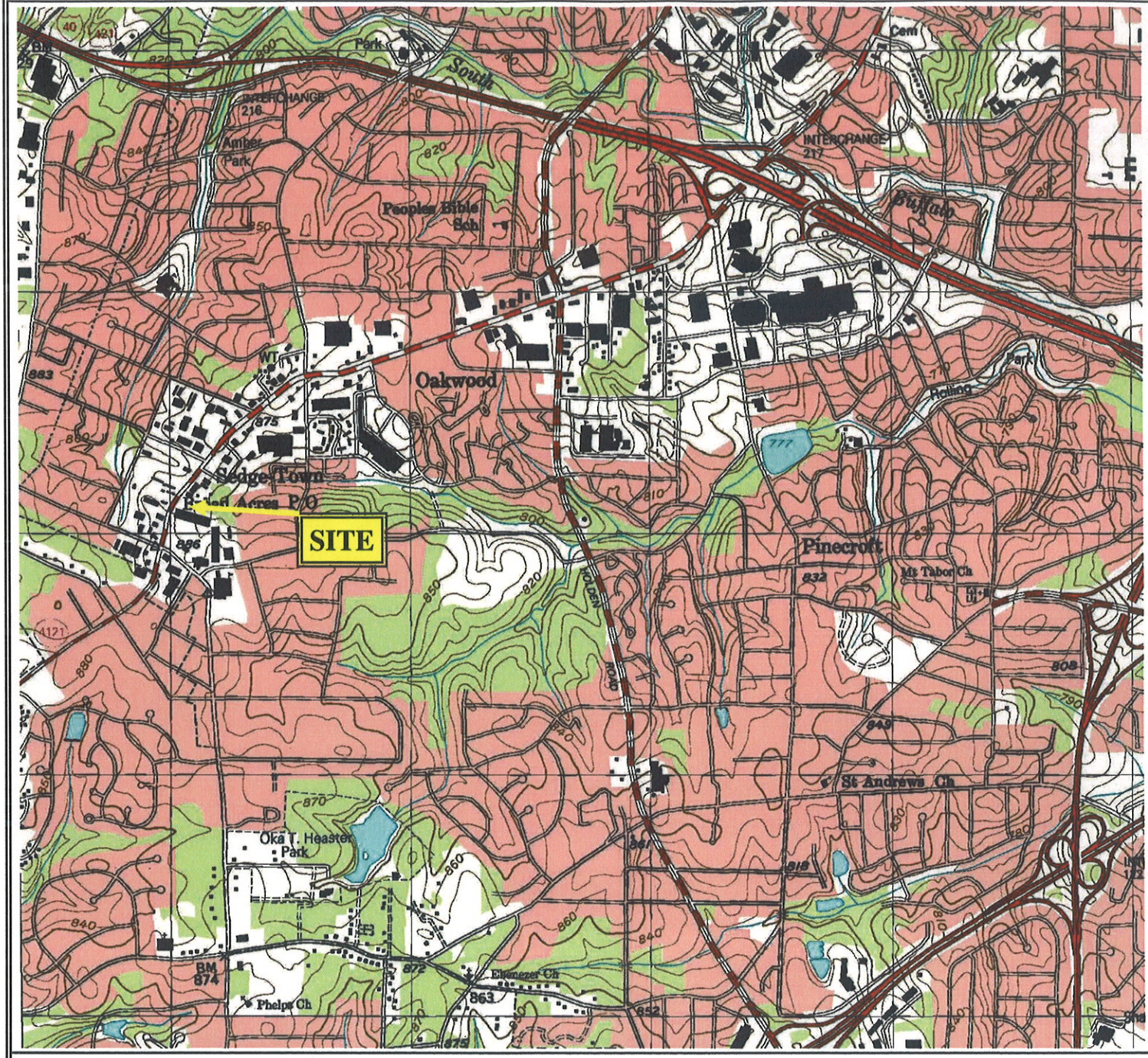
- If the impacted soil at the location of SB-7 extends up to five feet horizontally in all directions and eight feet vertically from the boring locations, an estimated total of 23 cubic yards of impacted soil is present at this location. Figure 2 shows the extent of impacted soil.

- The presence of TPH is evidence of a release of petroleum. MACTEC recommends notifying the property owner of this finding, who should then report this evidence to the Winston-Salem Regional Office of NCDENR.

5.0 QUALIFICATIONS

This assessment was performed under a limited scope for those purposes described above. The conclusions and recommendations presented in this report are based upon the data that were reviewed and documented in this report along with our experience on similar projects. The discovery of any additional information concerning environmental conditions at the site should be reported to MACTEC for additional review so that potential environmental impacts can be reassessed and the conclusions and recommendations modified, if appropriate.

FIGURES



NORTH

GREENSBORO, NC

1997

NIMA 5056 III SE-SERIES V842

CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929
1000 0 1000 2000

QUADRANGLE LOCATION

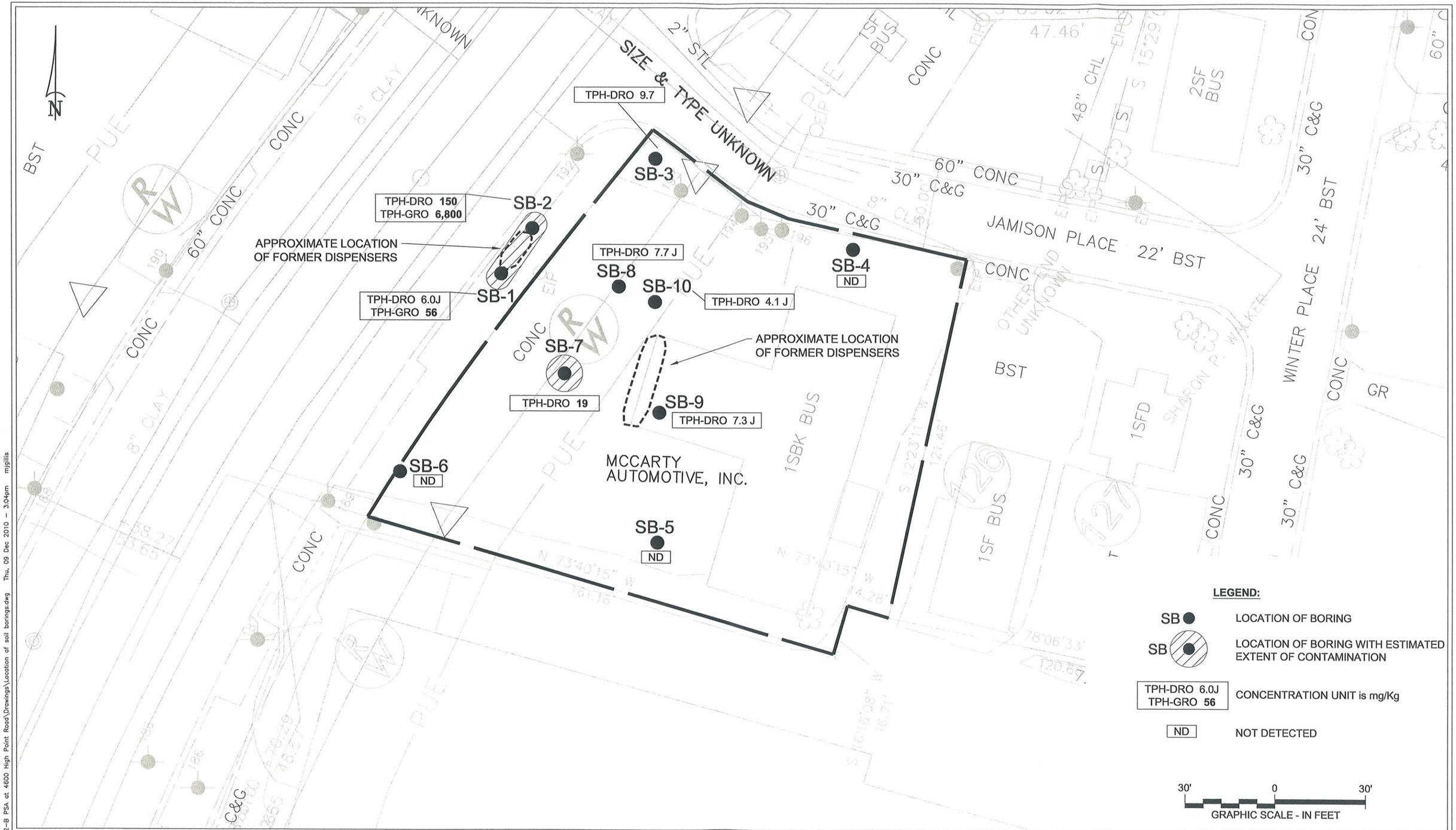
NOTE: SITE LOCATION IS APPROXIMATE

MACTEC

MACTEC ENGINEERING AND CONSULTING, INC.
3301 ATLANTIC AVENUE
RALEIGH, NORTH CAROLINA

TOPOGRAPHIC SITE MAP
FORMER MCCARTY AUTOMOTIVE PROPERTY
PARCEL #126
GREENSBORO, NORTH CAROLINA

DRAWN: MJG	DATE: DECEMBER 2010	FIGURE
ENG CHECK: CBS	SCALE: 1 : 24000	1
APPROVAL:	JOB: 6470-10-0244	



LEGEND:

SB ●	LOCATION OF BORING
SB ◐	LOCATION OF BORING WITH ESTIMATED EXTENT OF CONTAMINATION
TPH-DRO 6.0J TPH-GRO 56	CONCENTRATION UNIT is mg/Kg
ND	NOT DETECTED

30' 0 30'

GRAPHIC SCALE - IN FEET

MACTEC

MACTEC ENGINEERING AND CONSULTING, INC.
3301 ATLANTIC AVENUE
RALEIGH, NORTH CAROLINA

SITE LOCATION PLAN
FORMER MCCARTY AUTOMOTIVE PROPERTY, PARCEL #126
PROJECT NO. U-2412-B, TIP NO. 34802.1.1
GREENSBORO, NORTH CAROLINA

DRAWN:	R.R.	DATE:	DECEMBER 2010
ENG CHECK:	MJG	SCALE:	AS SHOWN
APPROVAL:		JOB No.:	6470-10-0244

FIGURE 2

REFERENCE: BASE DRAWINGS ARE PROVIDED BY NCDOT DATED 11/15/2010; MACTEC FIELD NOTES; LAB TEST RESULTS.

P:\6470\10\0244 NCDOT U-2412-B PSA at 4600 High Point Road\Drawings\Location of soil borings.dwg Thu, 09 Dec 2010 - 3:04pm mjgillis

TABLE

Table 1
Summary of Laboratory Test Results
State Project U-2412-B, TIP No. 34802.1.1
Former McCarty Automotive Property, Parcel #126
Greensboro, North Carolina
MACTEC Job No. 6470-10-0244

Analytical Method →			*EPA 8015*	*EPA 8015*
Contaminant of Concern →			*TPH-DRO*	*TPH-GRO*
Sample ID	**Date Collected**	**Sample Depth**		
			mg/Kg	
SB-1	11/10/2010	5'-6'	**6.0 J**	**56**
SB-2	11/10/2010	0'-1'	**150**	**6,800**
SB-3	11/10/2010	7'-8'	**9.7**	<6.0
SB-4	11/10/2010	7'-8'	<10	<6.8
SB-5	11/10/2010	7'-8'	<10	<6.4
SB-6	11/10/2010	7'-8'	<9.9	<5.8
SB-7	11/10/2010	7'-8'	**19**	<4.6
SB-8	11/10/2010	7'-8'	**7.7 J**	<4.8
SB-9	11/10/2010	7'-8'	**7.3 J**	<4.8
SB-10	11/10/2010	7'-8'	**4.1 J**	<5.5
NCDENR Action Level			*10*	*10*

Notes:

NCDENR	North Carolina Department of Environment and Natural Resources
Bold	Concentration exceeds Reporting Limit (RL)
Bold	Concentration exceeds the NCDENR Action Level
J	Analyte detected below the RL; therefore, result is an estimated concentration.
<#	Analyte not detected above the RL

Prepared by: MJG Date: 12/9/10

Checked by: CBS Date: 12/9/10

APPENDIX A

SCHNABEL GEOPHYSICS REPORT

Schnabel ENGINEERING

December 7, 2010

Mr. Robert Miller, PE, Senior Principal Engineer
Mactec Engineering and Consulting, Inc
3301 Atlantic Avenue
Raleigh, NC 27604

RE:	State Project:	U-2412B
	WBS Element:	34802.1.1
	County:	Guilford
	Description:	Greensboro – SR 4121 (Greensboro/High Point Road) from SR 1480 (Vickery Chapel Road) to SR 1424 (Hilltop Road)

Subject: **Project 09210013.30 Report on Geophysical Surveys**
Parcel 126, Guilford County, North Carolina

Dear Mr. Miller:

SCHNABEL ENGINEERING SOUTH, PC (Schnabel) is pleased to present this report on the geophysical surveys we conducted on the subject property. We understand this letter report will be included as an appendix in your report to the NCDOT. The report includes two 11x17 color figures and two 8.5x11 color figures.

INTRODUCTION

The work described in this report was conducted on November 1 and 2, 2010, by Schnabel under our 2009 contract with the NCDOT. The work was conducted over the accessible areas of the parcel as indicated by the NCDOT to support their environmental assessment of the subject property. Photographs of the parcel are included on Figure 1. The property is located on the southeast corner of the intersection of High Point Road (SR-4121) and Jamison Place in Greensboro, NC. The purpose of the geophysical surveys was to locate possible metal underground storage tanks (UST's) and associated metal product lines in the accessible areas of the right-of-way and/or easement.

The geophysical investigation consisted of electromagnetic (EM) induction surveys using a Geonics EM61-MK2 instrument. The EM61 metal detector is used to locate metal objects buried up to about eight feet below ground surface. Ground-penetrating radar (GPR) investigations of selected EM61 anomalies, including areas of reinforced concrete, were conducted using a Geophysical Survey Systems SIR-3000 system equipped with a 400 MHz antenna. Photographs of the equipment used are shown on Figure 2.

FIELD METHODOLOGY

Locations of geophysical data points were obtained using a sub-meter Trimble Pro-XRS DGPS system. References to direction and location in this report are based on the US State Plane 1983 System, North Carolina 3200 Zone, using the NAD 83 datum, with units in US survey feet. The locations of existing site features (monitoring wells, signs, etc.) were recorded for later correlation with the geophysical data and for location references to the NCDOT drawings.

The EM61 data were collected along parallel survey lines spaced approximately 2.5 feet apart. The EM61 and DGPS data were recorded digitally using a field computer and later transferred to a desktop computer for data processing. The GPR data were collected along survey lines spaced one to two feet apart in orthogonal directions over areas of reinforced concrete and anomalous EM readings not attributed to cultural features. The GPR data were reviewed in the field to evaluate the possible presence of UST's. The GPR data also were recorded digitally and later transferred to a desktop computer for further review.

Preliminary results for Parcel 126 were sent to Matt Gillis and Robert Miller of Mactec and Terry Fox of the NCDOT on November 5, 2010.

DISCUSSION OF RESULTS

The contoured EM61 data collected over Parcel 126 are shown on Figures 3 and 4. The EM61 early time gate results are plotted on Figure 3. The early time gate data provide the more sensitive detection of metal objects. Figure 4 shows the difference between the response of the top and bottom coils of the EM61 instrument (differential response). The difference is taken to remove the effect of surface and very shallowly buried metallic objects. Typically, the differential response emphasizes anomalies from deeper and larger objects such as UST's.

The early time gate and differential results show anomalies apparently caused by buried utilities, reinforced concrete, and known site features (Figures 3 and 4). The GPR data collected at the site do not indicate the presence of metallic UST's within the areas surveyed.

CONCLUSIONS

Our evaluation of the geophysical data collected on the subject property on Project U-2412B in Greensboro, NC indicates the following:

The geophysical data do not indicate the presence of metallic UST's in the areas surveyed on the subject property.

Copyright 2010

LIMITATIONS

These services have been performed and this report prepared for the North Carolina Department of Transportation in accordance with generally accepted guidelines for conducting geophysical surveys. It is generally recognized that the results of geophysical surveys are non-unique and may not represent actual subsurface conditions.

We appreciate the opportunity to have provided these services. Please call if you need additional information or have any questions.

