INITIAL ABATEMENT ACTION REPORT

NCDOT PARCEL 9 (FORMER SHUFORD PROPERTY)
121 HIBRITEN DRIVE
LENOIR, CALDWELL COUNTY, NORTH CAROLINA
STATE PROJECT U-2211-B WBS 34783.1.1

Prepared for:

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

1589 Mail Service Road
Raleigh, North Carolina

MACTEC Project: 6470-10-0155

August 17, 2010

MACTEC

engineering and constructing a better tomorrow

August 17, 2010

Mr. Ethan Caldwell, P.E., L.G.
Geoenvironmental Project Manager
NCDOT Geotechnical Engineering Department
1589 Mail Service Road
Raleigh, North Carolina 27699

Subject: **Initial Abatement Action Report**
NCDOT Parcel 9 (Former Shuford Property)
121 Hibriten Drive, Lenoir, Caldwell County, North Carolina
MACTEC Project 6470-10-0155
State Project U-2211 B, WBS 34783.1.1

Dear Mr. Caldwell:

MACTEC Engineering and Consulting, Inc. (MACTEC) is pleased to provide this Initial Abatement Action Report for the Underground Storage Tank (UST) located at the North Carolina Department of Transportation (NCDOT) Parcel 9, former Shuford property, in Lenoir, Caldwell County, North Carolina. The report was prepared in a format established in North Carolinas Department of Environment and Natural Resources (NCDENR) "Guidelines for Site Checks, Tank Closure, and Initial Response and Abatement for UST Releases" dated March 1, 2007 (change 3, effective December 1, 2008).

MACTEC appreciates the opportunity to provide our environmental services to the NCDOT. If you should have any questions concerning this report, please contact us at (828) 252-8130.

Sincerely,

MACTEC ENGINEERING AND CONSULTING, INC.

Rodney M. Clark, L.G.
Staff Geologist

for Rodney Clark
with permission

Matthew E. Wallace, P.E.
Principal Engineer

RMC/MEW:rmc

TABLE OF CONTENTS

A. Site Information

A.1 Site Identification

Date of Report:	August 17, 2010
Facility ID:	Not Applicable
UST Incident Number:	Not Available / Not yet assigned
Site Name:	NCDOT Parcel 9 (Former Shuford Property)
Street Address:	121 Hibriten Drive
City/Town:	Lenoir, North Carolina
Zip Code:	28645
County:	Caldwell County
Latitude/Longitude:	35.88971/81.52026
Geographic Data Point:	Approximate center of UST tank pit
Location Method:	USGS Topographical Map: *Lenoir, N.C. – NC. 7.5-Minute Quadrangle*

A.2 Contact Information

UST Owner:	Sybil Shuford Buff, Joseph Buff, Thomas Shuford III 121 Hibriten Dr Lenoir, North Carolina 28645 (828) 757-0302
UST Operator:	Former Shuford residence (inactive at time of closure)
Property Owner:	Sybil Shuford Buff, Joseph Buff, Thomas Shuford III 121 Hibriten Dr Lenoir, North Carolina 28645 (828) 757-0302
Property Occupant:	Former Shuford residence (unoccupied at time of closure)
Consultant:	MACTEC Engineering and Consulting Inc. 1308 Patton Avenue Asheville, North Carolina 28806 (828) 252-8130
Closure Contractor:	Zebra Environmental and Industrial Services, Inc. P.O. Box 357, 901 East Springfield Road High Point, North Carolina 27261 (336) 434-7750
Analytical Laboratory:	Prism Laboratories, Inc. 449 Springbrook Road Charlotte, North Carolina 28224 (704) 529-6364

A.3 Release Information

Date Discovered:	July 19, 2010
Quantity:	Unknown
Cause:	Unknown
Source:	UST and product piping
UST System:	One, 1,000-gallon (heating oil)

A.4 Certification

I, Matthew E. Wallace, a Professional Engineer ~~Licensed Geologist~~ for, MACTEC Engineering and Consulting, Inc., do certify that the information contained in this report is correct and accurate to the best of my knowledge.

NORTH CAROLINA PROFESSIONAL SEAL 24933 9/3/10 ENGINEER MATTHEW E. WALLACE

MACTEC Engineering and Consulting, Inc. is licensed to practice geology/engineering in North Carolina (North Carolina corporate engineering license No. F-0653).

B. Site History and Characterization

B.1 Site Description

NCDOT Parcel 9, former Shuford property, (site) is located at 121 Hibriten Drive in Lenoir, Caldwell County, North Carolina (Figure 1). The site contains two residences, grassy areas and woodlands. The identified UST was located approximately ten feet from the southeast corner of the residence located in the eastern portion of the site. The UST was reported to be approximately 1,000 gallons or less in capacity and utilized for heating oil storage for residential heating.

At the time of UST closure, two residences in disrepair were present at the site, with siding likely removed in anticipation of demolition. The site vegetation consisted primarily of grasses and shrubs adjacent to the residences and woodlands located in the southern portion of the site. Ground surface at the site slopes to the southeast. Natural surface runoff is towards an unnamed tributary of Gunpowder Creek.

B.2 Site Geology/Hydrology

The site is located in the Inner Piedmont Belt of the Piedmont Physiographic Province. The bedrock in this region consists of mimagtitic granitic gneiss. The site's underlying soils consist of Cecil-Urban land complex (eight to fifteen percent slopes), which typically consist of well drained, sandy to clayey loam.

Site topography indicates that surface water flow is to the southeast towards an unnamed tributary, located is located approximately 500 feet to the southeast of the UST location. The unnamed tributary flows southwest and discharges into Gunpowder Creek approximately 1,500 feet downstream. Since no major geologic features were identified on or near the site, it is reasonable to infer that the direction of near-surface groundwater flow under static conditions (no pumping interference) approximates the surface topography of the site.

The underlying soil in the tank pit area was observed to be primarily residual reddish brown silty sand from ground surface to four and a half feet below ground surface (bgs). The soil was observed to be yellowish brown silty to gravelly sand with some relict rock structure from four and half to seven and a half feet bgs. The maximum excavation depth achieved during UST closure was approximately seven and a half feet bgs. Groundwater and competent bedrock were not encountered during UST closure activities.

C. Closure Procedure

C.1 Site Preparations

In preparation for the UST closure, a "Notice of Intent: UST Permanent Closure" (UST-3) form was submitted to NCDENR. A copy of the UST-3 form is attached in Appendix A. A site-specific Health and Safety Plan was prepared to address safety concerns at the site. The Lenoir City Fire Department was also notified of the planned closure activities.

C.2 Residual Material

The UST closure activities were conducted on July 19, 2010. Prior to UST excavation, the contents of the UST were removed with a vacuum truck. Approximately 40 gallons of residual material was removed from the UST for off-site transport and disposal. The residual material appeared to be a mixture of heating oil and water. Copies of material manifests are included in Appendix B.

C.3 UST System Removal

C.3.1 UST Removal

After the residual material was removed from the UST, a backhoe removed approximately two feet of reddish brown silty sand, exposing the top of the steel UST (Photograph 1, Appendix C). Tank pit backfill material consisting primarily of reddish brown silty sand was excavated along the sides of the UST. The back hoe then lifted the UST from the tank pit. The UST was removed intact including an approximate two foot vent pipe and fill port (see Photographs 2, Appendix C). Visible rust/corrosion was observed on the UST during removal. Obvious corrosion holes in the walls of the UST were not observed. After removal from the tank pit, the UST was placed on a Zebra Environmental and Industrial Services, Inc. (Zebra) vehicle and secured for transport. A copy of the tank disposal certificate is included in Appendix B.

C.3.2 Product Line Removal

Approximately five feet of one-half inch diameter copper product line was encountered between the tank pit and the residence. The product line was observed to be approximately one feet bgs. The product line was removed from the excavation and capped where it entered the foundation wall of the residence.

C.4 Excavated Material

Excavated material from the tank pit was temporarily stockpiled adjacent to the excavation to the east and west. The material was visually assessed for staining and field-screened with a MiniRAE photoionization detector (PID) for volatile organic compounds. The stockpiled material did not exhibit staining, but did contain elevated PID readings and exhibited olfactory indications of contamination. The stockpiled soil was transported from the site for disposal as nonhazardous waste. Copies of material manifests are included in Appendix B

C.5 Site Investigation

C.5.1 Field Screening

A PID was used to screen material excavated from the tank pit. PID readings ranged from zero to 68.9 parts per million (ppm) during the removal of the UST system.

C.5.2 Soil Sampling

Soil samples were collected in general accordance with NCDENR's "Guidelines for Site Checks, Tank Closure, and Initial Response and Abatement for UST Releases" (the Guidelines) dated March 1, 2007 (change 3, effective December 1, 2008). Because of elevated PID readings and obvious contamination

beneath the UST, one soil sample, rather than two soil samples, was collected from residual soil beneath the mid-line of the UST (*Midline UST*). Due to elevated PID readings of soil/fill material in the tank pit, over-excavation of the tank pit was performed. Soil samples were collected from the base and sidewalls of the over-excavation and are discussed in Section D of this report. Soil samples were collected using individual single-use five-gram "T-handle" grab samplers and new single-use nitrile gloves. The soil samples were given unique names identifying the locations in which the samples were collected. The sample collected from beneath the midline of the UST was obtained from a backhoe bucket. In order to minimize sample contamination from the bucket, the sample was obtained in the approximate center of the excavated material in the bucket. A site location map showing the general location of the UST in relation to surrounding streets is shown on Figure 2 and soil sample locations within the excavation are identified on Figure 3.

C.5.3 Sample Handling

The soil sample was placed in an ice-chilled cooler and delivered, via overnight delivery, to Prism Laboratories, Inc (Prism), a North Carolina certified laboratory and submitted for analysis of total petroleum hydrocarbons (TPH) – diesel range organics (DRO) and TPH – gasoline range organics (GRO). The laboratory was instructed to also analyze the sample, if it contained 10 milligrams per kilogram (mg/kg) or greater of either DRO and/or GRO, for volatile organic compounds (VOCs) according to EPA Method 8260, semi-volatile organic compounds (SVOCs) according to EPA Method 8270, and volatile petroleum products (VPHs) and extractable petroleum products (EPHs) according to the MADEP Methods. The reportable action limit for DRO and GRO as published in the Guidelines is 10 mg/kg.

C.6 Results

The soil sample collected beneath the midline of the UST (*Midline UST*) exhibited a DRO concentration of 6,100 mg/kg and a GRO concentration of 190 mg/kg, which are greater than NCDENR's reportable action limit of 10 mg/kg. The sample results for DRO and GRO are summarized in Table 2 and the laboratory analytical report and chain-of-custody record are included in Appendix D.

Based on the DRO and GRO analytical results as compared to the NCDENR reportable action limit, the soil sample was also analyzed for VOCs, SVOCs, and VPH/EPH. The laboratory analytical report indicated concentrations of three VOCs and a concentration of pyrene (SVOC) in the soil sample exceeded the laboratory reporting limits. One VOC, tetrachloroethylene (PCE), was detected at an estimated concentration of 0.19 mg/kg, which is below the laboratory reporting limit. The soil sample also exhibited EPH and VPH concentrations above laboratory reporting limits. Sample results for VOCs,

SVOCs, VPHs, and EPHs are summarized in Table 2 and the laboratory analytical report and chain-of-custody record are included in Appendix D.

D. Excavation of Contaminated Soil

D.1 Over-excavation

Elevated PID readings were recorded in soils along the sidewalls and base of the tank pit. A backhoe was used to over-excavate the UST tank pit and the excavated material was screened with a PID for volatile organic vapors and observed for signs of apparent staining. The material removed was stockpiled to the east and west of the excavation (photograph 3, Appendix C). As the over-excavation proceeded in the tank pit, PID readings increased with depth. Over-excavation of the tank pit continued to a depth of approximately seven and a half feet bgs. Groundwater and competent bedrock were not encountered during over-excavation activities. The stockpiled soil was transported from the site for disposal as nonhazardous waste. Copies of material manifests for the contaminated material are located in Appendix B.

D.2 Dimensions of Final Excavation

The dimensions of the final excavation were approximately 8 feet by 15 feet, with a depth of approximately seven and a half feet bgs (Photograph 4, Appendix C). Based on weigh tickets, the amount of contaminated material removed from the site was approximately 18.8 tons. Approximate excavation dimensions are shown on Figure 3.

D.3 Over-Excavation Investigation.

D.3.1 Field Screening

A PID was used to screen material excavated from the site. PID readings of over-excavated soil ranged from zero to 88.6 ppm.

D.3.2 Soil Sampling of Over-Excavation

Post-excavation soil samples were collected in general accordance with NCDENR's Guidelines. Six soil samples were collected from the over-excavation in residual soil -- two soil samples were collected from the base of the excavation at seven and a half feet bgs and one from each sidewall at a depth of four feet to five feet bgs. Soil samples were collected using individual single-use five-gram "T-handle" grab samplers and new single-use nitrile gloves. Each soil sample was named for the location in which the sample was collected. Samples collected from the over-excavation were obtained from the backhoe bucket. In order to minimize sample contamination from the bucket, these samples were obtained in the

approximate center of the excavated material in the bucket. Soil sample locations are identified on Figure 2.

D.3.3 Sample Handling

Upon collection, the post-excavation soil samples were placed in ice-chilled coolers and delivered, via overnight delivery, to Prism for analysis of TPH–DRO and TPH–GRO. The laboratory was instructed that samples containing 10 mg/kg or greater of either DRO and/or GRO, were to also be analyzed for VOCs, SVOCs, VPHs, and EPHs. The reportable action level for DRO and GRO as published in NCDENR's Guidelines is 10 mg/kg.

D.4 Results

Of the six post-excavation soil samples, three soil samples exhibited DRO and/or GRO concentrations greater than 10 mg/kg. The two soil samples collected from the base of the excavation, *N. Base* and *S. Base*, exhibited DRO concentrations of 22,000 mg/kg and 14,000 mg/kg, respectively, and also exhibited GRO concentrations of 170 mg/kg and 310 mg/kg, respectively. The soil sample collected from the west sidewall of the excavation, *West SW*, exhibited a DRO concentration of 12 mg/kg. DRO and GRO analytical results are shown in Table 1 and the laboratory analytical report and chain-of-custody record are included in Appendix D.

Based on the GRO and DRO results as compared to the NCDENR reportable action level, soil samples *North Base*, *South Base* and *West SW* were also analyzed for VOCs, SVOCs, VPHs, and EPHs. The laboratory analytical report indicated concentrations of four VOCs and two SVOCs above the laboratory reporting limits. One VOC, PCE, from the *S. Base* soil sample, was detected at a concentration of 0.014 mg/kg. EPH and VPH concentrations were also detected above laboratory reporting limits. Analysis results for VOCs, SVOCs, VPHs, and EPHs are shown in Table 2 and the laboratory analytical report and chain-of-custody record are included in Appendix D.

Based on the field activities completed on July 19, 2010, a "24-Hour Release and UST Leak Reporting Form" (UST-61 Form) was submitted to NCDENR on July 20, 2010.

D.5 Backfilling of Excavations

Backfill material was obtained from the site at a location approximately seventy feet upgradient of the tank pit excavation. A PID and visual observation was used to screen material utilized as backfill. The backfill material did not exhibit elevated PID readings or visual staining. NCDOT requested that the excavation be backfilled and compacted to 95 percent of the standard Proctor laboratory compaction test. Backfill material was placed in approximately one-foot thick loose lifts and compacted using a

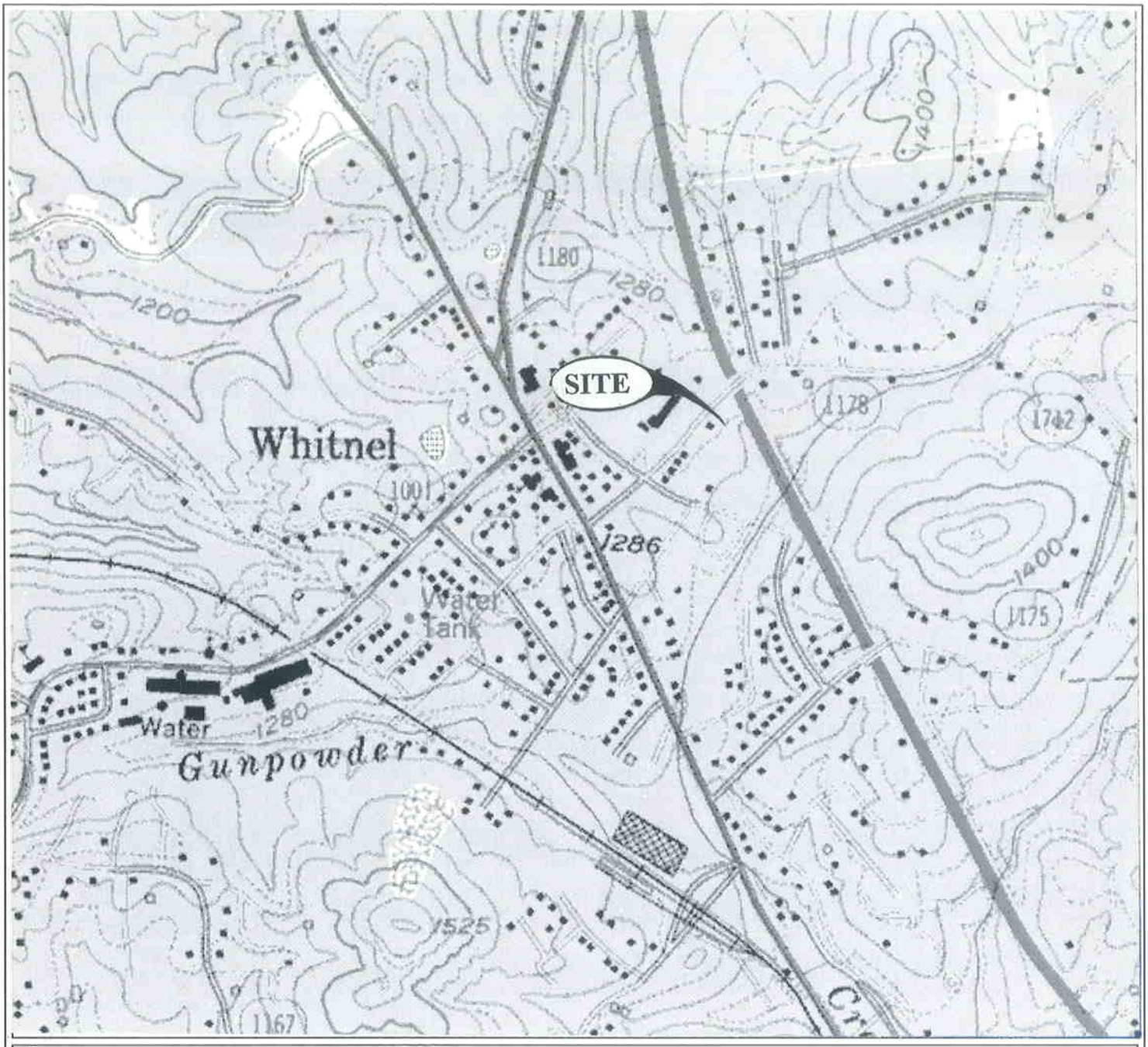
mechanized tamper and backhoe bucket. In place soil density test results indicated the compacted backfill met or exceeded the minimum specified compaction of 95 percent of the maximum dry density. A Compaction Test Report is included as Appendix E. The backhoe was used to achieve a relative uniform grade consistent with previous site grade (Photograph 5, Appendix C).

E. Conclusions and Recommendations

Laboratory analysis of soil samples collected from beneath the midline of the UST, the west sidewall and the base of the over-excavation identified soil contaminant concentrations exceeding published action limits. The detected concentrations indicate there has been a release of heating oil from the UST, or there have been overfills or spills associated with the UST. Concentrations of one VOC, PCE, were reported above the published Maximum Soil-to-Water Contaminant Concentration in the soil sample collected from beneath the midline of the UST (estimated concentration) and from one of the two soil samples collected from the base of the over-excavation. Concentrations of C5-C8 aliphatics, C9-C18 aliphatics, and C9-C22 aromatics were also detected above the published Maximum Soil-to-Water Contaminant Concentrations in three of the soil samples. The UST was considered to be utilized as a residential heating oil UST, therefore, the source of the concentrations of PCE detected in the soil samples collected in the area of the UST is not known.

Bedrock, free product, or groundwater was not encountered during excavation activities. Completed Site UST closure forms (NCDENR UST-2 and UST-61 form) are included in Appendix A. MACTEC recommends that a copy of this report be forwarded to NCDENR for their evaluation of the site with respect to these closure and initial abatement activities.

FIGURES



LENOIR, NORTH CAROLINA

35801-H5-TF-024

PRINTED 1956

PHOTOREVISED 1993
DMA 4655 I NE-SERIES V842

CONTOUR INTERVAL 40 FEET

GRAPHIC SCALE FEET

1000 500 0 1000 2000

NORTH

N.C.

QUADRANGLE LOCATION

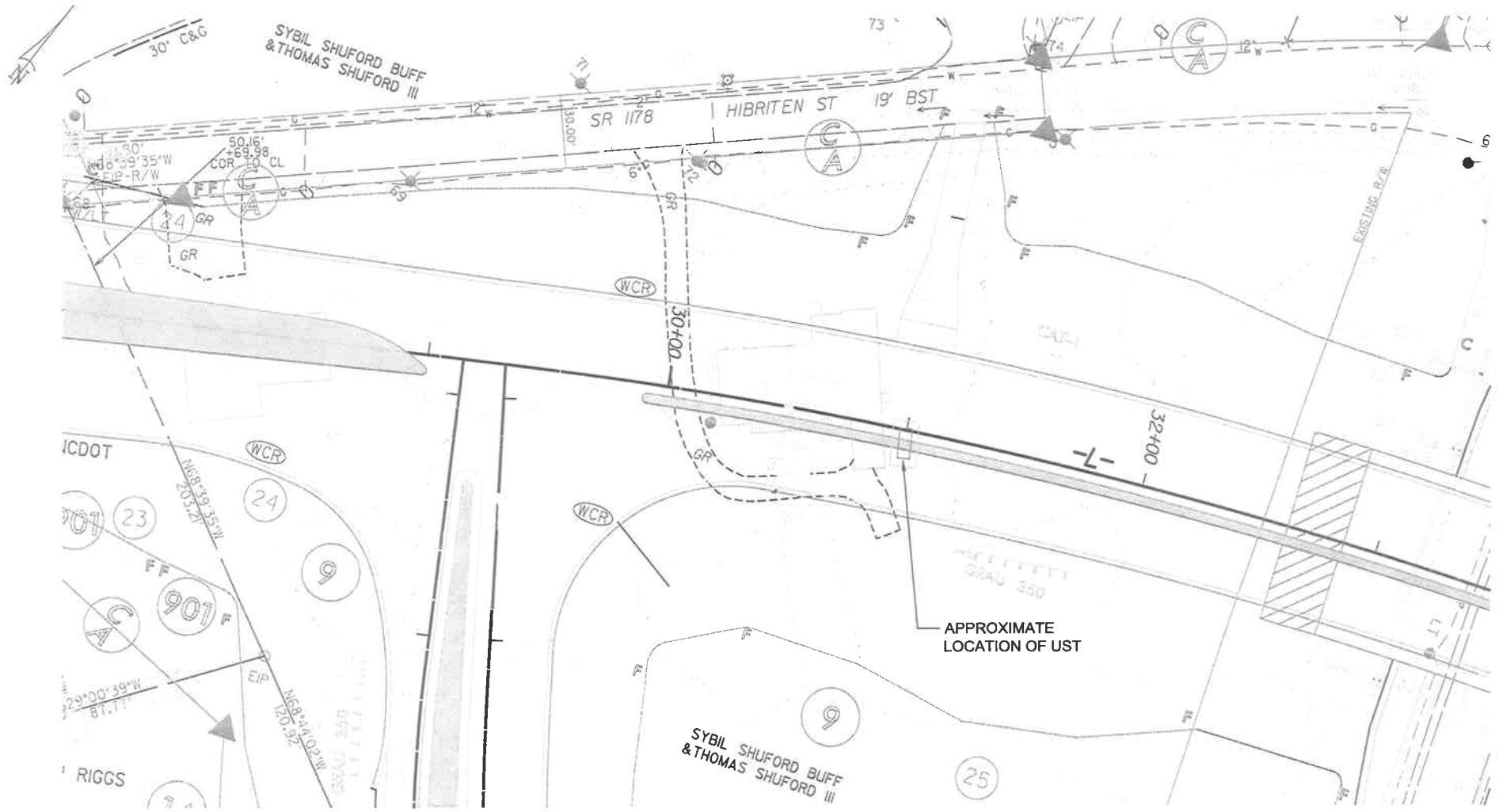
NOTE: SITE LOCATION IS APPROXIMATE.

MACTEC
ENGINEERING AND CONSULTING, INC.
ASHEVILLE, NORTH CAROLINA

TOPOGRAPHIC SITE MAP

NCDOT PARCEL #9
FORMER SHUFORD PROPERTY
LENOIR, NORTH CAROLINA

DRAWN:	DATE: JULY 2010
DFT CHECK: MEW	SCALE: 1" = 1,000'
ENG CHECK: —	JOB: 6470-10-0155
APPROVAL: MEW	FIG: 1

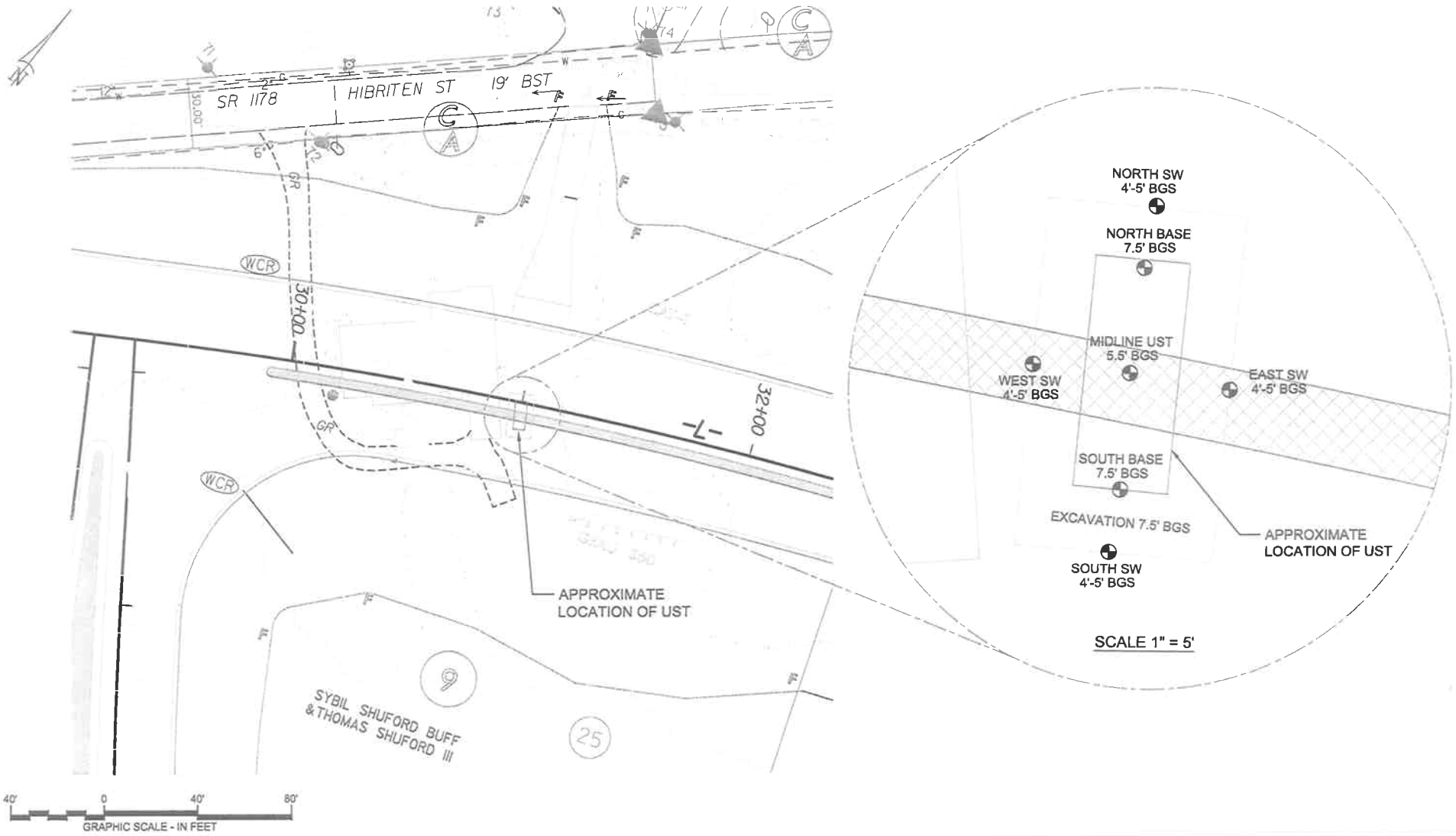


MACTEC
MACTEC ENGINEERING AND CONSULTING, INC.
3301 ATLANTIC AVENUE
RALEIGH, NORTH CAROLINA

SITE LOCATION MAP
NCDOT PARCEL 9 - FORMER SHUFORD PROPERTY
STATE PROJECT No. U-2211 B, WBS 34783.1.1
LENOIR, NORTH CAROLINA

DRAWN: R.R.	DATE: AUGUST 2010	DRAWING
ENG CHECK:	SCALE: AS SHOWN	2
APPROVAL:	JOB No.: 6470-10-0155.02	

REFERENCE: BASE DRAWINGS ARE PROVIDED BY NCDOT; MACTEC FIELD NOTES.



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

SAMPLE LOCATION MAP
NCDOT PARCEL 9 - FORMER SHUFORD PROPERTY
STATE PROJECT No. U-2211 B, WBS 34783.1.1
LENOIR, NORTH CAROLINA

DRAWN: R.R.	DATE: AUGUST 2010	DRAWING
ENG CHECK: —	SCALE: AS SHOWN	3
APPROVAL:	JOB No.: 6470-10-0155.02	

REFERENCE: BASE DRAWINGS ARE PROVIDED BY NCDOT; MACTEC FIELD NOTES.

