Preliminary Site Assessment

NCDOT Project U-5008

Charlotte - Sugar Creek Grade Separation

Parcel: Roy Carver Property

Owner: Roy Carver Jr. and Earl Carver

905 and 911 E. Sugar Creek Road

Charlotte, Mecklenburg County, North Carolina

WBS Element: 41141.1.1

January 3, 2014

Terracon Project No. 71137774

Prepared for:

North Carolina Department of Transportation (NCDOT)

Geotechnical Engineering Unit

Prepared by:

Terracon Consultants, Inc.

Charlotte, North Carolina

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January 3, 2014

Terracon

North Carolina Department of Transportation (NCDOT)
Geotechnical Engineering Unit
GeoEnvironmental Section
1589 Mail Service Center
Raleigh, North Carolina 27699-1589

Attn: Mr. Craig Haden, Geotechnical Project Manager

Re: Preliminary Site Assessment (PSA)
U-5008 – Sugar Creek Grade Separation
Parcel: Roy Carver Property
905 and 911 E. Sugar Creek Road
Charlotte, Mecklenburg County, North Carolina
Terracon Project No. 71137774
WBS Element: 41141.1.1

Dear Mr. Haden:

Terracon Consultants, Inc. (Terracon) is pleased to submit a Preliminary Site Assessment (PSA) report for the above referenced site. This assessment was performed in accordance with our Proposal for Preliminary Site Assessments (Terracon Proposal No. 71137E099 dated August 30, 2013). This report includes the findings of our investigation and provides our conclusions and recommendations.

Terracon appreciates the opportunity to provide these services to NCDOT. If you have any questions concerning this report or need additional information, please contact us at 704-509-1777.

Sincerely,

Terracon Consultants, Inc.

Analee Farrell, E.I.
Staff Environmental Professional

Christopher L. Corbitt, PG
Senior Geologist

Attachments

PRELIMINARY SITE ASSESSMENT

U-5008 – SUGAR CREEK GRADE SEPARATION
PARCEL – ROY CARVER PROPERTY
905 and 911 E. SUGAR CREEK ROAD
CHARLOTTE, MECKLENBURG COUNTY, NORTH CAROLINA

1.0 INTRODUCTION

1.1 Site Description

Site Name	Roy Carver Property
Site Location/Address	905 and 911 E. Sugar Creek Road, Charlotte, Mecklenburg County, North Carolina
General Site Description	The site is occupied by a used car sales lot and an auto detailing/tire repair business. Several small structures are located on the site. Remaining portions of the site are concrete or asphalt-paved. Reportedly, a former fuel dispenser island was noted on the site.

1.2 Site History

Currently, the Carver property is operated as a used car sales lot and auto detailing and tire repair facility. Reportedly, a former fuel dispenser island was observed on the property. According to information reviewed from the North Carolina Department of Environment and Natural Resources (NCDENR) UST database, there are no known USTs or groundwater incidents associated with this property.

1.3 Scope of Work

At your request, Terracon is completing a scope of work in accordance with the NCDOT's Request for Technical and Cost Proposal dated August 7, 2013 and Terracon's Proposal for Preliminary Site Assessment (Proposal No.71137E099) dated August 30, 2013. The scope of work included a geophysical investigation, collection of six soil samples for laboratory analysis, and preparation of a report documenting our soil investigation activities.

1.4 Standard of Care

Terracon's services were performed in a manner consistent with generally accepted practices of the profession undertaken in similar studies in the same geographical area during the same time period. Terracon makes no warranties, either expressed or implied, regarding the findings, conclusions or recommendations. Please note that Terracon does not warrant the work of laboratories, regulatory agencies or other third parties supplying information used in the preparation of the report. These PSA services were performed in accordance with the scope of work authorized by you, our client, as reflected in our proposal and were not conducted in

accordance with ASTM E1903-97.

1.5 Additional Scope Limitations

Findings, conclusions and recommendations resulting from these services are based upon information derived from the on-site activities and other services performed under this scope of work; such information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, undetectable or not present during these services, as such, we cannot represent that the site is free of hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during this PSA. Subsurface conditions may vary from those encountered at specific borings or wells or during other surveys, tests, assessments, investigations or exploratory services; the data, interpretations, findings, and our recommendations are based solely upon data obtained at the time and within the scope of these services.

1.6 Reliance

This report has been prepared for the exclusive use of our client, the North Carolina Department of Transportation (NCDOT). Authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the site) is prohibited without the expressed written consent of the client and Terracon.

2.0 FIELD ACTIVITIES

The following PSA activities are presented in the order that they were conducted in the field on November 5, 2013 and November 20, 2013. Exhibit 1 presents the general boundaries and topography of the site on portions of the Charlotte East, North Carolina USGS topographic quadrangle map dated 1967 and the Derita, North Carolina USGS topographic quadrangle map dated 1993. Exhibit 2 is a site layout plan that depicts the approximate locations of the site features, soil boring locations and analytical data.

2.1 Geophysical Survey

On November 5, 2013, Pyramid Environmental conducted a geophysical investigation at the site in an effort to determine if unknown, metallic underground storage tanks (USTs) were present beneath the proposed right-of-way (ROW) area. The geophysical investigation included an electromagnetic (EM) induction survey using a Geonics EM-61 MK1 metal detection instrument followed by a ground penetrating radar (GPR) survey using a GSSI SIR-2000 unit.

The geophysical investigation did not reveal the presence of probable metallic USTs in the area of investigation identified for this site; however, some areas of the site may contain buried debris. A copy of the geophysical report that includes a summary of the field findings is

included in Appendix C.

2.2 Soil Sampling

Based on the findings of the geophysical investigation, Terracon directed the advancement of six soil borings (CB-1 through CB-6) along the northern and western boundaries of the Carver property on November 20, 2013. The borings were completed by Probe Technology, Inc., a North Carolina licensed driller using a Geoprobe® direct-push rig. The drilling equipment was cleaned prior to beginning the project and before the advancement of each boring.

The soil borings were advanced within grassed and paved areas within the proposed right of way along Sugar Creek Road and Redwood Avenue. Soil samples were collected in 5-foot, disposable, acetate sleeves and were observed to document soil lithology, color, moisture content, and sensory evidence of impairment. Soil samples were placed in re-sealable plastic bags that were set aside for a sufficient amount of time to allow volatilization of organic compounds that may have been present in the soils. The soil samples were then screened using a field-portable *MiniRAE 3000* Photo-Ionization Detector (PID) by inserting the probe tip into the headspace of the bag. The PID readings and soil sample depths are included on individual Boring Logs in Appendix A and in Table 1.

The borings were advanced to depths of approximately 10 feet below ground surface (bgs). Based on our observations, soils obtained from the acetate sleeves were separated into approximately 5-foot intervals but discreet samples were collected throughout each interval. Groundwater was not encountered in any of the borings advanced at the site.

The soil samples were collected and placed in laboratory prepared glassware and placed on ice in a cooler which was secured with a custody seal. The sample cooler and completed chain-of-custody forms were relinquished to QROS in Raleigh, North Carolina.

2.3 Subsurface Conditions

Borings CB-1 through CB-6 were advanced to a depth of 10 feet bgs. The soils mostly consisted of dark brown to light brown and orange brown clayey silt. No petroleum odors were noted in any of the screened samples. Elevated PID readings were reported in most of the borings during the site investigation. Soil samples obtained from the boring interval with the highest PID readings were submitted for laboratory analysis. For borings with no elevated PID readings, soil samples were typically submitted from the deepest sampling interval in each boring.

3.0 LABORATORY ANALYSIS

The soil samples were submitted to QROS for rapid laboratory analysis of Gasoline Range Organics (GRO) and Diesel Range Organics (DRO). If detected petroleum (DRO and GRO)

constituents exceeded the regulatory action level (10 mg/kg) then additional soil samples were submitted to Pace Analytical Services (Pace) in Huntersville, North Carolina for analysis of volatile organic compounds (VOCs) by EPA Method 8260 and semi-volatile organic compounds (SVOCs) by EPA Method 8270. Please refer to Appendix D for the laboratory analytical reports.

4.0 DATA EVALUATION

4.1 Soil Sample Analytical Results and Interpretation

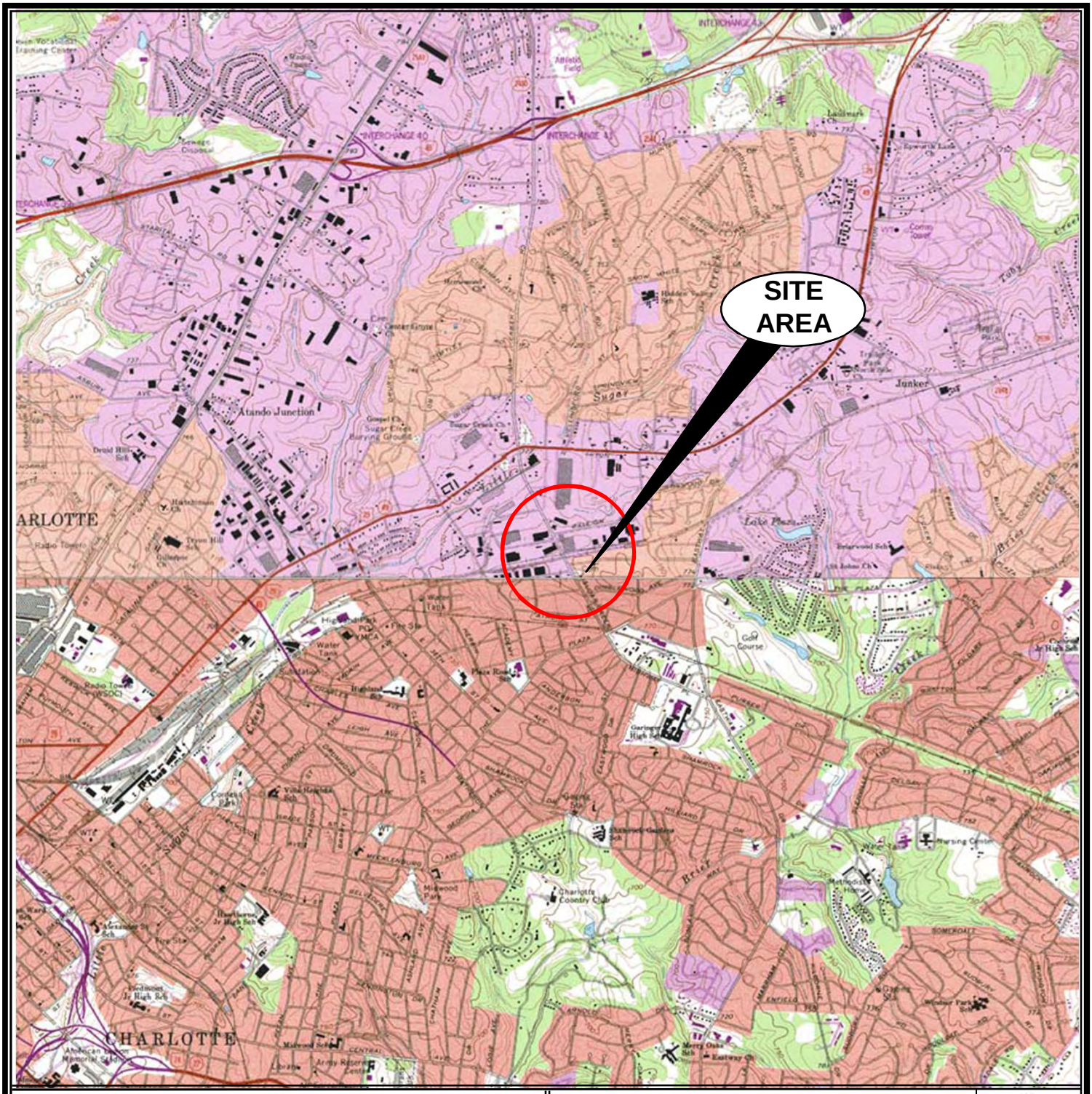
Based on the laboratory results, diesel range organics were detected above the laboratory reporting limits in samples CB-1, CB-2 and CB-4. None of the samples with detected concentrations of diesel range organics exceeded the 10 mg/kg regulatory action level; thus, no samples were submitted for analysis of VOCs or SVOCs. A summary of the laboratory results is provided in Table 1.