Sincerely,

SCHNABEL ENGINEERING SOUTH, PC

Jeremy S Strohmeyer, LG
Project Manager

Edward D Billington, LG
Senior Vice President

JS:NB
Attachments: Figures (4)
FILE: G:\2009 PROJECTS\09210013 (NCDOT 2009 GEOTECH UNIT SERVICES)\09210013.30 (U-2412B, GUIILFORD CO.)\REPORT\SCHNABEL GEOPHYSICAL REPORT ON U-2412B.DOCX

Copyright 2010

Parcel 126 – Former McCarty Automotive Property, looking northeast

Parcel 126 – Former McCarty Automotive Property, looking southeast

Schnabel ENGINEERING	STATE PROJECT U-2412B NC DEPT. OF TRANSPORTATION GUILFORD CO., NORTH CAROLINA PROJECT NO. 09210013.30	PARCELS 905 AND 906 SITE PHOTOS FIGURE 1

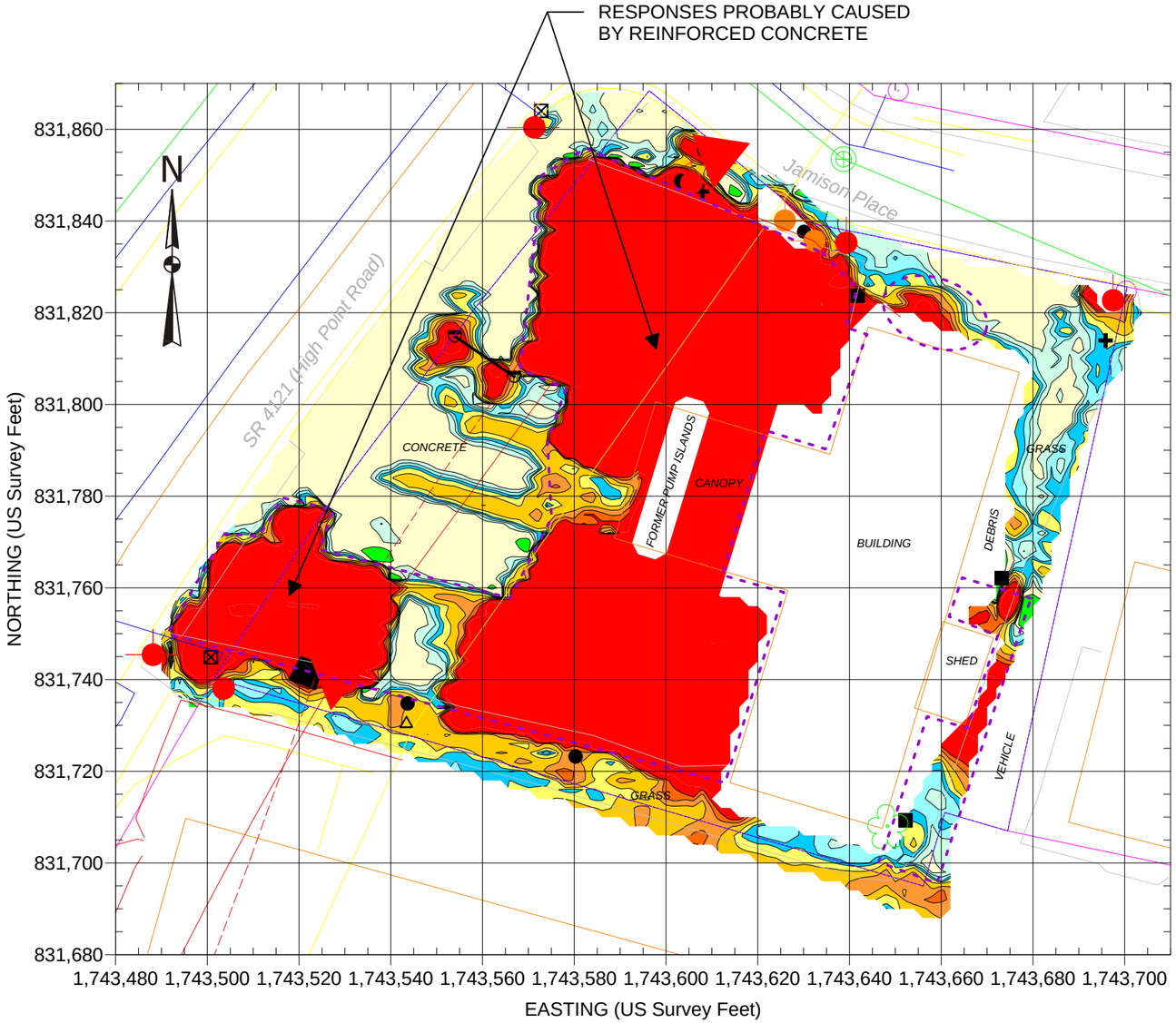
© Schnabel Engineering 2010 All Rights Reserved

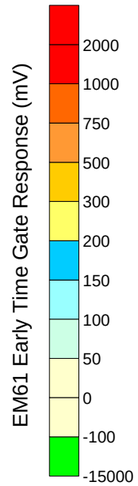
Geonics EM61-MK2

GSSI SIR-3000

Schnabel ENGINEERING	STATE PROJECT U-2412B NC DEPT. OF TRANSPORTATION GUILFORD CO., NORTH CAROLINA PROJECT NO. 09210013.30	PHOTOS OF GEOPHYSICAL EQUIPMENT USED FIGURE 2

© Schnabel Engineering 2010 All Rights Reserved





EXPLANATION

- SIGN
- UTILITY POLE
- GUY WIRE
- MISCELLANEOUS METALLIC OBJECT
- UTILITY MANHOLE, METER, BOX, ETC.
- LIGHT POLE
- DOT PROPOSED R/W
- DOT PROPOSED UTILITY EASEMENT
- PROPERTY LINE
- UTILITY (AS MARKED BY OTHERS OR AS PROVIDED BY NCDOT [VARIOUS COLORS])
- GPR SURVEY AREA

REF.: NCDOT FILE: u-2412b_rdy_psh_23.dgn
(FOR SOME SITE FEATURES)

Scale in US Survey Feet

0 30 60 90

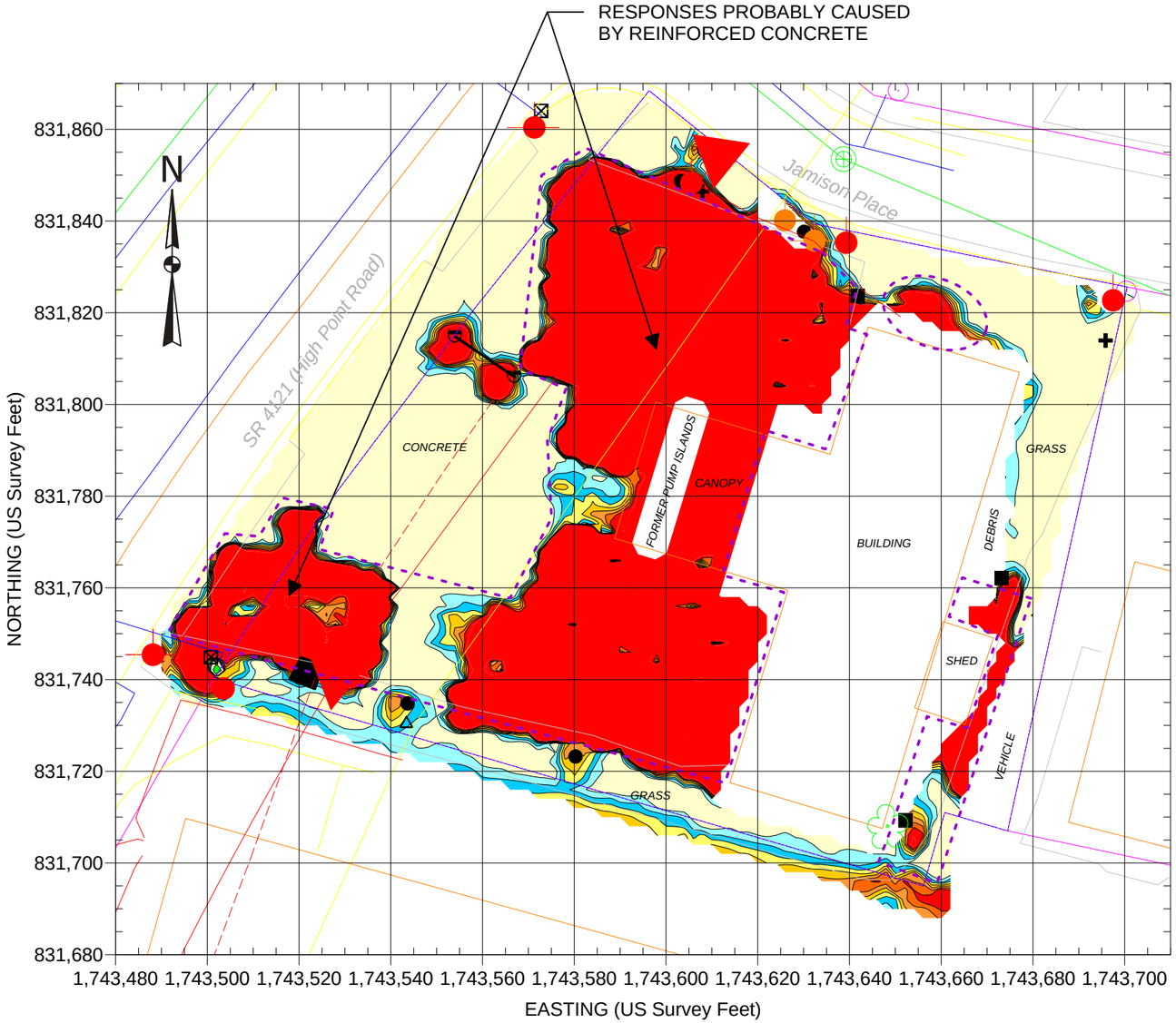
Note: The contour plot shows the earliest and most sensitive time gate of the EM61 bottom coil/channel in millivolts (mV). The EM data were collected on November 1, 2010, using a Geonics EM61-MK2 instrument. Positioning for the EM61 survey was provided using a submeter Trimble ProXRS DGPS system. Coordinates are in the US State Plane 1983 System, North Carolina Zone 3200, using the NAD 1983 datum. GPR data were acquired on November 2, 2010, using a Geophysical Survey Systems SIR 3000 equipped with a 400 MHz antenna.