TABLES

Table 1: Analytical Results for TPH-DRO and TPH-GRO

NCDOT Parcel 9 (Former Shuford Property)
121 Hibriten Drive
Lenoir, North Carolina
MACTEC Project: 6470-10-0155

SAMPLE ID	DEPTH (feet. bgs)	LOCATION	PID Readings (ppm)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)
MIDLINE UST	5.5'	UST Tank Pit	68.9	**6,100**	**190**
N. BASE	7.5'	UST Overexcavation	88.6	**22,000**	**170**
S. BASE	7.5'	UST Overexcavation	82.3	**14,000**	**310**
EAST SW	4'-5'	UST Overexcavation	0.0	BRL	BRL
NORTH SW	4'-5'	UST Overexcavation	39.0	BRL	2.4J
WEST SW	4'-5'	UST Overexcavation	12.6	**12**	BRL
SOUTH SW	4'-5'	UST Overexcavation	0.0	BRL	BRL

Notes:

TPH = Total Petroleum Hydrocarbons
GRO = Gasoline Range Organics
DRO = Diesel Range Organice
bgs = below ground surface
PID = Photoionization Detector
ppm = parts per million

Prepared By: RMC
Checked By: LRS 8/17/10

mg/kg = milligrams per kilogram
BRL = Below Reporting Limits
J = detected below reporting limit; result is estimated

BOLD = Reported concentrations above NCDENR Action Limit of 10 mg/kg

Table 2: Analytical Results for VOCs, SVOCs, VPH, and EPH

NCDOT Parcel 9 (Former Shuford Property)
121 Hibriten Drive
Lenoir, North Carolina
MACTEC Project: 6470-10-0155

Constituent	MIDLINE UST (mg/kg)	N.BASE (mg/kg)	S.BASE (mg/kg)	WEST SW (mg/kg)	Soil-to-Water Maximum Contaminant Concentration (mg/kg)	Industrial/ Commercial Soil Cleanup Levels (mg/kg)
VOCs & SVOCs						
Acetone			0.095	0.075	2.8	40,880
Methyl Ethyl Ketone (2-Butanone)			0.045 J	0.021 J	17	245,280
1,3,5-Trimethylbenzene	1.4	1.7			7.3	20,440
4-Isopropyltoluene	0.35	0.58			NL	NL
o-Xylene	0.12 J				NL	NL
sec-Butylbenzene	0.37				3.3	16,350
tert-Butylbenzene	0.16 J				3.4	16,350
Tetrachloroethylene	**0.19 J**		**0.014**		0.0074	110
2-Methylnaphthalene		1.6 J			1.7	1,635
Phenanthrene	1.0 J	6.2			60	12,264
Pyrene	6.4	7.4	7.4		290	12,264
VPH & EPH						
C5-C8 Aliphatics	12 J	51	**87**		72	24,528
C9-C18 Aliphatics [1]	**4,040**	**8,760**	**6,600**		3,300	245,280
C19-C36 Aliphatics	1,500	3,100	2,400		##	#
C9-C22 Aromatics [2]	**1,470**	**6,340**	**5,000**		34	12,264

Notes:

VOC = Volatile Organic Coumpound
SVOC = Semi-Volatile Organic Compound
VPH = Volatile Petroleum Hydrocarbons
EPH = Extractable Petroleum Hydrocarbons
Blank Cell = Below Laboratory Reporting Limits
(1) Calculated by adding C9-C12 aliphatics and C9-C18 aliphatics and subtracting C9-C10 aromatics
(2) Calculated by adding C9-C10 aromatics and C11-C22 aromatics
J = detected below laboratory reporting limits, estimated concentration
mg/kg = milligrams per kilogram
BOLD = Reported concentration above NCDENR's Soil-to-Water Maximum Contaminant Concentration
Reference: Table 8 of NCDENR's "Guidelines for Site Checks, Tank Closure, and Initial Response and Abatement for UST Releases" dated March 1, 2007 (change 3, effective December 1, 2008).
= Health based level > 100%
= Considered immobile

Prepared By: RMC
Checked By: LRD 8/17/10

APPENDIX A

UST Closure Forms (UST 2, UST-3 and UST-61 Forms)

UST-2 Site Investigation Report for Permanent Closure or Change-in-Service of UST

Return completed form to:
The DWM Regional Office located in the area where the facility is located. Send a copy to the Central Office in Raleigh so that the status of the tank may be changed to "PERMANENTLY CLOSED" and your tank fee account can be closed out.
SEE MAP ON THE BACK OF THIS FORM FOR THE CENTRAL AND REGIONAL OFFICE ADDRESSES.

STATE USE ONLY:
I.D. #_____
Date Received_____

INSTRUCTIONS (READ THIS FIRST)

For more than five UST systems you may attach additional forms as needed.

Permanent closure – For permanent closure, complete all sections of this form.

Change-in-service – For change-in-service where UST systems will be converted from containing a regulated substance to storing a non-regulated substance, complete sections I, II, III, IV, and VIII

Effective February 1, 1995, all UST closure/change-in-service reports must be submitted in the format provided in the UST-12 form. UST closure and change-in-services must be completed in accordance with the latest version of the *Guidelines for Tank Closure*. A copy of the UST-12 form and the *Guidelines for Tank Closure* can be obtained at www.wastenotnc.org.

You must make sure that USTs removed from your property are disposed of properly. When choosing a closure contractor, ask where the tank(s) will be taken for disposal. Usually, USTs are cleaned and cut up for scrap metal. This is dangerous work and must be performed by a qualified company. Tanks disposed of illegally in fields or other dumpsites can leak petroleum products and sludge into the environment. If your tanks are disposed of improperly, you could be held responsible for the cleanup of any environmental damage that occurs.

NOTE: If a release from the tank(s) has occurred, the site assessment portion of the tank closure must be conducted under the supervision of a P.E. or L.G., with all closure site assessment reports bearing the signature and seal of the P.E. or L.G.

I. OWNERSHIP OF TANKS

Owner Name (Corporation, Individual, Public Agency, or Other Entity)
Sybil Shuford Buff, Joseph Buff, Thomas Shuford III

Street Address
121 Hibriten Dr

City: Lenoir | County: Caldwell

State: NC | Zip Code: 28645

Phone Number
828-757-0302

II. LOCATION OF TANKS

Facility Name or Company
NCDOT Project U-2211-B Parcel#9 (former Shuford Property)

Facility ID # (If known)

Street Address
121 Hibriten Drive

City: Lenoir | County: Caldwell | Zip Code: 28645

Phone Number
NA

III. CONTACT PERSONNEL

Contact for Facility: Ethan Caldwell		Job Title: NCDOT GeoEnvironmental Project Mgr.	Phone. No: 919-250-4088
Closure Contractor Name: ene Cline	Closure Contractor Company: Zebra Environmental & Industri	Address: PO Box 357, High Point, NC 27261	Phone. No: 336-841-5276
Primary Consultant Name: Matthew E. Wallace	Primary Consultant Company: MACTEC Engineering & Consultin	Address: 1308 Patton Avenue, Asheville, NC	Phone. No: 828-252-8130

IV. UST INFORMATION FOR REGISTERED UST SYSTEMS

V. EXCAVATION CONDITION

Tank ID No.	Size in Gallons	Tank Dimensions	Last Contents	Last Use Date	Permanent Close Date	Change-in-Service Date	Water in excavation Yes	Water in excavation No	Free product Yes	Free product No	Notable odor or visible soil contamination Yes	Notable odor or visible soil contamination No
		'					☐	☐	☐	☐	☐	☐
							☐	☐	☐	☐	☐	☐
							☐	☐	☐	☐	☐	☐
							☐	☐	☐	☐	☐	☐
							☐	☐	☐	☐	☐	☐

VI. UST INFORMATION FOR UNREGISTERED UST SYSTEMS

VII. EXCAVATION CONDITION

Tank ID No.	Size in Gallons	Tank Dimensions	Last Contents	Last Use Date	Permanent Close Date	Tank Owner Name *	Water in excavation Yes	Water in excavation No	Free product Yes	Free product No	Notable odor or visible soil contamination Yes	Notable odor or visible soil contamination No
1	1000	4' x 10.5'	Heating Oil	unknow	7/19/10	NCDOT	☐	☒	☐	☒	☒	☐
							☐	☐	☐	☐	☐	☐
							☐	☐	☐	☐	☐	☐
							☐	☐	☐	☐	☐	☐
							☐	☐	☐	☐	☐	☐

* If the tank owner address is different from the one listed in Section I., then enter the street address, city, state, zip code and telephone no. below:

VIII. CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true accurate and complete.

Print name and official title of owner or owner's authorized representative	Signature	Date Signed
Matthew E. Wallace, as owner's agent on behalf of NCDOT	Matthew E. Wallace	9/3/10

UST-3 Notice of Intent: UST Permanent Closure or Change-in-Service

Return completed form to:
The DWM Regional Office located in the area where the facility is located. Send a copy to the Central Office in Raleigh so that the status of the tank may be changed to "PERMANENTLY CLOSED" and your tank fee account can be closed out.
SEE MAP ON THE BACK OF THIS FORM FOR THE CENTRAL AND REGIONAL OFFICE ADDRESSES.

STATE USE ONLY
I.D #
Date Received

INSTRUCTIONS (READ THIS FIRST)

Complete and return at least **thirty (30) days** prior to closure or change-in-service activities. If a Professional Engineer (P.E.) or a Licensed Geologist (L.G.) provides supervision for closure or change-in-service site assessment activities and signs and seals all closure reports then at least a **five (5) working days** notice is acceptable.

Completed UST closure or change-in-service site assessment reports, along with a copy of the UST-2 form, should be submitted to the appropriate Division of Waste Management (DWM) Regional Office within thirty (30) days following closure activities. The UST-2 form should also be submitted to the Central Office in Raleigh so that the status of the tanks may be changed to permanently closed and your tank fee account can be closed out.

UST closure and change-in-service site assessments must be completed in accordance with the latest version of the *Guidelines for Tank Closure*. The *Guidelines for Tank Closure* can be obtained at www.wastenotnc.org.

You must make sure that USTs removed from your property are disposed of properly. When choosing a closure contractor, ask where the tank(s) will be taken for disposal. Usually, USTs are cleaned and cut up for scrap metal. This is dangerous work and must be performed by a qualified company. Tanks disposed of illegally in fields or other dumpsites can leak petroleum products and sludge into the environment. If your tanks are disposed of improperly, you could be held responsible for the cleanup of any environmental damage that occurs.

I. OWNERSHIP OF TANKS

Owner Name (Corporation, Individual, Public Agency, or Other Entity)
North Carolina Department of Transportation

Street Address
1589 Mail Service Center

City: Raleigh
County: Wake

State: NC
Zip Code: 27699-1589

Phone Number
919.250.4088

II. LOCATION

Facility Name or Company
NCDOT Project U-2211-B Parcel #9 (Shuford Property)

Facility ID # (If known)

Street Address
121 Hibriten Drive

City: Lenoir
County: Caldwell
Zip Code: 28645

Phone Number

III. CONTACT PERSONNEL

Name:	Company Name:	Job Title:	Phone Number:
Ethan Caldwell	NCDOT Geotechnical Engineering Unit	GeoEnvironmental Project Manager	(919) 250-4088

IV. TANK REMOVAL, CLOSURE IN PLACE, CHANGE-IN SERVICE

1. Contact local fire marshal.
2. Plan entire closure event.
3. Conduct Site Soil Assessment.
4. If removing tanks or closing in place, refer to API Publication 2015 *Cleaning Petroleum Storage Tanks* and 1604 *Removal and Disposal of Used Underground Petroleum Storage Tanks.*
5. Provide a sketch locating piping, tanks and soil sampling locations.
6. Submit a closure report in the format of UST-12 (including the form UST-2) within thirty (30) days following the site investigation.
7. If a release from the tanks has occurred, the site assessment portion of the tank closure must be conducted under the supervision of a P.E. or L.G., with all closure site assessment reports bearing the signature and seal of the P.E. or L.G. If a release has not occurred, the supervision, signature or seal of a P.E. or L.G. is not required.
8. Keep closure records for three (3) years.

V. WORK TO BE PERFORMED BY

Contractor Name:	Contractor Company Name:		
Gene Cline	Zebra Environmental and Industrial Services		
Address: P.O. Box 357 High Point,	State: NC	Zip Code: 27261	Phone No: 336.841.5276
Primary Consultant Name: Matthew Wallace	Primary Consultant Company Name: MACTEC Engineering and Consulting		Consultant Phone No: 828.252.8130

VI. TANKS SCHEDULED FOR CLOSURE OR CHANGE-IN-SERVICE

Tank ID No.	Size in Gallons	Last Contents	Proposed Activity: Closure – Removal	Proposed Activity: Closure – Abandonment in Place *	Proposed Activity: Change-In-Service – New Contents Stored
TBD	< 1000	Heating Oil	☒	☐	
			☐	☐	
			☐	☐	
			☐	☐	
			☐	☐	

* Prior written approval to abandon a tank in place must be received from a DWM Regional Office.

VII. OWNER OR OWNER'S AUTHORIZED REPRESENTATIVE

I understand that I can be held responsible for environmental damage resulting from the improper disposal of my USTs.

Print name and official title: Matthew E. Wallace, as owner's agent on behalf of NCDOT

Signature	Date Signed	SCHEDULED REMOVAL DATE	**Notify your DWM Regional Office 48 hours before this date if scheduled removal date changes**
Matthew E. Wallace	7/15/10	July 19, 2010	

UST-61 — 24-Hour Release and UST Leak Reporting Form.

For Releases in NC

This form should be completed and submitted to the UST Section's regional office following a known or suspected release from an underground storage tank (UST) system. This form is required to be submitted within 24 hours of discovery of a known or suspected release

(DWM USE ONLY)
Incident # _____ Risk (H,I,L,U)_____
Received On _____ Received By _____
Reported by (*circle one*): Phone, Fax or Report
Region _____

Suspected Contamination? (Y/N) Y
Confirmed GW Contamination? (Y/N) N
Confirmed Soil Contamination ?(Y/N) N
Samples Taken?(Y/N) Y
Free Product? (Y/N) N If Yes, State Greatest Thickness _____

Facility ID Number NA
Date Leak Discovered 7/19/10
Comm/Non-Commercial? Non-Comm.
Reg/Non-regulated? Non-regulated

INCIDENT DESCRIPTION

Incident Name: NCDOT Project U-2211-B Parcel #9 (Shuford Property)

Address: 121 Hibriten Drive | County:

City/Town: Lenoir | Zip Code: 28645 | Regional Office (*circle one*): Asheville, Mooresville, Fayetteville, Raleigh, Washington, Wilmington, Winston-Salem

Latitude (decimal degrees): 35.88971 Longitude (decimal degrees) : 81.52026

Obtained by:
- ☐ GPS
- ☐ Topographic map
- ☐ GIS Address matching
- ☒ Other Terraserver
- ☐ Unknown

Describe location:

Briefly describe suspected or confirmed release: *(including but not limited to: nature of release, date of release, amount of release, amount of free product present and recovery efforts, initial responses conducted, impacts to receptors)*

- Petroleum-like odor observed in soil/fill adjacent and beneath UST during UST Closure.
- Over excavation was performed and will be reported in forthcoming initial abatement action report.

HOW RELEASE WAS DISCOVERED (Release Code)

(Check one)

- ☐ Release Detection Equipment or Methods
- ☒ During UST Closure/Removal
- ☐ Property Transfer
- ☒ Visual/Odor
- ☐ Water in Tank
- ☐ Water Supply Well Contamination
- ☐ Groundwater Contamination
- ☐ Surface Water Contamination
- ☒ Other (specify) Soil

SOURCE OF CONTAMINATION

Source of Release *(Check one to indicate primary source)*
- ☒ Tank
- ☐ Piping
- ☐ Dispenser
- ☐ Submersible Turbine Pump
- ☐ Delivery Problem
- ☐ Other
- ☐ Unknown

Definitions presented on reverse

Cause of Release *(Check one to indicate primary cause)*
- ☐ Spill
- ☐ Overfill
- ☐ Corrosion
- ☐ Physical or Mechanical Damage
- ☐ Install Problem
- ☐ Other
- ☒ Unknown

Definitions presented on reverse

Type of Release *(Check one)*
- ☒ Petroleum
- ☐ Non-Petroleum
- ☐ Both

Location *(Check one)*
- ☐ Facility
- ☒ Residence
- ☐ Other

Product Type Released *(Check one to indicate primary product type released)*
- ☐ Gasoline/ Diesel/ Kerosene
- ☒ Heating Oil
- ☐ Other Petroleum Products
- ☐ Metals
- ☐ Other Inorganics
- ☐ Other Organics
- ☐ Diesel/Veg. Oil Blend
- ☐ Vegetable Oil 100%
- ☐ E10 – E20
- ☐ E21 – E84
- ☐ E85 – E99
- ☐ Ethanol 100%
- ☐ E01 – E09

Ownership
1. Municipal 2. Military 3. Unknown 4. Private 5. Federal 6. County (7. State)

Operation Type
1. Public Service 2. Agricultural 3. (Residential) 4. Education/Relig. 5. Industrial 6. Commercial 7. Mining

IMPACT ON DRINKING WATER SUPPLIES

Water Supply Wells Affected? 1. Yes 2. No (3. Unknown)

Number of Water Supply Wells Affected _____

Water Supply Wells Contaminated: (*Include Users Names, Addresses and Phone Numbers. Attach additional sheet if necessary*)

1.
2.
3.

UST SYSTEM OWNER

UST Owner/Company			
North Carolina Department of Transportation			
Point of Contact		Address	
Albert Steib NCDOT ROW Agent		1589 Mail Service Center	
City	State	Zip Code	Telephone Number
Raleigh	NC	27699-1589	919-250-4088

UST SYSTEM OPERATOR

UST Operator/Company		Address	
City	State	Zip Code	Telephone Number

LANDOWNER AT LOCATION OF UST INCIDENT

Landowner		Address	
City	State	Zip Code	Telephone Number

Draw Sketch of Area (showing two major road intersections) or Attach Map

Person Reporting Incident	Rodney Clark	Company	MACTEC Engineering & Consulting	Telephone Number	828-252-8130
Title	Staff Geologist	Address	1308 Patton Avenue, Asheville, NC 28806	Date	7/20/2010

Definitions of Sources

Tank: means the tank that stores the product and is part of the underground storage tank system

Piping: means the piping and connectors running from the tank or submersible turbine pump to the dispenser or other end-use equipment (Vent, vapor recovery, or fill lines are excluded.)

Dispenser: includes the dispenser and the equipment used to connect the dispenser to the piping (e.g., a release from a suction pump or from components located above the shear valve)

Submersible Turbine Pump (STP) Area includes the submersible turbine pump head (typically located in the tank sump), the line leak detector, and the piping that connects the submersible turbine pump to the tank

Delivery Problem: identifies releases that occurred during product delivery to the tank. (Typical causes associated with this source are spills and overfills.)

Other: serves as the option to use when the release source is known but does not fit into one of the preceding categories (e.g., for releases from vent lines, vapor recovery lines, and fill lines)

Unknown: identifies releases for which the source has not been determined

Definitions of Causes

Spill: use this cause when a spill occurs (e.g., when the delivery hose is disconnected from the tank fill pipe or when the nozzle is removed from the dispenser)

Overfill: use when an overfill occurs (e.g., overfills may occur from the fill pipe at the tank or when the nozzle fails to shut off at the dispenser)

Physical or Mechanical Damage: use for all types of physical or mechanical damage, except corrosion (e.g., puncture of tank or piping, loose fittings, broken components, and components that have changed dimension)

Corrosion: use when a metal tank, piping, or other component has a release due to corrosion (e.g., for steel, corrosion takes the form of rust)

Installation Problem: use when the problem is determined to have occurred specifically because the UST system was not installed properly

Other: use this option when the cause is known but does not fit into one of the preceding categories (e.g., putting regulated substances into monitoring wells)

Unknown: use when the cause has not been determined

Caldwell County Mapping

1 inch = 200 feet

APPENDIX B

Material Manifests and UST Disposal Certificate

Zebra Environmental & Industrial Services Inc.
901 East Springfield Road High Point, NC 27263 Phone: 1-336-841-5276 Fax: 1-336-841-5509

Tank Disposal Manifest

Tank Owner/Authorized Representative: Name and Mailing address
N.C. DOT

Tank Owner/Authorized Representative: Contact: 828 252 6130
Phone: Rodney Clark

Description of Tanks:

Tank No.	Capacity	Previous Contents	Comments
#1	1K	#2 Fuel oil	121 Hilbriten
#2	1K	#2 Fuel oil	1401 Norwood ST
#3	275	#2 Fuel oil	1401 Norwood ST.
#4	275	#2 Fuel oil	Country Side

Tank Owner/Authorized Representative Certification: The undersigned certifies that the above listed storage tanks have been removed from the premises of the tank owner.

on behalf of NCDOT — Rodney Clark — 7/19/10
Signature — Printed Name — Month/Day/Year

Transporter: The under signed certifies that the above listed storage tanks have been transported to Zebra Environmental & industrial Services Inc, 901 East Springfield Road High Point, NC 27263

Signature — Printed Name — Month/Day/Year

Disposal Certification: The undersigned certifies that the above-named storage tank(s) have been accepted by the metal recycling facility.

Recycling Facility: L Gordon Iron + Metal Co.

Signature — Gene Clem — 7/20/2010
Printed Name — Month/Day/Year

MATERIAL MANIFEST

EMERGENCY PHONE NO.
(336) 841-5276

POST OFFICE BOX 357
HIGH POINT, NC 27261

TEL (336) 841-5276
FAX (336) 841-5509

Manifest Document No.	
Page	of
1	1
Zebra Job No.	
1703	

GENERATOR INFORMATION

Name	US EPA ID No.
NC DOT	
Street Address	**Mailing Address**
121 HIBRITEN DR LENOIR N.C. 28645	
Phone No.	
828 252 8130	
Contact	
Rodney Clark	

DESCRIPTION OF MATERIALS

	HM	USDOT Proper Shipping Name (Complete All Items for Hazardous Materials)	Hazard Class or Div	UN / NA ID No.	Packing Group	Containers Qty.	Containers Type	Total Quantity	Unit Wt./Vol.
a.		NON HAZARDOUS LIQUID N.O.S	N/A	N/A	N/A	1	TT	40	G
b.									
c.									

ADDITIONAL INFORMATION		ERG No.	Zebra Profile Code	Facility Use
a.	FUEL DIC & WATER			
b.				
c.				

GENERATOR'S CERTIFICATION

This is to certify that the above-described materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. I further certify that none of the materials described above are a hazardous waste as defined by EPA 40 CFR Part 261 or any applicable state law, and unless specifically identified above, the materials contain less than 1,000 ppm total halogens and do not contain quantifiable levels (2 ppm) of PCBs as defined by EPA 40 CFR Parts 279 and 761.

Printed / Typed Name	Signature	Mo. / Day / Yr.
on behalf of NCDOT Rodney Clark	Rodney Clark	7/19/10

TRANSPORTER INFORMATION

Transporter: Zebra Environmental & Industrial Services Inc

Address: 901 East Springfield Road, High Point, NC 27263

Transporter or EPA ID No.: NCO991302669 — Unit No.: UT-3

Phone: (336) 841-5276

I hereby acknowledge receipt of the above-described materials for transport from the generator site listed above.

Signature: Michael L Ball — Shipment Date: 7-19-10

I hereby acknowledge receipt of the above-described materials were received from the generator site and were transported to the facility listed below.

Signature: Michael L Ball — Delivery Date: 7-19-10

FACILITY INFORMATION

Facility: Zebra Environmental & Industrial Services, Inc.

Address: 901 East Springfield Road, High Point, NC 27263

Facility or EPA ID No.: NCO991302669

Phone: (336) 841-5276

Contact: David Tedder

I hereby acknowledge receipt of the materials covered by this manifest except for any discrepancy noted below.

Signature: Amy Tedder — Receipt Date

Discrepancies / Routing Codes / Handing Methods

a.

b.

c.

ORIGINAL - Facility Retain COPY 2 - Return to Generator COPY 3 - Transporter Retain COPY 4 - Generator Retain

MATERIAL MANIFEST

Zebra Environmental & Industrial Services

EMERGENCY PHONE NO. (336) 841-5276

POST OFFICE BOX 357 HIGH POINT, NC 27261

TEL (336) 841-5276 FAX (336) 841-5509

Manifest Document No.	
Page 1	of 1
Zebra Job No. 1763	

GENERATOR INFORMATION

Name	US EPA ID No.
NC DOT	

Street Address	Mailing Address	Phone No. / Contact
121 Hibriten Dr. Lenoir N.C. 28645		828 252 8130 Rodney Clark

DESCRIPTION OF MATERIALS

	HM	USDOT Proper Shipping Name (Complete All Items for Hazardous Materials)	Hazard Class or Div	UN / NA ID No.	Packing Group	Containers Qty.	Containers Type	Total Quantity	Unit Wt./Vol.
a.		Non Hazardous Solids N.O.S.	N/A	N/A	N/A	1	DT	18.80	
b.		7132 Soil (non-haz) 18.80							
c.									

ADDITIONAL INFORMATION		ERG No.	Zebra Profile Code	Facility Use
a.	Petro Impact Soil			
b.				
c.				

GENERATOR'S CERTIFICATION

This is to certify that the above-described materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. I further certify that none of the materials described above are a hazardous waste as defined by EPA 40 CFR Part 261 or any applicable state law, and unless specifically identified above, the materials contain less than 1,000 ppm total halogens and do not contain quantifiable levels (2 ppm) of PCBs as defined by EPA 40 CFR Parts 279 and 761.

Printed / Typed Name	Signature	Mo. / Day / Yr.
On behalf of NCDOT Rodney M. Clark		7/19/10

TRANSPORTER INFORMATION

Transporter 1/2 ~~Zebra Environmental & Industrial Services Inc~~

Address: 901 East Springfield Road, High Point, NC 27263

Transporter or EPA ID No.: NCO991302669 Unit No.: 213 DT-1

Phone: (336) 841-5276

I hereby acknowledge receipt of the above-described materials for transport from the generator site listed above.

Signature: [signature] Shipment Date: 7/19/10

I hereby acknowledge receipt of the above-described materials were received from the generator site and were transported to the facility listed below.

Signature: [signature] Delivery Date: 7/19/26

FACILITY INFORMATION

Facility: Environmental Soils

Address: 918 Crawford Rd Shelby N.C. 28150

Facility or EPA ID No.:

Phone: 704 434 0075

Contact: Ray Tinsley

I hereby acknowledge receipt of the materials covered by this manifest except for any discrepancy noted below.

Signature: Ray Tinsley Receipt Date: 7/19/10

Discrepancies / Routing Codes / Handing Methods

a.

b.

c.

ORIGINAL - Facility Retain COPY 2 - Return to Generator COPY 3 - Transporter Retain COPY 4 - Generator Retain

ENVIRONMENTAL SOILS, INC.
P.O. BOX 295
LATTIMORE, N.C. 28086-0489
704/434-0075
(704) 434-9533 FAX

Job Name: ZEBRA ENV.

Truck# RT2/DT1

Gross Wgt.: _____

Tare Wgt: _____

Net Wgt.: _____

Tons: _____

Weighed by: Ray Lowery

APPENDIX C

Photographs

Photograph 1: Removal of UST at Parcel 9, 121 Hibriten Drive (view is to the east).

Photograph 2: Removal of UST at Parcel 9, 121 Hibriten Drive (view is to the east).

Photograph 3: View of over-excavation at Parcel 9, 121 Hibriten Drive, (view is to the southwest).

Photograph 4: View of over-excavation and stock-piled soil at Parcel 9, 121 Hibriten Drive.

Photograph 5: View of grading of UST excavation at Parcel 9, 121 Hibriten Drive.

APPENDIX D

Laboratory Analytical Report and Chain-of-Custody

EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name:	Mactec - Asheville (NCDOT Project)	Laboratory Name:	Prism Laboratories, Inc.
Project Name:	NCDOT Lenoir	NC Certification # (Lab):	402
Site Location:	121 Hibriten Drive, Lenoir, NC	Sample Matrix:	Soil

Sample Information and Analytical Results							
Method for Ranges: MADEP EPH							
EPH Surrogate Standards: Aliphatic - 1-Chloro-octadecane / Aromatic - o-Terphenyl							
EPH Fractionation Surrogates: #1 - 2-Bromonaphthalene / #2 - Fluorobiphenyl							
Sample Identification:		[redacted]	Midline UST (5.5' bgs)	N.Base (7.5' bgs)	S. Base (7.5' bgs)	West Sw (4'-5' bgs)	
Date Collected:		[redacted]	7/19/2010	7/19/2010	7/19/2010	7/19/2010	
Date Received:		[redacted]	7/21/2010	7/21/2010	7/21/2010	7/21/2010	
Date Extracted:		[redacted]	8/2/2010	8/2/2010	8/2/2010	8/2/2010	
Date Analyzed:		[redacted]	8/3/2010	8/3/2010	8/3/2010	8/3/2010	
% Dry Solids:		[redacted]	79.1	79.0	75.3	79.5	
Dilution Factor:		[redacted]	5, 1*	10, 5*	5	1	
Hydrocarbon Ranges in mg/kg:		[redacted]	Sample Results	Sample Results	Sample Results	Sample Results	
C9-C18 Aliphatics		[redacted]	4200	9400	7300	<12	
C19-C36 Aliphatics		[redacted]	1500	3100	2400	<12	
C11-C22 Aromatics		[redacted]	1100*	5700*	4300	<12	
Blank:	C9-C18 Aliphatics	[redacted]	<9.9	<9.9	<9.9	<9.9	
	C19-C36 Aliphatics	[redacted]	<9.9	<9.9	<9.9	<9.9	
	C11-C22 Aromatics	[redacted]	<9.9	<9.9	<9.9	<9.9	
RL:	C9-C18 Aliphatics	[redacted]	63	120	66	12	
	C19-C36 Aliphatics	[redacted]	63	120	66	12	
	C11-C22 Aromatics	[redacted]	13	62	66	12	
MDL:	C9-C18 Aliphatics	[redacted]	4.0	8.0	4.2	0.80	
	C19-C36 Aliphatics	[redacted]	6.5	13	6.9	1.3	
	C11-C22 Aromatics	[redacted]	3.5	18	19	3.5	
Surrogate Acceptance Range:		Blank	40-140 %	40-140 %	40-140 %	40-140 %	
Aliphatic Surrogate % Rec.:		95	119	0 Ad	85	81	
Aromatic Surrogate % Rec.:		85	84	71	85	80	
Fractionation Surrogate Accep. Range:		Blank	40-140 %	40-140 %	40-140 %	40-140 %	
Frac. Surrogate #1 % Rec.:		81	123	124	102	80	
Frac. Surrogate #2 % Rec.:		83	113	63	87	80	

MDL = Method Detection Limit RL = Reporting Limit Blank = Laboratory Method Blank

Were all performance/acceptance standards for required QA/QC procedures achieved?	YES	No - Details Attached
Was blank correction applied as a significant modification of the method?	Yes	NO
Were any significant modifications to the EPH method made?	NO	Yes - Details Attached

Comments: Ad: Surrogate was diluted out.

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name:	Mactec - Asheville (NCDOT Project)	Laboratory Name:	Prism Laboratories, Inc.
Project Name:	NCDOT Lenoir	NC Certification # (Lab):	402
Site Location:	121 Hibriten Drive, Lenoir, NC	Sample Matrix:	Soil

Sample Information and Analytical Results							
Method for Ranges: MADEP VPH							
VPH Surrogate Standards: Aliphatic - 2,5-Dibromotoluene / Aromatic - 2,5-Dibromotoluene							
Sample Identification:			Midline UST (5.5' bgs)	N.Base (7.5' bgs)	S. Base (7.5' bgs)	West Sw (4'-5' bgs)	
Collection Option (for soil*):			1	1	1	1	
Date Collected:			7/19/2010	7/19/2010	7/19/2010	7/19/2010	
Date Received:			7/21/2010	7/21/2010	7/21/2010	7/21/2010	
Date Extracted:			8/3/2010	8/3/2010	8/3/2010	8/3/2010	
Date Analyzed:			8/3/2010	8/3/2010	8/4/2010	8/4/2010	
% Dry Solids:			79.1	79.0	75.3	79.5	
Dilution Factor:			100	100	100	100	
Hydrocarbon Ranges in mg/kg:			Sample Results	Sample Results	Sample Results	Sample Results	
C5-C8 Aliphatics			12 J	51	87	<16	
C9-C12 Aliphatics			210	<8.0	<9.4	<16	
C9-C10 Aromatics			370	640	700	<16	
Blank:	C5-C8 Aliphatics		<5.0	<5.0	<5.0	<5.0	
	C9-C12 Aliphatics		<5.0	<5.0	<5.0	<5.0	
	C9-C10 Aromatics		<5.0	<5.0	<5.0	<5.0	
RL:	C5-C8 Aliphatics		17	8.0	9.4	16	
	C9-C12 Aliphatics		17	8.0	9.4	16	
	C9-C10 Aromatics		17	8.0	9.4	16	
MDL:	C5-C8 Aliphatics		6.4	3.0	3.5	6.1	
	C9-C12 Aliphatics		6.1	2.8	3.3	5.8	
	C9-C10 Aromatics		1.8	0.85	1.0	1.7	
Surrogate Acceptance Range:		Blank	70-130 %	70-130 %	70-130 %	70-130 %	
Aliphatic Surrogate % Rec. - FID:		92	94	124	102	93	
Aromatic Surrogate % Rec. - PID:		97	125	83	76	92	

* Option 1 = Established fill line on vial
* Option 2 = Sampling device (indicate brand, e.g., EnCore TM)
* Option 3 = Field weight of soil

MDL = Method Detection Limit RL = Reporting Limit Blank = Laboratory Method Blank or Trip Blank (whichever is higher - indicate type)

Were all performance/acceptance standards for required QA/QC procedures achieved?	YES	No - Details Attached
Were any significant modifications to the VPH method made?	NO	Yes - Details Attached

Comments: VPH trip blank was not submitted to the laboratory.
J: Detected but below the reporting limit; therefore, result is an estimated concentration (CLP J-Flag).