5.0 CONCLUSIONS

The findings of this investigation are discussed below:

- The geophysical investigation did not identify probable metallic USTs in the area of investigation identified for this site; however, some areas of the site may contain buried debris.
- Six soil borings were advanced to depths of approximately 10 feet bgs.
- No gasoline range organics were detected above the laboratory reporting limits in the six soil samples obtained from the Carver property.
- Diesel range organics were detected above the laboratory reporting limits in samples CB-1, CB-2 and CB-4. None of the samples with detected concentrations of diesel range organics exceeded the 10 mg/kg regulatory action level.
- None of the samples were submitted for analysis of VOCs or SVOCs.
- Groundwater was not encountered in the soil borings advanced on the site.
- Based on the laboratory analytical results, no areas of contamination were identified in the soils within the project area.

FIGURES
EXHIBIT 1 - TOPOGRAPHIC MAP
EXHIBIT 2 – SITE DIAGRAM WITH SOIL BORING LOCATIONS AND ANALYTICAL DATA



USGS TOPOGRAPHIC MAP

ROY CARVER PROPERTY
905 AND 911 E. SUGAR CREEK ROAD

CHARLOTTE, NORTH CAROLINA

Terracon

N

PROJECT NO.: 71137774	
DATE: December 2013	
DRAWN BY: ALF	
SCALE: 1" = 2000'	EXHIBIT NO. 1

REFERENCE: USGS Topographic Map; Derita, North Carolina Quadrangle; dated 1993; Charlotte East, North Carolina Quadrangle; dated 1967, photorevised 1988.

PROJECT REFERENCE NO.	EXHIBIT
41141.1.1 (U–5008)	2

SITE DIAGRAM WITH SOIL BORING LOCATIONS AND ANALYTICAL DATA

ROY CARVER Jr. & EARL CARVER TRUSTEE PROPERTY
905 E SUGAR CREEK ROAD
MECKLENBURG COUNTY

LEGEND

- PROPERTY LINE
- EXISTING RIGHT OF WAY LINE
- PROPOSED RIGHT OF WAY LINE WITH IRON PIN AND CAP MARKER
- PROPOSED CONSTRUCTION EASEMENT
- PROPOSED EDGE OF TRAVEL
- PROPOSED CUT / FILL LINE
- PROPOSED PERMANENT UTILITY EASEMENT
- PROPOSED PERMANENT DRAINAGE EASEMENT
- PROPOSED CATCH BASIN
- PROPOSED DRAINAGE PIPING
- ESTIMATED SOIL CONTAMINATION
- SOIL AND/OR GROUNDWATER SAMPLE LOCATION

CB-6
NO CONSTITUENTS REPORTED ABOVE STANDARD[1,2]

CB-5
NO CONSTITUENTS REPORTED ABOVE STANDARD[1,2]

CB-4
NO CONSTITUENTS REPORTED ABOVE STANDARD[1,2]

CB-3
NO CONSTITUENTS REPORTED ABOVE STANDARD[1,2]

CB-2
NO CONSTITUENTS REPORTED ABOVE STANDARD[1,2]

CB-1
NO CONSTITUENTS REPORTED ABOVE STANDARD[1,2]

NORTHMORE PROPERTIES, INC
DB 2701 PG 225

MORE INCORPORATED
DB 2937 PG 069

ANDROMACHE E. TZANNIS
DB 9077 PG 359
PB 5 PG 273

ROY CARVER, JR. & EARL CARVER TRUSTEE
DB 19664 PG 403
PB 5 PG 273

EARL CARVER TRUSTEE
DB 19664 PG 403
PB 5 PG 273

TRUSTEES OF ZION PRIMITIVE BAPTIST CHURCH
DB 3438 PG 233
PB 3 PG 206

WILLIAM R HENDERSON
DB 24086 PG 190
PB 5 PG 273

BELLSOUTH

SUGAR CREEK RD

DINGLEWOOD AVENUE 24' BST

REDWOOD AVENUE 22' BST

NOTES:

1. MAXIMUM SOIL CONTAMINANT CONCENTRATION LEVELS (MSCCs)
2. NCDENR UST SECTION ACTION LEVEL

0 50 100
FEET

TABLES

TABLE 1 – SOIL SAMPLING ANALYTICAL RESULTS SUMMARY (GRO AND DRO)

TABLE 1

Soil Sampling Analytical Results Summary

GRO and DRO

NCDOT Project U-5008 - Charlotte - Sugar Creek Grade Separation

Parcel: Roy Carver Property

Sample ID#	PID (ppm)	Contaminant of Concern ⟶		GRO (C5-C10)	DRO (C10-C35)	TPH (C5-C35)
		Date Collected (mm/dd/yy)	Sample Depth (ft BGS)			
CB-1	146.3	11/20/13	0-5	ND	5.1	5.1
CB-2	184.8	11/20/13	5-10	ND	3.3	3.3
CB-3	200.3	11/20/13	5-10	ND	ND	ND
CB-4	140.5	11/20/13	5-10	ND	6.5	6.5
CB-5	137.2	11/20/13	0-5	ND	ND	ND
CB-6	0.0	11/20/13	5-10	ND	ND	ND
NCDENR Regulatory Action Limit (mg/kg)				10	10	10

- ND = Not Detected in concentrations above the reporting limit.
- ft. BGS = feet below ground surface
- Laboratory results reported in milligrams per kilogram (mg/kg).
- Boldface type and yellow shading indicate sample contaminant exceeds regulatory level
- PID = Photo-Ionization Detector

APPENDIX A
BORING LOGS

SOIL BORING LOG

PROJECT NAME: Roy Carver Property	SOIL BORING I.D.: CB-1
PROJECT NO.: 71137774	DATE(S) DRILLED: November 20, 2013
PROJECT LOCATION: 905 E. Sugar Creek Road Charlotte, North Carolina	DRILLING CONTR.: Probe Technology
	DRILL METHOD: Direct Push
	BORING DIAMETER: 2 inches
CLIENT: North Carolina Department of Transportation	SAMPLING METHOD/INTERVAL: GP (5-Foot)
LOGGED BY: S. Alex Chinery	REMARKS: BGS = below grade surface

DESCRIPTIVE LOG

SAMPLE INTERVAL	SAMPLE REC. (IN.)	BLOWS PER 6"	PID/FID (ppm)	GRAPHIC COLUMN	DEPTH (FT)	DESCRIPTION OF SOIL
					0.0	light brown/orange clayey silt
					0.5	
					1.0	
					1.5	
					2.0	
0 - 5.0		NA	146.3		2.5	
					3.0	
					3.5	
					4.0	
					4.5	
					5.0	
					5.5	dark brown/orange clayey silt
					6.0	
					6.5	
					7.0	
5.0-10.0		NA	45.2		7.5	
					8.0	
					8.5	
					9.0	
					9.5	
					10.0	BORING TERMINATED AT 10 FEET BGS
					10.5	
					11.0	
					11.5	
					12.0	
					15.5	
					13.0	
					13.5	
					14.0	
					14.5	
					15.0	
					15.5	
					16.0	

DRILLING METHODS
AR - AIR ROTARY
CFA - CONTINUOUS FLIGHT AUGER
DC - DRIVEN CASING
HA - HAND AUGER
HSA - HOLLOW STEM AUGER
MD - MUD DRILLING
RC - ROCK CORING
WR - WATER ROTARY

SAMPLING METHODS
SS - SPLIT SPOON
ST - SHELBY TUBE
GP - GEOPROBE

* - Sample collected for analysis
ND = <1 ppm

Terracon

SOIL BORING LOG

PROJECT NAME: Roy Carver Property	SOIL BORING I.D.: CB-2
PROJECT NO.: 71137774	DATE(S) DRILLED: November 20, 2013
PROJECT LOCATION: 905 E. Sugar Creek Road Charlotte, North Carolina	DRILLING CONTR.: Probe Technology
	DRILL METHOD: Direct Push
	BORING DIAMETER: 2 inches
CLIENT: North Carolina Department of Transportation	SAMPLING METHOD/INTERVAL: GP (5-Foot)
LOGGED BY: S. Alex Chinery	REMARKS: BGS = below grade surface

DESCRIPTIVE LOG

SAMPLE INTERVAL	SAMPLE REC. (IN.)	BLOWS PER 6"	PID/FID (ppm)	GRAPHIC COLUMN	DEPTH (FT)	DESCRIPTION OF SOIL
					0.0	brown/orange clayey silt
					0.5	
					1.0	
					1.5	
					2.0	
0 - 5.0		NA	173.3		2.5	
					3.0	
					3.5	
					4.0	
					4.5	
					5.0	
					5.5	
					6.0	
					6.5	
					7.0	
5.0-10.0		NA	184.8		7.5	
					8.0	
					8.5	
					9.0	
					9.5	
					10.0	BORING TERMINATED AT 10 FEET BGS
					10.5	
					11.0	
					11.5	
					12.0	
					15.5	
					13.0	
					13.5	
					14.0	
					14.5	
					15.0	
					15.5	
					16.0	

DRILLING METHODS
AR - AIR ROTARY
CFA - CONTINUOUS FLIGHT AUGER
DC - DRIVEN CASING
HA - HAND AUGER
HSA - HOLLOW STEM AUGER
MD - MUD DRILLING
RC - ROCK CORING
WR - WATER ROTARY

SAMPLING METHODS
SS - SPLIT SPOON
ST - SHELBY TUBE
GP - GEOPROBE

* - Sample collected for analysis
ND = <1 ppm

Terracon

SOIL BORING LOG

PROJECT NAME: Roy Carver Property	SOIL BORING I.D.: CB-3
PROJECT NO.: 71137774	DATE(S) DRILLED: November 20, 2013
PROJECT LOCATION: 905 E. Sugar Creek Road Charlotte, North Carolina	DRILLING CONTR.: Probe Technology
	DRILL METHOD: Direct Push
	BORING DIAMETER: 2 inches
CLIENT: North Carolina Department of Transportation	SAMPLING METHOD/INTERVAL: GP (5-Foot)
LOGGED BY: S. Alex Chinery	REMARKS: BGS = below grade surface