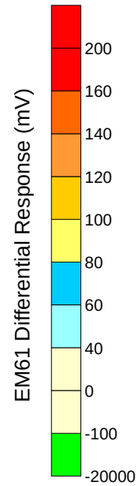
Schnabel ENGINEERING

STATE PROJECT U-2412B
GUILFORD COUNTY, NORTH CAROLINA
NC DEPARTMENT OF TRANSPORTATION
PROJECT NO. 09210013.30

PARCEL 126
EM61 EARLY TIME GATE RESPONSE
FIGURE 3

© Schnabel Engineering 2010 All Rights Reserved





EXPLANATION

- SIGN
- UTILITY POLE
- GUY WIRE
- MISCELLANEOUS METALLIC OBJECT
- UTILITY MANHOLE, METER, BOX, ETC.
- LIGHT POLE
- DOT PROPOSED R/W
- DOT PROPOSED UTILITY EASEMENT
- PROPERTY LINE
- UTILITY (AS MARKED BY OTHERS OR AS PROVIDED BY NCDOT [VARIOUS COLORS])
- GPR SURVEY AREA

REF.: NCDOT FILE: u-2412b_rdy_psh_23.dgn
(FOR SOME SITE FEATURES)

Scale in US Survey Feet

0 30 60 90

Note: The contour plot shows the difference, in millivolts (mV), between the readings from the top and bottom coils of the EM61. The difference is taken to reduce the effect of shallow metal objects and emphasize anomalies caused by deeper metallic objects, such as drums and tanks. The EM data were collected on November 1, 2010, using a Geonics EM61-MK2 instrument. Positioning for the EM61 survey was provided using a submeter Trimble ProXRS DGPS system. Coordinates are in the US State Plane 1983 System, North Carolina 3200 Zone, using the NAD 1983 datum. GPR data were acquired on November 2, 2010, using a Geophysical Survey Systems SIR 3000 equipped with a 400 MHz antenna.

Schnabel ENGINEERING

STATE PROJECT U-2412B
GUILFORD COUNTY, NORTH CAROLINA
NC DEPARTMENT OF TRANSPORTATION
PROJECT NO. 09210013.30

PARCEL 126
EM61 DIFFERENTIAL RESPONSE
FIGURE 4

© Schnabel Engineering 2010 All Rights Reserved

APPENDIX B

PROCEDURES FOR COLLECTING SOIL SAMPLES

Procedure for Collecting Soil Samples
for Laboratory Testing Using the Geoprobe

- MACTEC will collect the soil samples using the Geoprobe hammer impact system. Downforce or percussion will be utilized to advance the sampler to the desired depth to obtain the soil sample.

- Soil cores will be retrieved from the sampler and classified by an on-site geologist or engineer. The one-inch diameter cores are approximately four feet in length and are contained within a pre-cleaned, disposable plastic sleeve.

- Soil samples from the boring soil cores will be placed in pre-labeled, airtight, plastic "twin" bags.

- After several minutes, the gas contained in the "headspace" or void area within one of the twin bags will be tested with a photoionization detector (PID) or flame ionization detector (FID).

- The duplicate of the sample that exhibits the highest headspace reading will be submitted to the laboratory for testing. The remaining portion of the soil core will be utilized for classification purposes.

- The soils will be classified in accordance with the Unified Soils Classification System.

- The soil sample will be placed into laboratory-supplied bottles.

- Sample bottles will be labeled prior to sample collection.

- Caps will be secured on bottles.

- All sample containers will be placed in plastic bags and the bags sealed.

- Documentation, including chain-of-custody record and laboratory analytical request form, will be completed for all samples.

- Samples will be packed in coolers with "bubble wrap" and ice packs for shipment to the laboratory.

- The chain-of-custody record and analytical request form will be placed inside the cooler, which will be sealed with security tape.

- Samples will be sent to the analytical laboratory by overnight courier.

APPENDIX C

SOIL BORING RECORDS

MACTEC	MACTEC Engineering and Consulting, Inc. 3301 Atlantic Avenue Raleigh, North Carolina	Soil Boring Sample Record

MACTEC Project ID: NCDOT Greensboro, Former McCarty Automotive Property	MACTEC Field Representative
MACTEC Project #: 6470-10-0244	Gillis
Date: 11-10-10	
Boring ID: SB-1	

Depth Interval	Soil Description	Time	Headspace Screening Results (in ppm)	Comments
			PID	
0-1	Top 2" concrete; Dark brown to gray clayey fine to medium sand.		1.2	
1-2	Dark brown to gray clayey fine to medium sand.		1.8	
2-3	Dark brown to gray clayey fine to medium sand.		10.8	
3-4	Dark brown to gray clayey fine to medium sand.		20.6	
4-5	Dark brown to gray clayey fine to medium sand.		64.3	
5-6	Dark brown to gray clayey fine to medium sand.	1040	196	Sample
6-7	Dark brown to gray clayey fine to medium sand.		67.8	
7-8	Dark brown to gray clayey fine to medium sand.		64.4	

Prepared by: MJC Date: 12/9/10

Checked by: CBS Date: 12/9/10

MACTEC	MACTEC Engineering and Consulting, Inc. 3301 Atlantic Avenue Raleigh, North Carolina	Soil Boring Sample Record

MACTEC Project ID: NCDOT Greensboro, Former McCarty Automotive Property	**MACTEC Field Representative**
MACTEC Project #: 6470-10-0244	Gillis
Date: 11-10-10	
Boring ID: SB-2	

Depth Interval	Soil Description	Time	Headspace Screening Results (in ppm)	Comments
			PID	
0-1	Top 2" concrete; Dark brown to gray clayey fine to medium sand.	1050	1866	Sample
1-2	Dark brown to gray clayey fine to medium sand.		1158	
2-3	Dark brown to gray clayey fine to medium sand.		1023	
3-4	Dark brown to gray clayey fine to medium sand.		106	
4-5	Dark brown to gray clayey fine to medium sand.		110	
5-6	Dark brown to gray clayey fine to medium sand.		45.2	
6-7	Dark brown to gray clayey fine to medium sand.		22.7	
7-8	Dark brown to gray clayey fine to medium sand.		19.2	

Prepared by: MJG Date: 12/9/10

Checked by: CBS Date: 12/9/10

MACTEC	MACTEC Engineering and Consulting, Inc. 3301 Atlantic Avenue Raleigh, North Carolina	Soil Boring Sample Record

MACTEC Project ID: NCDOT Greensboro, Former McCarty Automotive Property	MACTEC Field Representative
MACTEC Project #: 6470-10-0244	Gillis
Date: 11-10-10	
Boring ID: SB-3	