0070567

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

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

Case Narrative

08/09/2010

Mactec - Asheville (NCDOT Project)
Rodney Clark
c/o MACTEC Eng. & Consulting, Inc, 1308 Patton Avenue
Asheville, NC 28806

Project: NCDOT Lenoir
Project No.: U-2211-B Parcel 9
Lab Submittal Date: 07/21/2010
Prism Work Order: 0070567

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. Bytill

Project Manager

Steven H. Bytill

Reviewed By

Data Qualifiers Key Reference:

A	Sample was diluted 10x due to the matrix.
Aa	Surrogate recovered outside established QC range due to matrix interference.
Ab	Surrogate recovered outside established QC range.
Ac	Surrogate was diluted out
Ad	Surrogate was diluted out.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
LH	High LCS recovery. Analyte not detected in the sample(s). No further action taken.
M	Matrix spike outside of the control 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.

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

Sample Receipt Summary

08/09/2010

Prism Work Order: 0070567

Client Sample ID	Lab Sample ID	Matrix	Date Sampled	Date Received
Midline UST (5.5' bgs)	0070567-01	Solid	07/19/10	07/21/10
N.Base (7.5' bgs)	0070567-02	Solid	07/19/10	07/21/10
S. Base (7.5' bgs)	0070567-03	Solid	07/19/10	07/21/10
East. SW (4'-5' bgs)	0070567-04	Solid	07/19/10	07/21/10
North SW (4'-5' bgs)	0070567-05	Solid	07/19/10	07/21/10
West Sw (4'-5' bgs)	0070567-06	Solid	07/19/10	07/21/10
South SW (4'-5' bgs)	0070567-07	Solid	07/19/10	07/21/10

Samples received in good condition at 3.7 degrees C unless otherwise noted.

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 - Asheville (NCDOT Project)
Attn: Rodney Clark
c/o MACTEC Eng. & Consulting, Inc, 1308 Pa
Asheville, NC 28806

Project: NCDOT Lenoir

Project No.: U-2211-B Parcel 9
Sample Matrix: Solid

Client Sample ID: Midline UST (5.5' bgs)
Prism Sample ID: 0070567-01
Prism Work Order: 0070567
Time Collected: 07/19/10 10:45
Time Submitted: 07/21/10 10:25

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Diesel Range Organics by GC/FID									
Diesel Range Organics	**6100**	**mg/kg dry**	**350**	**57**	**40**	**8015C**	**7/26/10 18:28**	**GRR**	**P0G0489**
			Surrogate			Recovery		Control Limits	
			o-Terphenyl			*0 %*		*49-124*	*Ac*
Extractable Petroleum Hydrocarbons by GC/FID									
C9-C18 Aliphatics	**4200**	**mg/kg dry**	**63**	**4.0**	**5**	**MADEP EPH**	**8/3/10 9:10**	**GRR**	**P0H0017**
C19-C36 Aliphatics	**1500**	**mg/kg dry**	**63**	**6.5**	**5**	**MADEP EPH**	**8/3/10 9:10**	**GRR**	**P0H0017**
C11-C22 Aromatics	**1100**	**mg/kg dry**	**13**	**3.5**	**1**	**MADEP EPH**	**8/3/10 0:36**	**GRR**	**P0H0017**
			Surrogate			Recovery		Control Limits	
			1-Chlorooctadecane			*119 %*		*40-140*	
			o-Terphenyl			*84 %*		*40-140*	
			2-Fluorobiphenyl			*113 %*		*40-140*	
			2-Bromonaphthalene			*123 %*		*40-140*	
Gasoline Range Organics by GC/FID									
Gasoline Range Organics	**190**	**mg/kg dry**	**57**	**7.4**	**500**	**8015C**	**7/27/10 3:04**	**HPE**	**P0G0528**
			Surrogate			Recovery		Control Limits	
			a,a,a-Trifluorotoluene			*90 %*		*55-129*	
General Chemistry Parameters									
% Solids	**79.1**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**7/26/10 12:18**	**JAB**	**P0G0505**
Semivolatile Organic Compounds by GC/MS									A
1,2,4-Trichlorobenzene	BRL	mg/kg dry	4.1	1.1	10	8270D	8/2/10 20:23	CGP	P0H0042
1,2-Dichlorobenzene	BRL	mg/kg dry	4.1	0.95	10	8270D	8/2/10 20:23	CGP	P0H0042
1,3-Dichlorobenzene	BRL	mg/kg dry	4.1	0.96	10	8270D	8/2/10 20:23	CGP	P0H0042
1,4-Dichlorobenzene	BRL	mg/kg dry	4.1	0.93	10	8270D	8/2/10 20:23	CGP	P0H0042
2,4,6-Trichlorophenol	BRL	mg/kg dry	4.1	1.0	10	8270D	8/2/10 20:23	CGP	P0H0042
2,4-Dichlorophenol	BRL	mg/kg dry	4.1	1.0	10	8270D	8/2/10 20:23	CGP	P0H0042
2,4-Dimethylphenol	BRL	mg/kg dry	4.1	1.1	10	8270D	8/2/10 20:23	CGP	P0H0042
2,4-Dinitrophenol	BRL	mg/kg dry	4.1	0.65	10	8270D	8/2/10 20:23	CGP	P0H0042
2,4-Dinitrotoluene	BRL	mg/kg dry	4.1	1.0	10	8270D	8/2/10 20:23	CGP	P0H0042
2,6-Dinitrotoluene	BRL	mg/kg dry	4.1	0.86	10	8270D	8/2/10 20:23	CGP	P0H0042
2-Chloronaphthalene	BRL	mg/kg dry	4.1	0.99	10	8270D	8/2/10 20:23	CGP	P0H0042
2-Chlorophenol	BRL	mg/kg dry	4.1	1.1	10	8270D	8/2/10 20:23	CGP	P0H0042
2-Methylnaphthalene	BRL	mg/kg dry	4.1	1.3	10	8270D	8/2/10 20:23	CGP	P0H0042
2-Methylphenol	BRL	mg/kg dry	4.1	1.0	10	8270D	8/2/10 20:23	CGP	P0H0042
2-Nitrophenol	BRL	mg/kg dry	4.1	0.94	10	8270D	8/2/10 20:23	CGP	P0H0042
3,3'-Dichlorobenzidine	BRL	mg/kg dry	4.1	1.0	10	8270D	8/2/10 20:23	CGP	P0H0042
3/4-Methylphenol	BRL	mg/kg dry	4.1	1.0	10	8270D	8/2/10 20:23	CGP	P0H0042
4,6-Dinitro-2-methylphenol	BRL	mg/kg dry	4.1	0.66	10	8270D	8/2/10 20:23	CGP	P0H0042
4-Bromophenyl phenyl ether	BRL	mg/kg dry	4.1	0.91	10	8270D	8/2/10 20:23	CGP	P0H0042
4-Chloro-3-methylphenol	BRL	mg/kg dry	4.1	0.94	10	8270D	8/2/10 20:23	CGP	P0H0042

Mactec - Asheville (NCDOT Project)
Attn: Rodney Clark
c/o MACTEC Eng. & Consulting, Inc, 1308 P
Asheville, NC 28806

Project: NCDOT Lenoir

Project No.: U-2211-B Parcel 9
Sample Matrix: Solid

Client Sample ID: Midline UST (5.5' bgs)
Prism Sample ID: 0070567-01
Prism Work Order: 0070567
Time Collected: 07/19/10 10:45
Time Submitted: 07/21/10 10:25

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
4-Chloroaniline	BRL	mg/kg dry	4.1	0.84	10	8270D	8/2/10 20:23	CGP	P0H0042
4-Chlorophenyl phenyl ether	BRL	mg/kg dry	4.1	0.82	10	8270D	8/2/10 20:23	CGP	P0H0042
4-Nitrophenol	BRL	mg/kg dry	4.1	0.56	10	8270D	8/2/10 20:23	CGP	P0H0042
Acenaphthene	BRL	mg/kg dry	4.1	0.89	10	8270D	8/2/10 20:23	CGP	P0H0042
Acenaphthylene	BRL	mg/kg dry	4.1	0.94	10	8270D	8/2/10 20:23	CGP	P0H0042
Anthracene	BRL	mg/kg dry	4.1	0.94	10	8270D	8/2/10 20:23	CGP	P0H0042
Azobenzene	BRL	mg/kg dry	4.1	0.92	10	8270D	8/2/10 20:23	CGP	P0H0042
Benzo(a)anthracene	BRL	mg/kg dry	4.1	1.0	10	8270D	8/2/10 20:23	CGP	P0H0042
Benzo(a)pyrene	BRL	mg/kg dry	4.1	0.55	10	8270D	8/2/10 20:23	CGP	P0H0042
Benzo(b)fluoranthene	BRL	mg/kg dry	4.1	0.86	10	8270D	8/2/10 20:23	CGP	P0H0042
Benzo(g,h,i)perylene	BRL	mg/kg dry	4.1	0.75	10	8270D	8/2/10 20:23	CGP	P0H0042
Benzo(k)fluoranthene	BRL	mg/kg dry	4.1	1.1	10	8270D	8/2/10 20:23	CGP	P0H0042
Benzoic Acid	BRL	mg/kg dry	4.1	1.1	10	8270D	8/2/10 20:23	CGP	P0H0042
Benzyl alcohol	BRL	mg/kg dry	4.1	1.0	10	8270D	8/2/10 20:23	CGP	P0H0042
bis(2-Chloroethoxy)methane	BRL	mg/kg dry	4.1	1.1	10	8270D	8/2/10 20:23	CGP	P0H0042
Bis(2-Chloroethyl)ether	BRL	mg/kg dry	4.1	1.1	10	8270D	8/2/10 20:23	CGP	P0H0042
Bis(2-chloroisopropyl)ether	BRL	mg/kg dry	4.1	1.1	10	8270D	8/2/10 20:23	CGP	P0H0042
Bis(2-Ethylhexyl)phthalate	BRL	mg/kg dry	4.1	1.3	10	8270D	8/2/10 20:23	CGP	P0H0042
Butyl benzyl phthalate	BRL	mg/kg dry	4.1	1.2	10	8270D	8/2/10 20:23	CGP	P0H0042
Chrysene	BRL	mg/kg dry	4.1	0.92	10	8270D	8/2/10 20:23	CGP	P0H0042
Dibenzo(a,h)anthracene	BRL	mg/kg dry	4.1	0.96	10	8270D	8/2/10 20:23	CGP	P0H0042
Dibenzofuran	BRL	mg/kg dry	4.1	0.89	10	8270D	8/2/10 20:23	CGP	P0H0042
Diethyl phthalate	BRL	mg/kg dry	4.1	1.0	10	8270D	8/2/10 20:23	CGP	P0H0042
Dimethyl phthalate	BRL	mg/kg dry	4.1	0.95	10	8270D	8/2/10 20:23	CGP	P0H0042
Di-n-butyl phthalate	BRL	mg/kg dry	4.1	1.4	10	8270D	8/2/10 20:23	CGP	P0H0042
Di-n-octyl phthalate	BRL	mg/kg dry	4.1	1.4	10	8270D	8/2/10 20:23	CGP	P0H0042
Fluoranthene	BRL	mg/kg dry	4.1	1.1	10	8270D	8/2/10 20:23	CGP	P0H0042
Fluorene	BRL	mg/kg dry	4.1	0.91	10	8270D	8/2/10 20:23	CGP	P0H0042
Hexachlorobenzene	BRL	mg/kg dry	4.1	0.93	10	8270D	8/2/10 20:23	CGP	P0H0042
Hexachlorobutadiene	BRL	mg/kg dry	4.1	1.1	10	8270D	8/2/10 20:23	CGP	P0H0042
Hexachlorocyclopentadiene	BRL	mg/kg dry	4.1	0.82	10	8270D	8/2/10 20:23	CGP	P0H0042
Hexachloroethane	BRL	mg/kg dry	4.1	0.98	10	8270D	8/2/10 20:23	CGP	P0H0042
Indeno(1,2,3-cd)pyrene	BRL	mg/kg dry	4.1	1.0	10	8270D	8/2/10 20:23	CGP	P0H0042
Isophorone	BRL	mg/kg dry	4.1	0.95	10	8270D	8/2/10 20:23	CGP	P0H0042
Naphthalene	BRL	mg/kg dry	4.1	1.1	10	8270D	8/2/10 20:23	CGP	P0H0042
Nitrobenzene	BRL	mg/kg dry	4.1	1.0	10	8270D	8/2/10 20:23	CGP	P0H0042
N-Nitroso-di-n-propylamine	BRL	mg/kg dry	4.1	0.93	10	8270D	8/2/10 20:23	CGP	P0H0042
N-Nitrosodiphenylamine	BRL	mg/kg dry	4.1	1.0	10	8270D	8/2/10 20:23	CGP	P0H0042
Pentachlorophenol	BRL	mg/kg dry	4.1	1.1	10	8270D	8/2/10 20:23	CGP	P0H0042
Phenanthrene	**1.0 J**	**mg/kg dry**	**4.1**	**0.92**	**10**	**8270D**	**8/2/10 20:23**	**CGP**	**P0H0042**
Phenol	BRL	mg/kg dry	4.1	1.1	10	8270D	8/2/10 20:23	CGP	P0H0042
Pyrene	**6.4**	**mg/kg dry**	**4.1**	**1.0**	**10**	**8270D**	**8/2/10 20:23**	**CGP**	**P0H0042**

Surrogate	Recovery	Control Limits

Mactec - Asheville (NCDOT Project)
Attn: Rodney Clark
c/o MACTEC Eng. & Consulting, Inc, 1308 Pa
Asheville, NC 28806

Project: NCDOT Lenoir

Project No.: U-2211-B Parcel 9
Sample Matrix: Solid

Client Sample ID: Midline UST (5.5' bgs)
Prism Sample ID: 0070567-01
Prism Work Order: 0070567
Time Collected: 07/19/10 10:45
Time Submitted: 07/21/10 10:25

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
			2,4,6-Tribromophenol			*99 %*		*34-134*	
			2-Fluorobiphenyl			*96 %*		*17-122*	
			2-Fluorophenol			*50 %*		*13-108*	
			Nitrobenzene-d5			*59 %*		*11-118*	
			Phenol-d5			*51 %*		*23-109*	
			Terphenyl-d14			*112 %*		*41-156*	
Volatile Organic Compounds by GC/MS									
1,1,1-Trichloroethane	BRL	mg/kg dry	0.25	0.090	50	8260B	8/2/10 14:26	KLA	P0H0033
1,1,2,2-Tetrachloroethane	BRL	mg/kg dry	0.25	0.069	50	8260B	8/2/10 14:26	KLA	P0H0033
1,1,2-Trichloroethane	BRL	mg/kg dry	0.25	0.033	50	8260B	8/2/10 14:26	KLA	P0H0033
1,1-Dichloroethane	BRL	mg/kg dry	0.25	0.062	50	8260B	8/2/10 14:26	KLA	P0H0033
1,1-Dichloroethylene	BRL	mg/kg dry	0.25	0.11	50	8260B	8/2/10 14:26	KLA	P0H0033
1,1-Dichloropropylene	BRL	mg/kg dry	0.25	0.095	50	8260B	8/2/10 14:26	KLA	P0H0033
1,2,3-Trichlorobenzene	BRL	mg/kg dry	0.50	0.037	50	8260B	8/2/10 14:26	KLA	P0H0033
1,2,3-Trichloropropane	BRL	mg/kg dry	0.25	0.029	50	8260B	8/2/10 14:26	KLA	P0H0033
1,2,4-Trichlorobenzene	BRL	mg/kg dry	0.50	0.043	50	8260B	8/2/10 14:26	KLA	P0H0033
1,2,4-Trimethylbenzene	BRL	mg/kg dry	0.25	0.060	50	8260B	8/2/10 14:26	KLA	P0H0033
1,2-Dibromoethane	BRL	mg/kg dry	0.25	0.023	50	8260B	8/2/10 14:26	KLA	P0H0033
1,2-Dichlorobenzene	BRL	mg/kg dry	0.25	0.053	50	8260B	8/2/10 14:26	KLA	P0H0033
1,2-Dichloroethane	BRL	mg/kg dry	0.25	0.037	50	8260B	8/2/10 14:26	KLA	P0H0033
1,2-Dichloropropane	BRL	mg/kg dry	0.25	0.041	50	8260B	8/2/10 14:26	KLA	P0H0033
1,3,5-Trimethylbenzene	**1.4**	**mg/kg dry**	**0.25**	**0.082**	**50**	**8260B**	**8/2/10 14:26**	**KLA**	**P0H0033**
1,3-Dichlorobenzene	BRL	mg/kg dry	0.25	0.051	50	8260B	8/2/10 14:26	KLA	P0H0033
1,3-Dichloropropane	BRL	mg/kg dry	0.25	0.028	50	8260B	8/2/10 14:26	KLA	P0H0033
1,4-Dichlorobenzene	BRL	mg/kg dry	0.25	0.044	50	8260B	8/2/10 14:26	KLA	P0H0033
2,2-Dichloropropane	BRL	mg/kg dry	0.25	0.098	50	8260B	8/2/10 14:26	KLA	P0H0033
2-Chlorotoluene	BRL	mg/kg dry	0.25	0.067	50	8260B	8/2/10 14:26	KLA	P0H0033
4-Chlorotoluene	BRL	mg/kg dry	0.25	0.051	50	8260B	8/2/10 14:26	KLA	P0H0033
4-Isopropyltoluene	**0.35**	**mg/kg dry**	**0.25**	**0.095**	**50**	**8260B**	**8/2/10 14:26**	**KLA**	**P0H0033**
Acetone	BRL	mg/kg dry	1.0	0.036	50	8260B	8/2/10 14:26	KLA	P0H0033
Benzene	BRL	mg/kg dry	0.25	0.061	50	8260B	8/2/10 14:26	KLA	P0H0033
Bromobenzene	BRL	mg/kg dry	0.25	0.049	50	8260B	8/2/10 14:26	KLA	P0H0033
Bromochloromethane	BRL	mg/kg dry	0.25	0.032	50	8260B	8/2/10 14:26	KLA	P0H0033
Bromodichloromethane	BRL	mg/kg dry	0.25	0.047	50	8260B	8/2/10 14:26	KLA	P0H0033
Bromoform	BRL	mg/kg dry	0.25	0.036	50	8260B	8/2/10 14:26	KLA	P0H0033
Bromomethane	BRL	mg/kg dry	0.50	0.13	50	8260B	8/2/10 14:26	KLA	P0H0033
Carbon Tetrachloride	BRL	mg/kg dry	0.25	0.065	50	8260B	8/2/10 14:26	KLA	P0H0033
Chlorobenzene	BRL	mg/kg dry	0.25	0.041	50	8260B	8/2/10 14:26	KLA	P0H0033
Chloroethane	BRL	mg/kg dry	0.50	0.090	50	8260B	8/2/10 14:26	KLA	P0H0033
Chloroform	BRL	mg/kg dry	0.25	0.058	50	8260B	8/2/10 14:26	KLA	P0H0033
Chloromethane	BRL	mg/kg dry	0.50	0.070	50	8260B	8/2/10 14:26	KLA	P0H0033
cis-1,2-Dichloroethylene	BRL	mg/kg dry	0.25	0.067	50	8260B	8/2/10 14:26	KLA	P0H0033
cis-1,3-Dichloropropylene	BRL	mg/kg dry	0.25	0.046	50	8260B	8/2/10 14:26	KLA	P0H0033

Mactec - Asheville (NCDOT Project)
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Asheville, NC 28806

Project: NCDOT Lenoir
Project No.: U-2211-B Parcel 9
Sample Matrix: Solid

Client Sample ID: Midline UST (5.5' bgs)
Prism Sample ID: 0070567-01
Prism Work Order: 0070567
Time Collected: 07/19/10 10:45
Time Submitted: 07/21/10 10:25

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Dibromochloromethane	BRL	mg/kg dry	0.25	0.029	50	8260B	8/2/10 14:26	KLA	P0H0033
Dichlorodifluoromethane	BRL	mg/kg dry	0.50	0.14	50	8260B	8/2/10 14:26	KLA	P0H0033
Ethylbenzene	BRL	mg/kg dry	0.25	0.063	50	8260B	8/2/10 14:26	KLA	P0H0033
Isopropyl Ether	BRL	mg/kg dry	0.25	0.052	50	8260B	8/2/10 14:26	KLA	P0H0033
Isopropylbenzene (Cumene)	BRL	mg/kg dry	0.25	0.074	50	8260B	8/2/10 14:26	KLA	P0H0033
m,p-Xylenes	BRL	mg/kg dry	0.50	0.12	50	8260B	8/2/10 14:26	KLA	P0H0033
Methyl Butyl Ketone (2-Hexanone)	BRL	mg/kg dry	1.0	0.036	50	8260B	8/2/10 14:26	KLA	P0H0033
Methyl Ethyl Ketone (2-Butanone)	BRL	mg/kg dry	1.0	0.063	50	8260B	8/2/10 14:26	KLA	P0H0033
Methyl Isobutyl Ketone	BRL	mg/kg dry	1.0	0.037	50	8260B	8/2/10 14:26	KLA	P0H0033
Methylene Chloride	BRL	mg/kg dry	0.25	0.055	50	8260B	8/2/10 14:26	KLA	P0H0033
Methyl-tert-Butyl Ether	BRL	mg/kg dry	0.25	0.027	50	8260B	8/2/10 14:26	KLA	P0H0033
Naphthalene	BRL	mg/kg dry	0.50	0.038	50	8260B	8/2/10 14:26	KLA	P0H0033
n-Butylbenzene	BRL	mg/kg dry	0.25	0.085	50	8260B	8/2/10 14:26	KLA	P0H0033
n-Propylbenzene	BRL	mg/kg dry	0.25	0.073	50	8260B	8/2/10 14:26	KLA	P0H0033
o-Xylene	**0.12 J**	**mg/kg dry**	**0.25**	**0.055**	**50**	**8260B**	**8/2/10 14:26**	**KLA**	**P0H0033**
sec-Butylbenzene	**0.37**	**mg/kg dry**	**0.25**	**0.097**	**50**	**8260B**	**8/2/10 14:26**	**KLA**	**P0H0033**
Styrene	BRL	mg/kg dry	0.25	0.039	50	8260B	8/2/10 14:26	KLA	P0H0033
tert-Butylbenzene	**0.16 J**	**mg/kg dry**	**0.25**	**0.080**	**50**	**8260B**	**8/2/10 14:26**	**KLA**	**P0H0033**
Tetrachloroethylene	**0.19 J**	**mg/kg dry**	**0.25**	**0.076**	**50**	**8260B**	**8/2/10 14:26**	**KLA**	**P0H0033**
Toluene	BRL	mg/kg dry	0.25	0.069	50	8260B	8/2/10 14:26	KLA	P0H0033
trans-1,2-Dichloroethylene	BRL	mg/kg dry	0.25	0.076	50	8260B	8/2/10 14:26	KLA	P0H0033
trans-1,3-Dichloropropylene	BRL	mg/kg dry	0.25	0.033	50	8260B	8/2/10 14:26	KLA	P0H0033
Trichloroethylene	BRL	mg/kg dry	0.25	0.071	50	8260B	8/2/10 14:26	KLA	P0H0033
Trichlorofluoromethane	BRL	mg/kg dry	0.50	0.15	50	8260B	8/2/10 14:26	KLA	P0H0033
Vinyl acetate	BRL	mg/kg dry	1.0	0.083	50	8260B	8/2/10 14:26	KLA	P0H0033
Vinyl chloride	BRL	mg/kg dry	0.50	0.11	50	8260B	8/2/10 14:26	KLA	P0H0033
Xylenes, total	BRL	mg/kg dry	0.75	0.19	50	8260B	8/2/10 14:26	KLA	P0H0033

Surrogate	Recovery	Control Limits	
4-Bromofluorobenzene	*143 %*	*70-130*	*Aa*
Dibromofluoromethane	*108 %*	*70-130*	
Toluene-d8	*99 %*	*70-130*	

Volatile Petroleum Hydrocarbons by GC/PID/FID

C5-C8 Aliphatics	**12 J**	**mg/kg dry**	**17**	**6.4**	**100**	**MADEP VPH**	**8/3/10 20:44**	**hea**	**P0H0051**
C9-C12 Aliphatics	**210**	**mg/kg dry**	**17**	**6.1**	**100**	**MADEP VPH**	**8/3/10 20:44**	**hea**	**P0H0051**
C9-C10 Aromatics	**370**	**mg/kg dry**	**17**	**1.8**	**100**	**MADEP VPH**	**8/3/10 20:44**	**hea**	**P0H0051**

Surrogate	Recovery	Control Limits
2,5-Dibromotoluene (PID)	*125 %*	*70-130*
2,5-Dibromotoluene (FID)	*94 %*	*70-130*

Mactec - Asheville (NCDOT Project)
Attn: Rodney Clark
c/o MACTEC Eng. & Consulting, Inc, 1308 P
Asheville, NC 28806

Project: NCDOT Lenoir

Project No.: U-2211-B Parcel 9
Sample Matrix: Solid

Client Sample ID: N.Base (7.5' bgs)
Prism Sample ID: 0070567-02
Prism Work Order: 0070567
Time Collected: 07/19/10 11:00
Time Submitted: 07/21/10 10:25

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Diesel Range Organics by GC/FID									
Diesel Range Organics	**22000**	**mg/kg dry**	**890**	**140**	**100**	**8015C**	**7/26/10 19:03**	**GRR**	**P0G0489**
			Surrogate			Recovery		Control Limits	
			o-Terphenyl			*0 %*		*49-124*	*Ac*
Extractable Petroleum Hydrocarbons by GC/FID									
C9-C18 Aliphatics	**9400**	**mg/kg dry**	**120**	**8.0**	**10**	**MADEP EPH**	**8/3/10 10:01**	**GRR**	**P0H0017**
C19-C36 Aliphatics	**3100**	**mg/kg dry**	**120**	**13**	**10**	**MADEP EPH**	**8/3/10 10:01**	**GRR**	**P0H0017**
C11-C22 Aromatics	**5700**	**mg/kg dry**	**62**	**18**	**5**	**MADEP EPH**	**8/3/10 10:52**	**GRR**	**P0H0017**
			Surrogate			Recovery		Control Limits	
			1-Chlorooctadecane			*0 %*		*40-140*	*Ad*
			o-Terphenyl			*71 %*		*40-140*	
			2-Fluorobiphenyl			*63 %*		*40-140*	
			2-Bromonaphthalene			*124 %*		*40-140*	
Gasoline Range Organics by GC/FID									
Gasoline Range Organics	**170**	**mg/kg dry**	**5.3**	**0.69**	**50**	**8015C**	**7/26/10 23:28**	**HPE**	**P0G0528**
			Surrogate			Recovery		Control Limits	
			a,a,a-Trifluorotoluene			*87 %*		*55-129*	
General Chemistry Parameters									
% Solids	**79.0**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**7/26/10 12:18**	**JAB**	**P0G0505**
Semivolatile Organic Compounds by GC/MS									A
1,2,4-Trichlorobenzene	BRL	mg/kg dry	4.2	1.1	10	8270D	8/2/10 20:54	CGP	P0H0042
1,2-Dichlorobenzene	BRL	mg/kg dry	4.2	0.96	10	8270D	8/2/10 20:54	CGP	P0H0042
1,3-Dichlorobenzene	BRL	mg/kg dry	4.2	0.97	10	8270D	8/2/10 20:54	CGP	P0H0042
1,4-Dichlorobenzene	BRL	mg/kg dry	4.2	0.95	10	8270D	8/2/10 20:54	CGP	P0H0042
2,4,6-Trichlorophenol	BRL	mg/kg dry	4.2	1.0	10	8270D	8/2/10 20:54	CGP	P0H0042
2,4-Dichlorophenol	BRL	mg/kg dry	4.2	1.1	10	8270D	8/2/10 20:54	CGP	P0H0042
2,4-Dimethylphenol	BRL	mg/kg dry	4.2	1.1	10	8270D	8/2/10 20:54	CGP	P0H0042
2,4-Dinitrophenol	BRL	mg/kg dry	4.2	0.66	10	8270D	8/2/10 20:54	CGP	P0H0042
2,4-Dinitrotoluene	BRL	mg/kg dry	4.2	1.0	10	8270D	8/2/10 20:54	CGP	P0H0042
2,6-Dinitrotoluene	BRL	mg/kg dry	4.2	0.87	10	8270D	8/2/10 20:54	CGP	P0H0042
2-Chloronaphthalene	BRL	mg/kg dry	4.2	1.0	10	8270D	8/2/10 20:54	CGP	P0H0042
2-Chlorophenol	BRL	mg/kg dry	4.2	1.1	10	8270D	8/2/10 20:54	CGP	P0H0042
2-Methylnaphthalene	**1.6 J**	**mg/kg dry**	**4.2**	**1.3**	**10**	**8270D**	**8/2/10 20:54**	**CGP**	**P0H0042**
2-Methylphenol	BRL	mg/kg dry	4.2	1.1	10	8270D	8/2/10 20:54	CGP	P0H0042
2-Nitrophenol	BRL	mg/kg dry	4.2	0.95	10	8270D	8/2/10 20:54	CGP	P0H0042
3,3'-Dichlorobenzidine	BRL	mg/kg dry	4.2	1.0	10	8270D	8/2/10 20:54	CGP	P0H0042
3/4-Methylphenol	BRL	mg/kg dry	4.2	1.1	10	8270D	8/2/10 20:54	CGP	P0H0042
4,6-Dinitro-2-methylphenol	BRL	mg/kg dry	4.2	0.68	10	8270D	8/2/10 20:54	CGP	P0H0042
4-Bromophenyl phenyl ether	BRL	mg/kg dry	4.2	0.92	10	8270D	8/2/10 20:54	CGP	P0H0042
4-Chloro-3-methylphenol	BRL	mg/kg dry	4.2	0.96	10	8270D	8/2/10 20:54	CGP	P0H0042

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Project: NCDOT Lenoir
Project No.: U-2211-B Parcel 9
Sample Matrix: Solid

Client Sample ID: N.Base (7.5' bgs)
Prism Sample ID: 0070567-02
Prism Work Order: 0070567
Time Collected: 07/19/10 11:00
Time Submitted: 07/21/10 10:25