DESCRIPTIVE LOG

SAMPLE INTERVAL	SAMPLE REC. (IN.)	BLOWS PER 6"	PID/FID (ppm)	GRAPHIC COLUMN	DEPTH (FT)	DESCRIPTION OF SOIL
					0.0	dark brown clayey silt
					0.5	
					1.0	
					1.5	
					2.0	
0 - 5.0		NA	96.3		2.5	
					3.0	
					3.5	
					4.0	
					4.5	
					5.0	
					5.5	tan/brown/orange clayey silt
					6.0	
					6.5	
					7.0	
5.0-10.0		NA	200.3		7.5	
					8.0	
					8.5	
					9.0	
					9.5	
					10.0	BORING TERMINATED AT 10 FEET BGS
					10.5	
					11.0	
					11.5	
					12.0	
					15.5	
					13.0	
					13.5	
					14.0	
					14.5	
					15.0	
					15.5	
					16.0	

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WR - WATER ROTARY

SAMPLING METHODS
SS - SPLIT SPOON
ST - SHELBY TUBE
GP - GEOPROBE

* - Sample collected for analysis
ND = <1 ppm

Terracon

SOIL BORING LOG

PROJECT NAME: Roy Carver Property	SOIL BORING I.D.: CB-4
PROJECT NO.: 71137774	DATE(S) DRILLED: November 20, 2013
PROJECT LOCATION: 905 E. Sugar Creek Road Charlotte, North Carolina	DRILLING CONTR.: Probe Technology
	DRILL METHOD: Direct Push
	BORING DIAMETER: 2 inches
CLIENT: North Carolina Department of Transportation	SAMPLING METHOD/INTERVAL: GP (5-Foot)
LOGGED BY: S. Alex Chinery	REMARKS: BGS = below grade surface

DESCRIPTIVE LOG

SAMPLE INTERVAL	SAMPLE REC. (IN.)	BLOWS PER 6"	PID/FID (ppm)	GRAPHIC COLUMN	DEPTH (FT)	DESCRIPTION OF SOIL
					0.0	tan/brown/orange clayey silt
					0.5	
					1.0	
					1.5	
					2.0	
0 - 5.0		NA	40.9		2.5	
					3.0	
					3.5	
					4.0	
					4.5	
					5.0	
					5.5	dark brown/orange clayey silt
					6.0	
					6.5	
					7.0	
5.0-10.0		NA	140.5		7.5	
					8.0	
					8.5	
					9.0	
					9.5	
					10.0	BORING TERMINATED AT 10 FEET BGS
					10.5	
					11.0	
					11.5	
					12.0	
					15.5	
					13.0	
					13.5	
					14.0	
					14.5	
					15.0	
					15.5	
					16.0	

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WR - WATER ROTARY

SAMPLING METHODS
SS - SPLIT SPOON
ST - SHELBY TUBE
GP - GEOPROBE

* - Sample collected for analysis
ND = <1 ppm

Terracon

SOIL BORING LOG

PROJECT NAME: Roy Carver Property	SOIL BORING I.D.: CB-5
PROJECT NO.: 71137774	DATE(S) DRILLED: November 20, 2013
PROJECT LOCATION: 905 E. Sugar Creek Road Charlotte, North Carolina	DRILLING CONTR.: Probe Technology
	DRILL METHOD: Direct Push
	BORING DIAMETER: 2 inches
CLIENT: North Carolina Department of Transportation	SAMPLING METHOD/INTERVAL: GP (5-Foot)
LOGGED BY: S. Alex Chinery	REMARKS: BGS = below grade surface

DESCRIPTIVE LOG

SAMPLE INTERVAL	SAMPLE REC. (IN.)	BLOWS PER 6"	PID/FID (ppm)	GRAPHIC COLUMN	DEPTH (FT)	DESCRIPTION OF SOIL
					0.0	light brown/tan clayey silt
					0.5	
					1.0	
					1.5	
					2.0	
0 - 5.0		NA	137.2		2.5	
					3.0	
					3.5	
					4.0	
					4.5	
					5.0	
					5.5	dark brown/tan clayey silt
					6.0	
					6.5	
					7.0	
5.0-10.0		NA	49.8		7.5	
					8.0	
					8.5	
					9.0	
					9.5	
					10.0	BORING TERMINATED AT 10 FEET BGS
					10.5	
					11.0	
					11.5	
					12.0	
					15.5	
					13.0	
					13.5	
					14.0	
					14.5	
					15.0	
					15.5	
					16.0	

DRILLING METHODS
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RC - ROCK CORING
WR - WATER ROTARY

SAMPLING METHODS
SS - SPLIT SPOON
ST - SHELBY TUBE
GP - GEOPROBE

* - Sample collected for analysis
ND = <1 ppm

Terracon

SOIL BORING LOG

PROJECT NAME: Roy Carver Property	SOIL BORING I.D.: CB-6
PROJECT NO.: 71137774	DATE(S) DRILLED: November 20, 2013
PROJECT LOCATION: 905 E. Sugar Creek Road Charlotte, North Carolina	DRILLING CONTR.: Probe Technology
	DRILL METHOD: Direct Push
	BORING DIAMETER: 2 inches
CLIENT: North Carolina Department of Transportation	SAMPLING METHOD/INTERVAL: GP (5-Foot)
LOGGED BY: S. Alex Chinery	REMARKS: BGS = below grade surface

DESCRIPTIVE LOG

SAMPLE INTERVAL	SAMPLE REC. (IN.)	BLOWS PER 6"	PID/FID (ppm)	GRAPHIC COLUMN	DEPTH (FT)	DESCRIPTION OF SOIL
					0.0	light brown clayey silt
					0.5	
					1.0	
					1.5	
					2.0	
0 - 5.0		NA	0.0		2.5	
					3.0	
					3.5	
					4.0	
					4.5	
					5.0	
					5.5	
					6.0	
					6.5	
					7.0	
5.0-10.0		NA	0.0		7.5	
					8.0	
					8.5	
					9.0	
					9.5	
					10.0	BORING TERMINATED AT 10 FEET BGS
					10.5	
					11.0	
					11.5	
					12.0	
					15.5	
					13.0	
					13.5	
					14.0	
					14.5	
					15.0	
					15.5	
					16.0	

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SAMPLING METHODS
SS - SPLIT SPOON
ST - SHELBY TUBE
GP - GEOPROBE

* - Sample collected for analysis
ND = <1 ppm

Terracon

APPENDIX B
PHOTOGRAPHS

Photo 1 View of auto sales lot on northern portion of Carver property.

Photo 2 View of auto detailing and tire repair shop on southern portion of Carver property.

APPENDIX C
GEOPHYSICAL SURVEY REPORT

PYRAMID ENVIRONMENTAL & ENGINEERING, P.C.

PYRAMID ENVIRONMENTAL & ENGINEERING
(PROJECT 2013-259)

GEOPHYSICAL SURVEY

CARVER AND TZANNIS PROPERTIES – 917 & 905 E. SUGAR CREEK ROAD NCDOT PROJECT U-5008

CHARLOTTE, MECKLENBURG COUNTY, NC

OCTOBER 15, 2013

Report prepared for: **Christopher L. Corbitt, PG**
Terracon Consultants, Inc.
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Charlotte, North Carolina 28206

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C257: GEOLOGY C1251: ENGINEERING

GEOPHYSICAL INVESTIGATION REPORT
917 & 905 E. Sugar Creek Road
Charlotte, Mecklenburg County, North Carolina

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EXECUTIVE SUMMARY

Project Description: Pyramid Environmental conducted a geophysical investigation for Terracon at the Andromache Tzannis property and the Roy Carver Jr. and Earl Carver Trustee property, located respectively at 917 and 905 E. Sugar Creek Road, Charlotte, Mecklenburg County, NC. These two properties were listed as separate parcels in the Request for Proposal sent to Pyramid, however, due to their adjacent nature one geophysical survey was performed that encompassed the entire area. The survey was part of a North Carolina Department of Transportation (NCDOT) Right-of-Way (ROW) investigation (NCDOT Project U-5008). Terracon directed Pyramid as to the geophysical survey boundaries at the project site, which were designed to include all proposed ROW and easement areas depicted in the NCDOT engineering plans.

Due to the widespread metal across the site (vehicles, fences, etc.), an EM61 survey was not performed because the level of interference would have been too great to make any significant observations regarding buried metal objects. For this reason, the geophysical survey at these properties consisted solely of a ground penetrating radar (GPR) survey.

Geophysical Results: The abundant nature of the parked vehicles, fences, and other metallic objects across the properties prevented an EM61 survey from being performed. The GPR surveys provided reliable results for the detection of USTs within the upper 5-6 feet of the subsurface within the accessible portions of the geophysical survey area. No significant reflectors were identified during the survey that would suggest a UST or USTs were present in the upper 5-6 feet of the subsurface within the areas surveyed. The geophysical investigation did not record any evidence of metallic USTs within the directed survey area.

INTRODUCTION

Pyramid Environmental conducted a geophysical investigation for Terracon at the Andromache Tzannis property and the Roy Carver Jr. and Earl Carver Trustee property, located respectively at 917 and 905 E. Sugar Creek Road, Charlotte, Mecklenburg County, NC. These two properties were listed as separate parcels in the Request for Proposal sent to Pyramid, however, due to their adjacent nature one geophysical survey was performed that encompassed the entire area. The survey was part of a North Carolina Department of Transportation (NCDOT) Right-of-Way (ROW) investigation (NCDOT Project U-5008). Terracon directed Pyramid as to the geophysical survey boundaries at the project site, which were designed to include all proposed ROW and easement areas depicted in the NCDOT engineering plans. The survey grid spanned approximately 130 feet from west to east and approximately 370 feet from north to south. Conducted on November 5, 2013, the geophysical investigation was performed to determine if unknown, metallic underground storage tanks (USTs) were present beneath the survey area.

The site had limited access, consisting of asphalt parking lot spaces and grassy areas with a large number of parked vehicles, equipment, and debris throughout the survey area. One section of the property was completely inaccessible due to vehicles and fences. Due to the widespread metal across the site (vehicles, fences, etc.), an EM61 survey was not performed because the level of interference would have been too great to make any significant observations regarding buried metal objects. For this reason, the geophysical survey at these properties consisted solely of a ground penetrating radar (GPR) survey. Aerial photographs showing the survey area boundaries and ground-level photographs are shown in **Figure 1**.

FIELD METHODOLOGY

Prior to conducting the geophysical investigation, a 10-foot by 10-foot survey grid was established across the accessible portions of the geophysical survey areas using measuring tapes 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 a GPR survey. As discussed above, the abundant metal at the site prevented a useful EM61 survey from being performed. GPR data were acquired in a grid-like fashion across all accessible portions of the site on November 5, 2013, using a Geophysical Survey Systems, Inc. (GSSI) SIR-2000 unit equipped with a 400 MHz antenna. Data were collected generally from east to west and north to south along transects spaced 5 to 10 feet apart across accessible areas. The GPR data were viewed in real time using a vertical scan of 512 samples, at a rate of 48 scans per second. GPR data were viewed down to a maximum depth of approximately 6 feet, based on an estimated two-way travel time of 8 nanoseconds per foot. GPR transect files were saved to the hard drive of the SIR unit and viewed for post-processing in the office.