Depth Interval	Soil Description	Time	Headspace Screening Results (in ppm)	Comments
			PID	
0-1	Top 2" topsoil and gravel; Dark brown to green clayey fine to medium sand.		0.0	
1-2	Dark brown to green clayey fine to medium sand.		0.0	
2-3	Dark brown to green clayey fine to medium sand.		0.0	
3-4	Dark brown to green clayey fine to medium sand.		0.0	
4-5	Dark brown to green clayey fine to medium sand.		0.0	
5-6	Dark brown to green clayey fine to medium sand.		0.0	
6-7	Dark brown to green clayey fine to medium sand.		0.0	
7-8	Dark brown to green clayey fine to medium sand.	1105	0.0	Sample

Prepared by: MJG Date: 12/9/10

Checked by: CBS Date: 12/9/10

MACTEC	MACTEC Engineering and Consulting, Inc. 3301 Atlantic Avenue Raleigh, North Carolina	Soil Boring Sample Record

MACTEC Project ID: NCDOT Greensboro, Former McCarty Automotive Property	**MACTEC Field Representative**
MACTEC Project #: 6470-10-0244	Gillis
Date: 11-10-10	
Boring ID: SB-4	

Depth Interval	Soil Description	Time	Headspace Screening Results (in ppm) PID	Comments
0-1	Dark brown to gray clayey fine to medium sand.		0.0	
1-2	Dark brown to gray clayey fine to medium sand.		0.0	
2-3	Brown clayey, silty fine to medium sand.		0.0	
3-4	Brown clayey, silty fine to medium sand.		0.0	
4-5	Light brown clayey, silty fine to medium sand.		0.0	
5-6	Light brown clayey, silty fine to medium sand.		0.0	
6-7	Light brown clayey, silty fine to medium sand.		0.0	
7-8	Light brown clayey, silty fine to medium sand.	1115	0.0	Sample

Prepared by: MJC Date: 12/9/10

Checked by: CBS Date: 12/9/10

MACTEC	MACTEC Engineering and Consulting, Inc. 3301 Atlantic Avenue Raleigh, North Carolina	Soil Boring Sample Record

MACTEC Project ID: NCDOT Greensboro, Former McCarty Automotive Property	MACTEC Field Representative
MACTEC Project #: 6470-10-0244	Gillis
Date: 11-10-10	
Boring ID: SB-5	

Depth Interval	Soil Description	Time	Headspace Screening Results (in ppm)	Comments
			PID	
0-1	Brown silty, clayey fine to medium sand.		0.0	
1-2	Brown silty, clayey fine to medium sand.		0.0	
2-3	Brown silty, clayey fine to medium sand.		0.0	
3-4	Light brown to reddish brown silty, clayey fine to medium sand.		0.0	
4-5	Light brown to reddish brown silty, clayey fine to medium sand.		0.0	
5-6	Light brown to reddish brown silty, clayey fine to medium sand.		0.0	
6-7	Light brown to reddish brown silty, clayey fine to medium sand.		0.0	
7-8	Light brown to reddish brown silty, clayey fine to medium sand.	1125	0.0	Sample

Prepared by: MJC Date: 12/9/10

Checked by: CBS Date: 12/9/10

MACTEC	MACTEC Engineering and Consulting, Inc. 3301 Atlantic Avenue Raleigh, North Carolina	Soil Boring Sample Record

MACTEC Project ID: NCDOT Greensboro, Former McCarty Automotive Property	MACTEC Field Representative
MACTEC Project #: 6470-10-0244	Gillis
Date: 11-10-10	
Boring ID: SB-6	

Depth Interval	Soil Description	Time	Headspace Screening Results (in ppm)	Comments
			PID	
0-1	Brown silty, clayey fine to medium sand.		0.0	
1-2	Light brown to reddish brown silty, clayey fine to medium sand.		0.0	
2-3	Light brown to reddish brown silty, clayey fine to medium sand.		0.0	
3-4	Light brown to reddish brown silty, clayey fine to medium sand.		0.0	
4-5	Light brown to reddish brown silty, clayey fine to medium sand.		0.0	
5-6	Light brown to reddish brown silty, clayey fine to medium sand.		0.0	
6-7	Light brown to reddish brown silty, clayey fine to medium sand.		0.0	
7-8	Light brown to reddish brown silty, clayey fine to medium sand.	1135	0.0	Sample

Prepared by: MJC Date: 12/9/10

Checked by: CBS Date: 12/9/10

MACTEC	MACTEC Engineering and Consulting, Inc. 3301 Atlantic Avenue Raleigh, North Carolina	Soil Boring Sample Record

MACTEC Project ID: NCDOT Greensboro, Former McCarty Automotive Property	**MACTEC Field Representative**
MACTEC Project #: 6470-10-0244	Gillis
Date: 11-10-10	
Boring ID: SB-7	

Depth Interval	Soil Description	Time	Headspace Screening Results (in ppm) PID	Comments
0-1	Top 2" concrete; Dark brown to gray silty, clayey fine to medium sand with gravel.		0.0	
1-2	Dark brown to gray silty, clayey fine to medium sand with gravel.		0.0	
2-3	Dark brown to gray silty, clayey fine to medium sand with gravel.		0.0	
3-4	Dark brown to gray silty, clayey fine to medium sand with gravel.		0.0	
4-5	Dark brown to gray silty, clayey fine to medium sand with gravel.		0.0	
5-6	Dark brown to gray silty, clayey fine to medium sand with gravel.		0.0	
6-7	Dark brown to gray silty, clayey fine to medium sand with gravel.		0.0	
7-8	Dark brown to gray silty, clayey fine to medium sand with gravel.	1145	0.0	Sample

Prepared by: MJC Date: 12/9/10

Checked by: CJS Date: 12/9/10

MACTEC	MACTEC Engineering and Consulting, Inc. 3301 Atlantic Avenue Raleigh, North Carolina	Soil Boring Sample Record

MACTEC Project ID: NCDOT Greensboro, Former McCarty Automotive Property	MACTEC Field Representative
MACTEC Project #: 6470-10-0244	Gillis
Date: 11-10-10	
Boring ID: SB-8	

Depth Interval	Soil Description	Time	Headspace Screening Results (in ppm)	Comments
			PID	
0-1	Top 2" concrete; Gray silty, clayey fine to medium sand.		0.0	
1-2	Gray silty, clayey fine to medium sand.		0.0	
2-3	Gray silty, clayey fine to medium sand.		0.0	
3-4	Gray silty, clayey fine to medium sand.		3.5	
4-5	Gray silty, clayey fine to medium sand.		5.5	
5-6	Gray silty, clayey fine to medium sand.		6.5	
6-7	Reddish brown to green silty fine to medium sand.		7.1	
7-8	Reddish brown to green silty fine to medium sand.	1200	8.1	Sample

Prepared by: MJG Date: 12/9/10

Checked by: CBS Date: 12/9/10

MACTEC	MACTEC Engineering and Consulting, Inc. 3301 Atlantic Avenue Raleigh, North Carolina	Soil Boring Sample Record

MACTEC Project ID: NCDOT Greensboro, Former McCarty Automotive Property	MACTEC Field Representative
MACTEC Project #: 6470-10-0244	Gillis
Date: 11-10-10	
Boring ID: SB-9	

Depth Interval	Soil Description	Time	Headspace Screening Results (in ppm)	Comments
			PID	
0-1	Top 2" concrete; Green silty, clayey fine to medium sand.		0.0	Minimal recovery from
1-2	Green silty, clayey fine to medium sand.		0.0	4'-8' below ground surface.
2-3	Green silty, clayey fine to medium sand.		0.0	
3-4	Green silty, clayey fine to medium sand.		0.0	
4-5	Green silty, clayey fine to medium sand.		0.0	
5-6	Green silty, clayey fine to medium sand.		0.0	
6-7	Green silty, clayey fine to medium sand.		0.0	
7-8	Green silty, clayey fine to medium sand.	1210	0.0	Sample

Prepared by: MJG Date: 12/9/10

Checked by: CBS Date: 12/9/10

MACTEC	MACTEC Engineering and Consulting, Inc. 3301 Atlantic Avenue Raleigh, North Carolina	Soil Boring Sample Record

MACTEC Project ID: NCDOT Greensboro, Former McCarty Automotive Property	MACTEC Field Representative
MACTEC Project #: 6470-10-0244	Gillis
Date: 11-10-10	
Boring ID: SB-10	

Depth Interval	Soil Description	Time	Headspace Screening Results (in ppm)	Comments
			PID	
0-1	Top 2" concrete; Brown to green clayey fine to medium sand.		0.0	
1-2	Brown to green clayey fine to medium sand.		0.0	
2-3	Brown to green clayey fine to medium sand.		0.0	
3-4	Brown to green clayey fine to medium sand.		0.0	
4-5	Brown to green clayey fine to medium sand.		0.0	
5-6	Brown to green clayey fine to medium sand.		0.0	
6-7	Brown to green clayey fine to medium sand.		1.2	
7-8	Brown to green clayey fine to medium sand.	1240	2.4	Sample

Prepared by: MJC Date: 12/9/10

Checked by: CBS Date: 12/9/10

APPENDIX D

LABORATORY ANALYTICAL REPORTS AND CHAIN-OF-CUSTODY RECORDS

PRISM LABORATORIES, INC.
Full-Service Analytical & Environmental Solutions

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

Case Narrative

12/02/2010

Mactec - Raleigh (NCDOT Project)
Matt Gillis
c/o MACTEC Eng. & Consulting, Inc, 3301 Atlantic Ave.
Raleigh, NC 27604

Project: NCDOT Greensboro
Project No.: WBS 34802.1.1
Lab Submittal Date: 11/11/2010
Prism Work Order: 0110391

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.