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
4-Chloroaniline	BRL	mg/kg dry	4.2	0.86	10	8270D	8/2/10 20:54	CGP	P0H0042
4-Chlorophenyl phenyl ether	BRL	mg/kg dry	4.2	0.83	10	8270D	8/2/10 20:54	CGP	P0H0042
4-Nitrophenol	BRL	mg/kg dry	4.2	0.57	10	8270D	8/2/10 20:54	CGP	P0H0042
Acenaphthene	BRL	mg/kg dry	4.2	0.91	10	8270D	8/2/10 20:54	CGP	P0H0042
Acenaphthylene	BRL	mg/kg dry	4.2	0.96	10	8270D	8/2/10 20:54	CGP	P0H0042
Anthracene	BRL	mg/kg dry	4.2	0.96	10	8270D	8/2/10 20:54	CGP	P0H0042
Azobenzene	BRL	mg/kg dry	4.2	0.93	10	8270D	8/2/10 20:54	CGP	P0H0042
Benzo(a)anthracene	BRL	mg/kg dry	4.2	1.0	10	8270D	8/2/10 20:54	CGP	P0H0042
Benzo(a)pyrene	BRL	mg/kg dry	4.2	0.56	10	8270D	8/2/10 20:54	CGP	P0H0042
Benzo(b)fluoranthene	BRL	mg/kg dry	4.2	0.88	10	8270D	8/2/10 20:54	CGP	P0H0042
Benzo(g,h,i)perylene	BRL	mg/kg dry	4.2	0.76	10	8270D	8/2/10 20:54	CGP	P0H0042
Benzo(k)fluoranthene	BRL	mg/kg dry	4.2	1.1	10	8270D	8/2/10 20:54	CGP	P0H0042
Benzoic Acid	BRL	mg/kg dry	4.2	1.1	10	8270D	8/2/10 20:54	CGP	P0H0042
Benzyl alcohol	BRL	mg/kg dry	4.2	1.0	10	8270D	8/2/10 20:54	CGP	P0H0042
bis(2-Chloroethoxy)methane	BRL	mg/kg dry	4.2	1.1	10	8270D	8/2/10 20:54	CGP	P0H0042
Bis(2-Chloroethyl)ether	BRL	mg/kg dry	4.2	1.1	10	8270D	8/2/10 20:54	CGP	P0H0042
Bis(2-chloroisopropyl)ether	BRL	mg/kg dry	4.2	1.1	10	8270D	8/2/10 20:54	CGP	P0H0042
Bis(2-Ethylhexyl)phthalate	BRL	mg/kg dry	4.2	1.3	10	8270D	8/2/10 20:54	CGP	P0H0042
Butyl benzyl phthalate	BRL	mg/kg dry	4.2	1.3	10	8270D	8/2/10 20:54	CGP	P0H0042
Chrysene	BRL	mg/kg dry	4.2	0.94	10	8270D	8/2/10 20:54	CGP	P0H0042
Dibenzo(a,h)anthracene	BRL	mg/kg dry	4.2	0.97	10	8270D	8/2/10 20:54	CGP	P0H0042
Dibenzofuran	BRL	mg/kg dry	4.2	0.91	10	8270D	8/2/10 20:54	CGP	P0H0042
Diethyl phthalate	BRL	mg/kg dry	4.2	1.0	10	8270D	8/2/10 20:54	CGP	P0H0042
Dimethyl phthalate	BRL	mg/kg dry	4.2	0.97	10	8270D	8/2/10 20:54	CGP	P0H0042
Di-n-butyl phthalate	BRL	mg/kg dry	4.2	1.4	10	8270D	8/2/10 20:54	CGP	P0H0042
Di-n-octyl phthalate	BRL	mg/kg dry	4.2	1.4	10	8270D	8/2/10 20:54	CGP	P0H0042
Fluoranthene	BRL	mg/kg dry	4.2	1.1	10	8270D	8/2/10 20:54	CGP	P0H0042
Fluorene	BRL	mg/kg dry	4.2	0.92	10	8270D	8/2/10 20:54	CGP	P0H0042
Hexachlorobenzene	BRL	mg/kg dry	4.2	0.94	10	8270D	8/2/10 20:54	CGP	P0H0042
Hexachlorobutadiene	BRL	mg/kg dry	4.2	1.1	10	8270D	8/2/10 20:54	CGP	P0H0042
Hexachlorocyclopentadiene	BRL	mg/kg dry	4.2	0.84	10	8270D	8/2/10 20:54	CGP	P0H0042
Hexachloroethane	BRL	mg/kg dry	4.2	0.99	10	8270D	8/2/10 20:54	CGP	P0H0042
Indeno(1,2,3-cd)pyrene	BRL	mg/kg dry	4.2	1.1	10	8270D	8/2/10 20:54	CGP	P0H0042
Isophorone	BRL	mg/kg dry	4.2	0.97	10	8270D	8/2/10 20:54	CGP	P0H0042
Naphthalene	BRL	mg/kg dry	4.2	1.1	10	8270D	8/2/10 20:54	CGP	P0H0042
Nitrobenzene	BRL	mg/kg dry	4.2	1.1	10	8270D	8/2/10 20:54	CGP	P0H0042
N-Nitroso-di-n-propylamine	BRL	mg/kg dry	4.2	0.94	10	8270D	8/2/10 20:54	CGP	P0H0042
N-Nitrosodiphenylamine	BRL	mg/kg dry	4.2	1.0	10	8270D	8/2/10 20:54	CGP	P0H0042
Pentachlorophenol	BRL	mg/kg dry	4.2	1.1	10	8270D	8/2/10 20:54	CGP	P0H0042
Phenanthrene	**6.2**	**mg/kg dry**	**4.2**	**0.93**	**10**	**8270D**	**8/2/10 20:54**	**CGP**	**P0H0042**
Phenol	BRL	mg/kg dry	4.2	1.1	10	8270D	8/2/10 20:54	CGP	P0H0042
Pyrene	**7.4**	**mg/kg dry**	**4.2**	**1.0**	**10**	**8270D**	**8/2/10 20:54**	**CGP**	**P0H0042**

Surrogate	Recovery	Control Limits

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Asheville, NC 28806

Project: NCDOT Lenoir
Project No.: U-2211-B Parcel 9
Sample Matrix: Solid

Client Sample ID: N.Base (7.5' bgs)
Prism Sample ID: 0070567-02
Prism Work Order: 0070567
Time Collected: 07/19/10 11:00
Time Submitted: 07/21/10 10:25

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
			2,4,6-Tribromophenol			70 %		34-134	
			2-Fluorobiphenyl			85 %		17-122	
			2-Fluorophenol			32 %		13-108	
			Nitrobenzene-d5			54 %		11-118	
			Phenol-d5			42 %		23-109	
			Terphenyl-d14			91 %		41-156	
Volatile Organic Compounds by GC/MS									
1,1,1-Trichloroethane	BRL	mg/kg dry	0.24	0.085	50	8260B	8/2/10 15:44	KLA	P0H0033
1,1,2,2-Tetrachloroethane	BRL	mg/kg dry	0.24	0.065	50	8260B	8/2/10 15:44	KLA	P0H0033
1,1,2-Trichloroethane	BRL	mg/kg dry	0.24	0.031	50	8260B	8/2/10 15:44	KLA	P0H0033
1,1-Dichloroethane	BRL	mg/kg dry	0.24	0.058	50	8260B	8/2/10 15:44	KLA	P0H0033
1,1-Dichloroethylene	BRL	mg/kg dry	0.24	0.10	50	8260B	8/2/10 15:44	KLA	P0H0033
1,1-Dichloropropylene	BRL	mg/kg dry	0.24	0.090	50	8260B	8/2/10 15:44	KLA	P0H0033
1,2,3-Trichlorobenzene	BRL	mg/kg dry	0.47	0.035	50	8260B	8/2/10 15:44	KLA	P0H0033
1,2,3-Trichloropropane	BRL	mg/kg dry	0.24	0.027	50	8260B	8/2/10 15:44	KLA	P0H0033
1,2,4-Trichlorobenzene	BRL	mg/kg dry	0.47	0.041	50	8260B	8/2/10 15:44	KLA	P0H0033
1,2,4-Trimethylbenzene	BRL	mg/kg dry	0.24	0.056	50	8260B	8/2/10 15:44	KLA	P0H0033
1,2-Dibromoethane	BRL	mg/kg dry	0.24	0.022	50	8260B	8/2/10 15:44	KLA	P0H0033
1,2-Dichlorobenzene	BRL	mg/kg dry	0.24	0.050	50	8260B	8/2/10 15:44	KLA	P0H0033
1,2-Dichloroethane	BRL	mg/kg dry	0.24	0.035	50	8260B	8/2/10 15:44	KLA	P0H0033
1,2-Dichloropropane	BRL	mg/kg dry	0.24	0.039	50	8260B	8/2/10 15:44	KLA	P0H0033
1,3,5-Trimethylbenzene	**1.7**	**mg/kg dry**	**0.24**	**0.077**	**50**	**8260B**	**8/2/10 15:44**	**KLA**	**P0H0033**
1,3-Dichlorobenzene	BRL	mg/kg dry	0.24	0.048	50	8260B	8/2/10 15:44	KLA	P0H0033
1,3-Dichloropropane	BRL	mg/kg dry	0.24	0.026	50	8260B	8/2/10 15:44	KLA	P0H0033
1,4-Dichlorobenzene	BRL	mg/kg dry	0.24	0.041	50	8260B	8/2/10 15:44	KLA	P0H0033
2,2-Dichloropropane	BRL	mg/kg dry	0.24	0.092	50	8260B	8/2/10 15:44	KLA	P0H0033
2-Chlorotoluene	BRL	mg/kg dry	0.24	0.064	50	8260B	8/2/10 15:44	KLA	P0H0033
4-Chlorotoluene	BRL	mg/kg dry	0.24	0.048	50	8260B	8/2/10 15:44	KLA	P0H0033
4-Isopropyltoluene	**0.58**	**mg/kg dry**	**0.24**	**0.090**	**50**	**8260B**	**8/2/10 15:44**	**KLA**	**P0H0033**
Acetone	BRL	mg/kg dry	0.95	0.034	50	8260B	8/2/10 15:44	KLA	P0H0033
Benzene	BRL	mg/kg dry	0.24	0.057	50	8260B	8/2/10 15:44	KLA	P0H0033
Bromobenzene	BRL	mg/kg dry	0.24	0.047	50	8260B	8/2/10 15:44	KLA	P0H0033
Bromochloromethane	BRL	mg/kg dry	0.24	0.030	50	8260B	8/2/10 15:44	KLA	P0H0033
Bromodichloromethane	BRL	mg/kg dry	0.24	0.045	50	8260B	8/2/10 15:44	KLA	P0H0033
Bromoform	BRL	mg/kg dry	0.24	0.034	50	8260B	8/2/10 15:44	KLA	P0H0033
Bromomethane	BRL	mg/kg dry	0.47	0.12	50	8260B	8/2/10 15:44	KLA	P0H0033
Carbon Tetrachloride	BRL	mg/kg dry	0.24	0.061	50	8260B	8/2/10 15:44	KLA	P0H0033
Chlorobenzene	BRL	mg/kg dry	0.24	0.039	50	8260B	8/2/10 15:44	KLA	P0H0033
Chloroethane	BRL	mg/kg dry	0.47	0.085	50	8260B	8/2/10 15:44	KLA	P0H0033
Chloroform	BRL	mg/kg dry	0.24	0.055	50	8260B	8/2/10 15:44	KLA	P0H0033
Chloromethane	BRL	mg/kg dry	0.47	0.066	50	8260B	8/2/10 15:44	KLA	P0H0033
cis-1,2-Dichloroethylene	BRL	mg/kg dry	0.24	0.063	50	8260B	8/2/10 15:44	KLA	P0H0033
cis-1,3-Dichloropropylene	BRL	mg/kg dry	0.24	0.044	50	8260B	8/2/10 15:44	KLA	P0H0033

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Project: NCDOT Lenoir
Project No.: U-2211-B Parcel 9
Sample Matrix: Solid

Client Sample ID: N.Base (7.5' bgs)
Prism Sample ID: 0070567-02
Prism Work Order: 0070567
Time Collected: 07/19/10 11:00
Time Submitted: 07/21/10 10:25

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Dibromochloromethane	BRL	mg/kg dry	0.24	0.028	50	8260B	8/2/10 15:44	KLA	P0H0033
Dichlorodifluoromethane	BRL	mg/kg dry	0.47	0.13	50	8260B	8/2/10 15:44	KLA	P0H0033
Ethylbenzene	BRL	mg/kg dry	0.24	0.060	50	8260B	8/2/10 15:44	KLA	P0H0033
Isopropyl Ether	BRL	mg/kg dry	0.24	0.049	50	8260B	8/2/10 15:44	KLA	P0H0033
Isopropylbenzene (Cumene)	BRL	mg/kg dry	0.24	0.070	50	8260B	8/2/10 15:44	KLA	P0H0033
m,p-Xylenes	BRL	mg/kg dry	0.47	0.12	50	8260B	8/2/10 15:44	KLA	P0H0033
Methyl Butyl Ketone (2-Hexanone)	BRL	mg/kg dry	0.95	0.034	50	8260B	8/2/10 15:44	KLA	P0H0033
Methyl Ethyl Ketone (2-Butanone)	BRL	mg/kg dry	0.95	0.059	50	8260B	8/2/10 15:44	KLA	P0H0033
Methyl Isobutyl Ketone	BRL	mg/kg dry	0.95	0.035	50	8260B	8/2/10 15:44	KLA	P0H0033
Methylene Chloride	BRL	mg/kg dry	0.24	0.052	50	8260B	8/2/10 15:44	KLA	P0H0033
Methyl-tert-Butyl Ether	BRL	mg/kg dry	0.24	0.026	50	8260B	8/2/10 15:44	KLA	P0H0033
Naphthalene	BRL	mg/kg dry	0.47	0.035	50	8260B	8/2/10 15:44	KLA	P0H0033
n-Butylbenzene	BRL	mg/kg dry	0.24	0.080	50	8260B	8/2/10 15:44	KLA	P0H0033
n-Propylbenzene	BRL	mg/kg dry	0.24	0.069	50	8260B	8/2/10 15:44	KLA	P0H0033
o-Xylene	BRL	mg/kg dry	0.24	0.052	50	8260B	8/2/10 15:44	KLA	P0H0033
sec-Butylbenzene	BRL	mg/kg dry	0.24	0.092	50	8260B	8/2/10 15:44	KLA	P0H0033
Styrene	BRL	mg/kg dry	0.24	0.037	50	8260B	8/2/10 15:44	KLA	P0H0033
tert-Butylbenzene	BRL	mg/kg dry	0.24	0.076	50	8260B	8/2/10 15:44	KLA	P0H0033
Tetrachloroethylene	BRL	mg/kg dry	0.24	0.072	50	8260B	8/2/10 15:44	KLA	P0H0033
Toluene	BRL	mg/kg dry	0.24	0.065	50	8260B	8/2/10 15:44	KLA	P0H0033
trans-1,2-Dichloroethylene	BRL	mg/kg dry	0.24	0.072	50	8260B	8/2/10 15:44	KLA	P0H0033
trans-1,3-Dichloropropylene	BRL	mg/kg dry	0.24	0.031	50	8260B	8/2/10 15:44	KLA	P0H0033
Trichloroethylene	BRL	mg/kg dry	0.24	0.067	50	8260B	8/2/10 15:44	KLA	P0H0033
Trichlorofluoromethane	BRL	mg/kg dry	0.47	0.15	50	8260B	8/2/10 15:44	KLA	P0H0033
Vinyl acetate	BRL	mg/kg dry	0.95	0.078	50	8260B	8/2/10 15:44	KLA	P0H0033
Vinyl chloride	BRL	mg/kg dry	0.47	0.10	50	8260B	8/2/10 15:44	KLA	P0H0033
Xylenes, total	BRL	mg/kg dry	0.71	0.18	50	8260B	8/2/10 15:44	KLA	P0H0033

Surrogate	Recovery	Control Limits
4-Bromofluorobenzene	*108 %*	*70-130*
Dibromofluoromethane	*89 %*	*70-130*
Toluene-d8	*81 %*	*70-130*

Volatile Petroleum Hydrocarbons by GC/PID/FID

C5-C8 Aliphatics	**51**	**mg/kg dry**	**8.0**	**3.0**	**100**	**MADEP VPH**	**8/3/10 21:19**	**hea**	**P0H0051**
C9-C12 Aliphatics	BRL	mg/kg dry	8.0	2.8	100	MADEP VPH	8/3/10 21:19	hea	P0H0051
C9-C10 Aromatics	**640**	**mg/kg dry**	**8.0**	**0.85**	**100**	**MADEP VPH**	**8/3/10 21:19**	**hea**	**P0H0051**

Surrogate	Recovery	Control Limits
2,5-Dibromotoluene (PID)	*83 %*	*70-130*
2,5-Dibromotoluene (FID)	*124 %*	*70-130*

Mactec - Asheville (NCDOT Project)
Attn: Rodney Clark
c/o MACTEC Eng. & Consulting, Inc, 1308 Pa
Asheville, NC 28806

Project: NCDOT Lenoir

Project No.: U-2211-B Parcel 9
Sample Matrix: Solid

Client Sample ID: S. Base (7.5' bgs)
Prism Sample ID: 0070567-03
Prism Work Order: 0070567
Time Collected: 07/19/10 11:15
Time Submitted: 07/21/10 10:25

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Diesel Range Organics by GC/FID									
Diesel Range Organics	**14000**	**mg/kg dry**	**930**	**160**	**100**	**8015C**	**7/24/10 15:00**	**GRR**	**P0G0489**
			Surrogate			Recovery		Control Limits	
			o-Terphenyl			*0 %*		*49-124*	*Ac*
Extractable Petroleum Hydrocarbons by GC/FID									
C9-C18 Aliphatics	**7300**	**mg/kg dry**	**66**	**4.2**	**5**	**MADEP EPH**	**8/3/10 13:16**	**GRR**	**P0H0017**
C19-C36 Aliphatics	**2400**	**mg/kg dry**	**66**	**6.9**	**5**	**MADEP EPH**	**8/3/10 13:16**	**GRR**	**P0H0017**
C11-C22 Aromatics	**4300**	**mg/kg dry**	**66**	**19**	**5**	**MADEP EPH**	**8/3/10 14:01**	**GRR**	**P0H0017**
			Surrogate			Recovery		Control Limits	
			1-Chlorooctadecane			*85 %*		*40-140*	
			o-Terphenyl			*85 %*		*40-140*	
			2-Fluorobiphenyl			*87 %*		*40-140*	
			2-Bromonaphthalene			*102 %*		*40-140*	
Gasoline Range Organics by GC/FID									
Gasoline Range Organics	**310**	**mg/kg dry**	**5.9**	**0.77**	**50**	**8015C**	**7/26/10 23:59**	**HPE**	**P0G0528**
			Surrogate			Recovery		Control Limits	
			a,a,a-Trifluorotoluene			*95 %*		*55-129*	
General Chemistry Parameters									
% Solids	**75.3**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**7/26/10 12:18**	**JAB**	**P0G0505**
Semivolatile Organic Compounds by GC/MS									A
1,2,4-Trichlorobenzene	BRL	mg/kg dry	4.4	1.1	10	8270D	8/2/10 21:24	CGP	P0H0042
1,2-Dichlorobenzene	BRL	mg/kg dry	4.4	1.0	10	8270D	8/2/10 21:24	CGP	P0H0042
1,3-Dichlorobenzene	BRL	mg/kg dry	4.4	1.0	10	8270D	8/2/10 21:24	CGP	P0H0042
1,4-Dichlorobenzene	BRL	mg/kg dry	4.4	0.99	10	8270D	8/2/10 21:24	CGP	P0H0042
2,4,6-Trichlorophenol	BRL	mg/kg dry	4.4	1.1	10	8270D	8/2/10 21:24	CGP	P0H0042
2,4-Dichlorophenol	BRL	mg/kg dry	4.4	1.1	10	8270D	8/2/10 21:24	CGP	P0H0042
2,4-Dimethylphenol	BRL	mg/kg dry	4.4	1.1	10	8270D	8/2/10 21:24	CGP	P0H0042
2,4-Dinitrophenol	BRL	mg/kg dry	4.4	0.69	10	8270D	8/2/10 21:24	CGP	P0H0042
2,4-Dinitrotoluene	BRL	mg/kg dry	4.4	1.1	10	8270D	8/2/10 21:24	CGP	P0H0042
2,6-Dinitrotoluene	BRL	mg/kg dry	4.4	0.91	10	8270D	8/2/10 21:24	CGP	P0H0042
2-Chloronaphthalene	BRL	mg/kg dry	4.4	1.0	10	8270D	8/2/10 21:24	CGP	P0H0042
2-Chlorophenol	BRL	mg/kg dry	4.4	1.2	10	8270D	8/2/10 21:24	CGP	P0H0042
2-Methylnaphthalene	BRL	mg/kg dry	4.4	1.3	10	8270D	8/2/10 21:24	CGP	P0H0042
2-Methylphenol	BRL	mg/kg dry	4.4	1.1	10	8270D	8/2/10 21:24	CGP	P0H0042
2-Nitrophenol	BRL	mg/kg dry	4.4	1.0	10	8270D	8/2/10 21:24	CGP	P0H0042
3,3'-Dichlorobenzidine	BRL	mg/kg dry	4.4	1.1	10	8270D	8/2/10 21:24	CGP	P0H0042
3/4-Methylphenol	BRL	mg/kg dry	4.4	1.1	10	8270D	8/2/10 21:24	CGP	P0H0042
4,6-Dinitro-2-methylphenol	BRL	mg/kg dry	4.4	0.71	10	8270D	8/2/10 21:24	CGP	P0H0042
4-Bromophenyl phenyl ether	BRL	mg/kg dry	4.4	0.97	10	8270D	8/2/10 21:24	CGP	P0H0042
4-Chloro-3-methylphenol	BRL	mg/kg dry	4.4	1.0	10	8270D	8/2/10 21:24	CGP	P0H0042

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Project: NCDOT Lenoir
Project No.: U-2211-B Parcel 9
Sample Matrix: Solid

Client Sample ID: S. Base (7.5' bgs)
Prism Sample ID: 0070567-03
Prism Work Order: 0070567
Time Collected: 07/19/10 11:15
Time Submitted: 07/21/10 10:25

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
4-Chloroaniline	BRL	mg/kg dry	4.4	0.90	10	8270D	8/2/10 21:24	CGP	P0H0042
4-Chlorophenyl phenyl ether	BRL	mg/kg dry	4.4	0.87	10	8270D	8/2/10 21:24	CGP	P0H0042
4-Nitrophenol	BRL	mg/kg dry	4.4	0.60	10	8270D	8/2/10 21:24	CGP	P0H0042
Acenaphthene	BRL	mg/kg dry	4.4	0.95	10	8270D	8/2/10 21:24	CGP	P0H0042
Acenaphthylene	BRL	mg/kg dry	4.4	1.0	10	8270D	8/2/10 21:24	CGP	P0H0042
Anthracene	BRL	mg/kg dry	4.4	1.0	10	8270D	8/2/10 21:24	CGP	P0H0042
Azobenzene	BRL	mg/kg dry	4.4	0.98	10	8270D	8/2/10 21:24	CGP	P0H0042
Benzo(a)anthracene	BRL	mg/kg dry	4.4	1.1	10	8270D	8/2/10 21:24	CGP	P0H0042
Benzo(a)pyrene	BRL	mg/kg dry	4.4	0.58	10	8270D	8/2/10 21:24	CGP	P0H0042
Benzo(b)fluoranthene	BRL	mg/kg dry	4.4	0.92	10	8270D	8/2/10 21:24	CGP	P0H0042
Benzo(g,h,i)perylene	BRL	mg/kg dry	4.4	0.79	10	8270D	8/2/10 21:24	CGP	P0H0042
Benzo(k)fluoranthene	BRL	mg/kg dry	4.4	1.2	10	8270D	8/2/10 21:24	CGP	P0H0042
Benzoic Acid	BRL	mg/kg dry	4.4	1.1	10	8270D	8/2/10 21:24	CGP	P0H0042
Benzyl alcohol	BRL	mg/kg dry	4.4	1.1	10	8270D	8/2/10 21:24	CGP	P0H0042
bis(2-Chloroethoxy)methane	BRL	mg/kg dry	4.4	1.2	10	8270D	8/2/10 21:24	CGP	P0H0042
Bis(2-Chloroethyl)ether	BRL	mg/kg dry	4.4	1.2	10	8270D	8/2/10 21:24	CGP	P0H0042
Bis(2-chloroisopropyl)ether	BRL	mg/kg dry	4.4	1.2	10	8270D	8/2/10 21:24	CGP	P0H0042
Bis(2-Ethylhexyl)phthalate	BRL	mg/kg dry	4.4	1.4	10	8270D	8/2/10 21:24	CGP	P0H0042
Butyl benzyl phthalate	BRL	mg/kg dry	4.4	1.3	10	8270D	8/2/10 21:24	CGP	P0H0042
Chrysene	BRL	mg/kg dry	4.4	0.98	10	8270D	8/2/10 21:24	CGP	P0H0042
Dibenzo(a,h)anthracene	BRL	mg/kg dry	4.4	1.0	10	8270D	8/2/10 21:24	CGP	P0H0042
Dibenzofuran	BRL	mg/kg dry	4.4	0.95	10	8270D	8/2/10 21:24	CGP	P0H0042
Diethyl phthalate	BRL	mg/kg dry	4.4	1.1	10	8270D	8/2/10 21:24	CGP	P0H0042
Dimethyl phthalate	BRL	mg/kg dry	4.4	1.0	10	8270D	8/2/10 21:24	CGP	P0H0042
Di-n-butyl phthalate	BRL	mg/kg dry	4.4	1.4	10	8270D	8/2/10 21:24	CGP	P0H0042
Di-n-octyl phthalate	BRL	mg/kg dry	4.4	1.4	10	8270D	8/2/10 21:24	CGP	P0H0042
Fluoranthene	BRL	mg/kg dry	4.4	1.2	10	8270D	8/2/10 21:24	CGP	P0H0042
Fluorene	BRL	mg/kg dry	4.4	0.96	10	8270D	8/2/10 21:24	CGP	P0H0042
Hexachlorobenzene	BRL	mg/kg dry	4.4	0.98	10	8270D	8/2/10 21:24	CGP	P0H0042
Hexachlorobutadiene	BRL	mg/kg dry	4.4	1.1	10	8270D	8/2/10 21:24	CGP	P0H0042
Hexachlorocyclopentadiene	BRL	mg/kg dry	4.4	0.87	10	8270D	8/2/10 21:24	CGP	P0H0042
Hexachloroethane	BRL	mg/kg dry	4.4	1.0	10	8270D	8/2/10 21:24	CGP	P0H0042
Indeno(1,2,3-cd)pyrene	BRL	mg/kg dry	4.4	1.1	10	8270D	8/2/10 21:24	CGP	P0H0042
Isophorone	BRL	mg/kg dry	4.4	1.0	10	8270D	8/2/10 21:24	CGP	P0H0042
Naphthalene	BRL	mg/kg dry	4.4	1.1	10	8270D	8/2/10 21:24	CGP	P0H0042
Nitrobenzene	BRL	mg/kg dry	4.4	1.1	10	8270D	8/2/10 21:24	CGP	P0H0042
N-Nitroso-di-n-propylamine	BRL	mg/kg dry	4.4	0.98	10	8270D	8/2/10 21:24	CGP	P0H0042
N-Nitrosodiphenylamine	BRL	mg/kg dry	4.4	1.1	10	8270D	8/2/10 21:24	CGP	P0H0042
Pentachlorophenol	BRL	mg/kg dry	4.4	1.2	10	8270D	8/2/10 21:24	CGP	P0H0042
Phenanthrene	BRL	mg/kg dry	4.4	0.97	10	8270D	8/2/10 21:24	CGP	P0H0042
Phenol	BRL	mg/kg dry	4.4	1.2	10	8270D	8/2/10 21:24	CGP	P0H0042
Pyrene	7.4	mg/kg dry	4.4	1.1	10	8270D	8/2/10 21:24	CGP	P0H0042
			Surrogate			Recovery		Control Limits	

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Asheville, NC 28806

Project: NCDOT Lenoir

Project No.: U-2211-B Parcel 9
Sample Matrix: Solid

Client Sample ID: S. Base (7.5' bgs)
Prism Sample ID: 0070567-03
Prism Work Order: 0070567
Time Collected: 07/19/10 11:15
Time Submitted: 07/21/10 10:25

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
			2,4,6-Tribromophenol			*59 %*		*34-134*	
			2-Fluorobiphenyl			*91 %*		*17-122*	
			2-Fluorophenol			*42 %*		*13-108*	
			Nitrobenzene-d5			*59 %*		*11-118*	
			Phenol-d5			*46 %*		*23-109*	
			Terphenyl-d14			*95 %*		*41-156*	
Volatile Organic Compounds by GC/MS									
1,1,1-Trichloroethane	BRL	mg/kg dry	0.0032	0.00075	1	8260B	8/2/10 18:11	KLA	P0H0019
1,1,2,2-Tetrachloroethane	BRL	mg/kg dry	0.0032	0.00090	1	8260B	8/2/10 18:11	KLA	P0H0019
1,1,2-Trichloroethane	BRL	mg/kg dry	0.0032	0.00093	1	8260B	8/2/10 18:11	KLA	P0H0019
1,1-Dichloroethane	BRL	mg/kg dry	0.0032	0.00083	1	8260B	8/2/10 18:11	KLA	P0H0019
1,1-Dichloroethylene	BRL	mg/kg dry	0.0032	0.00077	1	8260B	8/2/10 18:11	KLA	P0H0019
1,1-Dichloropropylene	BRL	mg/kg dry	0.0032	0.00068	1	8260B	8/2/10 18:11	KLA	P0H0019
1,2,3-Trichlorobenzene	BRL	mg/kg dry	0.0032	0.0011	1	8260B	8/2/10 18:11	KLA	P0H0019
1,2,3-Trichloropropane	BRL	mg/kg dry	0.0032	0.0014	1	8260B	8/2/10 18:11	KLA	P0H0019
1,2,4-Trichlorobenzene	BRL	mg/kg dry	0.0032	0.00088	1	8260B	8/2/10 18:11	KLA	P0H0019
1,2,4-Trimethylbenzene	BRL	mg/kg dry	0.0032	0.00080	1	8260B	8/2/10 18:11	KLA	P0H0019
1,2-Dibromoethane	BRL	mg/kg dry	0.0032	0.00090	1	8260B	8/2/10 18:11	KLA	P0H0019
1,2-Dichlorobenzene	BRL	mg/kg dry	0.0032	0.00088	1	8260B	8/2/10 18:11	KLA	P0H0019
1,2-Dichloroethane	BRL	mg/kg dry	0.0032	0.00084	1	8260B	8/2/10 18:11	KLA	P0H0019
1,2-Dichloropropane	BRL	mg/kg dry	0.0032	0.00097	1	8260B	8/2/10 18:11	KLA	P0H0019
1,3,5-Trimethylbenzene	BRL	mg/kg dry	0.0032	0.00087	1	8260B	8/2/10 18:11	KLA	P0H0019
1,3-Dichlorobenzene	BRL	mg/kg dry	0.0032	0.00078	1	8260B	8/2/10 18:11	KLA	P0H0019
1,3-Dichloropropane	BRL	mg/kg dry	0.0032	0.00067	1	8260B	8/2/10 18:11	KLA	P0H0019
1,4-Dichlorobenzene	BRL	mg/kg dry	0.0032	0.00081	1	8260B	8/2/10 18:11	KLA	P0H0019
2,2-Dichloropropane	BRL	mg/kg dry	0.0032	0.00077	1	8260B	8/2/10 18:11	KLA	P0H0019
2-Chlorotoluene	BRL	mg/kg dry	0.0032	0.00083	1	8260B	8/2/10 18:11	KLA	P0H0019
4-Chlorotoluene	BRL	mg/kg dry	0.0032	0.00080	1	8260B	8/2/10 18:11	KLA	P0H0019
4-Isopropyltoluene	BRL	mg/kg dry	0.0032	0.00094	1	8260B	8/2/10 18:11	KLA	P0H0019
Acetone	**0.095**	**mg/kg dry**	**0.032**	**0.0014**	**1**	**8260B**	**8/2/10 18:11**	**KLA**	**P0H0019**
Benzene	BRL	mg/kg dry	0.0019	0.00087	1	8260B	8/2/10 18:11	KLA	P0H0019
Bromobenzene	BRL	mg/kg dry	0.0032	0.00079	1	8260B	8/2/10 18:11	KLA	P0H0019
Bromochloromethane	BRL	mg/kg dry	0.0032	0.00088	1	8260B	8/2/10 18:11	KLA	P0H0019
Bromodichloromethane	BRL	mg/kg dry	0.0032	0.00075	1	8260B	8/2/10 18:11	KLA	P0H0019
Bromoform	BRL	mg/kg dry	0.0032	0.00071	1	8260B	8/2/10 18:11	KLA	P0H0019
Bromomethane	BRL	mg/kg dry	0.0065	0.00082	1	8260B	8/2/10 18:11	KLA	P0H0019
Carbon Tetrachloride	BRL	mg/kg dry	0.0032	0.00095	1	8260B	8/2/10 18:11	KLA	P0H0019
Chlorobenzene	BRL	mg/kg dry	0.0032	0.00074	1	8260B	8/2/10 18:11	KLA	P0H0019
Chloroethane	BRL	mg/kg dry	0.0065	0.0017	1	8260B	8/2/10 18:11	KLA	P0H0019
Chloroform	BRL	mg/kg dry	0.0032	0.00082	1	8260B	8/2/10 18:11	KLA	P0H0019
Chloromethane	BRL	mg/kg dry	0.0032	0.00077	1	8260B	8/2/10 18:11	KLA	P0H0019
cis-1,2-Dichloroethylene	BRL	mg/kg dry	0.0032	0.00076	1	8260B	8/2/10 18:11	KLA	P0H0019
cis-1,3-Dichloropropylene	BRL	mg/kg dry	0.0032	0.00077	1	8260B	8/2/10 18:11	KLA	P0H0019