DISCUSSION OF RESULTS

The locations of the GPR transect performed at the property, as well as images of select GPR transects, are presented in **Figure 2**. Images of all GPR transects are included in **Appendix A**. Transects were performed wherever possible in between parked vehicles, along the roadway, within median areas, and within open areas at the properties that fell within the NCDOT proposed ROW. It should be noted that the limited access prevented the property from being surveyed to the resolution and accuracy that our standard survey would provide under more normal site conditions. Additionally, one area of the property between Y=180 and Y=245 was completely inaccessible due to vehicles and fences.

GPR images were viewed in real time during the survey for analysis of any large objects or reflectors that may be indicative of possible USTs. No significant reflectors were identified during the survey that would suggest a UST or USTs were present in the upper 5-6 feet of the subsurface within the areas surveyed. Images of GPR Transects 3, 7 and 17 are included on **Figure 2**. GPR Transect 3 was performed across a portion of an area at the property that appeared to have contained USTs and/or gas pump islands. This transect recorded evidence of a break in the natural soil reflectors that suggested the subsurface had possibly been excavated and

backfilled at this location, likely during the construction of the gas pump area. Transect 7 provided evidence of at least one likely utility or conduit extending from south to north through the Tzannis property. Transect 17 provides a view of the general geology at the south (Carver) property.

The geophysical investigation did not record any evidence of USTs within the accessible portions of the proposed ROW and easement areas at the properties. However, it should be noted that an EM61 metal detection survey was not performed, and that the GPR survey was limited to the accessible portions of the site. Parked vehicles and other obstacles prevented significant portions of the site from being surveyed.

SUMMARY & CONCLUSIONS

Our evaluation of the GPR data collected across the properties at 905 & 917 E. Sugar Creek Road in Charlotte, North Carolina, provides the following summary and conclusions:

- The abundant nature of the parked vehicles, fences, and other metallic objects across the properties prevented an EM61 survey from being performed.
- The GPR surveys provided reliable results for the detection of USTs within the upper 5-6 feet of the subsurface within the accessible portions of the geophysical survey area.
- No significant reflectors were identified during the survey that would suggest a UST or USTs were present in the upper 5-6 feet of the subsurface within the areas surveyed.
- The geophysical investigation did not record any evidence of metallic USTs within the directed survey area.
- Significant portions of the properties were not surveyed due to limited access.

LIMITATIONS

Geophysical surveys have been performed and this report prepared for Terracon in accordance with generally accepted guidelines for GPR surveys. It is generally recognized that the results of the GPR surveys are non-unique and may not represent actual subsurface conditions. The GPR results obtained for this project have not conclusively determined that no metallic UST lie within the survey area of the Mecklenburg County property, but that no evidence of metallic USTs was detected. Additionally, it should be understood that areas containing extensive vegetation, reinforced concrete, or other restrictions to the accessibility of the geophysical instruments could not be fully investigated. In the case of this property, significant portions of the site were inaccessible by the GPR equipment.

Approximate Boundaries of the Geophysical Survey Area

View of South & West Portion of Survey Area
(Facing Approximately North)

View of Northwest Portion of Survey Area
(Facing Approximately South)

TITLE	TZANNIS & CARVER PROPERTIES: GEOPHYSICAL SURVEY BOUNDARIES AND SITE PHOTOGRAPHS
PROJECT	SUGAR CREEK ROAD NCDOT ROW IMPROVEMENT PROJECT CHARLOTTE, MECKLENBURG COUNTY, NC

PYRAMID ENVIRONMENTAL & ENGINEERING, P.C
503 INDUSTRIAL AVENUE
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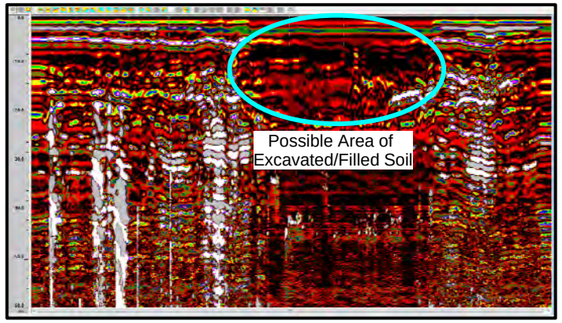
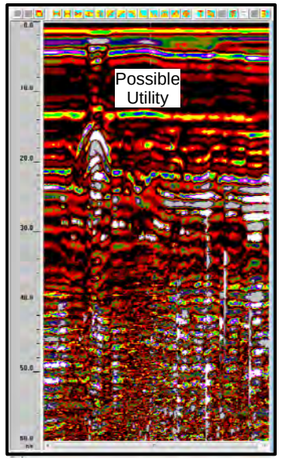
License # C1251 Eng. / License # C257 Geology

DATE	11/6/2013	CLIENT	TERRACON
PYRAMID PROJECT #:	2013-259		**FIGURE 1**

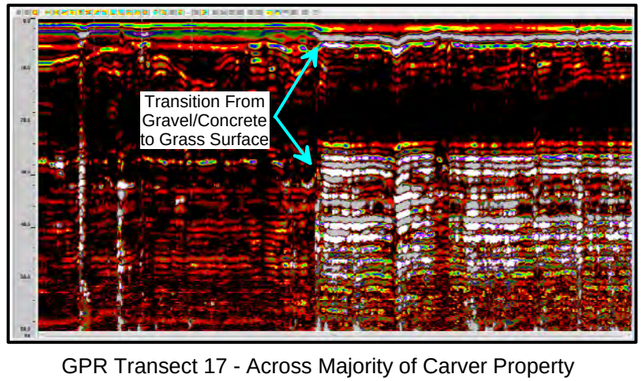
Locations of GPR Transects at Tzannis & Carver Properties



GPR Transect 3 - Across Possible Former Tank Pit



GPR Transect 7 -
Showing Probable Utility



GPR Transect 17 - Across Majority of Carver Property

NO EVIDENCE OF METALLIC USTs OBSERVED

Due to the abundance of metal (vehicles, fences, debris) at this project site, EM61 surveys were not performed. A grid was set up to perform GPR surveys across all accessible areas. Ground penetrating radar (GPR) data were collected on November 5, 2013, using a GSSI SIR 2000 unit coupled to a 400 MHz antennae.

N

TITLE	TZANNIS & CARVER PROPERTIES - GPR TRANSECT LOCATIONS AND SELECT IMAGES
PROJECT	SUGAR CREEK ROAD NCDOT ROW IMPROVEMENT PROJECT CHARLOTTE, MECKLENBURG COUNTY, NC

PYRAMID ENVIRONMENTAL & ENGINEERING, P.C
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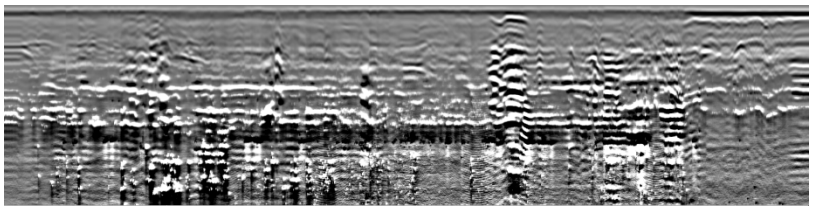
License # C1251 Eng. / License # C257 Geology

DATE 11/6/2013	CLIENT TERRACON
PYRAMID PROJECT #: 2013-259	**FIGURE 2**

Appendix A – GPR Transect Images

Transect 1



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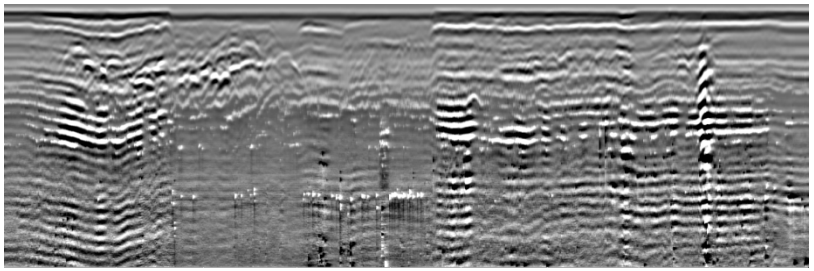

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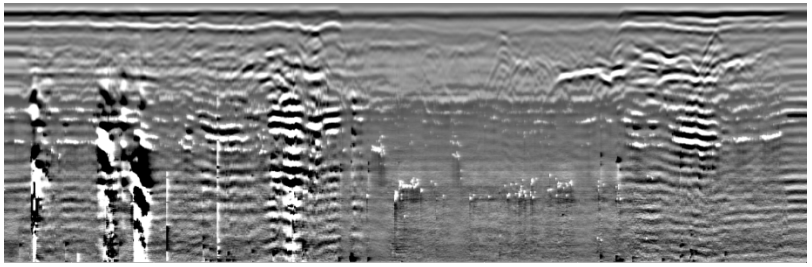

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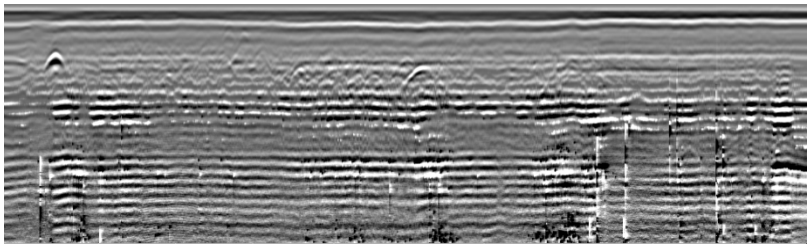

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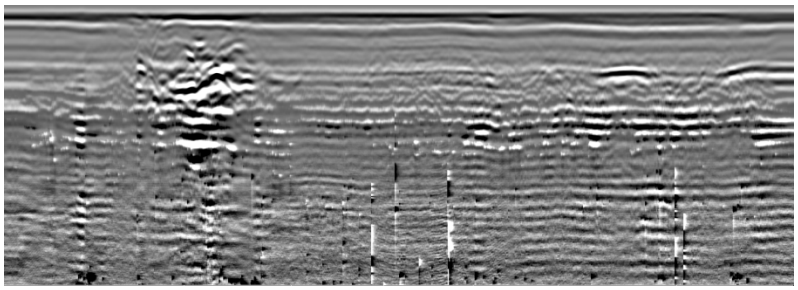

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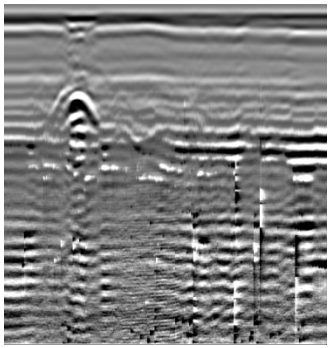

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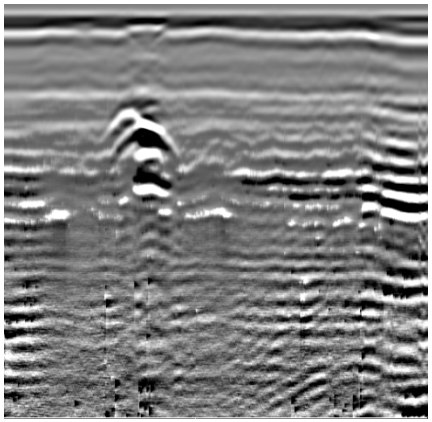

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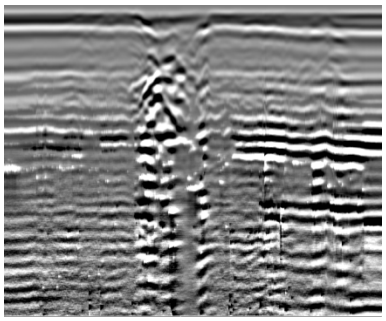