Steven H. Syptile

Project Manager

Steven H. Syptile

Reviewed By

Data Qualifiers Key Reference:

A	Insufficient methanol in vials for 5035 analysis. Sample was prepared and analyzed as 5030.
DO	Surrogates diluted out.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
SR	Surrogate recovery outside the QC limits.
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.

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

Sample Receipt Summary

12/02/2010

Prism Work Order: 0110391

Client Sample ID	Lab Sample ID	Matrix	Date Sampled	Date Received
SB-1	0110391-01	Soil	11/10/10	11/11/10
SB-2	0110391-02	Soil	11/10/10	11/11/10
SB-3	0110391-03	Soil	11/10/10	11/11/10
SB-4	0110391-04	Soil	11/10/10	11/11/10
SB-5	0110391-05	Soil	11/10/10	11/11/10
SB-6	0110391-06	Soil	11/10/10	11/11/10
SB-7	0110391-07	Soil	11/10/10	11/11/10
SB-8	0110391-08	Soil	11/10/10	11/11/10
SB-9	0110391-09	Soil	11/10/10	11/11/10
SB-10	0110391-10	Soil	11/10/10	11/11/10

Samples received in good condition at 2.9 degrees C unless otherwise noted.

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

Mactec - Raleigh (NCDOT Project)
Attn: Matt Gillis
c/o MACTEC Eng. & Consulting, Inc, 3301 At
Raleigh, NC 27604

Project: NCDOT Greensboro

Project No.: WBS 34802.1.1
Sample Matrix: Soil

Client Sample ID: SB-1
Prism Sample ID: 0110391-01
Prism Work Order: 0110391
Time Collected: 11/10/10 10:40
Time Submitted: 11/11/10 14:50

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Diesel Range Organics by GC/FID									
Diesel Range Organics	**6.0 J**	**mg/kg dry**	**10**	**1.6**	**1**	**8015C**	**11/16/10 11:11**	**JMV**	**P0K0432**
			Surrogate			Recovery		Control Limits	
			o-Terphenyl			*70 %*		*49-124*	
Gasoline Range Organics by GC/FID									
Gasoline Range Organics	**56**	**mg/kg dry**	**10**	**1.3**	**50**	**8015C**	**11/19/10 1:36**	**HPE**	**P0K0477**
			Surrogate			Recovery		Control Limits	
			a,a,a-Trifluorotoluene			*94 %*		*55-129*	
General Chemistry Parameters									
% Solids	**70.1**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**11/16/10 15:00**	**JAB**	**P0K0460**

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

Mactec - Raleigh (NCDOT Project)
Attn: Matt Gillis
c/o MACTEC Eng. & Consulting, Inc, 3301 At
Raleigh, NC 27604

Project: NCDOT Greensboro

Project No.: WBS 34802.1.1
Sample Matrix: Soil

Client Sample ID: SB-2
Prism Sample ID: 0110391-02
Prism Work Order: 0110391
Time Collected: 11/10/10 10:50
Time Submitted: 11/11/10 14:50

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Diesel Range Organics by GC/FID									
Diesel Range Organics	**150**	**mg/kg dry**	**8.0**	**1.3**	**1**	**8015C**	**11/16/10 11:44**	**JMV**	**P0K0432**
			Surrogate			Recovery		Control Limits	
			o-Terphenyl			*76 %*		*49-124*	
Gasoline Range Organics by GC/FID									A
Gasoline Range Organics	**6800**	**mg/kg dry**	**440**	**57**	**5000**	**8015C**	**11/18/10 10:51**	**HPE**	**P0K0477**
			Surrogate			Recovery		Control Limits	
			a,a,a-Trifluorotoluene			*0 %*		*55-129*	*DO*
General Chemistry Parameters									
% Solids	**87.2**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**11/16/10 15:00**	**JAB**	**P0K0460**

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

Mactec - Raleigh (NCDOT Project)
Attn: Matt Gillis
c/o MACTEC Eng. & Consulting, Inc, 3301 At
Raleigh, NC 27604

Project: NCDOT Greensboro

Project No.: WBS 34802.1.1
Sample Matrix: Soil

Client Sample ID: SB-3
Prism Sample ID: 0110391-03
Prism Work Order: 0110391
Time Collected: 11/10/10 11:05
Time Submitted: 11/11/10 14:50

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Diesel Range Organics by GC/FID									
Diesel Range Organics	**9.7**	**mg/kg dry**	**9.7**	**1.6**	**1**	**8015C**	**11/16/10 12:19**	**JMV**	**P0K0432**
			Surrogate			Recovery		Control Limits	
			o-Terphenyl			*75 %*		*49-124*	
Gasoline Range Organics by GC/FID									
Gasoline Range Organics	BRL	mg/kg dry	6.0	0.79	50	8015C	11/17/10 19:34	HPE	P0K0477
			Surrogate			Recovery		Control Limits	
			a,a,a-Trifluorotoluene			*118 %*		*55-129*	
General Chemistry Parameters									
% Solids	**72.4**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**11/16/10 15:00**	**JAB**	**P0K0460**

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

Mactec - Raleigh (NCDOT Project)
Attn: Matt Gillis
c/o MACTEC Eng. & Consulting, Inc, 3301 At
Raleigh, NC 27604

Project: NCDOT Greensboro

Project No.: WBS 34802.1.1
Sample Matrix: Soil

Client Sample ID: SB-4
Prism Sample ID: 0110391-04
Prism Work Order: 0110391
Time Collected: 11/10/10 11:15
Time Submitted: 11/11/10 14:50

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	10	1.6	1	8015C	11/16/10 12:55	JMV	P0K0432
			Surrogate			Recovery		Control Limits	
			o-Terphenyl			*72 %*		*49-124*	
Gasoline Range Organics by GC/FID									
Gasoline Range Organics	BRL	mg/kg dry	6.8	0.89	50	8015C	11/17/10 20:05	HPE	P0K0477
			Surrogate			Recovery		Control Limits	
			a,a,a-Trifluorotoluene			*168 %*		*55-129*	*SR*
General Chemistry Parameters									
% Solids	**69.5**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**11/16/10 15:00**	**JAB**	**P0K0460**

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

Mactec - Raleigh (NCDOT Project)
Attn: Matt Gillis
c/o MACTEC Eng. & Consulting, Inc, 3301 At
Raleigh, NC 27604

Project: NCDOT Greensboro

Project No.: WBS 34802.1.1
Sample Matrix: Soil

Client Sample ID: SB-5
Prism Sample ID: 0110391-05
Prism Work Order: 0110391
Time Collected: 11/10/10 11:25
Time Submitted: 11/11/10 14:50

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	10	1.6	1	8015C	11/16/10 13:30	JMV	P0K0432
			Surrogate			Recovery		Control Limits	
			o-Terphenyl			*61 %*		*49-124*	
Gasoline Range Organics by GC/FID									
Gasoline Range Organics	BRL	mg/kg dry	6.4	0.84	50	8015C	11/17/10 20:36	HPE	P0K0477
			Surrogate			Recovery		Control Limits	
			a,a,a-Trifluorotoluene			*187 %*		*55-129*	*SR*
General Chemistry Parameters									
% Solids	**68.5**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**11/16/10 15:00**	**JAB**	**P0K0460**

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

Mactec - Raleigh (NCDOT Project)
Attn: Matt Gillis
c/o MACTEC Eng. & Consulting, Inc, 3301 At
Raleigh, NC 27604