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Project: NCDOT Lenoir
Project No.: U-2211-B Parcel 9
Sample Matrix: Solid

Client Sample ID: S. Base (7.5' bgs)
Prism Sample ID: 0070567-03
Prism Work Order: 0070567
Time Collected: 07/19/10 11:15
Time Submitted: 07/21/10 10:25

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Dibromochloromethane	BRL	mg/kg dry	0.0032	0.00082	1	8260B	8/2/10 18:11	KLA	P0H0019
Dichlorodifluoromethane	BRL	mg/kg dry	0.0032	0.00067	1	8260B	8/2/10 18:11	KLA	P0H0019
Ethylbenzene	BRL	mg/kg dry	0.0032	0.00068	1	8260B	8/2/10 18:11	KLA	P0H0019
Isopropyl Ether	BRL	mg/kg dry	0.0032	0.00080	1	8260B	8/2/10 18:11	KLA	P0H0019
Isopropylbenzene (Cumene)	BRL	mg/kg dry	0.0032	0.00073	1	8260B	8/2/10 18:11	KLA	P0H0019
m,p-Xylenes	BRL	mg/kg dry	0.0065	0.0017	1	8260B	8/2/10 18:11	KLA	P0H0019
Methyl Butyl Ketone (2-Hexanone)	BRL	mg/kg dry	0.032	0.00098	1	8260B	8/2/10 18:11	KLA	P0H0019
Methyl Ethyl Ketone (2-Butanone)	**0.045 J**	**mg/kg dry**	**0.065**	**0.00083**	**1**	**8260B**	**8/2/10 18:11**	**KLA**	**P0H0019**
Methyl Isobutyl Ketone	BRL	mg/kg dry	0.032	0.00071	1	8260B	8/2/10 18:11	KLA	P0H0019
Methylene Chloride	BRL	mg/kg dry	0.0032	0.00086	1	8260B	8/2/10 18:11	KLA	P0H0019
Methyl-tert-Butyl Ether	BRL	mg/kg dry	0.0065	0.00068	1	8260B	8/2/10 18:11	KLA	P0H0019
Naphthalene	BRL	mg/kg dry	0.0065	0.0018	1	8260B	8/2/10 18:11	KLA	P0H0019
n-Butylbenzene	BRL	mg/kg dry	0.0032	0.0012	1	8260B	8/2/10 18:11	KLA	P0H0019
n-Propylbenzene	BRL	mg/kg dry	0.0032	0.00093	1	8260B	8/2/10 18:11	KLA	P0H0019
o-Xylene	BRL	mg/kg dry	0.0032	0.00072	1	8260B	8/2/10 18:11	KLA	P0H0019
sec-Butylbenzene	BRL	mg/kg dry	0.0032	0.00085	1	8260B	8/2/10 18:11	KLA	P0H0019
Styrene	BRL	mg/kg dry	0.0032	0.00063	1	8260B	8/2/10 18:11	KLA	P0H0019
tert-Butylbenzene	BRL	mg/kg dry	0.0032	0.00088	1	8260B	8/2/10 18:11	KLA	P0H0019
Tetrachloroethylene	**0.014**	**mg/kg dry**	**0.0032**	**0.00084**	**1**	**8260B**	**8/2/10 18:11**	**KLA**	**P0H0019**
Toluene	BRL	mg/kg dry	0.0032	0.00079	1	8260B	8/2/10 18:11	KLA	P0H0019
trans-1,2-Dichloroethylene	BRL	mg/kg dry	0.0032	0.00064	1	8260B	8/2/10 18:11	KLA	P0H0019
trans-1,3-Dichloropropylene	BRL	mg/kg dry	0.0032	0.00065	1	8260B	8/2/10 18:11	KLA	P0H0019
Trichloroethylene	BRL	mg/kg dry	0.0032	0.00091	1	8260B	8/2/10 18:11	KLA	P0H0019
Trichlorofluoromethane	BRL	mg/kg dry	0.0032	0.00092	1	8260B	8/2/10 18:11	KLA	P0H0019
Vinyl acetate	BRL	mg/kg dry	0.016	0.0022	1	8260B	8/2/10 18:11	KLA	P0H0019
Vinyl chloride	BRL	mg/kg dry	0.0032	0.00085	1	8260B	8/2/10 18:11	KLA	P0H0019
Xylenes, total	BRL	mg/kg dry	0.0097	0.0024	1	8260B	8/2/10 18:11	KLA	P0H0019

Surrogate	Recovery	Control Limits	
4-Bromofluorobenzene	*160 %*	*70-130*	*Aa*
Dibromofluoromethane	*106 %*	*84-123*	
Toluene-d8	*92 %*	*76-129*	

Volatile Petroleum Hydrocarbons by GC/PID/FID

C5-C8 Aliphatics	**87**	**mg/kg dry**	**9.4**	**3.5**	**100**	**MADEP VPH**	**8/4/10 0:53**	**hea**	**P0H0051**
C9-C12 Aliphatics	BRL	mg/kg dry	9.4	3.3	100	MADEP VPH	8/4/10 0:53	hea	P0H0051
C9-C10 Aromatics	**700**	**mg/kg dry**	**9.4**	**1.0**	**100**	**MADEP VPH**	**8/4/10 0:53**	**hea**	**P0H0051**

Surrogate	Recovery	Control Limits
2,5-Dibromotoluene (PID)	*76 %*	*70-130*
2,5-Dibromotoluene (FID)	*102 %*	*70-130*

Mactec - Asheville (NCDOT Project)
Attn: Rodney Clark
c/o MACTEC Eng. & Consulting, Inc, 1308 P
Asheville, NC 28806

Project: NCDOT Lenoir
Project No.: U-2211-B Parcel 9
Sample Matrix: Solid

Client Sample ID: East. SW (4'-5' bgs)
Prism Sample ID: 0070567-04
Prism Work Order: 0070567
Time Collected: 07/19/10 11:30
Time Submitted: 07/21/10 10:25

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	1.7	1	8015C	7/24/10 9:05	GRR	P0G0489
			Surrogate			Recovery		Control Limits	
			o-Terphenyl			*76 %*		*49-124*	
Gasoline Range Organics by GC/FID									
Gasoline Range Organics	BRL	mg/kg dry	7.0	0.92	50	8015C	7/27/10 0:30	HPE	P0G0528
			Surrogate			Recovery		Control Limits	
			a,a,a-Trifluorotoluene			*92 %*		*55-129*	
General Chemistry Parameters									
% Solids	**68.4**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**7/26/10 12:18**	**JAB**	**P0G0505**

Mactec - Asheville (NCDOT Project)
Attn: Rodney Clark
c/o MACTEC Eng. & Consulting, Inc, 1308 Pa
Asheville, NC 28806

Project: NCDOT Lenoir
Project No.: U-2211-B Parcel 9
Sample Matrix: Solid

Client Sample ID: North SW (4'-5' bgs)
Prism Sample ID: 0070567-05
Prism Work Order: 0070567
Time Collected: 07/19/10 11:45
Time Submitted: 07/21/10 10:25

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	9.7	1.6	1	8015C	7/24/10 10:51	GRR	P0G0489
			Surrogate			Recovery		Control Limits	
			o-Terphenyl			*65 %*		*49-124*	
Gasoline Range Organics by GC/FID									
Gasoline Range Organics	**2.4 J**	**mg/kg dry**	**6.0**	**0.78**	**50**	**8015C**	**7/27/10 1:01**	**HPE**	**P0G0528**
			Surrogate			Recovery		Control Limits	
			a,a,a-Trifluorotoluene			*56 %*		*55-129*	
General Chemistry Parameters									
% Solids	**71.4**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**7/26/10 12:18**	**JAB**	**P0G0505**

Mactec - Asheville (NCDOT Project)
Attn: Rodney Clark
c/o MACTEC Eng. & Consulting, Inc, 1308 P
Asheville, NC 28806

Project: NCDOT Lenoir
Project No.: U-2211-B Parcel 9
Sample Matrix: Solid

Client Sample ID: West Sw (4'-5' bgs)
Prism Sample ID: 0070567-06
Prism Work Order: 0070567
Time Collected: 07/19/10 12:00
Time Submitted: 07/21/10 10:25

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Diesel Range Organics by GC/FID									
Diesel Range Organics	**12**	**mg/kg dry**	**8.8**	**1.4**	**1**	**8015C**	**7/24/10 11:27**	**GRR**	**P0G0489**
			Surrogate			Recovery		Control Limits	
			o-Terphenyl			*104 %*		*49-124*	
Extractable Petroleum Hydrocarbons by GC/FID									
C9-C18 Aliphatics	BRL	mg/kg dry	12	0.80	1	MADEP EPH	8/3/10 4:54	GRR	P0H0017
C19-C36 Aliphatics	BRL	mg/kg dry	12	1.3	1	MADEP EPH	8/3/10 4:54	GRR	P0H0017
C11-C22 Aromatics	BRL	mg/kg dry	12	3.5	1	MADEP EPH	8/3/10 5:45	GRR	P0H0017
			Surrogate			Recovery		Control Limits	
			1-Chlorooctadecane			*81 %*		*40-140*	
			o-Terphenyl			*80 %*		*40-140*	
			2-Fluorobiphenyl			*80 %*		*40-140*	
			2-Bromonaphthalene			*80 %*		*40-140*	
Gasoline Range Organics by GC/FID									
Gasoline Range Organics	BRL	mg/kg dry	6.2	0.81	50	8015C	7/27/10 1:32	HPE	P0G0528
			Surrogate			Recovery		Control Limits	
			a,a,a-Trifluorotoluene			*100 %*		*55-129*	
General Chemistry Parameters									
% Solids	**79.5**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**7/26/10 12:18**	**JAB**	**P0G0505**
Semivolatile Organic Compounds by GC/MS									
1,2,4-Trichlorobenzene	BRL	mg/kg dry	0.41	0.11	1	8270D	8/2/10 21:54	CGP	P0H0042
1,2-Dichlorobenzene	BRL	mg/kg dry	0.41	0.095	1	8270D	8/2/10 21:54	CGP	P0H0042
1,3-Dichlorobenzene	BRL	mg/kg dry	0.41	0.096	1	8270D	8/2/10 21:54	CGP	P0H0042
1,4-Dichlorobenzene	BRL	mg/kg dry	0.41	0.094	1	8270D	8/2/10 21:54	CGP	P0H0042
2,4,6-Trichlorophenol	BRL	mg/kg dry	0.41	0.10	1	8270D	8/2/10 21:54	CGP	P0H0042
2,4-Dichlorophenol	BRL	mg/kg dry	0.41	0.11	1	8270D	8/2/10 21:54	CGP	P0H0042
2,4-Dimethylphenol	BRL	mg/kg dry	0.41	0.11	1	8270D	8/2/10 21:54	CGP	P0H0042
2,4-Dinitrophenol	BRL	mg/kg dry	0.41	0.065	1	8270D	8/2/10 21:54	CGP	P0H0042
2,4-Dinitrotoluene	BRL	mg/kg dry	0.41	0.10	1	8270D	8/2/10 21:54	CGP	P0H0042
2,6-Dinitrotoluene	BRL	mg/kg dry	0.41	0.086	1	8270D	8/2/10 21:54	CGP	P0H0042
2-Chloronaphthalene	BRL	mg/kg dry	0.41	0.099	1	8270D	8/2/10 21:54	CGP	P0H0042
2-Chlorophenol	BRL	mg/kg dry	0.41	0.11	1	8270D	8/2/10 21:54	CGP	P0H0042
2-Methylnaphthalene	BRL	mg/kg dry	0.41	0.13	1	8270D	8/2/10 21:54	CGP	P0H0042
2-Methylphenol	BRL	mg/kg dry	0.41	0.10	1	8270D	8/2/10 21:54	CGP	P0H0042
2-Nitrophenol	BRL	mg/kg dry	0.41	0.094	1	8270D	8/2/10 21:54	CGP	P0H0042
3,3'-Dichlorobenzidine	BRL	mg/kg dry	0.41	0.10	1	8270D	8/2/10 21:54	CGP	P0H0042
3/4-Methylphenol	BRL	mg/kg dry	0.41	0.10	1	8270D	8/2/10 21:54	CGP	P0H0042
4,6-Dinitro-2-methylphenol	BRL	mg/kg dry	0.41	0.067	1	8270D	8/2/10 21:54	CGP	P0H0042
4-Bromophenyl phenyl ether	BRL	mg/kg dry	0.41	0.091	1	8270D	8/2/10 21:54	CGP	P0H0042
4-Chloro-3-methylphenol	BRL	mg/kg dry	0.41	0.095	1	8270D	8/2/10 21:54	CGP	P0H0042
4-Chloroaniline	BRL	mg/kg dry	0.41	0.085	1	8270D	8/2/10 21:54	CGP	P0H0042

Mactec - Asheville (NCDOT Project)
Attn: Rodney Clark
c/o MACTEC Eng. & Consulting, Inc, 1308 Pa
Asheville, NC 28806

Project: NCDOT Lenoir

Project No.: U-2211-B Parcel 9
Sample Matrix: Solid

Client Sample ID: West Sw (4'-5' bgs)
Prism Sample ID: 0070567-06
Prism Work Order: 0070567
Time Collected: 07/19/10 12:00
Time Submitted: 07/21/10 10:25

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
4-Chlorophenyl phenyl ether	BRL	mg/kg dry	0.41	0.082	1	8270D	8/2/10 21:54	CGP	P0H0042
4-Nitrophenol	BRL	mg/kg dry	0.41	0.057	1	8270D	8/2/10 21:54	CGP	P0H0042
Acenaphthene	BRL	mg/kg dry	0.41	0.090	1	8270D	8/2/10 21:54	CGP	P0H0042
Acenaphthylene	BRL	mg/kg dry	0.41	0.095	1	8270D	8/2/10 21:54	CGP	P0H0042
Anthracene	BRL	mg/kg dry	0.41	0.095	1	8270D	8/2/10 21:54	CGP	P0H0042
Azobenzene	BRL	mg/kg dry	0.41	0.092	1	8270D	8/2/10 21:54	CGP	P0H0042
Benzo(a)anthracene	BRL	mg/kg dry	0.41	0.10	1	8270D	8/2/10 21:54	CGP	P0H0042
Benzo(a)pyrene	BRL	mg/kg dry	0.41	0.055	1	8270D	8/2/10 21:54	CGP	P0H0042
Benzo(b)fluoranthene	BRL	mg/kg dry	0.41	0.087	1	8270D	8/2/10 21:54	CGP	P0H0042
Benzo(g,h,i)perylene	BRL	mg/kg dry	0.41	0.075	1	8270D	8/2/10 21:54	CGP	P0H0042
Benzo(k)fluoranthene	BRL	mg/kg dry	0.41	0.11	1	8270D	8/2/10 21:54	CGP	P0H0042
Benzoic Acid	BRL	mg/kg dry	0.41	0.11	1	8270D	8/2/10 21:54	CGP	P0H0042
Benzyl alcohol	BRL	mg/kg dry	0.41	0.10	1	8270D	8/2/10 21:54	CGP	P0H0042
bis(2-Chloroethoxy)methane	BRL	mg/kg dry	0.41	0.11	1	8270D	8/2/10 21:54	CGP	P0H0042
Bis(2-Chloroethyl)ether	BRL	mg/kg dry	0.41	0.11	1	8270D	8/2/10 21:54	CGP	P0H0042
Bis(2-chloroisopropyl)ether	BRL	mg/kg dry	0.41	0.11	1	8270D	8/2/10 21:54	CGP	P0H0042
Bis(2-Ethylhexyl)phthalate	BRL	mg/kg dry	0.41	0.13	1	8270D	8/2/10 21:54	CGP	P0H0042
Butyl benzyl phthalate	BRL	mg/kg dry	0.41	0.12	1	8270D	8/2/10 21:54	CGP	P0H0042
Chrysene	BRL	mg/kg dry	0.41	0.093	1	8270D	8/2/10 21:54	CGP	P0H0042
Dibenzo(a,h)anthracene	BRL	mg/kg dry	0.41	0.096	1	8270D	8/2/10 21:54	CGP	P0H0042
Dibenzofuran	BRL	mg/kg dry	0.41	0.090	1	8270D	8/2/10 21:54	CGP	P0H0042
Diethyl phthalate	BRL	mg/kg dry	0.41	0.10	1	8270D	8/2/10 21:54	CGP	P0H0042
Dimethyl phthalate	BRL	mg/kg dry	0.41	0.096	1	8270D	8/2/10 21:54	CGP	P0H0042
Di-n-butyl phthalate	BRL	mg/kg dry	0.41	0.14	1	8270D	8/2/10 21:54	CGP	P0H0042
Di-n-octyl phthalate	BRL	mg/kg dry	0.41	0.14	1	8270D	8/2/10 21:54	CGP	P0H0042
Fluoranthene	BRL	mg/kg dry	0.41	0.11	1	8270D	8/2/10 21:54	CGP	P0H0042
Fluorene	BRL	mg/kg dry	0.41	0.091	1	8270D	8/2/10 21:54	CGP	P0H0042
Hexachlorobenzene	BRL	mg/kg dry	0.41	0.093	1	8270D	8/2/10 21:54	CGP	P0H0042
Hexachlorobutadiene	BRL	mg/kg dry	0.41	0.11	1	8270D	8/2/10 21:54	CGP	P0H0042
Hexachlorocyclopentadiene	BRL	mg/kg dry	0.41	0.083	1	8270D	8/2/10 21:54	CGP	P0H0042
Hexachloroethane	BRL	mg/kg dry	0.41	0.098	1	8270D	8/2/10 21:54	CGP	P0H0042
Indeno(1,2,3-cd)pyrene	BRL	mg/kg dry	0.41	0.10	1	8270D	8/2/10 21:54	CGP	P0H0042
Isophorone	BRL	mg/kg dry	0.41	0.096	1	8270D	8/2/10 21:54	CGP	P0H0042
Naphthalene	BRL	mg/kg dry	0.41	0.11	1	8270D	8/2/10 21:54	CGP	P0H0042
Nitrobenzene	BRL	mg/kg dry	0.41	0.10	1	8270D	8/2/10 21:54	CGP	P0H0042
N-Nitroso-di-n-propylamine	BRL	mg/kg dry	0.41	0.093	1	8270D	8/2/10 21:54	CGP	P0H0042
N-Nitrosodiphenylamine	BRL	mg/kg dry	0.41	0.10	1	8270D	8/2/10 21:54	CGP	P0H0042
Pentachlorophenol	BRL	mg/kg dry	0.41	0.11	1	8270D	8/2/10 21:54	CGP	P0H0042
Phenanthrene	BRL	mg/kg dry	0.41	0.092	1	8270D	8/2/10 21:54	CGP	P0H0042
Phenol	BRL	mg/kg dry	0.41	0.11	1	8270D	8/2/10 21:54	CGP	P0H0042
Pyrene	BRL	mg/kg dry	0.41	0.10	1	8270D	8/2/10 21:54	CGP	P0H0042

Surrogate	Recovery	Control Limits
2,4,6-Tribromophenol	*66 %*	*34-134*

Mactec - Asheville (NCDOT Project)
Attn: Rodney Clark
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Asheville, NC 28806

Project: NCDOT Lenoir
Project No.: U-2211-B Parcel 9
Sample Matrix: Solid

Client Sample ID: West Sw (4'-5' bgs)
Prism Sample ID: 0070567-06
Prism Work Order: 0070567
Time Collected: 07/19/10 12:00
Time Submitted: 07/21/10 10:25

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
			2-Fluorobiphenyl			*68 %*		*17-122*	
			2-Fluorophenol			*53 %*		*13-108*	
			Nitrobenzene-d5			*51 %*		*11-118*	
			Phenol-d5			*49 %*		*23-109*	
			Terphenyl-d14			*116 %*		*41-156*	
Volatile Organic Compounds by GC/MS									
1,1,1-Trichloroethane	BRL	mg/kg dry	0.0054	0.0012	1	8260B	8/2/10 13:02	KLA	P0H0019
1,1,2,2-Tetrachloroethane	BRL	mg/kg dry	0.0054	0.0015	1	8260B	8/2/10 13:02	KLA	P0H0019
1,1,2-Trichloroethane	BRL	mg/kg dry	0.0054	0.0015	1	8260B	8/2/10 13:02	KLA	P0H0019
1,1-Dichloroethane	BRL	mg/kg dry	0.0054	0.0014	1	8260B	8/2/10 13:02	KLA	P0H0019
1,1-Dichloroethylene	BRL	mg/kg dry	0.0054	0.0013	1	8260B	8/2/10 13:02	KLA	P0H0019
1,1-Dichloropropylene	BRL	mg/kg dry	0.0054	0.0011	1	8260B	8/2/10 13:02	KLA	P0H0019
1,2,3-Trichlorobenzene	BRL	mg/kg dry	0.0054	0.0018	1	8260B	8/2/10 13:02	KLA	P0H0019
1,2,3-Trichloropropane	BRL	mg/kg dry	0.0054	0.0023	1	8260B	8/2/10 13:02	KLA	P0H0019
1,2,4-Trichlorobenzene	BRL	mg/kg dry	0.0054	0.0015	1	8260B	8/2/10 13:02	KLA	P0H0019
1,2,4-Trimethylbenzene	BRL	mg/kg dry	0.0054	0.0013	1	8260B	8/2/10 13:02	KLA	P0H0019
1,2-Dibromoethane	BRL	mg/kg dry	0.0054	0.0015	1	8260B	8/2/10 13:02	KLA	P0H0019
1,2-Dichlorobenzene	BRL	mg/kg dry	0.0054	0.0015	1	8260B	8/2/10 13:02	KLA	P0H0019
1,2-Dichloroethane	BRL	mg/kg dry	0.0054	0.0014	1	8260B	8/2/10 13:02	KLA	P0H0019
1,2-Dichloropropane	BRL	mg/kg dry	0.0054	0.0016	1	8260B	8/2/10 13:02	KLA	P0H0019
1,3,5-Trimethylbenzene	BRL	mg/kg dry	0.0054	0.0014	1	8260B	8/2/10 13:02	KLA	P0H0019
1,3-Dichlorobenzene	BRL	mg/kg dry	0.0054	0.0013	1	8260B	8/2/10 13:02	KLA	P0H0019
1,3-Dichloropropane	BRL	mg/kg dry	0.0054	0.0011	1	8260B	8/2/10 13:02	KLA	P0H0019
1,4-Dichlorobenzene	BRL	mg/kg dry	0.0054	0.0013	1	8260B	8/2/10 13:02	KLA	P0H0019
2,2-Dichloropropane	BRL	mg/kg dry	0.0054	0.0013	1	8260B	8/2/10 13:02	KLA	P0H0019
2-Chlorotoluene	BRL	mg/kg dry	0.0054	0.0014	1	8260B	8/2/10 13:02	KLA	P0H0019
4-Chlorotoluene	BRL	mg/kg dry	0.0054	0.0013	1	8260B	8/2/10 13:02	KLA	P0H0019
4-Isopropyltoluene	BRL	mg/kg dry	0.0054	0.0016	1	8260B	8/2/10 13:02	KLA	P0H0019
Acetone	**0.075**	**mg/kg dry**	**0.054**	**0.0024**	**1**	**8260B**	**8/2/10 13:02**	**KLA**	**P0H0019**
Benzene	BRL	mg/kg dry	0.0033	0.0014	1	8260B	8/2/10 13:02	KLA	P0H0019
Bromobenzene	BRL	mg/kg dry	0.0054	0.0013	1	8260B	8/2/10 13:02	KLA	P0H0019
Bromochloromethane	BRL	mg/kg dry	0.0054	0.0015	1	8260B	8/2/10 13:02	KLA	P0H0019
Bromodichloromethane	BRL	mg/kg dry	0.0054	0.0012	1	8260B	8/2/10 13:02	KLA	P0H0019
Bromoform	BRL	mg/kg dry	0.0054	0.0012	1	8260B	8/2/10 13:02	KLA	P0H0019
Bromomethane	BRL	mg/kg dry	0.011	0.0014	1	8260B	8/2/10 13:02	KLA	P0H0019
Carbon Tetrachloride	BRL	mg/kg dry	0.0054	0.0016	1	8260B	8/2/10 13:02	KLA	P0H0019
Chlorobenzene	BRL	mg/kg dry	0.0054	0.0012	1	8260B	8/2/10 13:02	KLA	P0H0019
Chloroethane	BRL	mg/kg dry	0.011	0.0028	1	8260B	8/2/10 13:02	KLA	P0H0019
Chloroform	BRL	mg/kg dry	0.0054	0.0014	1	8260B	8/2/10 13:02	KLA	P0H0019
Chloromethane	BRL	mg/kg dry	0.0054	0.0013	1	8260B	8/2/10 13:02	KLA	P0H0019
cis-1,2-Dichloroethylene	BRL	mg/kg dry	0.0054	0.0013	1	8260B	8/2/10 13:02	KLA	P0H0019
cis-1,3-Dichloropropylene	BRL	mg/kg dry	0.0054	0.0013	1	8260B	8/2/10 13:02	KLA	P0H0019
Dibromochloromethane	BRL	mg/kg dry	0.0054	0.0014	1	8260B	8/2/10 13:02	KLA	P0H0019

Mactec - Asheville (NCDOT Project)
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Asheville, NC 28806

Project: NCDOT Lenoir
Project No.: U-2211-B Parcel 9
Sample Matrix: Solid

Client Sample ID: West Sw (4'-5' bgs)
Prism Sample ID: 0070567-06
Prism Work Order: 0070567
Time Collected: 07/19/10 12:00
Time Submitted: 07/21/10 10:25

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Dichlorodifluoromethane	BRL	mg/kg dry	0.0054	0.0011	1	8260B	8/2/10 13:02	KLA	P0H0019
Ethylbenzene	BRL	mg/kg dry	0.0054	0.0011	1	8260B	8/2/10 13:02	KLA	P0H0019
Isopropyl Ether	BRL	mg/kg dry	0.0054	0.0013	1	8260B	8/2/10 13:02	KLA	P0H0019
Isopropylbenzene (Cumene)	BRL	mg/kg dry	0.0054	0.0012	1	8260B	8/2/10 13:02	KLA	P0H0019
m,p-Xylenes	BRL	mg/kg dry	0.011	0.0029	1	8260B	8/2/10 13:02	KLA	P0H0019
Methyl Butyl Ketone (2-Hexanone)	BRL	mg/kg dry	0.054	0.0016	1	8260B	8/2/10 13:02	KLA	P0H0019
Methyl Ethyl Ketone (2-Butanone)	**0.021 J**	**mg/kg dry**	**0.11**	**0.0014**	**1**	**8260B**	**8/2/10 13:02**	**KLA**	**P0H0019**
Methyl Isobutyl Ketone	BRL	mg/kg dry	0.054	0.0012	1	8260B	8/2/10 13:02	KLA	P0H0019
Methylene Chloride	BRL	mg/kg dry	0.0054	0.0014	1	8260B	8/2/10 13:02	KLA	P0H0019
Methyl-tert-Butyl Ether	BRL	mg/kg dry	0.011	0.0011	1	8260B	8/2/10 13:02	KLA	P0H0019
Naphthalene	BRL	mg/kg dry	0.011	0.0029	1	8260B	8/2/10 13:02	KLA	P0H0019
n-Butylbenzene	BRL	mg/kg dry	0.0054	0.0020	1	8260B	8/2/10 13:02	KLA	P0H0019
n-Propylbenzene	BRL	mg/kg dry	0.0054	0.0015	1	8260B	8/2/10 13:02	KLA	P0H0019
o-Xylene	BRL	mg/kg dry	0.0054	0.0012	1	8260B	8/2/10 13:02	KLA	P0H0019
sec-Butylbenzene	BRL	mg/kg dry	0.0054	0.0014	1	8260B	8/2/10 13:02	KLA	P0H0019
Styrene	BRL	mg/kg dry	0.0054	0.0011	1	8260B	8/2/10 13:02	KLA	P0H0019
tert-Butylbenzene	BRL	mg/kg dry	0.0054	0.0015	1	8260B	8/2/10 13:02	KLA	P0H0019
Tetrachloroethylene	BRL	mg/kg dry	0.0054	0.0014	1	8260B	8/2/10 13:02	KLA	P0H0019
Toluene	BRL	mg/kg dry	0.0054	0.0013	1	8260B	8/2/10 13:02	KLA	P0H0019
trans-1,2-Dichloroethylene	BRL	mg/kg dry	0.0054	0.0011	1	8260B	8/2/10 13:02	KLA	P0H0019
trans-1,3-Dichloropropylene	BRL	mg/kg dry	0.0054	0.0011	1	8260B	8/2/10 13:02	KLA	P0H0019
Trichloroethylene	BRL	mg/kg dry	0.0054	0.0015	1	8260B	8/2/10 13:02	KLA	P0H0019
Trichlorofluoromethane	BRL	mg/kg dry	0.0054	0.0015	1	8260B	8/2/10 13:02	KLA	P0H0019
Vinyl acetate	BRL	mg/kg dry	0.027	0.0037	1	8260B	8/2/10 13:02	KLA	P0H0019
Vinyl chloride	BRL	mg/kg dry	0.0054	0.0014	1	8260B	8/2/10 13:02	KLA	P0H0019
Xylenes, total	BRL	mg/kg dry	0.016	0.0041	1	8260B	8/2/10 13:02	KLA	P0H0019

Surrogate	Recovery	Control Limits
4-Bromofluorobenzene	*99 %*	*70-130*
Dibromofluoromethane	*104 %*	*84-123*
Toluene-d8	*95 %*	*76-129*

Volatile Petroleum Hydrocarbons by GC/PID/FID

C5-C8 Aliphatics	BRL	mg/kg dry	16	6.1	100	MADEP VPH	8/4/10 18:16	hea	P0H0051
C9-C12 Aliphatics	BRL	mg/kg dry	16	5.8	100	MADEP VPH	8/4/10 18:16	hea	P0H0051
C9-C10 Aromatics	BRL	mg/kg dry	16	1.7	100	MADEP VPH	8/4/10 18:16	hea	P0H0051

Surrogate	Recovery	Control Limits
2,5-Dibromotoluene (PID)	*92 %*	*70-130*
2,5-Dibromotoluene (FID)	*93 %*	*70-130*

Mactec - Asheville (NCDOT Project)
Attn: Rodney Clark
c/o MACTEC Eng. & Consulting, Inc, 1308 P
Asheville, NC 28806

Project: NCDOT Lenoir

Project No.: U-2211-B Parcel 9
Sample Matrix: Solid

Client Sample ID: South SW (4'-5' bgs)
Prism Sample ID: 0070567-07
Prism Work Order: 0070567
Time Collected: 07/19/10 12:30
Time Submitted: 07/21/10 10:25

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	9.2	1.5	1	8015C	7/24/10 12:02	GRR	P0G0489
			Surrogate			Recovery		Control Limits	
			o-Terphenyl			*77 %*		*49-124*	
Gasoline Range Organics by GC/FID									
Gasoline Range Organics	BRL	mg/kg dry	6.1	0.80	50	8015C	7/27/10 2:02	HPE	P0G0528
			Surrogate			Recovery		Control Limits	
			a,a,a-Trifluorotoluene			*105 %*		*55-129*	
General Chemistry Parameters									
% Solids	**75.4**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**7/26/10 12:18**	**JAB**	**P0G0505**

Mactec - Asheville (NCDOT Project) Project: NCDOT Lenoir
Attn: Rodney Clark
c/o MACTEC Eng. & Consulting, Inc, 1308 P: Project No: U-2211-B Parcel 9
Asheville, NC 28806