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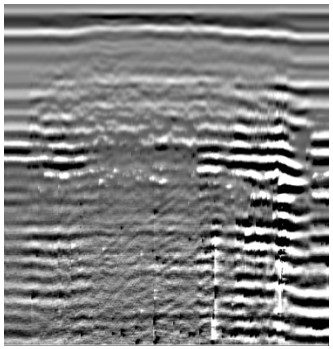

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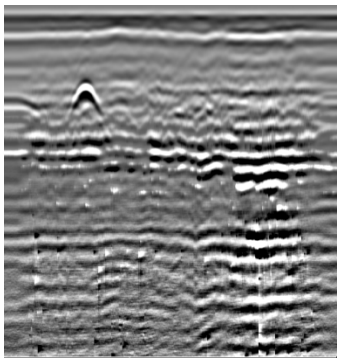

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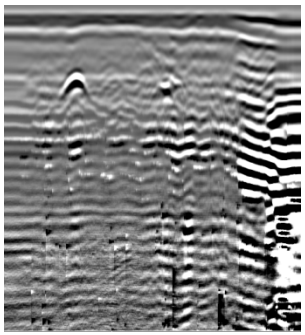

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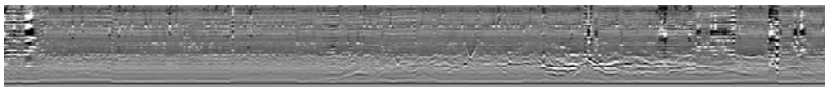

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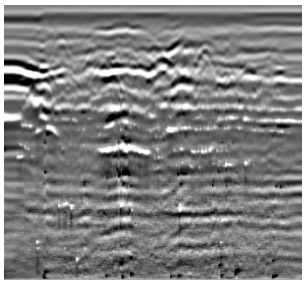

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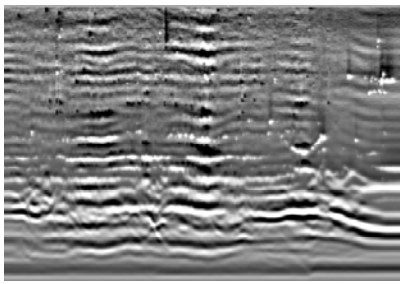

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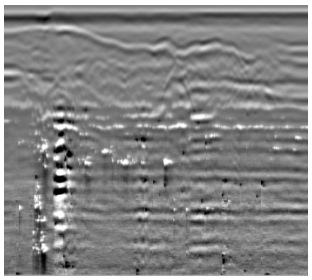

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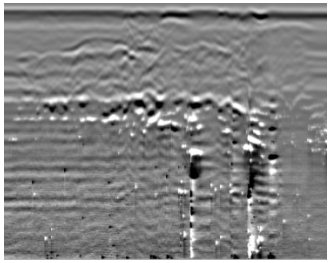

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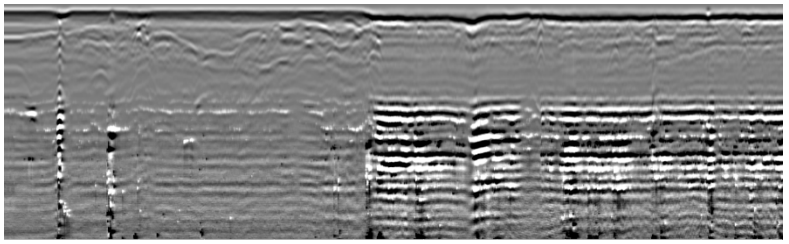

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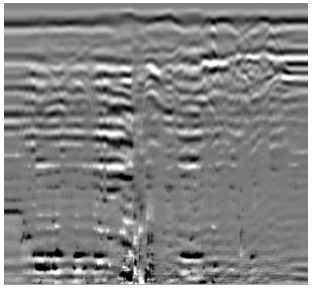

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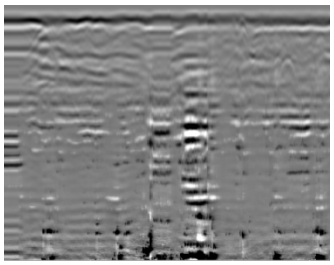

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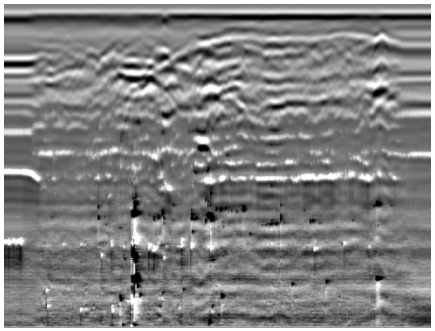

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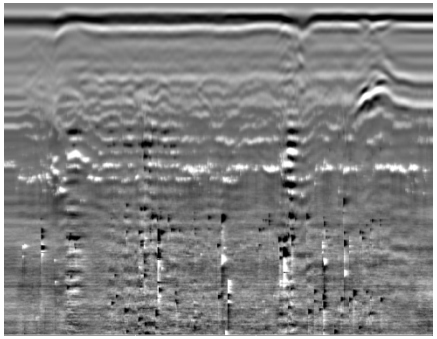

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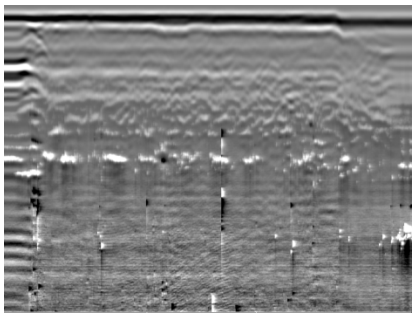

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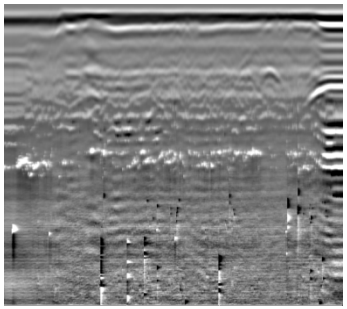

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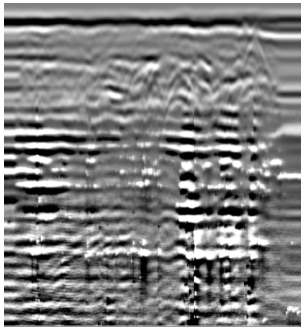

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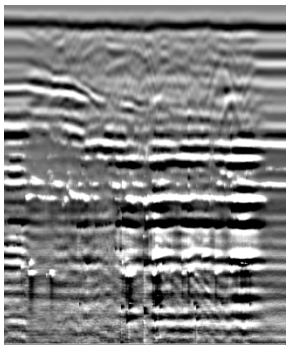


APPENDIX D
LABORATORY ANAYLTICAL REPORT AND CHAIN OF CUSTODY

KB LABS, INC.
6821 SW Archer Road
Gainesville, Florida 32608
***Telephone* (352) 367-0073**
***Fax* (352) 378-6491**
Email: info@kbmobilelabs.com

November 27, 2013

Christopher Corbitt
Terracon Consultants
2020 Starita Road, Suite E
Charlotte, NC 28206

RE: NCDOT Sugar Creek Road

Dear Mr. Corbitt:

Enclosed is the final report of the on-site analysis performed by KB Labs, Inc. on behalf of QROS for the above referenced site. Included are a brief project narrative, final analytical results, and sample chain-of-custody form.

If you have any questions, please do not hesitate to call me or Kelly Bergdoll, President of KB Labs, at (352) 367-0073.

Sincerely,

KB Labs, Inc.

Todd Romero
Director of Operations

KB Labs, Inc.
6821 SW Archer Road
Gainesville, FL 32608
Phone: 352-367-0073
Fax: 352-367-0073
Email: info@kbmobilelabs.com

PROJECT NARRATIVE

Project Scope

On November 21, 2013, a total of 22 soil samples were received and analyzed for a NCDOT site. The samples were analyzed for field TPH.

Analytical Procedure

All samples were analyzed using Ultra -violet Fluorescence Spectrometry. For soils, ten grams of soil was extracted in 20 mL of methanol. Extracts were then analyzed on a UV fluorometer. Fluorescence was compared against a series of prepared calibration standards to produce the results. For this project a QED analyzer was used that provides a fluorescence fingerprint image for each sample and uses a spectral library to help identify the dominant hydrocarbon type where possible.

Analytical Results

Laboratory results were provided to the client on November 21, 2013. Final results of the on-site analyses are provided in this report. The data produced and reported in the field has been reviewed and approved for this final report by the Director of Operations for KB Labs.

Method Blanks: Daily analysis of methanol reagent samples was performed in order to monitor the cleanliness of the analytical system before and during each analytical run. Continuing Calibration: Following initial standardization with a five point PAH curve, standards were analyzed periodically to determine the stability of the calibration before, during, and after each analytical run.

Data are reported on an as received (wet weight) basis.

QED

AQROS

Hydrocarbon Analysis Results

Client: Terracon Consultants, Inc.
Address:

Samples taken November 20,2013
Samples extracted November 20,2013
Samples analysed November 21,2013

Contact: Chris Corbitt

Operator CSB

Project: NCDOT-Sugar Creek

Matrix	Sample ID	Dilution used	BTEX (C6 - C9)	GRO (C5 - C10)	DRO (C10 - C35)	TPH (C5 - C35)	Total Aromatics (C10-C35)	16 EPA PAHs	BaP	Ratios			HC Fingerprint Match
										% light	% mid	% heavy	
s	CB-1	10.7	<0.5	<0.5	5.1	5.1	3.82	0.09	< 0.027	50.5	38.2	11.2	V.Deg.PHC 99.6%
s	CB-2	11.6	<0.6	<0.6	3.3	3.3	2.52	< 0.06	< 0.029	45.1	39.7	15.2	V.Deg.PHC 99.1%
s	CB-3	12.0	<0.6	<0.6	<0.6	<0.6	< 0.6	< 0.06	< 0.03	0	0	100	Match not possible
s	CB-4	11.6	<0.6	<0.6	6.5	6.5	4.8	0.17	< 0.029	55.5	34.7	9.8	V.Deg.PHC 82.4%
s	CB-5	11.5	<0.6	<0.6	<0.6	<0.6	< 0.57	< 0.06	< 0.029	0	10.9	89.1	Match not possible
s	CB-6	12.4	<0.6	<0.6	<0.6	<0.6	< 0.62	< 0.06	< 0.031	0	0	100	Match not possible
s	CB-7	10.9	<0.5	<0.5	<0.5	<0.5	< 0.55	< 0.05	< 0.027	0	15.8	84.2	Match not possible
s	CB-8	10.2	<0.5	<0.5	<0.5	<0.5	< 0.51	< 0.05	< 0.026	0	6.1	93.9	Match not possible
s	CB-9	12.3	<0.6	<0.6	<0.6	<0.6	< 0.61	< 0.06	< 0.031	0	17.6	82.4	Match not possible
s	CB-6-req	12.4	<0.6	<0.6	<0.6	<0.6	< 0.62	< 0.06	< 0.031	0	0	100	Match not possible

Initial Calibrator QC check OK

Low Range Calibrator Final check Low 0.063

High Range Calibrator Final check OK 1.492

Results generated by a QED HC-1 analyser

Concentration values in mg/kg for soil samples and mg/L for water samples.