Project: NCDOT Greensboro

Project No.: WBS 34802.1.1
Sample Matrix: Soil

Client Sample ID: SB-6
Prism Sample ID: 0110391-06
Prism Work Order: 0110391
Time Collected: 11/10/10 11:35
Time Submitted: 11/11/10 14:50

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	9.9	1.6	1	8015C	11/16/10 18:16	JMV	P0K0432
			Surrogate			Recovery		Control Limits	
			o-Terphenyl			*71 %*		*49-124*	
Gasoline Range Organics by GC/FID									
Gasoline Range Organics	BRL	mg/kg dry	5.8	0.76	50	8015C	11/17/10 21:07	HPE	P0K0477
			Surrogate			Recovery		Control Limits	
			a,a,a-Trifluorotoluene			*115 %*		*55-129*	
General Chemistry Parameters									
% Solids	**71.0**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**11/16/10 15:00**	**JAB**	**P0K0460**

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

Mactec - Raleigh (NCDOT Project)
Attn: Matt Gillis
c/o MACTEC Eng. & Consulting, Inc, 3301 At
Raleigh, NC 27604

Project: NCDOT Greensboro

Project No.: WBS 34802.1.1
Sample Matrix: Soil

Client Sample ID: SB-7
Prism Sample ID: 0110391-07
Prism Work Order: 0110391
Time Collected: 11/10/10 11:45
Time Submitted: 11/11/10 14:50

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Diesel Range Organics by GC/FID									
Diesel Range Organics	**19**	**mg/kg dry**	**8.0**	**1.3**	**1**	**8015C**	**11/16/10 15:17**	**JMV**	**P0K0432**
			Surrogate			Recovery		Control Limits	
			o-Terphenyl			*74 %*		*49-124*	
Gasoline Range Organics by GC/FID									
Gasoline Range Organics	BRL	mg/kg dry	4.6	0.60	50	8015C	11/17/10 21:38	HPE	P0K0477
			Surrogate			Recovery		Control Limits	
			a,a,a-Trifluorotoluene			*127 %*		*55-129*	
General Chemistry Parameters									
% Solids	**87.4**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**11/16/10 15:00**	**JAB**	**P0K0460**

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

Mactec - Raleigh (NCDOT Project)
Attn: Matt Gillis
c/o MACTEC Eng. & Consulting, Inc, 3301 At
Raleigh, NC 27604

Project: NCDOT Greensboro

Project No.: WBS 34802.1.1
Sample Matrix: Soil

Client Sample ID: SB-8
Prism Sample ID: 0110391-08
Prism Work Order: 0110391
Time Collected: 11/10/10 12:00
Time Submitted: 11/11/10 14:50

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Diesel Range Organics by GC/FID									
Diesel Range Organics	**7.7 J**	**mg/kg dry**	**8.6**	**1.4**	**1**	**8015C**	**11/16/10 16:29**	**JMV**	**P0K0432**
			Surrogate			Recovery		Control Limits	
			o-Terphenyl			*66 %*		*49-124*	
Gasoline Range Organics by GC/FID									
Gasoline Range Organics	BRL	mg/kg dry	4.8	0.62	50	8015C	11/17/10 22:09	HPE	P0K0477
			Surrogate			Recovery		Control Limits	
			a,a,a-Trifluorotoluene			*117 %*		*55-129*	
General Chemistry Parameters									
% Solids	**80.6**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**11/16/10 15:00**	**JAB**	**P0K0460**

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

Mactec - Raleigh (NCDOT Project)
Attn: Matt Gillis
c/o MACTEC Eng. & Consulting, Inc, 3301 At
Raleigh, NC 27604

Project: NCDOT Greensboro

Project No.: WBS 34802.1.1
Sample Matrix: Soil

Client Sample ID: SB-9
Prism Sample ID: 0110391-09
Prism Work Order: 0110391
Time Collected: 11/10/10 12:10
Time Submitted: 11/11/10 14:50

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Diesel Range Organics by GC/FID									
Diesel Range Organics	**7.3 J**	**mg/kg dry**	**9.4**	**1.5**	**1**	**8015C**	**11/16/10 15:53**	**JMV**	**P0K0432**
			Surrogate			Recovery		Control Limits	
			o-Terphenyl			*62 %*		*49-124*	
Gasoline Range Organics by GC/FID									
Gasoline Range Organics	BRL	mg/kg dry	4.8	0.63	50	8015C	11/17/10 22:40	HPE	P0K0477
			Surrogate			Recovery		Control Limits	
			a,a,a-Trifluorotoluene			*107 %*		*55-129*	
General Chemistry Parameters									
% Solids	**73.9**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**11/16/10 15:00**	**JAB**	**P0K0460**

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

Mactec - Raleigh (NCDOT Project)
Attn: Matt Gillis
c/o MACTEC Eng. & Consulting, Inc, 3301 At
Raleigh, NC 27604

Project: NCDOT Greensboro

Project No.: WBS 34802.1.1
Sample Matrix: Soil

Client Sample ID: SB-10
Prism Sample ID: 0110391-10
Prism Work Order: 0110391
Time Collected: 11/10/10 12:40
Time Submitted: 11/11/10 14:50

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Diesel Range Organics by GC/FID									
Diesel Range Organics	**4.1 J**	**mg/kg dry**	**9.7**	**1.6**	**1**	**8015C**	**11/16/10 17:40**	**JMV**	**P0K0432**
			Surrogate			Recovery		Control Limits	
			o-Terphenyl			*58 %*		*49-124*	
Gasoline Range Organics by GC/FID									
Gasoline Range Organics	BRL	mg/kg dry	5.5	0.72	50	8015C	11/17/10 23:11	HPE	P0K0477
			Surrogate			Recovery		Control Limits	
			a,a,a-Trifluorotoluene			*121 %*		*55-129*	
General Chemistry Parameters									
% Solids	**71.8**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**11/16/10 15:00**	**JAB**	**P0K0460**

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

Mactec - Raleigh (NCDOT Project) Project: NCDOT Greensboro Prism Work Order: 0110391
Attn: Matt Gillis Time Submitted: 11/11/2010 2:50:00PM
c/o MACTEC Eng. & Consulting, Inc, 3301 A Project No: WBS 34802.1.1
Raleigh, NC 27604

Gasoline Range Organics by GC/FID - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0K0477 - 5035										
Blank (P0K0477-BLK1)				Prepared & Analyzed: 11/17/10						
Gasoline Range Organics	BRL	5.0	mg/kg wet							
Surrogate: a,a,a-Trifluorotoluene	*5.50*		*mg/kg wet*	*5.00*		*110*	*55-129*			
LCS (P0K0477-BS1)				Prepared & Analyzed: 11/17/10						
Gasoline Range Organics	44.4	5.0	mg/kg wet	50.0		89	67-116			
Surrogate: a,a,a-Trifluorotoluene	*5.50*		*mg/kg wet*	*5.00*		*110*	*55-129*			
LCS Dup (P0K0477-BSD1)				Prepared & Analyzed: 11/17/10						
Gasoline Range Organics	44.6	5.0	mg/kg wet	50.0		89	67-116	0.7	200	
Surrogate: a,a,a-Trifluorotoluene	*5.55*		*mg/kg wet*	*5.00*		*111*	*55-129*			
Matrix Spike (P0K0477-MS1)		**Source: 0110391-01**		Prepared & Analyzed: 11/17/10						
Gasoline Range Organics	102	7.1	mg/kg dry	71.3	56.3	64	57-113			
Surrogate: a,a,a-Trifluorotoluene	*9.91*		*mg/kg dry*	*7.13*		*139*	*55-129*			*SR*
Matrix Spike Dup (P0K0477-MSD1)		**Source: 0110391-01**		Prepared & Analyzed: 11/17/10						
Gasoline Range Organics	100	7.1	mg/kg dry	71.3	56.3	61	57-113	2	23	
Surrogate: a,a,a-Trifluorotoluene	*9.84*		*mg/kg dry*	*7.13*		*138*	*55-129*			*SR*

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

Mactec - Raleigh (NCDOT Project) Project: NCDOT Greensboro Prism Work Order: 0110391
Attn: Matt Gillis Time Submitted: 11/11/2010 2:50:00PM
c/o MACTEC Eng. & Consulting, Inc, 3301 A Project No: WBS 34802.1.1
Raleigh, NC 27604