Prism Work Order: 0070567
Time Submitted: 7/21/2010 10:25:00AM

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0H0019 - 5035										
Blank (P0H0019-BLK1)				Prepared & Analyzed: 08/02/10						
1,1,1-Trichloroethane	BRL	0.0050	mg/kg wet							
1,1,2,2-Tetrachloroethane	BRL	0.0050	mg/kg wet							
1,1,2-Trichloroethane	BRL	0.0050	mg/kg wet							
1,1-Dichloroethane	BRL	0.0050	mg/kg wet							
1,1-Dichloroethylene	BRL	0.0050	mg/kg wet							
1,1-Dichloropropylene	BRL	0.0050	mg/kg wet							
1,2,3-Trichlorobenzene	BRL	0.0050	mg/kg wet							
1,2,3-Trichloropropane	BRL	0.0050	mg/kg wet							
1,2,4-Trichlorobenzene	BRL	0.0050	mg/kg wet							
1,2,4-Trimethylbenzene	BRL	0.0050	mg/kg wet							
1,2-Dibromoethane	BRL	0.0050	mg/kg wet							
1,2-Dichlorobenzene	BRL	0.0050	mg/kg wet							
1,2-Dichloroethane	BRL	0.0050	mg/kg wet							
1,2-Dichloropropane	BRL	0.0050	mg/kg wet							
1,3,5-Trimethylbenzene	BRL	0.0050	mg/kg wet							
1,3-Dichlorobenzene	BRL	0.0050	mg/kg wet							
1,3-Dichloropropane	BRL	0.0050	mg/kg wet							
1,4-Dichlorobenzene	BRL	0.0050	mg/kg wet							
2,2-Dichloropropane	BRL	0.0050	mg/kg wet							
2-Chlorotoluene	BRL	0.0050	mg/kg wet							
4-Chlorotoluene	BRL	0.0050	mg/kg wet							
4-Isopropyltoluene	BRL	0.0050	mg/kg wet							
Acetone	BRL	0.050	mg/kg wet							
Benzene	BRL	0.0030	mg/kg wet							
Bromobenzene	BRL	0.0050	mg/kg wet							
Bromochloromethane	BRL	0.0050	mg/kg wet							
Bromodichloromethane	BRL	0.0050	mg/kg wet							
Bromoform	BRL	0.0050	mg/kg wet							
Bromomethane	BRL	0.010	mg/kg wet							
Carbon Tetrachloride	BRL	0.0050	mg/kg wet							
Chlorobenzene	BRL	0.0050	mg/kg wet							
Chloroethane	BRL	0.010	mg/kg wet							
Chloroform	BRL	0.0050	mg/kg wet							
Chloromethane	BRL	0.0050	mg/kg wet							
cis-1,2-Dichloroethylene	BRL	0.0050	mg/kg wet							
cis-1,3-Dichloropropylene	BRL	0.0050	mg/kg wet							
Dibromochloromethane	BRL	0.0050	mg/kg wet							
Dichlorodifluoromethane	BRL	0.0050	mg/kg wet							
Ethylbenzene	BRL	0.0050	mg/kg wet							
Isopropyl Ether	BRL	0.0050	mg/kg wet							
Isopropylbenzene (Cumene)	BRL	0.0050	mg/kg wet							
m,p-Xylenes	BRL	0.010	mg/kg wet							
Methyl Butyl Ketone (2-Hexanone)	BRL	0.050	mg/kg wet							
Methyl Ethyl Ketone (2-Butanone)	BRL	0.10	mg/kg wet							
Methyl Isobutyl Ketone	BRL	0.050	mg/kg wet							
Methylene Chloride	BRL	0.0050	mg/kg wet							

Mactec - Asheville (NCDOT Project) Project: NCDOT Lenoir
Attn: Rodney Clark
c/o MACTEC Eng. & Consulting, Inc, 1308 P: Project No: U-2211-B Parcel 9
Asheville, NC 28806

Prism Work Order: 0070567
Time Submitted: 7/21/2010 10:25:00AM

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0H0019 - 5035										
Blank (P0H0019-BLK1)				Prepared & Analyzed: 08/02/10						
Methyl-tert-Butyl Ether	BRL	0.010	mg/kg wet							
Naphthalene	BRL	0.010	mg/kg wet							
n-Butylbenzene	BRL	0.0050	mg/kg wet							
n-Propylbenzene	BRL	0.0050	mg/kg wet							
o-Xylene	BRL	0.0050	mg/kg wet							
sec-Butylbenzene	BRL	0.0050	mg/kg wet							
Styrene	BRL	0.0050	mg/kg wet							
tert-Butylbenzene	BRL	0.0050	mg/kg wet							
Tetrachloroethylene	BRL	0.0050	mg/kg wet							
Toluene	BRL	0.0050	mg/kg wet							
trans-1,2-Dichloroethylene	BRL	0.0050	mg/kg wet							
trans-1,3-Dichloropropylene	BRL	0.0050	mg/kg wet							
Trichloroethylene	BRL	0.0050	mg/kg wet							
Trichlorofluoromethane	BRL	0.0050	mg/kg wet							
Vinyl acetate	BRL	0.025	mg/kg wet							
Vinyl chloride	BRL	0.0050	mg/kg wet							
Xylenes, total	BRL	0.015	mg/kg wet							
Surrogate: 4-Bromofluorobenzene	*51.5*		*ug/L*	*50.0*		*103*	*70-130*			
Surrogate: Dibromofluoromethane	*50.8*		*ug/L*	*50.0*		*102*	*84-123*			
Surrogate: Toluene-d8	*48.0*		*ug/L*	*50.0*		*96*	*76-129*			
LCS (P0H0019-BS1)				Prepared & Analyzed: 08/02/10						
1,1-Dichloroethylene	0.0488	0.0050	mg/kg wet	0.0500		98	67-149			
Benzene	0.0463	0.0030	mg/kg wet	0.0500		93	74-127			
Chlorobenzene	0.0440	0.0050	mg/kg wet	0.0500		88	74-118			
Toluene	0.0462	0.0050	mg/kg wet	0.0500		92	71-129			
Trichloroethylene	0.0463	0.0050	mg/kg wet	0.0500		93	75-133			
Surrogate: 4-Bromofluorobenzene	*51.0*		*ug/L*	*50.0*		*102*	*70-130*			
Surrogate: Dibromofluoromethane	*50.7*		*ug/L*	*50.0*		*101*	*84-123*			
Surrogate: Toluene-d8	*46.2*		*ug/L*	*50.0*		*92*	*76-129*			

Mactec - Asheville (NCDOT Project) Project: NCDOT Lenoir Prism Work Order: 0070567
Attn: Rodney Clark Time Submitted: 7/21/2010 10:25:00AM
c/o MACTEC Eng. & Consulting, Inc, 1308 P; Project No: U-2211-B Parcel 9
Asheville, NC 28806

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0H0019 - 5035										
LCS Dup (P0H0019-BSD1)				Prepared & Analyzed: 08/02/10						
1,1-Dichloroethylene	0.0492	0.0050	mg/kg wet	0.0500		98	67-149	0.8	200	
Benzene	0.0465	0.0030	mg/kg wet	0.0500		93	74-127	0.3	200	
Chlorobenzene	0.0449	0.0050	mg/kg wet	0.0500		90	74-118	2	200	
Toluene	0.0462	0.0050	mg/kg wet	0.0500		92	71-129	0.04	200	
Trichloroethylene	0.0466	0.0050	mg/kg wet	0.0500		93	75-133	0.5	200	
Surrogate: 4-Bromofluorobenzene	*49.8*		*ug/L*	*50.0*		*100*	*70-130*			
Surrogate: Dibromofluoromethane	*49.9*		*ug/L*	*50.0*		*100*	*84-123*			
Surrogate: Toluene-d8	*46.5*		*ug/L*	*50.0*		*93*	*76-129*			
Batch P0H0033 - 5035										
Blank (P0H0033-BLK1)				Prepared: 07/30/10 Analyzed: 08/02/10						
1,1,1-Trichloroethane	BRL	0.25	mg/kg wet							
1,1,2,2-Tetrachloroethane	BRL	0.25	mg/kg wet							
1,1,2-Trichloroethane	BRL	0.25	mg/kg wet							
1,1-Dichloroethane	BRL	0.25	mg/kg wet							
1,1-Dichloroethylene	BRL	0.25	mg/kg wet							
1,1-Dichloropropylene	BRL	0.25	mg/kg wet							
1,2,3-Trichlorobenzene	BRL	0.50	mg/kg wet							
1,2,3-Trichloropropane	BRL	0.25	mg/kg wet							
1,2,4-Trichlorobenzene	BRL	0.50	mg/kg wet							
1,2,4-Trimethylbenzene	BRL	0.25	mg/kg wet							
1,2-Dibromoethane	BRL	0.25	mg/kg wet							
1,2-Dichlorobenzene	BRL	0.25	mg/kg wet							
1,2-Dichloroethane	BRL	0.25	mg/kg wet							
1,2-Dichloropropane	BRL	0.25	mg/kg wet							
1,3,5-Trimethylbenzene	BRL	0.25	mg/kg wet							
1,3-Dichlorobenzene	BRL	0.25	mg/kg wet							
1,3-Dichloropropane	BRL	0.25	mg/kg wet							
1,4-Dichlorobenzene	BRL	0.25	mg/kg wet							
2,2-Dichloropropane	BRL	0.25	mg/kg wet							
2-Chlorotoluene	BRL	0.25	mg/kg wet							
4-Chlorotoluene	BRL	0.25	mg/kg wet							
4-Isopropyltoluene	BRL	0.25	mg/kg wet							
Acetone	BRL	1.0	mg/kg wet							
Benzene	BRL	0.25	mg/kg wet							
Bromobenzene	BRL	0.25	mg/kg wet							
Bromochloromethane	BRL	0.25	mg/kg wet							
Bromodichloromethane	BRL	0.25	mg/kg wet							
Bromoform	BRL	0.25	mg/kg wet							
Bromomethane	BRL	0.50	mg/kg wet							
Carbon Tetrachloride	BRL	0.25	mg/kg wet							
Chlorobenzene	BRL	0.25	mg/kg wet							
Chloroethane	BRL	0.50	mg/kg wet							
Chloroform	BRL	0.25	mg/kg wet							
Chloromethane	BRL	0.50	mg/kg wet							
cis-1,2-Dichloroethylene	BRL	0.25	mg/kg wet							

Mactec - Asheville (NCDOT Project)
Attn: Rodney Clark
c/o MACTEC Eng. & Consulting, Inc, 1308 P
Asheville, NC 28806

Project: NCDOT Lenoir
Project No: U-2211-B Parcel 9

Prism Work Order: 0070567
Time Submitted: 7/21/2010 10:25:00AM

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0H0033 - 5035										
Blank (P0H0033-BLK1)				Prepared: 07/30/10 Analyzed: 08/02/10						
cis-1,3-Dichloropropylene	BRL	0.25	mg/kg wet							
Dibromochloromethane	BRL	0.25	mg/kg wet							
Dichlorodifluoromethane	BRL	0.50	mg/kg wet							
Ethylbenzene	BRL	0.25	mg/kg wet							
Isopropyl Ether	BRL	0.25	mg/kg wet							
Isopropylbenzene (Cumene)	BRL	0.25	mg/kg wet							
m,p-Xylenes	BRL	0.50	mg/kg wet							
Methyl Butyl Ketone (2-Hexanone)	BRL	1.0	mg/kg wet							
Methyl Ethyl Ketone (2-Butanone)	BRL	1.0	mg/kg wet							
Methyl Isobutyl Ketone	BRL	1.0	mg/kg wet							
Methylene Chloride	BRL	0.25	mg/kg wet							
Methyl-tert-Butyl Ether	BRL	0.25	mg/kg wet							
Naphthalene	BRL	0.50	mg/kg wet							
n-Butylbenzene	BRL	0.25	mg/kg wet							
n-Propylbenzene	BRL	0.25	mg/kg wet							
o-Xylene	BRL	0.25	mg/kg wet							
sec-Butylbenzene	BRL	0.25	mg/kg wet							
Styrene	BRL	0.25	mg/kg wet							
tert-Butylbenzene	BRL	0.25	mg/kg wet							
Tetrachloroethylene	BRL	0.25	mg/kg wet							
Toluene	BRL	0.25	mg/kg wet							
trans-1,2-Dichloroethylene	BRL	0.25	mg/kg wet							
trans-1,3-Dichloropropylene	BRL	0.25	mg/kg wet							
Trichloroethylene	BRL	0.25	mg/kg wet							
Trichlorofluoromethane	BRL	0.50	mg/kg wet							
Vinyl acetate	BRL	1.0	mg/kg wet							
Vinyl chloride	BRL	0.50	mg/kg wet							
Xylenes, total	BRL	0.75	mg/kg wet							
Surrogate: 4-Bromofluorobenzene	*2.77*		*mg/kg wet*	*2.50*		*111*	*70-130*			
Surrogate: Dibromofluoromethane	*2.86*		*mg/kg wet*	*2.50*		*114*	*70-130*			
Surrogate: Toluene-d8	*2.73*		*mg/kg wet*	*2.50*		*109*	*70-130*			

Mactec - Asheville (NCDOT Project) Project: NCDOT Lenoir
Attn: Rodney Clark
c/o MACTEC Eng. & Consulting, Inc, 1308 P; Project No: U-2211-B Parcel 9
Asheville, NC 28806

Prism Work Order: 0070567
Time Submitted: 7/21/2010 10:25:00AM

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0H0033 - 5035										
LCS (P0H0033-BS1)				Prepared: 07/30/10 Analyzed: 08/02/10						
1,1-Dichloroethylene	4.12	0.25	mg/kg wet	2.50		165	70-130			LH
Benzene	2.22	0.25	mg/kg wet	2.50		89	70-130			
Chlorobenzene	2.29	0.25	mg/kg wet	2.50		92	70-130			
Toluene	2.02	0.25	mg/kg wet	2.50		81	70-130			
Trichloroethylene	2.08	0.25	mg/kg wet	2.50		83	70-130			
Surrogate: 4-Bromofluorobenzene	*2.44*		*mg/kg wet*	*2.50*		*98*	*70-130*			
Surrogate: Dibromofluoromethane	*2.37*		*mg/kg wet*	*2.50*		*95*	*70-130*			
Surrogate: Toluene-d8	*2.44*		*mg/kg wet*	*2.50*		*98*	*70-130*			
LCS Dup (P0H0033-BSD1)				Prepared: 07/30/10 Analyzed: 08/02/10						
1,1-Dichloroethylene	2.71	0.25	mg/kg wet	2.50		108	70-130	42	200	
Benzene	2.59	0.25	mg/kg wet	2.50		104	70-130	15	200	
Chlorobenzene	2.50	0.25	mg/kg wet	2.50		100	70-130	9	200	
Toluene	2.31	0.25	mg/kg wet	2.50		92	70-130	13	200	
Trichloroethylene	2.45	0.25	mg/kg wet	2.50		98	70-130	16	200	
Surrogate: 4-Bromofluorobenzene	*2.80*		*mg/kg wet*	*2.50*		*112*	*70-130*			
Surrogate: Dibromofluoromethane	*2.82*		*mg/kg wet*	*2.50*		*113*	*70-130*			
Surrogate: Toluene-d8	*2.75*		*mg/kg wet*	*2.50*		*110*	*70-130*			

Mactec - Asheville (NCDOT Project) Project: NCDOT Lenoir
Attn: Rodney Clark
c/o MACTEC Eng. & Consulting, Inc, 1308 P: Project No: U-2211-B Parcel 9
Asheville, NC 28806

Prism Work Order: 0070567
Time Submitted: 7/21/2010 10:25:00AM

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0H0042 - 3550C MS										
Blank (P0H0042-BLK1)				Prepared & Analyzed: 08/02/10						
1,2,4-Trichlorobenzene	BRL	0.33	mg/kg wet							
1,2-Dichlorobenzene	BRL	0.33	mg/kg wet							
1,3-Dichlorobenzene	BRL	0.33	mg/kg wet							
1,4-Dichlorobenzene	BRL	0.33	mg/kg wet							
2,4,6-Trichlorophenol	BRL	0.33	mg/kg wet							
2,4-Dichlorophenol	BRL	0.33	mg/kg wet							
2,4-Dimethylphenol	BRL	0.33	mg/kg wet							
2,4-Dinitrophenol	BRL	0.33	mg/kg wet							
2,4-Dinitrotoluene	BRL	0.33	mg/kg wet							
2,6-Dinitrotoluene	BRL	0.33	mg/kg wet							
2-Chloronaphthalene	BRL	0.33	mg/kg wet							
2-Chlorophenol	BRL	0.33	mg/kg wet							
2-Methylnaphthalene	BRL	0.33	mg/kg wet							
2-Methylphenol	BRL	0.33	mg/kg wet							
2-Nitrophenol	BRL	0.33	mg/kg wet							
3,3'-Dichlorobenzidine	BRL	0.33	mg/kg wet							
3/4-Methylphenol	BRL	0.33	mg/kg wet							
4,6-Dinitro-2-methylphenol	BRL	0.33	mg/kg wet							
4-Bromophenyl phenyl ether	BRL	0.33	mg/kg wet							
4-Chloro-3-methylphenol	BRL	0.33	mg/kg wet							
4-Chloroaniline	BRL	0.33	mg/kg wet							
4-Chlorophenyl phenyl ether	BRL	0.33	mg/kg wet							
4-Nitrophenol	BRL	0.33	mg/kg wet							
Acenaphthene	BRL	0.33	mg/kg wet							
Acenaphthylene	BRL	0.33	mg/kg wet							
Anthracene	BRL	0.33	mg/kg wet							
Azobenzene	BRL	0.33	mg/kg wet							
Benzo(a)anthracene	BRL	0.33	mg/kg wet							
Benzo(a)pyrene	BRL	0.33	mg/kg wet							
Benzo(b)fluoranthene	BRL	0.33	mg/kg wet							
Benzo(g,h,i)perylene	BRL	0.33	mg/kg wet							
Benzo(k)fluoranthene	BRL	0.33	mg/kg wet							
Benzoic Acid	BRL	0.33	mg/kg wet							
Benzyl alcohol	BRL	0.33	mg/kg wet							
bis(2-Chloroethoxy)methane	BRL	0.33	mg/kg wet							
Bis(2-Chloroethyl)ether	BRL	0.33	mg/kg wet							
Bis(2-chloroisopropyl)ether	BRL	0.33	mg/kg wet							
Bis(2-Ethylhexyl)phthalate	BRL	0.33	mg/kg wet							
Butyl benzyl phthalate	BRL	0.33	mg/kg wet							
Chrysene	BRL	0.33	mg/kg wet							
Dibenzo(a,h)anthracene	BRL	0.33	mg/kg wet							
Dibenzofuran	BRL	0.33	mg/kg wet							
Diethyl phthalate	BRL	0.33	mg/kg wet							
Dimethyl phthalate	BRL	0.33	mg/kg wet							
Di-n-butyl phthalate	BRL	0.33	mg/kg wet							
Di-n-octyl phthalate	BRL	0.33	mg/kg wet							

Mactec - Asheville (NCDOT Project) Project: NCDOT Lenoir
Attn: Rodney Clark
c/o MACTEC Eng. & Consulting, Inc, 1308 P: Project No: U-2211-B Parcel 9
Asheville, NC 28806

Prism Work Order: 0070567
Time Submitted: 7/21/2010 10:25:00AM

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0H0042 - 3550C MS										
Blank (P0H0042-BLK1)				Prepared & Analyzed: 08/02/10						
Fluoranthene	BRL	0.33	mg/kg wet							
Fluorene	BRL	0.33	mg/kg wet							
Hexachlorobenzene	BRL	0.33	mg/kg wet							
Hexachlorobutadiene	BRL	0.33	mg/kg wet							
Hexachlorocyclopentadiene	BRL	0.33	mg/kg wet							
Hexachloroethane	BRL	0.33	mg/kg wet							
Indeno(1,2,3-cd)pyrene	BRL	0.33	mg/kg wet							
Isophorone	BRL	0.33	mg/kg wet							
Naphthalene	BRL	0.33	mg/kg wet							
Nitrobenzene	BRL	0.33	mg/kg wet							
N-Nitroso-di-n-propylamine	BRL	0.33	mg/kg wet							
N-Nitrosodiphenylamine	BRL	0.33	mg/kg wet							
Pentachlorophenol	BRL	0.33	mg/kg wet							
Phenanthrene	BRL	0.33	mg/kg wet							
Phenol	BRL	0.33	mg/kg wet							
Pyrene	BRL	0.33	mg/kg wet							
Surrogate: 2,4,6-Tribromophenol	*1.58*		*mg/kg wet*	*3.30*		*48*	*34-134*			
Surrogate: 2-Fluorobiphenyl	*1.23*		*mg/kg wet*	*1.65*		*74*	*17-122*			
Surrogate: 2-Fluorophenol	*1.86*		*mg/kg wet*	*3.30*		*56*	*13-108*			
Surrogate: Nitrobenzene-d5	*0.904*		*mg/kg wet*	*1.65*		*55*	*11-118*			
Surrogate: Phenol-d5	*1.67*		*mg/kg wet*	*3.30*		*51*	*23-109*			
Surrogate: Terphenyl-d14	*2.10*		*mg/kg wet*	*1.65*		*128*	*41-156*			
LCS (P0H0042-BS1)				Prepared & Analyzed: 08/02/10						
1,2,4-Trichlorobenzene	1.25	0.33	mg/kg wet	1.68		74	35-95			
1,2-Dichlorobenzene	1.14	0.33	mg/kg wet	1.68		68	34-94			
1,3-Dichlorobenzene	1.12	0.33	mg/kg wet	1.68		67	31-92			
1,4-Dichlorobenzene	1.09	0.33	mg/kg wet	1.68		65	33-92			
2,4,6-Trichlorophenol	1.12	0.33	mg/kg wet	1.68		66	43-110			
2,4-Dichlorophenol	1.20	0.33	mg/kg wet	1.68		71	37-103			
2,4-Dimethylphenol	1.16	0.33	mg/kg wet	1.68		69	39-105			
2,4-Dinitrophenol	0.491	0.33	mg/kg wet	1.68		29	28-129			
2,4-Dinitrotoluene	1.15	0.33	mg/kg wet	1.68		68	59-115			
2,6-Dinitrotoluene	1.32	0.33	mg/kg wet	1.68		78	52-120			
2-Chloronaphthalene	0.997	0.33	mg/kg wet	1.68		59	41-104			
2-Chlorophenol	1.08	0.33	mg/kg wet	1.68		64	35-98			
2-Methylnaphthalene	1.35	0.33	mg/kg wet	1.68		81	31-106			
2-Methylphenol	1.04	0.33	mg/kg wet	1.68		62	32-108			
2-Nitrophenol	1.02	0.33	mg/kg wet	1.68		61	35-100			
3,3'-Dichlorobenzidine	2.42	0.33	mg/kg wet	1.68		144	10-200			
3/4-Methylphenol	1.04	0.33	mg/kg wet	1.68		62	36-103			
4,6-Dinitro-2-methylphenol	1.02	0.33	mg/kg wet	1.68		61	44-124			
4-Bromophenyl phenyl ether	1.73	0.33	mg/kg wet	1.68		103	44-119			
4-Chloro-3-methylphenol	1.14	0.33	mg/kg wet	1.68		68	48-106			
4-Chloroaniline	1.54	0.33	mg/kg wet	1.68		92	45-103			
4-Chlorophenyl phenyl ether	1.43	0.33	mg/kg wet	1.68		85	53-109			

Mactec - Asheville (NCDOT Project) Project: NCDOT Lenoir Prism Work Order: 0070567
Attn: Rodney Clark Time Submitted: 7/21/2010 10:25:00AM
c/o MACTEC Eng. & Consulting, Inc, 1308 P: Project No: U-2211-B Parcel 9
Asheville, NC 28806

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0H0042 - 3550C MS										
LCS (P0H0042-BS1)				Prepared & Analyzed: 08/02/10						
4-Nitrophenol	0.934	0.33	mg/kg wet	1.68		56	40-124			
Acenaphthene	1.33	0.33	mg/kg wet	1.68		79	47-106			
Acenaphthylene	1.39	0.33	mg/kg wet	1.68		82	47-113			
Anthracene	1.52	0.33	mg/kg wet	1.68		90	57-121			
Azobenzene	1.45	0.33	mg/kg wet	1.68		86	49-117			
Benzo(a)anthracene	1.11	0.33	mg/kg wet	1.68		66	55-123			
Benzo(a)pyrene	1.67	0.33	mg/kg wet	1.68		99	61-120			
Benzo(b)fluoranthene	1.44	0.33	mg/kg wet	1.68		86	52-126			
Benzo(g,h,i)perylene	1.81	0.33	mg/kg wet	1.68		108	53-121			
Benzo(k)fluoranthene	1.43	0.33	mg/kg wet	1.68		85	50-131			
Benzyl alcohol	0.983	0.33	mg/kg wet	1.68		58	35-101			
bis(2-Chloroethoxy)methane	1.13	0.33	mg/kg wet	1.68		67	37-106			
Bis(2-Chloroethyl)ether	0.945	0.33	mg/kg wet	1.68		56	33-99			
Bis(2-chloroisopropyl)ether	0.762	0.33	mg/kg wet	1.68		45	26-106			
Bis(2-Ethylhexyl)phthalate	1.53	0.33	mg/kg wet	1.68		91	50-142			
Butyl benzyl phthalate	1.69	0.33	mg/kg wet	1.68		100	49-143			
Chrysene	1.94	0.33	mg/kg wet	1.68		115	53-126			
Dibenzo(a,h)anthracene	1.90	0.33	mg/kg wet	1.68		113	53-124			
Dibenzofuran	1.34	0.33	mg/kg wet	1.68		80	48-109			
Diethyl phthalate	1.45	0.33	mg/kg wet	1.68		86	59-118			
Dimethyl phthalate	1.52	0.33	mg/kg wet	1.68		90	58-113			
Di-n-butyl phthalate	1.68	0.33	mg/kg wet	1.68		100	51-129			
Di-n-octyl phthalate	1.74	0.33	mg/kg wet	1.68		104	49-140			
Fluoranthene	0.977	0.33	mg/kg wet	1.68		58	52-122			
Fluorene	1.30	0.33	mg/kg wet	1.68		78	52-110			
Hexachlorobenzene	1.67	0.33	mg/kg wet	1.68		100	52-117			
Hexachlorobutadiene	1.37	0.33	mg/kg wet	1.68		82	35-101			
Hexachlorocyclopentadiene	0.527	0.33	mg/kg wet	1.68		31	31-111			
Hexachloroethane	1.01	0.33	mg/kg wet	1.68		60	30-93			
Indeno(1,2,3-cd)pyrene	1.45	0.33	mg/kg wet	1.68		86	40-133			
Isophorone	1.09	0.33	mg/kg wet	1.68		65	41-103			
Naphthalene	1.38	0.33	mg/kg wet	1.68		82	38-98			
Nitrobenzene	1.00	0.33	mg/kg wet	1.68		60	28-110			
N-Nitroso-di-n-propylamine	0.928	0.33	mg/kg wet	1.68		55	36-104			
N-Nitrosodiphenylamine	1.86	0.33	mg/kg wet	1.68		111	57-134			
Pentachlorophenol	1.02	0.33	mg/kg wet	1.68		61	48-136			
Phenanthrene	1.53	0.33	mg/kg wet	1.68		91	57-118			
Phenol	0.911	0.33	mg/kg wet	1.68		54	27-107			
Pyrene	2.22	0.33	mg/kg wet	1.68		132	48-132			
Surrogate: 2,4,6-Tribromophenol	*3.25*		*mg/kg wet*	*3.36*		*97*	*34-134*			
Surrogate: 2-Fluorobiphenyl	*1.37*		*mg/kg wet*	*1.68*		*81*	*17-122*			
Surrogate: 2-Fluorophenol	*1.95*		*mg/kg wet*	*3.36*		*58*	*13-108*			
Surrogate: Nitrobenzene-d5	*1.02*		*mg/kg wet*	*1.68*		*61*	*11-118*			
Surrogate: Phenol-d5	*1.86*		*mg/kg wet*	*3.36*		*55*	*23-109*			
Surrogate: Terphenyl-d14	*1.81*		*mg/kg wet*	*1.68*		*108*	*41-156*			

Mactec - Asheville (NCDOT Project) Project: NCDOT Lenoir
Attn: Rodney Clark
c/o MACTEC Eng. & Consulting, Inc, 1308 P Project No: U-2211-B Parcel 9
Asheville, NC 28806

Prism Work Order: 0070567
Time Submitted: 7/21/2010 10:25:00AM

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0H0042 - 3550C MS										
LCS Dup (P0H0042-BSD1)				Prepared & Analyzed: 08/02/10						
1,2,4-Trichlorobenzene	1.16	0.33	mg/kg wet	1.64		70	35-95	8	200	
1,2-Dichlorobenzene	1.04	0.33	mg/kg wet	1.64		63	34-94	9	200	
1,3-Dichlorobenzene	1.02	0.33	mg/kg wet	1.64		62	31-92	9	200	
1,4-Dichlorobenzene	1.02	0.33	mg/kg wet	1.64		62	33-92	7	200	
2,4,6-Trichlorophenol	1.03	0.33	mg/kg wet	1.64		62	43-110	8	200	
2,4-Dichlorophenol	1.14	0.33	mg/kg wet	1.64		69	37-103	5	200	
2,4-Dimethylphenol	1.07	0.33	mg/kg wet	1.64		65	39-105	8	200	
2,4-Dinitrophenol	0.526	0.33	mg/kg wet	1.64		32	28-129	7	200	
2,4-Dinitrotoluene	1.05	0.33	mg/kg wet	1.64		64	59-115	9	200	
2,6-Dinitrotoluene	1.22	0.33	mg/kg wet	1.64		74	52-120	7	200	
2-Chloronaphthalene	0.875	0.33	mg/kg wet	1.64		53	41-104	13	200	
2-Chlorophenol	0.998	0.33	mg/kg wet	1.64		61	35-98	8	200	
2-Methylnaphthalene	1.25	0.33	mg/kg wet	1.64		76	31-106	8	200	
2-Methylphenol	0.957	0.33	mg/kg wet	1.64		58	32-108	8	200	
2-Nitrophenol	0.966	0.33	mg/kg wet	1.64		59	35-100	6	200	
3,3'-Dichlorobenzidine	2.31	0.33	mg/kg wet	1.64		140	10-200	5	200	
3/4-Methylphenol	0.956	0.33	mg/kg wet	1.64		58	36-103	8	200	
4,6-Dinitro-2-methylphenol	0.876	0.33	mg/kg wet	1.64		53	44-124	16	200	
4-Bromophenyl phenyl ether	1.70	0.33	mg/kg wet	1.64		103	44-119	2	200	
4-Chloro-3-methylphenol	1.05	0.33	mg/kg wet	1.64		64	48-106	8	200	
4-Chloroaniline	1.43	0.33	mg/kg wet	1.64		87	45-103	7	200	
4-Chlorophenyl phenyl ether	1.31	0.33	mg/kg wet	1.64		80	53-109	9	200	
4-Nitrophenol	0.877	0.33	mg/kg wet	1.64		53	40-124	6	200	
Acenaphthene	1.22	0.33	mg/kg wet	1.64		74	47-106	9	200	
Acenaphthylene	1.27	0.33	mg/kg wet	1.64		77	47-113	9	200	
Anthracene	1.38	0.33	mg/kg wet	1.64		84	57-121	9	200	
Azobenzene	1.36	0.33	mg/kg wet	1.64		83	49-117	7	200	
Benzo(a)anthracene	1.01	0.33	mg/kg wet	1.64		61	55-123	10	200	
Benzo(a)pyrene	1.56	0.33	mg/kg wet	1.64		95	61-120	7	200	
Benzo(b)fluoranthene	1.67	0.33	mg/kg wet	1.64		102	52-126	15	200	
Benzo(g,h,i)perylene	1.67	0.33	mg/kg wet	1.64		102	53-121	8	200	
Benzo(k)fluoranthene	1.38	0.33	mg/kg wet	1.64		84	50-131	4	200	
Benzyl alcohol	0.906	0.33	mg/kg wet	1.64		55	35-101	8	200	
bis(2-Chloroethoxy)methane	1.04	0.33	mg/kg wet	1.64		63	37-106	8	200	
Bis(2-Chloroethyl)ether	0.883	0.33	mg/kg wet	1.64		54	33-99	7	200	
Bis(2-chloroisopropyl)ether	0.707	0.33	mg/kg wet	1.64		43	26-106	7	200	
Bis(2-Ethylhexyl)phthalate	1.38	0.33	mg/kg wet	1.64		84	50-142	10	200	
Butyl benzyl phthalate	1.52	0.33	mg/kg wet	1.64		92	49-143	11	200	
Chrysene	1.80	0.33	mg/kg wet	1.64		109	53-126	8	200	
Dibenzo(a,h)anthracene	1.40	0.33	mg/kg wet	1.64		85	53-124	30	200	
Dibenzofuran	1.24	0.33	mg/kg wet	1.64		75	48-109	8	200	
Diethyl phthalate	1.33	0.33	mg/kg wet	1.64		81	59-118	9	200	
Dimethyl phthalate	1.41	0.33	mg/kg wet	1.64		86	58-113	7	200	
Di-n-butyl phthalate	1.53	0.33	mg/kg wet	1.64		93	51-129	9	200	
Di-n-octyl phthalate	1.32	0.33	mg/kg wet	1.64		80	49-140	28	200	
Fluoranthene	0.860	0.33	mg/kg wet	1.64		52	52-122	13	200	