Soil values are not corrected for moisture or stone content

Fingerprints provide a tentative hydrocarbon identification based on operator selected library matches

Fingerprint match abbreviations Est = Specific calibrator not used, result estimated (PFM)= Poor library fingerprint match

(SBS)= site specific background subracted (LBS)= Library background subtracted % = match confidence

Hydrocarbon Analysis Results

Client: Terracon Consultants, Inc.
Address:

Samples taken November 19,2013
Samples extracted November 19,2013
Samples analysed November 21,2013

Contact: Chris Corbitt

Operator CSB

Project: NCDOT-Sugar Creek

Matrix	Sample ID	Dilution used	BTEX (C6 - C9)	GRO (C5 - C10)	DRO (C10 - C35)	TPH (C5 - C35)	Total Aromatics (C10-C35)	16 EPA PAHs	BaP	Ratios			HC Fingerprint Match
										% light	% mid	% heavy	
s	MB-1	11.7	<0.6	<0.6	14.1	14.1	10.58	0.25	< 0.029	50.5	43.1	6.4	V.Deg.PHC 100%
s	MB-2	60.8	100.2	271.7	943.4	1215.1	111.2	1.61	< 0.152	99.1	0.7	0.2	Deg.Kerosene (est) 73.4%
s	MB-3	11.4	<0.6	<0.6	<0.6	<0.6	< 0.57	< 0.06	< 0.028	0	59.1	40.9	V.Deg.PHC 90.6%
s	MB-4	11.1	<0.6	<0.6	10.4	10.4	7.86	0.25	< 0.028	49.9	42.6	7.5	V.Deg.PHC 99.4%
s	MB-5	12.0	<0.6	<0.6	12.1	12.1	8.81	0.2	< 0.03	57.6	36.2	6.2	V.Deg.PHC 98.8%
s	MB-6	20.0	<1	<1	<1	<1	< 1	< 0.1	< 0.05	0	68.1	31.9	Match not possible
s	MB-7	9.8	<0.5	<0.5	<0.5	<0.5	< 0.49	< 0.05	< 0.024	0	14	86	Match not possible
s	MB-8	10.1	<0.5	<0.5	<0.5	<0.5	< 0.51	< 0.05	< 0.025	0	0	100	Match not possible
s	MB-9	11.8	<0.6	1	18	19	16.81	0.4	< 0.029	85	12.8	2.1	Degraded Fuel (est) (PFM)
s	MB-10	11.9	<0.6	<0.6	<0.6	<0.6	< 0.59	< 0.06	< 0.03	0	0	100	Match not possible

Initial Calibrator QC check OK

Low Range Calibrator Final check OK 0.069

High Range Calibrator Final check OK 1.485

Results generated by a QED HC-1 analyser

Concentration values in mg/kg for soil samples and mg/L for water samples.

Soil values are not corrected for moisture or stone content

Fingerprints provide a tentative hydrocarbon identification based on operator selected library matches

Fingerprint match abbreviations Est = Specific calibrator not used, result estimated (PFM)= Poor library fingerprint match

(SBS)= site specific background subracted (LBS)= Library background subtracted % = match confidence

Hydrocarbon Analysis Results

Client: Terracon Consultants, Inc.
Address:

Samples taken November 19,2013
Samples extracted November 19,2013
Samples analysed November 21,2013

Contact: Chris Corbitt

Operator CSB

Project: NCDOT-Sugar Creek

Matrix	Sample ID	Dilution used	BTEX (C6 - C9)	GRO (C5 - C10)	DRO (C10 - C35)	TPH (C5 - C35)	Total Aromatics (C10-C35)	16 EPA PAHs	BaP	Ratios			HC Fingerprint Match
										% light	% mid	% heavy	
s	MB-11	12.2	<0.6	<0.6	<0.6	<0.6	< 0.61	< 0.06	< 0.03	0	67.8	32.2	Match not possible
s	MB-12	12.5	<0.6	<0.6	<0.6	<0.6	< 0.63	< 0.06	< 0.031	0	66.9	33.1	Match not possible
s	MB-13	12.1	<0.6	<0.6	<0.6	<0.6	< 0.6	< 0.06	< 0.03	0	66.4	33.6	Match not possible

Initial Calibrator QC check OK

Low Range Calibrator Final check OK 0.070

High Range Calibrator Final check OK 1.496

Results generated by a QED HC-1 analyser

Concentration values in mg/kg for soil samples and mg/L for water samples.

Soil values are not corrected for moisture or stone content

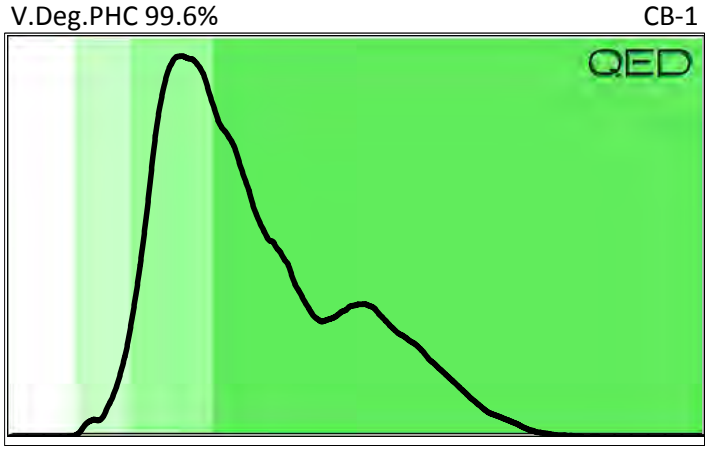
Fingerprints provide a tentative hydrocarbon identification based on operator selected library matches

Fingerprint match abbreviations Est = Specific calibrator not used, result estimated (PFM)= Poor library fingerprint match

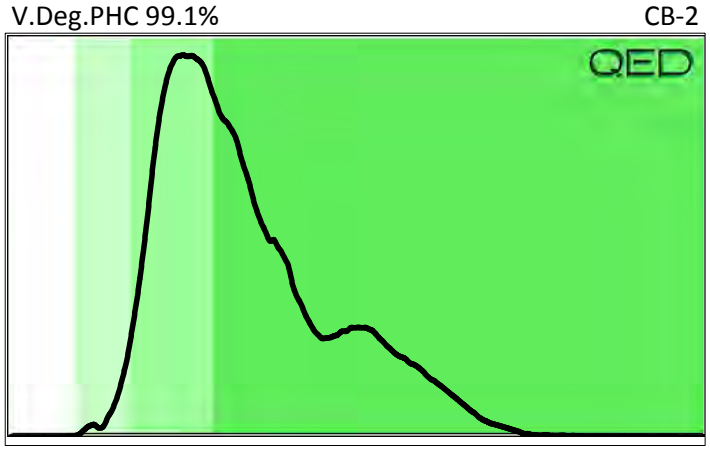
(SBS)= site specific background subracted (LBS)= Library background subtracted % = match confidence