Diesel Range Organics by GC/FID - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0K0432 - 3545A										
Blank (P0K0432-BLK1)				Prepared & Analyzed: 11/15/10						
Diesel Range Organics	BRL	7.0	mg/kg wet							
Surrogate: o-Terphenyl	*1.28*		*mg/kg wet*	*1.60*		*80*	*49-124*			
LCS (P0K0432-BS1)				Prepared & Analyzed: 11/15/10						
Diesel Range Organics	60.2	7.0	mg/kg wet	79.9		75	55-109			
Surrogate: o-Terphenyl	*1.71*		*mg/kg wet*	*1.60*		*107*	*49-124*			
LCS Dup (P0K0432-BSD1)				Prepared & Analyzed: 11/15/10						
Diesel Range Organics	58.6	7.0	mg/kg wet	79.9		73	55-109	3	200	
Surrogate: o-Terphenyl	*1.73*		*mg/kg wet*	*1.60*		*108*	*49-124*			
Matrix Spike (P0K0432-MS1)		**Source: 0110391-04**		Prepared: 11/15/10 Analyzed: 11/16/10						
Diesel Range Organics	78.1	10	mg/kg dry	115	BRL	68	50-117			
Surrogate: o-Terphenyl	*2.20*		*mg/kg dry*	*2.29*		*96*	*49-124*			
Matrix Spike Dup (P0K0432-MSD1)		**Source: 0110391-04**		Prepared: 11/15/10 Analyzed: 11/16/10						
Diesel Range Organics	84.3	10	mg/kg dry	115	BRL	73	50-117	8	24	
Surrogate: o-Terphenyl	*2.43*		*mg/kg dry*	*2.30*		*106*	*49-124*			

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

Mactec - Raleigh (NCDOT Project) Project: NCDOT Greensboro Prism Work Order: 0110391
Attn: Matt Gillis Time Submitted: 11/11/2010 2:50:00PM
c/o MACTEC Eng. & Consulting, Inc, 3301 A Project No: WBS 34802.1.1
Raleigh, NC 27604

General Chemistry Parameters - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0K0460 - NO PREP										
Blank (P0K0460-BLK1)				Prepared & Analyzed: 11/16/10						
% Solids	100	0.100	% by Weight							
Duplicate (P0K0460-DUP1)		**Source: 0110391-08**		Prepared & Analyzed: 11/16/10						
% Solids	75.9	0.100	% by Weight		80.6			6	20	

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

Sample Extraction Data

Prep Method: 3545A

Lab Number	Batch	Initial	Final	Date
0110391-01	P0K0432	25.01 g	1 mL	11/15/10
0110391-02	P0K0432	25.03 g	1 mL	11/15/10
0110391-03	P0K0432	25.04 g	1 mL	11/15/10
0110391-04	P0K0432	25.07 g	1 mL	11/15/10
0110391-05	P0K0432	25.04 g	1 mL	11/15/10
0110391-06	P0K0432	25.02 g	1 mL	11/15/10
0110391-07	P0K0432	25.08 g	1 mL	11/15/10
0110391-08	P0K0432	25.11 g	1 mL	11/15/10
0110391-09	P0K0432	25.17 g	1 mL	11/15/10
0110391-10	P0K0432	25.12 g	1 mL	11/15/10

Prep Method: 5035

Lab Number	Batch	Initial	Final	Date
0110391-01	P0K0477	3.56 g	5 mL	11/17/10
0110391-02	P0K0477	6.49 g	5 mL	11/17/10
0110391-03	P0K0477	5.71 g	5 mL	11/17/10
0110391-04	P0K0477	5.26 g	5 mL	11/17/10
0110391-05	P0K0477	5.66 g	5 mL	11/17/10
0110391-06	P0K0477	6.03 g	5 mL	11/17/10
0110391-07	P0K0477	6.18 g	5 mL	11/17/10
0110391-08	P0K0477	6.48 g	5 mL	11/17/10
0110391-09	P0K0477	7.02 g	5 mL	11/17/10
0110391-10	P0K0477	6.31 g	5 mL	11/17/10

NO PREP

Lab Number	Batch	Initial	Final	Date
0110391-01	P0K0460	30 g	30 mL	11/16/10
0110391-02	P0K0460	30 g	30 mL	11/16/10
0110391-03	P0K0460	30 g	30 mL	11/16/10
0110391-04	P0K0460	30 g	30 mL	11/16/10
0110391-05	P0K0460	30 g	30 mL	11/16/10
0110391-06	P0K0460	30 g	30 mL	11/16/10
0110391-07	P0K0460	30 g	30 mL	11/16/10
0110391-08	P0K0460	30 g	30 mL	11/16/10
0110391-09	P0K0460	30 g	30 mL	11/16/10
0110391-10	P0K0460	30 g	30 mL	11/16/10

This report should not be reproduced, except in its entirety, without the written consent of Prism Laboratories, Inc.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC.
Full-Service Analytical & Environmental Solutions

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

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1 QUOTE # TO ENSURE PROPER BILLING: ______

Client Company Name: MACTEC
Report To/Contact Name: Matthew Gillis
Reporting Address: 3301 Atlantic Ave Raleigh NC 27604
Phone: 9198760416 Fax (Yes) (No): ______
Email (Yes) (No) Email Address: mjgillis@mactec.com
EDD Type: PDF ✓ Excel ____ Other ____
Site Location Name: NCDOT Greensboro Former McCarty Automotive
Site Location Physical Address: 4601 High Point Road

Project Name: NCDOT Greensboro Former McCarty Automotive
Short Hold Analysis: (Yes) (No) UST Project: (Yes) (No)
*Please ATTACH any project specific reporting (QC LEVEL I II III IV) provisions and/or QC Requirements
Invoice To: NCDOT
Address: U-2412B TIP No 34802.1.1
Purchase Order No./Billing Reference ______
Requested Due Date ☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 4 Days ☐ 5 Days
"Working Days" ☐ 6-9 Days ☒ Standard 10 days ☐ Rush Work Must Be Pre-Approved
Samples received after 15:00 will be processed next business day.
Turnaround time is based on business days, excluding weekends and holidays.
(SEE REVERSE FOR TERMS & CONDITIONS REGARDING SERVICES RENDERED BY PRISM LABORATORIES, INC. TO CLIENT)

LAB USE ONLY

	YES	NO	N/A
Samples INTACT upon arrival?	X		
Received ON WET ICE? Temp 2.9	X		
PROPER PRESERVATIVES indicated?	X		
Received WITHIN HOLDING TIMES?	X		
CUSTODY SEALS INTACT?			X
VOLATILES rec'd W/OUT HEADSPACE?			X
PROPER CONTAINERS used?	X		

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

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	*TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	DRO	GRO						REMARKS	PRISM LAB ID NO.
SB-1	11-10-10	1040	Soil	C + VOA	4		None + methanol	X	X							01
SB-2	↓	1050	↓	↓	↓		↓	X	X							02
SB-3	↓	1105	↓	↓	↓		↓	X	X							03
SB-4	↓	1115	↓	↓	↓		↓	X	X							04
SB-5	↓	1125	↓	↓	↓		↓	X	X							05
SB-6	↓	1135	↓	↓	↓		↓	X	X							06
SB-7	↓	1145	↓	↓	↓		↓	X	X							07
SB-8	↓	1200	↓	↓	↓		↓	X	X							08
SB-9	↓	1210	↓	↓	↓		↓	X	X							09
SB-10	↓	1240						X	X							10

Sampler's Signature [signature] Sampled By (Print Name) Matthew Gillis Affiliation MACTEC

PRESS DOWN FIRMLY - 3 COPIES

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

Relinquished By: (Signature)	Received By: (Signature)	Date	Military/Hours
[signature]	[signature]	11/11/10	1040
[signature]	[signature]	11/11/10	1050
[signature]	Received For Prism Laboratories By: [signature]	11/11/10	1308

Method of Shipment: NOTE: ALL SAMPLE COOLERS SHOULD BE TAPED SHUT WITH CUSTODY SEALS FOR TRANSPORTATION TO THE LABORATORY. SAMPLES ARE NOT ACCEPTED AND VERIFIED AGAINST COC UNTIL RECEIVED AT THE LABORATORY.
☐ Fed Ex ☐ UPS ☐ Hand-delivered ☐ Prism Field Service ☐ Other ______

COC Group No. 0110391

Additional Comments: [signature] [signature] 11/11/10 1450

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

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

[signature] 11/11/10 @ 1450

SEE REVERSE FOR TERMS & CONDITIONS

ORIGINAL

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