Mactec - Asheville (NCDOT Project) Project: NCDOT Lenoir Prism Work Order: 0070567
Attn: Rodney Clark Time Submitted: 7/21/2010 10:25:00AM
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Asheville, NC 28806

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0H0042 - 3550C MS										
LCS Dup (P0H0042-BSD1)				Prepared & Analyzed: 08/02/10						
Fluorene	1.21	0.33	mg/kg wet	1.64		74	52-110	7	200	
Hexachlorobenzene	1.55	0.33	mg/kg wet	1.64		94	52-117	8	200	
Hexachlorobutadiene	1.28	0.33	mg/kg wet	1.64		78	35-101	7	200	
Hexachlorocyclopentadiene	0.767	0.33	mg/kg wet	1.64		47	31-111	37	200	
Hexachloroethane	0.927	0.33	mg/kg wet	1.64		56	30-93	9	200	
Indeno(1,2,3-cd)pyrene	1.95	0.33	mg/kg wet	1.64		119	40-133	30	200	
Isophorone	1.01	0.33	mg/kg wet	1.64		61	41-103	7	200	
Naphthalene	1.28	0.33	mg/kg wet	1.64		78	38-98	8	200	
Nitrobenzene	0.966	0.33	mg/kg wet	1.64		59	28-110	4	200	
N-Nitroso-di-n-propylamine	0.849	0.33	mg/kg wet	1.64		52	36-104	9	200	
N-Nitrosodiphenylamine	1.75	0.33	mg/kg wet	1.64		106	57-134	6	200	
Pentachlorophenol	1.32	0.33	mg/kg wet	1.64		80	48-136	26	200	
Phenanthrene	1.39	0.33	mg/kg wet	1.64		84	57-118	10	200	
Phenol	0.846	0.33	mg/kg wet	1.64		51	27-107	7	200	
Pyrene	2.02	0.33	mg/kg wet	1.64		123	48-132	9	200	
Surrogate: 2,4,6-Tribromophenol	*2.89*		*mg/kg wet*	*3.29*		*88*	*34-134*			
Surrogate: 2-Fluorobiphenyl	*1.24*		*mg/kg wet*	*1.64*		*75*	*17-122*			
Surrogate: 2-Fluorophenol	*1.81*		*mg/kg wet*	*3.29*		*55*	*13-108*			
Surrogate: Nitrobenzene-d5	*0.941*		*mg/kg wet*	*1.64*		*57*	*11-118*			
Surrogate: Phenol-d5	*1.69*		*mg/kg wet*	*3.29*		*51*	*23-109*			
Surrogate: Terphenyl-d14	*1.60*		*mg/kg wet*	*1.64*		*97*	*41-156*			
Matrix Spike (P0H0042-MS1)		**Source: 0070567-06**		Prepared & Analyzed: 08/02/10						
1,2,4-Trichlorobenzene	1.46	0.42	mg/kg dry	2.10	BRL	70	25-104			
1,2-Dichlorobenzene	1.29	0.42	mg/kg dry	2.10	BRL	61	22-103			
1,3-Dichlorobenzene	1.38	0.42	mg/kg dry	2.10	BRL	66	18-101			
1,4-Dichlorobenzene	1.25	0.42	mg/kg dry	2.10	BRL	60	14-108			
2,4,6-Trichlorophenol	1.33	0.42	mg/kg dry	2.10	BRL	64	44-115			
2,4-Dichlorophenol	1.41	0.42	mg/kg dry	2.10	BRL	67	26-120			
2,4-Dimethylphenol	1.36	0.42	mg/kg dry	2.10	BRL	65	33-113			
2,4-Dinitrophenol	0.698	0.42	mg/kg dry	2.10	BRL	33	14-148			
2,4-Dinitrotoluene	1.33	0.42	mg/kg dry	2.10	BRL	64	49-134			
2,6-Dinitrotoluene	1.58	0.42	mg/kg dry	2.10	BRL	75	44-131			
2-Chloronaphthalene	1.54	0.42	mg/kg dry	2.10	BRL	73	38-112			
2-Chlorophenol	1.27	0.42	mg/kg dry	2.10	BRL	61	26-108			
2-Methylnaphthalene	1.61	0.42	mg/kg dry	2.10	BRL	77	12-128			
2-Methylphenol	1.26	0.42	mg/kg dry	2.10	BRL	60	26-116			
2-Nitrophenol	1.24	0.42	mg/kg dry	2.10	BRL	59	20-119			
3,3'-Dichlorobenzidine	1.54	0.42	mg/kg dry	2.10	BRL	73	10-191			
3/4-Methylphenol	1.24	0.42	mg/kg dry	2.10	BRL	59	28-116			
4,6-Dinitro-2-methylphenol	1.34	0.42	mg/kg dry	2.10	BRL	64	30-148			
4-Bromophenyl phenyl ether	2.26	0.42	mg/kg dry	2.10	BRL	108	43-126			
4-Chloro-3-methylphenol	1.40	0.42	mg/kg dry	2.10	BRL	67	41-120			
4-Chloroaniline	1.84	0.42	mg/kg dry	2.10	BRL	88	35-115			
4-Chlorophenyl phenyl ether	1.79	0.42	mg/kg dry	2.10	BRL	85	45-123			
4-Nitrophenol	1.18	0.42	mg/kg dry	2.10	BRL	56	33-136			

Mactec - Asheville (NCDOT Project) Project: NCDOT Lenoir
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Prism Work Order: 0070567
Time Submitted: 7/21/2010 10:25:00AM

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0H0042 - 3550C MS										
Matrix Spike (P0H0042-MS1)	**Source: 0070567-06**			Prepared & Analyzed: 08/02/10						
Acenaphthene	1.62	0.42	mg/kg dry	2.10	BRL	77	46-115			
Acenaphthylene	1.71	0.42	mg/kg dry	2.10	BRL	81	40-125			
Anthracene	1.86	0.42	mg/kg dry	2.10	BRL	89	56-127			
Azobenzene	1.87	0.42	mg/kg dry	2.10	BRL	89	49-123			
Benzo(a)anthracene	1.42	0.42	mg/kg dry	2.10	BRL	68	50-134			
Benzo(a)pyrene	1.84	0.42	mg/kg dry	2.10	BRL	88	59-129			
Benzo(b)fluoranthene	1.98	0.42	mg/kg dry	2.10	BRL	94	46-141			
Benzo(g,h,i)perylene	1.26	0.42	mg/kg dry	2.10	BRL	60	47-136			
Benzo(k)fluoranthene	1.87	0.42	mg/kg dry	2.10	BRL	89	36-151			
Benzoic Acid	0.381	0.42	mg/kg dry	2.10	BRL	18	10-122			J
Benzyl alcohol	1.20	0.42	mg/kg dry	2.10	BRL	57	29-112			
bis(2-Chloroethoxy)methane	1.35	0.42	mg/kg dry	2.10	BRL	65	31-119			
Bis(2-Chloroethyl)ether	1.17	0.42	mg/kg dry	2.10	BRL	56	23-111			
Bis(2-chloroisopropyl)ether	0.993	0.42	mg/kg dry	2.10	BRL	47	22-109			
Bis(2-Ethylhexyl)phthalate	2.06	0.42	mg/kg dry	2.10	BRL	98	45-153			
Butyl benzyl phthalate	2.22	0.42	mg/kg dry	2.10	BRL	106	43-156			
Chrysene	2.50	0.42	mg/kg dry	2.10	BRL	119	46-140			
Dibenzo(a,h)anthracene	1.70	0.42	mg/kg dry	2.10	BRL	81	43-141			
Dibenzofuran	1.67	0.42	mg/kg dry	2.10	BRL	79	45-121			
Diethyl phthalate	1.77	0.42	mg/kg dry	2.10	BRL	84	53-128			
Dimethyl phthalate	1.86	0.42	mg/kg dry	2.10	BRL	89	54-123			
Di-n-butyl phthalate	2.08	0.42	mg/kg dry	2.10	BRL	99	44-137			
Di-n-octyl phthalate	2.43	0.42	mg/kg dry	2.10	BRL	116	45-151			
Fluoranthene	1.12	0.42	mg/kg dry	2.10	BRL	54	37-140			
Fluorene	1.63	0.42	mg/kg dry	2.10	BRL	78	49-119			
Hexachlorobenzene	1.98	0.42	mg/kg dry	2.10	BRL	95	47-128			
Hexachlorobutadiene	1.56	0.42	mg/kg dry	2.10	BRL	74	24-107			
Hexachlorocyclopentadiene	0.575	0.42	mg/kg dry	2.10	BRL	27	20-121			
Hexachloroethane	1.19	0.42	mg/kg dry	2.10	BRL	57	17-102			
Indeno(1,2,3-cd)pyrene	1.11	0.42	mg/kg dry	2.10	BRL	53	27-156			
Isophorone	1.32	0.42	mg/kg dry	2.10	BRL	63	22-130			
Naphthalene	1.72	0.42	mg/kg dry	2.10	BRL	82	27-111			
Nitrobenzene	1.24	0.42	mg/kg dry	2.10	BRL	59	23-120			
N-Nitroso-di-n-propylamine	1.15	0.42	mg/kg dry	2.10	BRL	55	27-120			
N-Nitrosodiphenylamine	2.30	0.42	mg/kg dry	2.10	BRL	110	46-153			
Pentachlorophenol	0.688	0.42	mg/kg dry	2.10	BRL	33	36-155			M
Phenanthrene	1.88	0.42	mg/kg dry	2.10	BRL	90	48-137			
Phenol	1.14	0.42	mg/kg dry	2.10	BRL	54	23-115			
Pyrene	2.71	0.42	mg/kg dry	2.10	BRL	129	43-146			
Surrogate: 2,4,6-Tribromophenol	*3.89*		*mg/kg dry*	*4.19*		*93*	*34-134*			
Surrogate: 2-Fluorobiphenyl	*1.60*		*mg/kg dry*	*2.10*		*76*	*17-122*			
Surrogate: 2-Fluorophenol	*2.27*		*mg/kg dry*	*4.19*		*54*	*13-108*			
Surrogate: Nitrobenzene-d5	*1.21*		*mg/kg dry*	*2.10*		*58*	*11-118*			
Surrogate: Phenol-d5	*2.23*		*mg/kg dry*	*4.19*		*53*	*23-109*			
Surrogate: Terphenyl-d14	*2.15*		*mg/kg dry*	*2.10*		*102*	*41-156*			

Mactec - Asheville (NCDOT Project) Project: NCDOT Lenoir
Attn: Rodney Clark
c/o MACTEC Eng. & Consulting, Inc, 1308 P: Project No: U-2211-B Parcel 9
Asheville, NC 28806

Prism Work Order: 0070567
Time Submitted: 7/21/2010 10:25:00AM

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0H0042 - 3550C MS										
Matrix Spike Dup (P0H0042-MSD1)	**Source: 0070567-06**			Prepared & Analyzed: 08/02/10						
1,2,4-Trichlorobenzene	1.61	0.42	mg/kg dry	2.10	BRL	76	25-104	10	46	
1,2-Dichlorobenzene	1.44	0.42	mg/kg dry	2.10	BRL	68	22-103	11	49	
1,3-Dichlorobenzene	1.53	0.42	mg/kg dry	2.10	BRL	73	18-101	10	55	
1,4-Dichlorobenzene	1.39	0.42	mg/kg dry	2.10	BRL	66	14-108	10	50	
2,4,6-Trichlorophenol	1.42	0.42	mg/kg dry	2.10	BRL	68	44-115	7	35	
2,4-Dichlorophenol	1.60	0.42	mg/kg dry	2.10	BRL	76	26-120	13	45	
2,4-Dimethylphenol	1.45	0.42	mg/kg dry	2.10	BRL	69	33-113	6	47	
2,4-Dinitrophenol	0.989	0.42	mg/kg dry	2.10	BRL	47	14-148	35	39	
2,4-Dinitrotoluene	1.40	0.42	mg/kg dry	2.10	BRL	67	49-134	5	28	
2,6-Dinitrotoluene	1.63	0.42	mg/kg dry	2.10	BRL	78	44-131	3	31	
2-Chloronaphthalene	1.71	0.42	mg/kg dry	2.10	BRL	82	38-112	11	37	
2-Chlorophenol	1.43	0.42	mg/kg dry	2.10	BRL	68	26-108	12	51	
2-Methylnaphthalene	1.75	0.42	mg/kg dry	2.10	BRL	83	12-128	8	48	
2-Methylphenol	1.40	0.42	mg/kg dry	2.10	BRL	67	26-116	10	48	
2-Nitrophenol	1.40	0.42	mg/kg dry	2.10	BRL	67	20-119	12	44	
3,3'-Dichlorobenzidine	0.996	0.42	mg/kg dry	2.10	BRL	47	10-191	43	35	M
3/4-Methylphenol	1.38	0.42	mg/kg dry	2.10	BRL	66	28-116	11	45	
4,6-Dinitro-2-methylphenol	1.42	0.42	mg/kg dry	2.10	BRL	68	30-148	6	27	
4-Bromophenyl phenyl ether	2.33	0.42	mg/kg dry	2.10	BRL	111	43-126	3	26	
4-Chloro-3-methylphenol	1.48	0.42	mg/kg dry	2.10	BRL	71	41-120	6	35	
4-Chloroaniline	2.03	0.42	mg/kg dry	2.10	BRL	97	35-115	10	41	
4-Chlorophenyl phenyl ether	1.81	0.42	mg/kg dry	2.10	BRL	86	45-123	1	30	
4-Nitrophenol	1.25	0.42	mg/kg dry	2.10	BRL	60	33-136	6	31	
Acenaphthene	1.72	0.42	mg/kg dry	2.10	BRL	82	46-115	6	35	
Acenaphthylene	1.80	0.42	mg/kg dry	2.10	BRL	86	40-125	5	35	
Anthracene	1.89	0.42	mg/kg dry	2.10	BRL	90	56-127	1	26	
Azobenzene	1.94	0.42	mg/kg dry	2.10	BRL	92	49-123	4	30	
Benzo(a)anthracene	1.40	0.42	mg/kg dry	2.10	BRL	67	50-134	1	25	
Benzo(a)pyrene	1.88	0.42	mg/kg dry	2.10	BRL	89	59-129	2	22	
Benzo(b)fluoranthene	1.53	0.42	mg/kg dry	2.10	BRL	73	46-141	26	33	
Benzo(g,h,i)perylene	1.40	0.42	mg/kg dry	2.10	BRL	67	47-136	10	26	
Benzo(k)fluoranthene	2.00	0.42	mg/kg dry	2.10	BRL	95	36-151	7	38	
Benzoic Acid	0.226	0.42	mg/kg dry	2.10	BRL	11	10-122	51	60	J
Benzyl alcohol	1.34	0.42	mg/kg dry	2.10	BRL	64	29-112	12	43	
bis(2-Chloroethoxy)methane	1.49	0.42	mg/kg dry	2.10	BRL	71	31-119	10	46	
Bis(2-Chloroethyl)ether	1.30	0.42	mg/kg dry	2.10	BRL	62	23-111	11	54	
Bis(2-chloroisopropyl)ether	1.08	0.42	mg/kg dry	2.10	BRL	51	22-109	8	50	
Bis(2-Ethylhexyl)phthalate	1.83	0.42	mg/kg dry	2.10	BRL	87	45-153	12	26	
Butyl benzyl phthalate	2.00	0.42	mg/kg dry	2.10	BRL	95	43-156	11	22	
Chrysene	2.51	0.42	mg/kg dry	2.10	BRL	120	46-140	0.6	32	
Dibenzo(a,h)anthracene	1.94	0.42	mg/kg dry	2.10	BRL	92	43-141	13	25	
Dibenzofuran	1.71	0.42	mg/kg dry	2.10	BRL	82	45-121	3	36	
Diethyl phthalate	1.82	0.42	mg/kg dry	2.10	BRL	87	53-128	3	20	
Dimethyl phthalate	1.89	0.42	mg/kg dry	2.10	BRL	90	54-123	2	24	
Di-n-butyl phthalate	2.15	0.42	mg/kg dry	2.10	BRL	103	44-137	4	33	
Di-n-octyl phthalate	2.14	0.42	mg/kg dry	2.10	BRL	102	45-151	13	25	

Mactec - Asheville (NCDOT Project) Project: NCDOT Lenoir
Attn: Rodney Clark
c/o MACTEC Eng. & Consulting, Inc, 1308 P Project No: U-2211-B Parcel 9
Asheville, NC 28806

Prism Work Order: 0070567
Time Submitted: 7/21/2010 10:25:00AM

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0H0042 - 3550C MS										
Matrix Spike Dup (P0H0042-MSD1)		**Source: 0070567-06**		Prepared & Analyzed: 08/02/10						
Fluoranthene	1.11	0.42	mg/kg dry	2.10	BRL	53	37-140	1	35	
Fluorene	1.67	0.42	mg/kg dry	2.10	BRL	80	49-119	2	31	
Hexachlorobenzene	2.01	0.42	mg/kg dry	2.10	BRL	96	47-128	2	23	
Hexachlorobutadiene	1.70	0.42	mg/kg dry	2.10	BRL	81	24-107	9	50	
Hexachlorocyclopentadiene	0.704	0.42	mg/kg dry	2.10	BRL	34	20-121	20	50	
Hexachloroethane	1.34	0.42	mg/kg dry	2.10	BRL	64	17-102	11	50	
Indeno(1,2,3-cd)pyrene	1.36	0.42	mg/kg dry	2.10	BRL	65	27-156	20	35	
Isophorone	1.45	0.42	mg/kg dry	2.10	BRL	69	22-130	10	37	
Naphthalene	1.88	0.42	mg/kg dry	2.10	BRL	89	27-111	9	51	
Nitrobenzene	1.38	0.42	mg/kg dry	2.10	BRL	66	23-120	11	43	
N-Nitroso-di-n-propylamine	1.29	0.42	mg/kg dry	2.10	BRL	61	27-120	11	47	
N-Nitrosodiphenylamine	2.35	0.42	mg/kg dry	2.10	BRL	112	46-153	2	29	
Pentachlorophenol	0.760	0.42	mg/kg dry	2.10	BRL	36	36-155	10	31	
Phenanthrene	1.92	0.42	mg/kg dry	2.10	BRL	91	48-137	2	32	
Phenol	1.25	0.42	mg/kg dry	2.10	BRL	59	23-115	9	56	
Pyrene	2.52	0.42	mg/kg dry	2.10	BRL	120	43-146	7	31	
Surrogate: 2,4,6-Tribromophenol	*3.88*		*mg/kg dry*	*4.20*		*92*	*34-134*			
Surrogate: 2-Fluorobiphenyl	*1.72*		*mg/kg dry*	*2.10*		*82*	*17-122*			
Surrogate: 2-Fluorophenol	*2.53*		*mg/kg dry*	*4.20*		*60*	*13-108*			
Surrogate: Nitrobenzene-d5	*1.33*		*mg/kg dry*	*2.10*		*64*	*11-118*			
Surrogate: Phenol-d5	*2.47*		*mg/kg dry*	*4.20*		*59*	*23-109*			
Surrogate: Terphenyl-d14	*1.94*		*mg/kg dry*	*2.10*		*92*	*41-156*			

Mactec - Asheville (NCDOT Project) Project: NCDOT Lenoir
Attn: Rodney Clark
c/o MACTEC Eng. & Consulting, Inc, 1308 P: Project No: U-2211-B Parcel 9
Asheville, NC 28806

Prism Work Order: 0070567
Time Submitted: 7/21/2010 10:25:00AM

Volatile Petroleum Hydrocarbons by GC/PID/FID - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0H0051 - MADEP VPH (S)										
Blank (P0H0051-BLK1)				Prepared & Analyzed: 08/03/10						
C5-C8 Aliphatics	BRL	5.0	mg/kg wet							
C9-C12 Aliphatics	BRL	5.0	mg/kg wet							
C9-C10 Aromatics	BRL	5.0	mg/kg wet							
Surrogate: 2,5-Dibromotoluene (PID)	*8.06*		*mg/kg wet*	*8.33*		*97*	*70-130*			
Surrogate: 2,5-Dibromotoluene (FID)	*7.70*		*mg/kg wet*	*8.33*		*92*	*70-130*			
LCS (P0H0051-BS1)				Prepared & Analyzed: 08/03/10						
C5-C8 Aliphatics	30.7	5.0	mg/kg wet	32.0		96	70-130			
C9-C10 Aromatics	11.0	5.0	mg/kg wet	10.7		103	70-130			
C9-C12 Aliphatic	36.1	5.0	mg/kg wet	32.0		113	70-130			
Surrogate: 2,5-Dibromotoluene (PID)	*8.10*		*mg/kg wet*	*8.33*		*97*	*70-130*			
Surrogate: 2,5-Dibromotoluene (FID)	*7.89*		*mg/kg wet*	*8.33*		*95*	*70-130*			
LCS Dup (P0H0051-BSD1)				Prepared: 08/03/10 Analyzed: 08/04/10						
C5-C8 Aliphatics	29.1	5.0	mg/kg wet	32.0		91	70-130	6	200	
C9-C10 Aromatics	10.6	5.0	mg/kg wet	10.7		100	70-130	3	200	
C9-C12 Aliphatic	28.5	5.0	mg/kg wet	32.0		89	70-130	23	200	
Surrogate: 2,5-Dibromotoluene (PID)	*7.53*		*mg/kg wet*	*8.33*		*90*	*70-130*			
Surrogate: 2,5-Dibromotoluene (FID)	*7.47*		*mg/kg wet*	*8.33*		*90*	*70-130*			

Mactec - Asheville (NCDOT Project) Project: NCDOT Lenoir
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Asheville, NC 28806

Prism Work Order: 0070567
Time Submitted: 7/21/2010 10:25:00AM

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 P0G0528 - 5035										
Blank (P0G0528-BLK1)				Prepared & Analyzed: 07/26/10						
Gasoline Range Organics	BRL	5.0	mg/kg wet							
Surrogate: a,a,a-Trifluorotoluene	*4.30*		*mg/kg wet*	*5.00*		*86*	*55-129*			
LCS (P0G0528-BS1)				Prepared & Analyzed: 07/26/10						
Gasoline Range Organics	40.0	5.0	mg/kg wet	50.0		80	67-116			
Surrogate: a,a,a-Trifluorotoluene	*5.05*		*mg/kg wet*	*5.00*		*101*	*55-129*			
LCS Dup (P0G0528-BSD1)				Prepared & Analyzed: 07/26/10						
Gasoline Range Organics	41.1	5.0	mg/kg wet	50.0		82	67-116	3	200	
Surrogate: a,a,a-Trifluorotoluene	*5.10*		*mg/kg wet*	*5.00*		*102*	*55-129*			

Mactec - Asheville (NCDOT Project) Project: NCDOT Lenoir
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Asheville, NC 28806

Prism Work Order: 0070567
Time Submitted: 7/21/2010 10:25:00AM

Extractable Petroleum Hydrocarbons by GC/FID - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0H0017 - MADEP EPH (S)										
Blank (P0H0017-BLK1)				Prepared & Analyzed: 08/02/10						
C9-C18 Aliphatics	BRL	9.9	mg/kg wet							
C19-C36 Aliphatics	BRL	9.9	mg/kg wet							
C11-C22 Aromatics	BRL	9.9	mg/kg wet							
Surrogate: 1-Chlorooctadecane	*1.87*		*mg/kg wet*	*1.98*		*95*	*40-140*			
Surrogate: o-Terphenyl	*1.68*		*mg/kg wet*	*1.98*		*85*	*40-140*			
Surrogate: 2-Fluorobiphenyl	*3.27*		*mg/kg wet*	*3.95*		*83*	*40-140*			
Surrogate: 2-Bromonaphthalene	*3.19*		*mg/kg wet*	*3.95*		*81*	*40-140*			
LCS (P0H0017-BS1)				Prepared & Analyzed: 08/02/10						
C9-C18 Aliphatics	26.0	9.9	mg/kg wet	59.2		44	40-140			
C19-C36 Aliphatics	44.6	9.9	mg/kg wet	79.0		57	40-140			
C11-C22 Aromatics	108	9.9	mg/kg wet	168		65	40-140			
Surrogate: 1-Chlorooctadecane	*1.45*		*mg/kg wet*	*1.97*		*73*	*40-140*			
Surrogate: o-Terphenyl	*1.41*		*mg/kg wet*	*1.97*		*71*	*40-140*			
Surrogate: 2-Fluorobiphenyl	*4.11*		*mg/kg wet*	*3.95*		*104*	*40-140*			
Surrogate: 2-Bromonaphthalene	*4.13*		*mg/kg wet*	*3.95*		*105*	*40-140*			
LCS Dup (P0H0017-BSD1)				Prepared & Analyzed: 08/02/10						
C9-C18 Aliphatics	34.8	9.9	mg/kg wet	59.6		58	40-140	29	200	
C19-C36 Aliphatics	66.8	9.9	mg/kg wet	79.4		84	40-140	40	200	
C11-C22 Aromatics	130	9.9	mg/kg wet	169		77	40-140	18	200	
Surrogate: 1-Chlorooctadecane	*2.12*		*mg/kg wet*	*1.99*		*107*	*40-140*			
Surrogate: o-Terphenyl	*1.77*		*mg/kg wet*	*1.99*		*89*	*40-140*			
Surrogate: 2-Fluorobiphenyl	*3.25*		*mg/kg wet*	*3.97*		*82*	*40-140*			
Surrogate: 2-Bromonaphthalene	*3.29*		*mg/kg wet*	*3.97*		*83*	*40-140*			
Matrix Spike (P0H0017-MS1)	**Source: 0070567-06**			Prepared & Analyzed: 08/02/10						
C9-C18 Aliphatics	45.1	13	mg/kg dry	75.3	BRL	60	40-140			
C19-C36 Aliphatics	74.9	13	mg/kg dry	100	BRL	75	40-140			
C11-C22 Aromatics	169	13	mg/kg dry	213	BRL	79	40-140			
Surrogate: 1-Chlorooctadecane	*1.85*		*mg/kg dry*	*2.51*		*74*	*40-140*			
Surrogate: o-Terphenyl	*1.65*		*mg/kg dry*	*2.51*		*66*	*40-140*			
Surrogate: 2-Fluorobiphenyl	*4.22*		*mg/kg dry*	*5.02*		*84*	*40-140*			
Surrogate: 2-Bromonaphthalene	*3.96*		*mg/kg dry*	*5.02*		*79*	*40-140*			

Mactec - Asheville (NCDOT Project)
Attn: Rodney Clark
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Project: NCDOT Lenoir
Project No: U-2211-B Parcel 9

Prism Work Order: 0070567
Time Submitted: 7/21/2010 10:25:00AM

Extractable Petroleum Hydrocarbons by GC/FID - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0H0017 - MADEP EPH (S)										
Matrix Spike Dup (P0H0017-MSD1)	**Source: 0070567-06**			Prepared & Analyzed: 08/02/10						
C9-C18 Aliphatics	45.2	13	mg/kg dry	75.4	BRL	60	40-140	0.2	50	
C19-C36 Aliphatics	78.6	13	mg/kg dry	101	BRL	78	40-140	5	50	
C11-C22 Aromatics	171	13	mg/kg dry	214	BRL	80	40-140	1	50	
Surrogate: 1-Chlorooctadecane	*2.35*		*mg/kg dry*	*2.51*		*93*	*40-140*			
Surrogate: o-Terphenyl	*2.11*		*mg/kg dry*	*2.51*		*84*	*40-140*			
Surrogate: 2-Fluorobiphenyl	*4.53*		*mg/kg dry*	*5.03*		*90*	*40-140*			
Surrogate: 2-Bromonaphthalene	*4.58*		*mg/kg dry*	*5.03*		*91*	*40-140*			

Mactec - Asheville (NCDOT Project) Project: NCDOT Lenoir
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Prism Work Order: 0070567
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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 P0G0489 - 3545A										
Blank (P0G0489-BLK1)				Prepared: 07/22/10 Analyzed: 07/24/10						
Diesel Range Organics	BRL	7.0	mg/kg wet							
Surrogate: o-Terphenyl	*1.37*		*mg/kg wet*	*1.60*		*86*	*49-124*			
LCS (P0G0489-BS1)				Prepared: 07/22/10 Analyzed: 07/24/10						
Diesel Range Organics	66.9	7.0	mg/kg wet	80.0		84	55-109			
Surrogate: o-Terphenyl	*1.47*		*mg/kg wet*	*1.60*		*92*	*49-124*			
LCS Dup (P0G0489-BSD1)				Prepared: 07/22/10 Analyzed: 07/24/10						
Diesel Range Organics	73.2	7.0	mg/kg wet	79.8		92	55-109	9	200	
Surrogate: o-Terphenyl	*1.99*		*mg/kg wet*	*1.60*		*125*	*49-124*			*Ab*

Mactec - Asheville (NCDOT Project) Project: NCDOT Lenoir
Attn: Rodney Clark
c/o MACTEC Eng. & Consulting, Inc, 1308 P: Project No: U-2211-B Parcel 9
Asheville, NC 28806

Prism Work Order: 0070567
Time Submitted: 7/21/2010 10:25:00AM

General Chemistry Parameters - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0G0505 - NO PREP										
Duplicate (P0G0505-DUP2)		**Source: 0070567-07**		Prepared: 07/23/10 Analyzed: 07/26/10						
% Solids	73.7	0.100	% by Weight		75.4			2	20	

Sample Extraction Data

Prep Method: 3545A

Lab Number	Batch	Initial	Final	Date
0070567-01	P0G0489	25.15 g	1 mL	07/22/10
0070567-02	P0G0489	24.99 g	1 mL	07/22/10
0070567-03	P0G0489	25.02 g	1 mL	07/22/10
0070567-04	P0G0489	25.01 g	1 mL	07/22/10
0070567-05	P0G0489	25.16 g	1 mL	07/22/10
0070567-06	P0G0489	25.13 g	1 mL	07/22/10
0070567-07	P0G0489	25.1 g	1 mL	07/22/10

Prep Method: MADEP EPH (S)

Lab Number	Batch	Initial	Final	Date
0070567-01	P0H0017	10.05 g	2 mL	08/02/10
0070567-01	P0H0017	10.05 g	2 mL	08/02/10
0070567-02	P0H0017	10.14 g	2 mL	08/02/10
0070567-02	P0H0017	10.14 g	2 mL	08/02/10
0070567-03	P0H0017	10.06 g	2 mL	08/02/10
0070567-03	P0H0017	10.06 g	2 mL	08/02/10
0070567-06	P0H0017	10.1 g	2 mL	08/02/10
0070567-06	P0H0017	10.1 g	2 mL	08/02/10

Prep Method: 5035

Lab Number	Batch	Initial	Final	Date
0070567-01	P0G0528	5.53 g	5 mL	07/26/10
0070567-02	P0G0528	5.99 g	5 mL	07/26/10
0070567-03	P0G0528	5.62 g	5 mL	07/26/10
0070567-04	P0G0528	5.19 g	5 mL	07/26/10
0070567-05	P0G0528	5.84 g	5 mL	07/26/10
0070567-06	P0G0528	5.05 g	5 mL	07/26/10
0070567-07	P0G0528	5.42 g	5 mL	07/26/10

NO PREP

Lab Number	Batch	Initial	Final	Date
0070567-01	P0G0505	30 g	30 mL	07/23/10
0070567-02	P0G0505	30 g	30 mL	07/23/10
0070567-03	P0G0505	30 g	30 mL	07/23/10
0070567-04	P0G0505	30 g	30 mL	07/23/10
0070567-05	P0G0505	30 g	30 mL	07/23/10
0070567-06	P0G0505	30 g	30 mL	07/23/10
0070567-07	P0G0505	30 g	30 mL	07/23/10

Prep Method: 3550C MS

Lab Number	Batch	Initial	Final	Date
0070567-01	P0H0042	30.35 g	1 mL	08/02/10
0070567-02	P0H0042	29.9 g	1 mL	08/02/10
0070567-03	P0H0042	30.02 g	1 mL	08/02/10
0070567-06	P0H0042	30.07 g	1 mL	08/02/10

Prep Method: 5035

Lab Number	Batch	Initial	Final	Date
0070567-01	P0H0033	6.3 g	5 mL	07/30/10
0070567-02	P0H0033	6.67 g	5 mL	07/30/10
0070567-03	P0H0019	10.22 g	5 mL	08/02/10
0070567-06	P0H0019	5.79 g	5 mL	08/02/10

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Sample Extraction Data

Prep Method: MADEP VPH (S)

Lab Number	Batch	Initial	Final	Date
0070567-01	P0H0051	5.48 g	16 mL	08/03/10
0070567-02	P0H0051	11.82 g	16 mL	08/03/10
0070567-03	P0H0051	10.6 g	16 mL	08/03/10
0070567-06	P0H0051	5.74 g	16 mL	08/03/10

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CHAIN OF CUSTODY RECORD

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

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

PAGE 1 OF 1 QUOTE # TO ENSURE PROPER BILLING: NCDOT PROJECT U-2214-B PARCEL 9

Project Name: NCDOT Lenoir - Parcel 9
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 Ruby
Invoice To: ~~MACTEC~~ NCDOT
Address:

Client Company Name: MACTEC
Report To/Contact Name: Rodney Clark
Reporting Address: 1308 Patton Ave Asheville, NC 28805
Phone: 828-252-8130 Fax (Yes) (No): 828-251-9690
Email (Yes) (No) Email Address rmclark@mactec.com
EDD Type: PDF ✓ Excel ___ Other ___
Site Location Name: PARCEL 9 (SHUFORD FARM)
Site Location Physical Address: 121 Hibriten Drive Lenoir, NC

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? Temp 3.7	✓		
Received ON WET ICE?	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?	✓		
CUSTODY SEALS INTACT?	✓		
VOLATILES rec'd W/OUT HEADSPACE?			✓
PROPER CONTAINERS used?	✓		

TO BE FILLED IN BY CLIENT/SAMPLING PERSONNEL

Certification: NELAC ___ USACE ___ FL ___ NC ✓ SC ___ OTHER ___ N/A ___
Water Chlorinated: YES ___ NO ✓
Sample Iced Upon Collection: YES ✓ NO ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	ANALYSES REQUESTED: TPH-DRO	TPH-GRO 5035	MADEP VPH	MADEP EPH	5035 Field Extracted	SVOCs 8270	REMARKS	PRISM LAB ID NO.
MIDLINE UST (5.5' bgs)	7/19/10	1045	SOIL	A, C, VOA	10	4oz & 40mL	Ice, Na_2SO_4, Methanol	✓	✓	X	X	X	X	X = Hold analyses	01
N. BASE (7.5' bgs)		1100						✓	✓	X	X	X	X	Run analyses if	02
S. BASE (7.5' bgs)		1115						✓	✓	X	X	X	X	action limit of	03
EAST SW (4-5' bgs)		1130						✓	✓	X	X	X	X	10 mg/kg is	04
NORTH SW (4-5' bgs)		1145						✓	✓	X	X	X	X	exceeded	05
WEST SW (4'-5' bgs)		1200						✓	✓	X	X	X	X	for TPH-DRO	06
SOUTH SW (4'-5' bgs)		1230						✓	✓	X	X	X	X	or TPH-GRO	07
														analyses	

Sampler's Signature [signature] Sampled By (Print Name) Rodney M Clark 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.