Project NCDOT-Sugar Creek **Date** November 21,2013

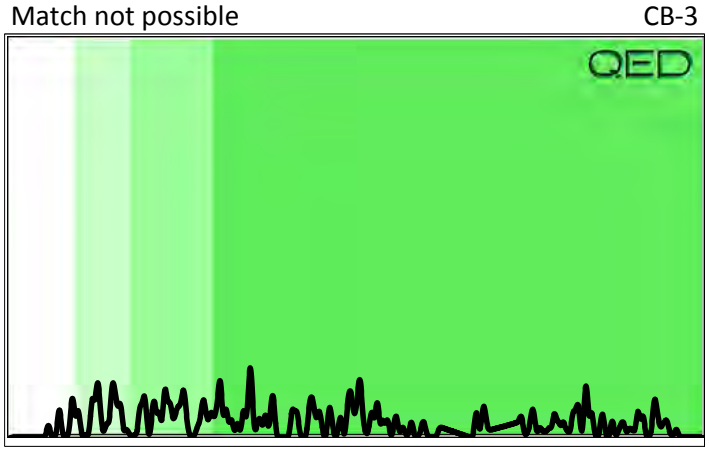
V.Deg.PHC 99.6% CB-1



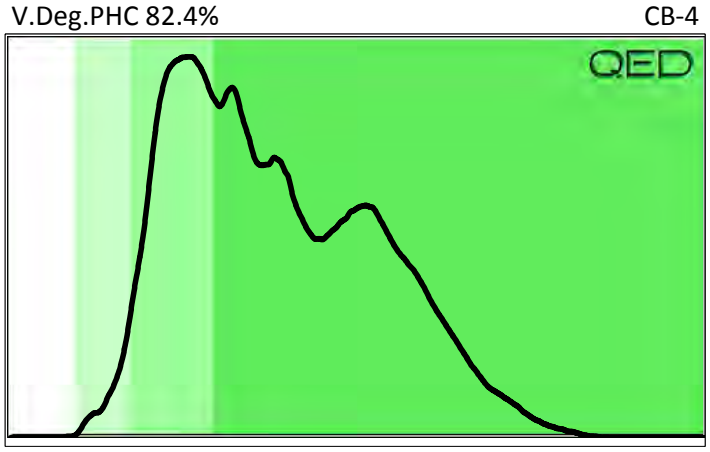
V.Deg.PHC 99.1% CB-2



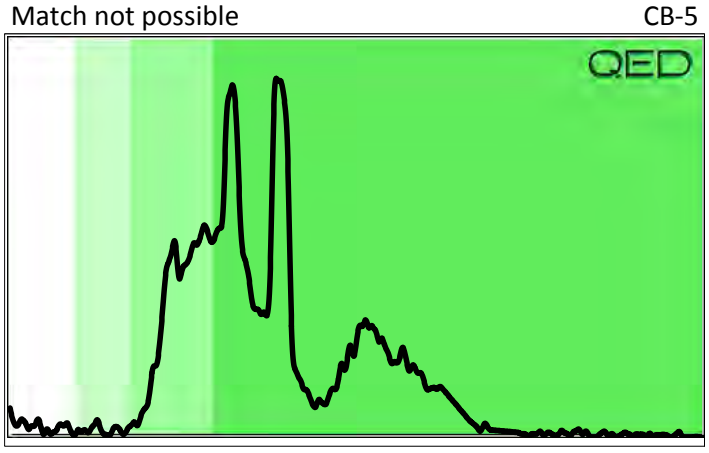
Match not possible CB-3



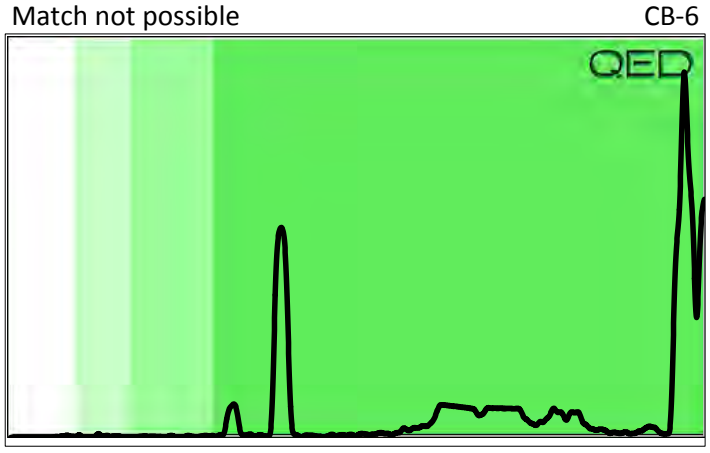
V.Deg.PHC 82.4% CB-4



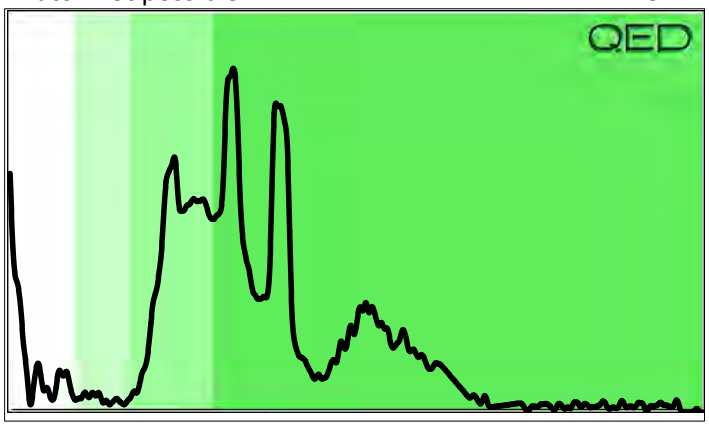
Match not possible CB-5



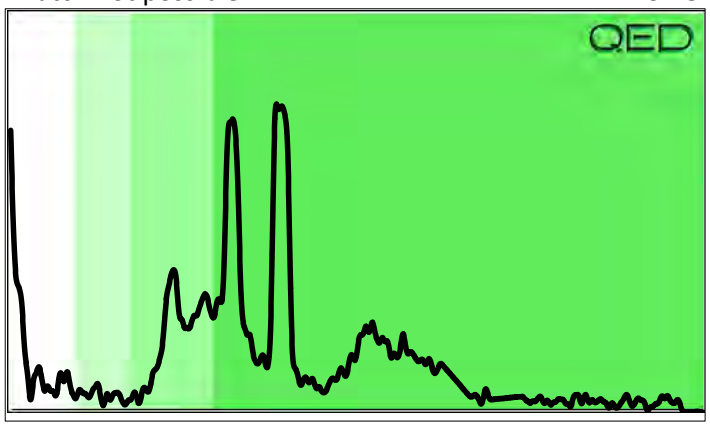
Match not possible CB-6



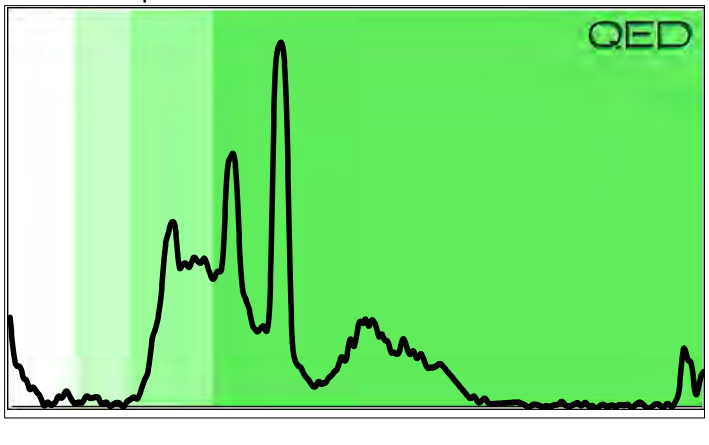
Match not possible CB-7



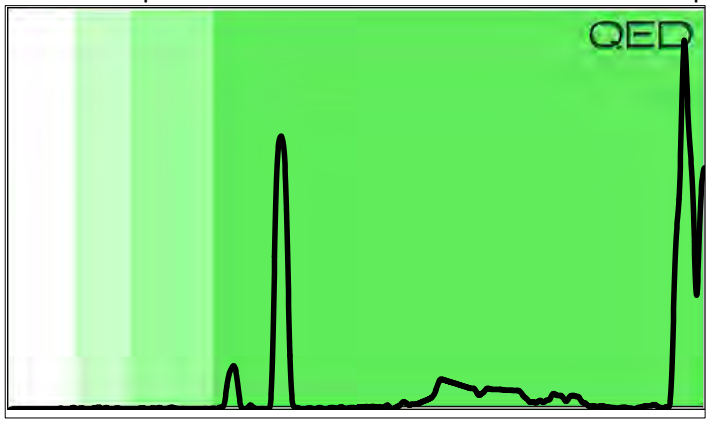
Match not possible CB-8



Match not possible CB-9

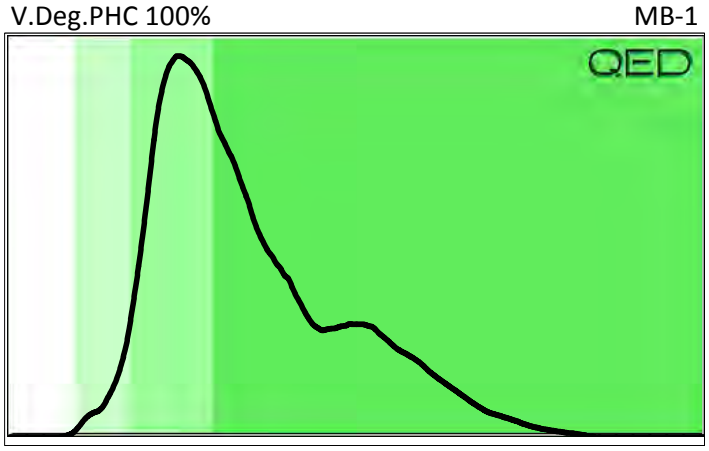


Match not possible CB-6-req

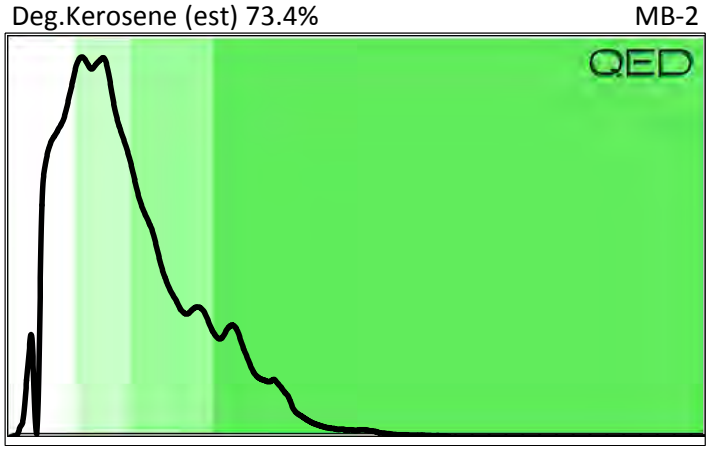


Project NCDOT-Sugar Creek **Date** November 21,2013

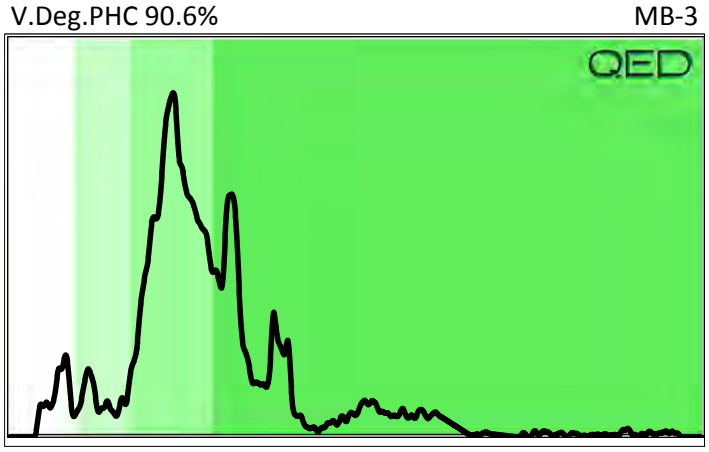
V.Deg.PHC 100% MB-1



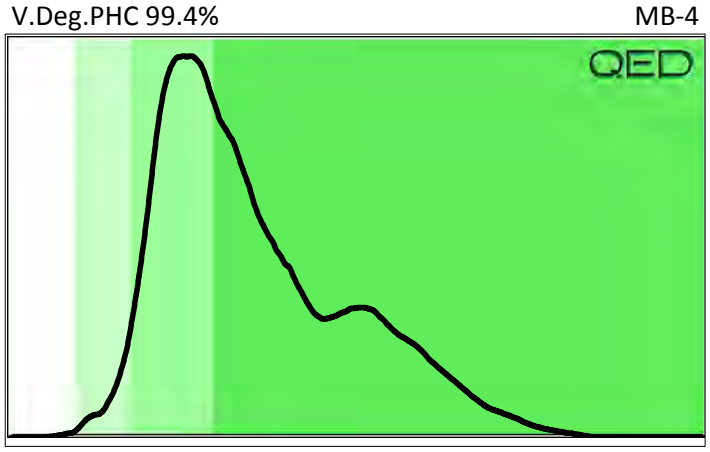
Deg.Kerosene (est) 73.4% MB-2



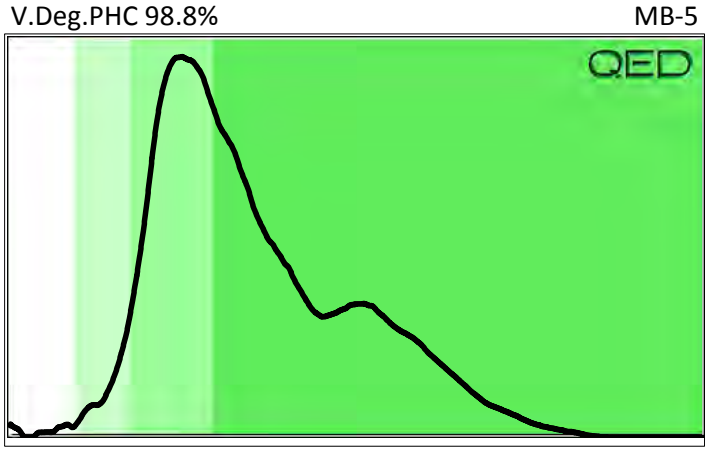
V.Deg.PHC 90.6% MB-3



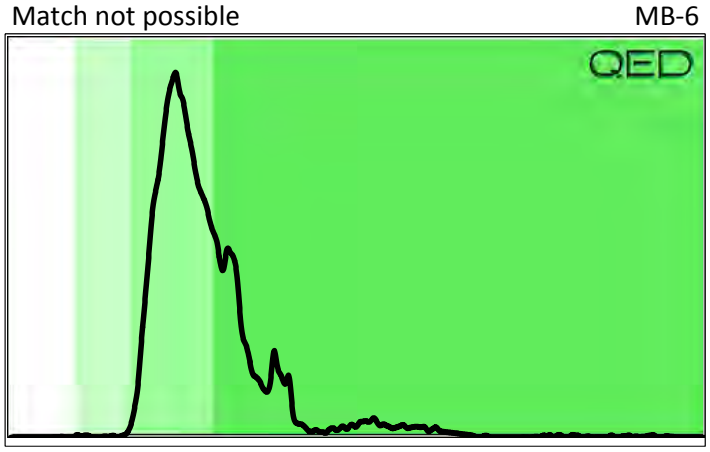
V.Deg.PHC 99.4% MB-4



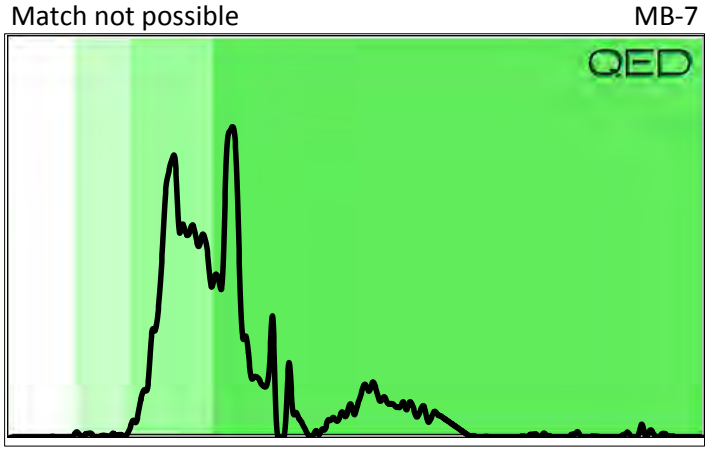
V.Deg.PHC 98.8% MB-5



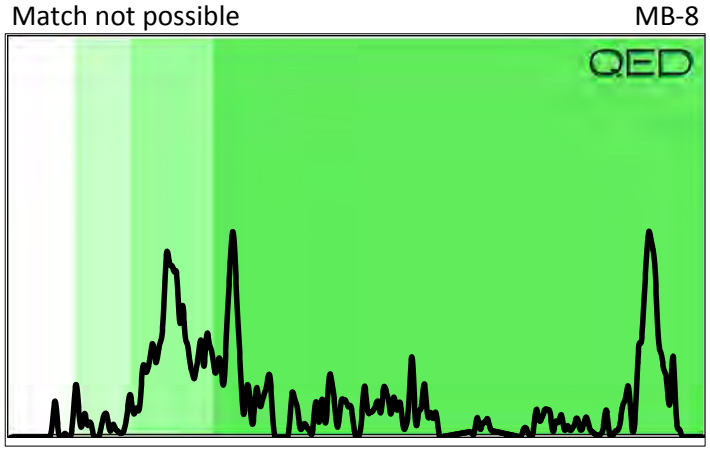
Match not possible MB-6



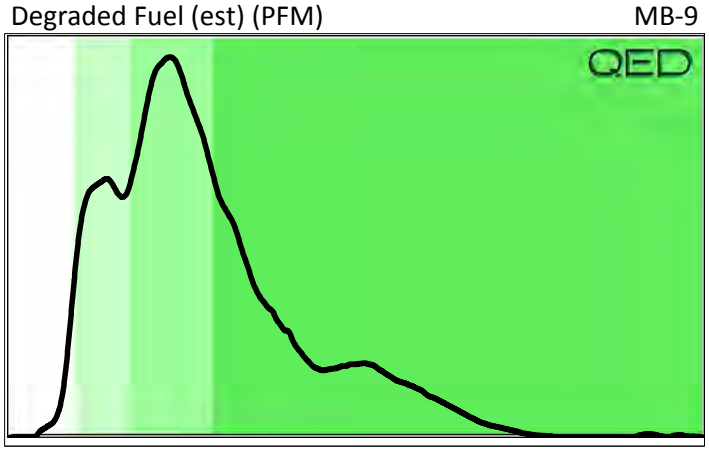
Match not possible MB-7



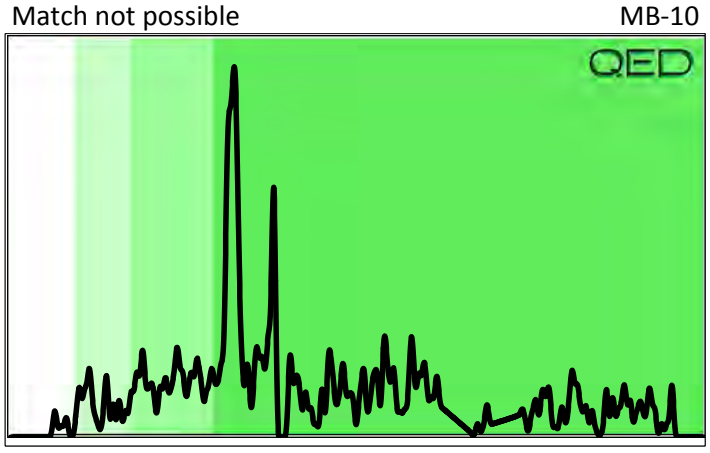
Match not possible MB-8



Degraded Fuel (est) (PFM) MB-9

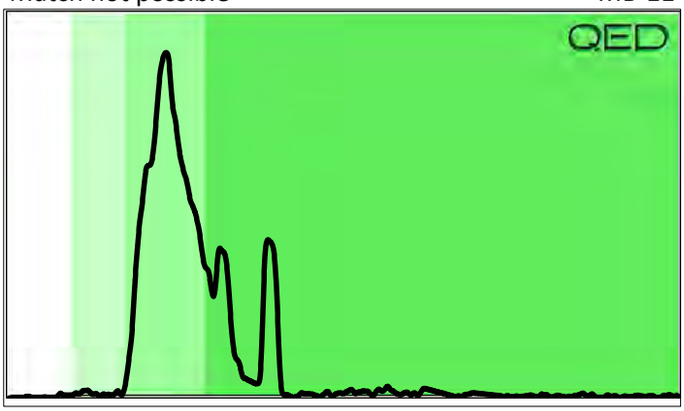


Match not possible MB-10

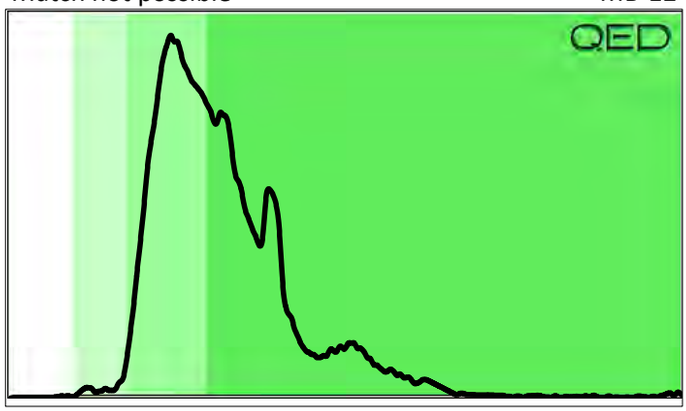


Project NCDOT-Sugar Creek **Date** November 21,2013

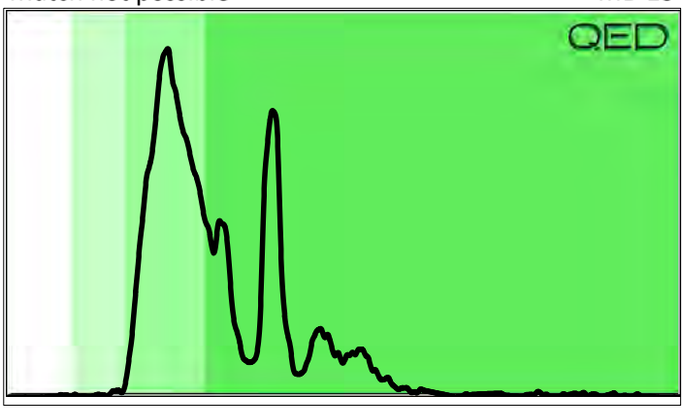
Match not possible MB-11



Match not possible MB-12



Match not possible MB-13



CHAIN-OF-CUSTODY RECORD

Mobile Laboratory Services

6821 SW Archer Road
Gainesville, FL 32608
TEL (352) 367-0073 · FAX (352) 378-6491

6701 Conference Drive
Raleigh, NC 27607
TEL (352) 538-6507

MOBILE UNIT # 4

CLIENT NAME: Terracon Consultants, Inc

PROJECT NAME & ADDRESS: NCDOT - Sugar Creek Road, Charlotte, NC

SAMPLERS: Alex Chinery

CONTACT PERSON: Chris Corbitt

BATCH # (Lab Use Only)

PRESERVATION: C Chilled; H HCL; Ot Other (see Remarks)