		Date	Military/Hours
Relinquished By: (Signature) [signature]	Received By: (Signature)	7/20/10	1845
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature)	Received For Prism Laboratories By:	Date 7/21/10	1045

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. 0070567

Additional Comments:
2x 40z
1x 40z (A)

PRISM USE ONLY

Site Arrival Time:
Site Departure Time:
Field Tech Fee:
Mileage:

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

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

SEE REVERSE FOR TERMS & CONDITIONS

ORIGINAL

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

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

Case Narrative

07/30/2010

Mactec - Asheville (NCDOT Project)
Rodney Clark
c/o MACTEC Eng. & Consulting, Inc, 1308 Patton Avenue
Asheville, NC 28806

Project: NCDOT Lenoir
Project No.: U-2211-B Parcel 9
Lab Submittal Date: 07/21/2010
Prism Work Order: 0070567

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.

DATA SUBJECT TO CHANGE

Reviewed By

Data Qualifiers Key Reference:

A	Surrogate recovered outside established QC range.
Aa	Surrogate was diluted out
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
BRL	Below Reporting Limit
MDL	Method Detection Limit
RPD	Relative Percent Difference
*	Results reported to the reporting limit. All other results are reported to the MDL with values between MDL and reporting limit indicated with a J.

Sample Receipt Summary

07/30/2010

Prism Work Order: 0070567

Client Sample ID	Lab Sample ID	Matrix	Date Sampled	Date Received
DRAFT: Midline UST (5.5' bgs)	0070567-01	Solid	07/19/10	07/21/10
DRAFT: N.Base (7.5' bgs)	0070567-02	Solid	07/19/10	07/21/10
DRAFT: S. Base (7.5' bgs)	0070567-03	Solid	07/19/10	07/21/10
DRAFT: East. SW (4'-5' bgs)	0070567-04	Solid	07/19/10	07/21/10
DRAFT: North SW (4'-5' bgs)	0070567-05	Solid	07/19/10	07/21/10
DRAFT: West Sw (4'-5' bgs)	0070567-06	Solid	07/19/10	07/21/10
DRAFT: South SW (4'-5' bgs)	0070567-07	Solid	07/19/10	07/21/10

Samples received in good condition at 3.7 degrees C unless otherwise noted.

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Mactec - Asheville (NCDOT Project)
Attn: Rodney Clark
c/o MACTEC Eng. & Consulting, Inc, 1308 P
Asheville, NC 28806

Project: NCDOT Lenoir
Project No.: U-2211-B Parcel 9
Sample Matrix: Solid

Client Sample ID: DRAFT: Midline UST (5.5'
Prism Sample ID: 0070567-01
Prism Work Order: 0070567
Time Collected: 07/19/10 10:45
Time Submitted: 07/21/10 10:25

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
DRAFT: Diesel Range Organics by GC/FID									
Diesel Range Organics	**6100**	**mg/kg dry**	**350**	**57**	**40**	**8015C**	**7/26/10 18:28**	**GRR**	**P0G0489**
			Surrogate			Recovery		Control Limits	
			o-Terphenyl			*0 %*		*49-124*	*Aa*
DRAFT: Gasoline Range Organics by GC/FID									
Gasoline Range Organics	**190**	**mg/kg dry**	**57**	**7.4**	**500**	**8015C**	**7/27/10 3:04**	**HPE**	**P0G0528**
			Surrogate			Recovery		Control Limits	
			a,a,a-Trifluorotoluene			*90 %*		*55-129*	
DRAFT: General Chemistry Parameters									
% Solids	**79.1**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**7/26/10 12:18**	**JAB**	**P0G0505**

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Mactec - Asheville (NCDOT Project)
Attn: Rodney Clark
c/o MACTEC Eng. & Consulting, Inc, 1308 P
Asheville, NC 28806

Project: NCDOT Lenoir
Project No.: U-2211-B Parcel 9
Sample Matrix: Solid

Client Sample ID: DRAFT: N.Base (7.5' bgs)
Prism Sample ID: 0070567-02
Prism Work Order: 0070567
Time Collected: 07/19/10 11:00
Time Submitted: 07/21/10 10:25

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
DRAFT: Diesel Range Organics by GC/FID									
Diesel Range Organics	**22000**	**mg/kg dry**	**890**	**140**	**100**	**8015C**	**7/26/10 19:03**	**GRR**	**P0G0489**
			Surrogate			Recovery		Control Limits	
			o-Terphenyl			*0 %*		*49-124*	*Aa*
DRAFT: Gasoline Range Organics by GC/FID									
Gasoline Range Organics	**170**	**mg/kg dry**	**5.3**	**0.69**	**50**	**8015C**	**7/26/10 23:28**	**HPE**	**P0G0528**
			Surrogate			Recovery		Control Limits	
			a,a,a-Trifluorotoluene			*87 %*		*55-129*	
DRAFT: General Chemistry Parameters									
% Solids	**79.0**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**7/26/10 12:18**	**JAB**	**P0G0505**

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 - Asheville (NCDOT Project)
Attn: Rodney Clark
c/o MACTEC Eng. & Consulting, Inc, 1308 P
Asheville, NC 28806

Project: NCDOT Lenoir
Project No.: U-2211-B Parcel 9
Sample Matrix: Solid

Client Sample ID: DRAFT: S. Base (7.5' bgs)
Prism Sample ID: 0070567-03
Prism Work Order: 0070567
Time Collected: 07/19/10 11:15
Time Submitted: 07/21/10 10:25

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
DRAFT: Diesel Range Organics by GC/FID									
Diesel Range Organics	**14000**	**mg/kg dry**	**930**	**150**	**100**	**8015C**	**7/24/10 15:00**	**GRR**	**P0G0489**
			Surrogate			Recovery		Control Limits	
			o-Terphenyl			*0 %*		*49-124*	*Aa*
DRAFT: Gasoline Range Organics by GC/FID									
Gasoline Range Organics	**310**	**mg/kg dry**	**5.9**	**0.77**	**50**	**8015C**	**7/26/10 23:59**	**HPE**	**P0G0528**
			Surrogate			Recovery		Control Limits	
			a,a,a-Trifluorotoluene			*95 %*		*55-129*	
DRAFT: General Chemistry Parameters									
% Solids	**75.3**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**7/26/10 12:18**	**JAB**	**P0G0505**

Mactec - Asheville (NCDOT Project)
Attn: Rodney Clark
c/o MACTEC Eng. & Consulting, Inc, 1308 P
Asheville, NC 28806

Project: NCDOT Lenoir
Project No.: U-2211-B Parcel 9
Sample Matrix: Solid

Client Sample ID: DRAFT: East. SW (4'-5' bg
Prism Sample ID: 0070567-04
Prism Work Order: 0070567
Time Collected: 07/19/10 11:30
Time Submitted: 07/21/10 10:25

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
DRAFT: Diesel Range Organics by GC/FID									
Diesel Range Organics	BRL	mg/kg dry	10	1.7	1	8015C	7/24/10 9:05	GRR	P0G0489
			Surrogate			Recovery		Control Limits	
			o-Terphenyl			*76 %*		*49-124*	
DRAFT: Gasoline Range Organics by GC/FID									
Gasoline Range Organics	BRL	mg/kg dry	7.0	0.92	50	8015C	7/27/10 0:30	HPE	P0G0528
			Surrogate			Recovery		Control Limits	
			a,a,a-Trifluorotoluene			*92 %*		*55-129*	
DRAFT: General Chemistry Parameters									
% Solids	**68.4**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**7/26/10 12:18**	**JAB**	**P0G0505**

Mactec - Asheville (NCDOT Project)
Attn: Rodney Clark
c/o MACTEC Eng. & Consulting, Inc, 1308 P
Asheville, NC 28806

Project: NCDOT Lenoir
Project No.: U-2211-B Parcel 9
Sample Matrix: Solid

Client Sample ID: DRAFT: North SW (4'-5' bg
Prism Sample ID: 0070567-05
Prism Work Order: 0070567
Time Collected: 07/19/10 11:45
Time Submitted: 07/21/10 10:25

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
DRAFT: Diesel Range Organics by GC/FID									
Diesel Range Organics	BRL	mg/kg dry	9.7	1.6	1	8015C	7/24/10 10:51	GRR	P0G0489
			Surrogate			Recovery		Control Limits	
			o-Terphenyl			*65 %*		*49-124*	
DRAFT: Gasoline Range Organics by GC/FID									
Gasoline Range Organics	**2.4 J**	**mg/kg dry**	**6.0**	**0.78**	**50**	**8015C**	**7/27/10 1:01**	**HPE**	**P0G0528**
			Surrogate			Recovery		Control Limits	
			a,a,a-Trifluorotoluene			*56 %*		*55-129*	
DRAFT: General Chemistry Parameters									
% Solids	**71.4**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**7/26/10 12:18**	**JAB**	**P0G0505**

Mactec - Asheville (NCDOT Project)
Attn: Rodney Clark
c/o MACTEC Eng. & Consulting, Inc, 1308 P
Asheville, NC 28806

Project: NCDOT Lenoir
Project No.: U-2211-B Parcel 9
Sample Matrix: Solid

Client Sample ID: DRAFT: West Sw (4'-5' bgs
Prism Sample ID: 0070567-06
Prism Work Order: 0070567
Time Collected: 07/19/10 12:00
Time Submitted: 07/21/10 10:25

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
DRAFT: Diesel Range Organics by GC/FID									
Diesel Range Organics	**12**	**mg/kg dry**	**8.8**	**1.4**	**1**	**8015C**	**7/24/10 11:27**	**GRR**	**P0G0489**
			Surrogate			Recovery		Control Limits	
			o-Terphenyl			*104 %*		*49-124*	
DRAFT: Gasoline Range Organics by GC/FID									
Gasoline Range Organics	BRL	mg/kg dry	6.2	0.81	50	8015C	7/27/10 1:32	HPE	P0G0528
			Surrogate			Recovery		Control Limits	
			a,a,a-Trifluorotoluene			*100 %*		*55-129*	
DRAFT: General Chemistry Parameters									
% Solids	**79.5**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**7/26/10 12:18**	**JAB**	**P0G0505**

Mactec - Asheville (NCDOT Project)
Attn: Rodney Clark
c/o MACTEC Eng. & Consulting, Inc, 1308 P
Asheville, NC 28806

Project: NCDOT Lenoir
Project No.: U-2211-B Parcel 9
Sample Matrix: Solid

Client Sample ID: DRAFT: South SW (4'-5' bg
Prism Sample ID: 0070567-07
Prism Work Order: 0070567
Time Collected: 07/19/10 12:30
Time Submitted: 07/21/10 10:25

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
DRAFT: Diesel Range Organics by GC/FID									
Diesel Range Organics	BRL	mg/kg dry	9.2	1.5	1	8015C	7/24/10 12:02	GRR	P0G0489
			Surrogate			Recovery		Control Limits	
			o-Terphenyl			*77 %*		*49-124*	
DRAFT: Gasoline Range Organics by GC/FID									
Gasoline Range Organics	BRL	mg/kg dry	6.1	0.80	50	8015C	7/27/10 2:02	HPE	P0G0528
			Surrogate			Recovery		Control Limits	
			a,a,a-Trifluorotoluene			*105 %*		*55-129*	
DRAFT: General Chemistry Parameters									
% Solids	**75.4**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**7/26/10 12:18**	**JAB**	**P0G0505**

Mactec - Asheville (NCDOT Project) Project: NCDOT Lenoir
Attn: Rodney Clark
c/o MACTEC Eng. & Consulting, Inc, 1308 P Project No: U-2211-B Parcel 9
Asheville, NC 28806

Prism Work Order: 0070567
Time Submitted: 7/21/2010 10:25:00AM

DRAFT: 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 P0G0528 - 5035										
Blank (P0G0528-BLK1)				Prepared & Analyzed: 07/26/10						
Gasoline Range Organics	BRL	5.0	mg/kg wet							
Surrogate: a,a,a-Trifluorotoluene	*4.30*		*mg/kg wet*	*5.00*		*86*	*55-129*			
LCS (P0G0528-BS1)				Prepared & Analyzed: 07/26/10						
Gasoline Range Organics	40.0	5.0	mg/kg wet	50.0		80	67-116			
Surrogate: a,a,a-Trifluorotoluene	*5.05*		*mg/kg wet*	*5.00*		*101*	*55-129*			
LCS Dup (P0G0528-BSD1)				Prepared & Analyzed: 07/26/10						
Gasoline Range Organics	41.1	5.0	mg/kg wet	50.0		82	67-116	3	200	
Surrogate: a,a,a-Trifluorotoluene	*5.10*		*mg/kg wet*	*5.00*		*102*	*55-129*			

Mactec - Asheville (NCDOT Project) Project: NCDOT Lenoir
Attn: Rodney Clark
c/o MACTEC Eng. & Consulting, Inc, 1308 P: Project No: U-2211-B Parcel 9
Asheville, NC 28806

Prism Work Order: 0070567
Time Submitted: 7/21/2010 10:25:00AM

DRAFT: 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 P0G0489 - 3545A										
Blank (P0G0489-BLK1)				Prepared: 07/22/10 Analyzed: 07/24/10						
Diesel Range Organics	BRL	7.0	mg/kg wet							
Surrogate: o-Terphenyl	*1.37*		*mg/kg wet*	*1.60*		*86*	*49-124*			
LCS (P0G0489-BS1)				Prepared: 07/22/10 Analyzed: 07/24/10						
Diesel Range Organics	66.9	7.0	mg/kg wet	80.0		84	55-109			
Surrogate: o-Terphenyl	*1.47*		*mg/kg wet*	*1.60*		*92*	*49-124*			
LCS Dup (P0G0489-BSD1)				Prepared: 07/22/10 Analyzed: 07/24/10						
Diesel Range Organics	73.2	7.0	mg/kg wet	79.8		92	55-109	9	200	
Surrogate: o-Terphenyl	*1.99*		*mg/kg wet*	*1.60*		*125*	*49-124*			*A*

Mactec - Asheville (NCDOT Project) Project: NCDOT Lenoir
Attn: Rodney Clark
c/o MACTEC Eng. & Consulting, Inc, 1308 P: Project No: U-2211-B Parcel 9
Asheville, NC 28806

Prism Work Order: 0070567
Time Submitted: 7/21/2010 10:25:00AM

DRAFT: General Chemistry Parameters - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0G0505 - NO PREP										
Duplicate (P0G0505-DUP2)		**Source: 0070567-07**		Prepared: 07/23/10 Analyzed: 07/26/10						
% Solids	73.7	0.100	% by Weight		75.4			2	20	

Sample Extraction Data

Prep Method: 3545A

Lab Number	Batch	Initial	Final	Date
0070567-01	P0G0489	25.15 g	1 mL	07/22/10
0070567-02	P0G0489	24.99 g	1 mL	07/22/10
0070567-03	P0G0489	25.02 g	1 mL	07/22/10
0070567-04	P0G0489	25.01 g	1 mL	07/22/10
0070567-05	P0G0489	25.16 g	1 mL	07/22/10
0070567-06	P0G0489	25.13 g	1 mL	07/22/10
0070567-07	P0G0489	25.1 g	1 mL	07/22/10

Prep Method: 5035

Lab Number	Batch	Initial	Final	Date
0070567-01	P0G0528	5.53 g	5 mL	07/26/10
0070567-02	P0G0528	5.99 g	5 mL	07/26/10
0070567-03	P0G0528	5.62 g	5 mL	07/26/10
0070567-04	P0G0528	5.19 g	5 mL	07/26/10
0070567-05	P0G0528	5.84 g	5 mL	07/26/10
0070567-06	P0G0528	5.05 g	5 mL	07/26/10
0070567-07	P0G0528	5.42 g	5 mL	07/26/10

NO PREP

Lab Number	Batch	Initial	Final	Date
0070567-01	P0G0505	30 g	30 mL	07/23/10
0070567-02	P0G0505	30 g	30 mL	07/23/10
0070567-03	P0G0505	30 g	30 mL	07/23/10
0070567-04	P0G0505	30 g	30 mL	07/23/10
0070567-05	P0G0505	30 g	30 mL	07/23/10
0070567-06	P0G0505	30 g	30 mL	07/23/10
0070567-07	P0G0505	30 g	30 mL	07/23/10

CHAIN OF CUSTODY RECORD

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

PAGE 1 OF 1 QUOTE # TO ENSURE PROPER BILLING: NCDOT PROJECT U-2211-B PARCEL 9

Project Name: NCDOT Lenoir - Parcel 9
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 Ruby
Invoice To: [redacted] NCDOT
Address:

Client Company Name: MACTEC
Report To/Contact Name: Rodney Clark
Reporting Address: 1308 Patton Ave Asheville, NC 28805
Phone: 828-252-8130 Fax (Yes) (No): 828-251-9692
Email (Yes) (No) Email Address rmclark@mactec.com
EDD Type: PDF ✓ Excel ___ Other ___
Site Location Name: PARCEL 9 (SHUFORD FARM)
Site Location Physical Address: 121 Hibriten Drive Lenoir, NC

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?			
Received ON WET ICE? Temp 3.7	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?	✓		
CUSTODY SEALS INTACT?	✓		
VOLATILES rec'd W/OUT HEADSPACE?			✓
PROPER CONTAINERS used?	✓		

TO BE FILLED IN BY CLIENT/SAMPLING PERSONNEL

Certification: NELAC ___ USACE ___ FL ___ NC ✓ SC ___ OTHER ___ N/A ___
Water Chlorinated: YES ___ NO ✓
Sample Iced Upon Collection: YES ✓ NO ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	SAMPLE CONTAINER NO.	SAMPLE CONTAINER SIZE	PRESERVATIVES	ANALYSES REQUESTED: TPH-DRO	TPH-GRO 5035	MADEP VPH	MADEP EPH	5035/5030 w/ PID/FID	SVOCs 8270	REMARKS	PRISM LAB ID NO.
MIDLINE UST (5.5' bgs)	7/19/10	1045	SOIL	A, C, VOA	10	4oz & 40mL	Ice, Na2SO4, Methanol	✓	✓	X	X	X	X	X = Hold analysis	01
N. BASE (7.5' bgs)		1100						✓	✓	X	X	X	X	Run analyses if	02
S. BASE (7.5' bgs)		1115						✓	✓	X	X	X	X	action limit of	03
EAST SW (4-5' bgs)		1130						✓	✓	X	X	X	X	10 mg/kg is	04
NORTH SW (4-5' bgs)		1145						✓	✓	X	X	X	X	exceeded	05
WEST SW (4'-5' bgs)		1200						✓	✓	X	X	X	X	for TPH-DRO	06
SOUTH SW (4'-5' bgs)		1230						✓	✓	X	X	X	X	or TPH-GRO	07
														analyses	

PRESS DOWN FIRMLY - 3 COPIES

Sampler's Signature Rodney M Clark Sampled By (Print Name) Rodney M Clark Affiliation MACTEC

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 initiallized.

		Date	Military/Hours
Relinquished By: (Signature)	Received By: (Signature)	7/20/10	1845
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature)	Received For Prism Laboratories By:	Date 7/21/10	1045

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. 0070567

Additional Comments:
2x 40z
1x 40z (A)

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

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

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

SEE REVERSE FOR TERMS & CONDITIONS

ORIGINAL

APPENDIX E

Compaction Test Report

REPORT OF FIELD DENSITY TESTS

1308 Patton Avenue
Asheville, North Carolina 28806

MACTEC

CLIENT: NC Department of Transportation

PROJECT: NCDOT Project U-2211-B (Parcel 9) **JOB NUMBER:** 6470100155.01

Test Date	Test Number	Moisture Content (%)	Dry Density (PCF)	Proctor Number	Max. Dry Density (pcf)	Optimum Moisture (%)	Compaction (%)	Specified Compaction (%)	ASTM Test Method	Elevation or Depth
7/19/2010	1	13.8	105.8	1	110.4	11.8	**95.9**	95	D2937	-5
Location:	Parcel # 9 UST Backfill: Approximate 7ft. x 14 ft. excavation									
Comments:										
Drive Tube Volume: 0.033(cu. ft.)						Moisture Test Method: D4959				
7/19/2010	2	14.1	105.8	1	110.4	11.8	**95.9**	95	D2937	-4
Location:	Parcel # 9 UST Backfill: Approximate 7ft. x 14 ft. excavation									
Comments:										
Drive Tube Volume: 0.033(cu. ft.)						Moisture Test Method: D4959				
7/19/2010	3	13.7	105.4	1	110.4	11.8	**95.5**	95	D2937	-3
Location:	Parcel # 9 UST Backfill: Approximate 7ft. x 14 ft. excavation									
Comments:										
Drive Tube Volume: 0.033(cu. ft.)						Moisture Test Method: D4959				
7/19/2010	4	14.2	106.2	1	110.4	11.8	**96.2**	95	D2937	-2
Location:	Parcel # 9 UST Backfill: Approximate 7ft. x 14 ft. excavation									
Comments:										
Drive Tube Volume: 0.033(cu. ft.)						Moisture Test Method: D4959				
7/19/2010	5	14.4	106.3	1	110.4	11.8	**96.3**	95	D2937	-1
Location:	Parcel # 9 UST Backfill: Approximate 7ft. x 14 ft. excavation.									
Comments:										
Drive Tube Volume: 0.033(cu. ft.)						Moisture Test Method: D4959				
7/19/2010	6	14.0	106.7	1	110.4	11.8	**96.6**	95	D2937	Existing Grade
Location:	Parcel # 9 UST Backfill: Approximate 7ft. x 14 ft. excavation									
Comments:										
Drive Tube Volume: 0.033(cu. ft.)						Moisture Test Method: D4959				
7/19/2010	7	14.3	107.5	1					Check	
Location:	Check Plug									
Comments:										

REMARKS

Performed in General Accordance With Referenced ASTM Methods
<< Denotes Percent Compaction or Moisture is Less Than Specifed.

RESPECTFULLY SUBMITTED

MACTEC

MACTEC Engineering and Consulting, Inc.
1308 Patton Avenue – Asheville, North Carolina 28806
Phone (828) 252-8130 ~ Fax (828) 251-9690

DAILY WORK SUMMARY

Page 1 of 1

Date: 7-19-10

Project Name: NC DOT Lenoir Parcel 9 Project Number: 6470100155.01

Project Location: Lenoir NC Client: N.C. DOT Office Time: N/A

Requested By: Contractor On-Site Contact: —

Arrived On-Site: 330 Departed Site: 545 Travel Time: 3.0 Total Time Charged: 5.25

Density Tests Performed: (Y)/N Test Numbers: 1-7 Nuclear Density Gauge Charge: — (day)

Concrete Testing Performed: Y/(N) No. Cylinders Cast: — Round Trip Mileage 160 (miles)

SUMMARY OF OBSERVATIONS AND WORK PERFORMED

NCDOT Project: U-2211-B

Technician on site per contractor request to provide density testing service - Crew using on site borrow material to backfill 7'x14' excavation to remove underground storage tank -

Tech performed drive tube densities on compacted fill material upon completion of compaction effort - Tests performed on nominal 12 in. vertical increments. Test results based on check plug comparison to family-of-curves - Actual results pend proctor evaluation of bag sample obtained -

- In-place density testing results indicate placed & compacted fill met or exceeded the specified compaction of 95% of the laboratory determined maximum dry density.

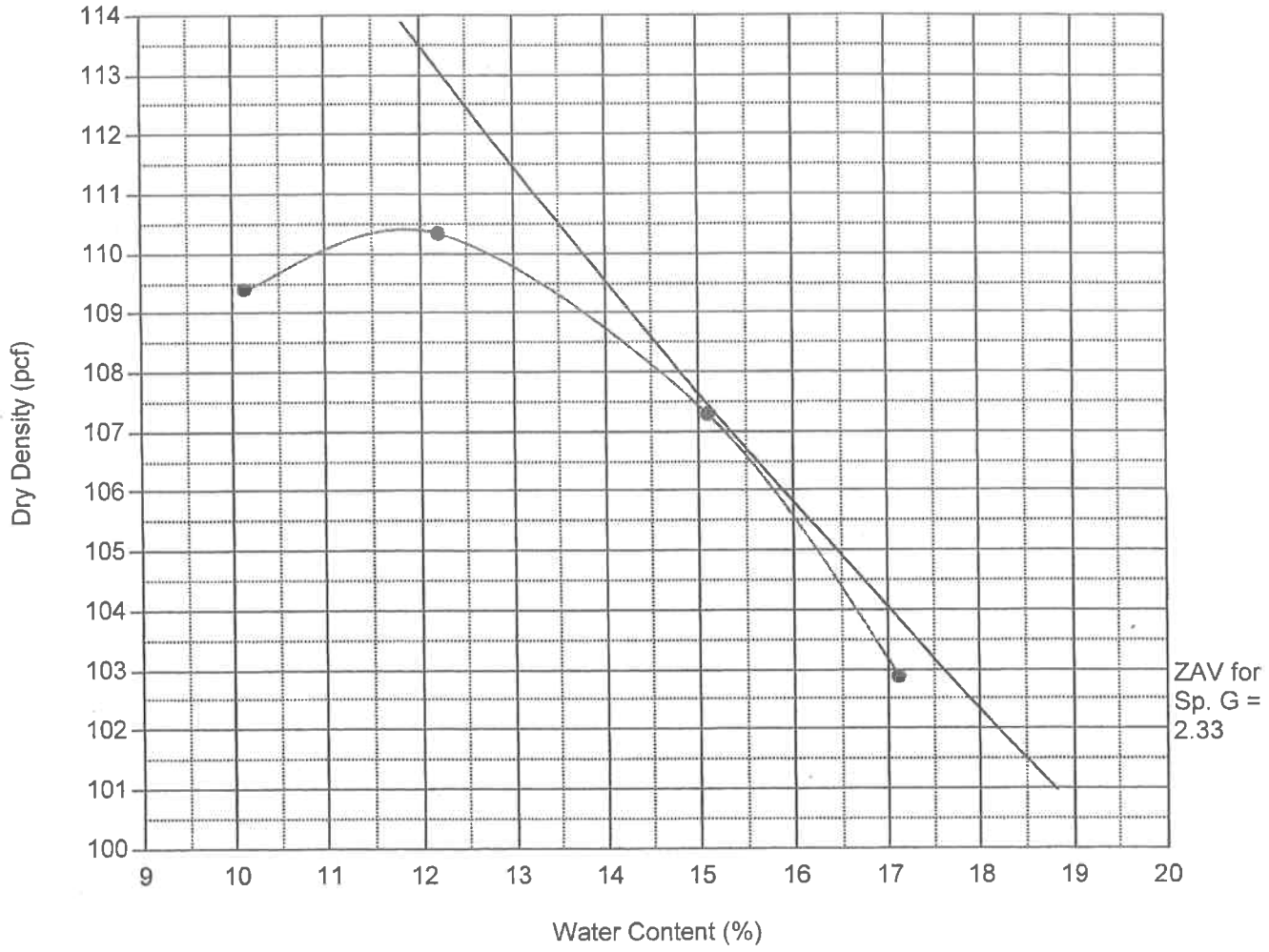
Weather conditions at time of testing: Clear/Partly Cloudy/Cloudy/Light Rain/Heavy Rain/Snow/Sleet

Temp. 90's

Submitted by: _____ Date: 7-19-10

Reviewed by: _____ Date: 7-26-10

Compaction Test Report



Test Results	Material Description
Test Specification: ASTM D698 Standard Proctor Method A **Maximum Dry Density:** 110.4 pcf **Optimum Moisture:** 11.8 %	Tan, red, micaceous, silty sand
Client: NC Department of Transportation **Project:** NCDOT Project U-2211-B (Parcel 9) **Project No.** 6470100155.01 **Test No:** 1 **Date:** 7/23/2010 **Source:** On Site: Parcel # 9 (Shuford Property)	**Remarks:** Natural Field Moisture: 9.0% (moisture loss during transportation is anticipated)
MACTEC	**Tested By:** Joe Nesbitt **Checked By:** K.Weir