SAMPLE FIELD ID.\ NUMBER	DATE SAMPLED	TIME SAMPLED	COMP.	GRAB	DATE REC'D	TIME REC'D	STATION LOCATION / No.	SAMPLE MATRIX	NUMBER OF CONTAINERS	IDENTIFY PARAMETERS DESIRED AND NO. OF CONTAINERS: TPH 8260, GRO	COMMENT / SAMPLE PRE FIX
MB 1	11/19/13	14:00		X				S	1		12
MB 2	"	14:05		X				"	"		10.2
MB 3		14:10		X							12.3
MB 4		14:15		X							12.6
MB 5		14:20		X							11.7
MB 6		15:00		X							peak observed, no match 7
MB 7		16:00		X							14.3
MB 8		15:55		X							13.8
MB 9		15:45		X							11.9
MB 10		15:20		X							11.8
MB 11		15:15		X							peak observed, no match 11.5
MB 12		15:10		X							" " 11.2
MB 13		15:05		X							" " 11.6

Precleaned Containers Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*	Date / Time	**Remarks and Observations**
Relinquished by: *(Signature)* Chris Corbitt	Date / Time 11/20/13 15:30	Received by: *(Signature)*	Date / Time 11/21/13 1340	

Matrix Types S Soil SW Surface Water GW Ground Water SG Soil Gas

CHAIN-OF-CUSTODY RECORD

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MOBILE UNIT # 4

CLIENT NAME	PROJECT NAME & ADDRESS	BATCH # (Lab Use Only)
Terracon Consultants, Inc.	NCDOT – Sugar Creek Road, Charlotte, NC	

SAMPLERS	CONTACT PERSON
Alex Chinery	Chris Corbitt

PRESERVATION: C Chilled; H HCL; Ot Other (see Remarks)

SAMPLE FIELD ID.\ NUMBER	DATE SAMPLED	TIME SAMPLED	COMP.	GRAB	DATE REC'D	TIME REC'D	STATION LOCATION / No.	SAMPLE MATRIX	NUMBER OF CONTAINERS	IDENTIFY PARAMETERS DESIRED AND NO. OF CONTAINERS: TPH DRO, GRO	COMMENT / SAMPLE PRE FIX
✓CB 1	11/20/13	10:50		X				S	1		13.1
✓CB 2		10:55		X							12.1
✓CB 3		11:00		X							11.7
✓CB 4		11:05		X							12.1
✓CB 5		11:10		X							12.2
✓CB 6		11:15		X							11.3 Extract was very colored
✓CB 7		11:20		X							12.8
✓CB 8		11:25		X							13.7
✓CB 9		11:30		X							11.9

	Date / Time	Received by: (Signature)	Date / Time	Remarks and Observations
Precleaned Containers Relinquished by: (Signature)				
Relinquished by: (Signature) [signature]	11/20/13 15:30	Received by: (Signature) [signature]	11/21/13 1300	

Matrix Types S Soil SW Surface Water GW Ground Water SG Soil Gas