

**PRELIMINARY SITE ASSESSMENT
FOR
PARCEL #59
WILMINGTON RIVER CLUB PROPERTY
BRUNSWICK COUNTY, NORTH CAROLINA**

**STATE PROJECT: R-2633B
WBS ELEMENT: 34491.1.2
US 17 – WILMINGTON BYPASS**

PREPARED FOR:

**NCDOT GEOTECHNICAL ENGINEERING UNIT-GEOENVIRONMENTAL SECTION
1589 MSC
RALEIGH, NORTH CAROLINA 27699-1589**

JUNE 30, 2010

PREPARED BY:

**CATLIN ENGINEERS AND SCIENTISTS
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CATLIN PROJECT NO. 210050

**CORPORATE GEOLOGY LICENSE CERTIFICATION NO. C-118
CORPORATE LICENSURE NO. FOR ENGINEERING SERVICES C-0585**

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June 30, 2010

1.0 INTRODUCTION

1.1 PURPOSE OF INVESTIGATION AND DESCRIPTION

CATLIN Engineers and Scientists (CATLIN) were retained by the North Carolina Department of Transportation (NCDOT) Geotechnical Engineering Unit to provide a field investigation concluding with a Preliminary Site Assessment (PSA) for the above referenced property. In response to a Request for Technical and Cost Proposal (RFP) dated April 1, 2010, and subsequent site reconnaissance and discussions with NCDOT GeoEnvironmental Project Manager Mr. Terry Fox, LG, CATLIN submitted a proposal for conducting an investigation at the Wilmington River Club (WRC) parcel near Navassa, North Carolina. Figure 1 illustrates the general location and the Site Map is illustrated on Figure 2.

According to the RFP:

This Hunting Club Parcel borders the High Rise Service Company property. The High Rise site has petroleum contaminated soil and groundwater. Petroleum products have been buried along the northern property boundary extending over and onto the WRC parcel. A series of borings spaced at about 100 feet along the east-west access road is recommended.

The work scope as requested includes:

- Determine if contaminated soils are present.
- If contamination is evident, estimate the quantity of impacted soils and indicate the approximate area of soil contamination on a site map.
- Prepare a report including field activities, findings, and recommendations and submit in triplicate.

In addition to the RFP, NCDOT provided plan sheets associated with the roadway construction. CATLIN and NCDOT agreed to proposed boring and sample locations within the right-of-way and/or easement for soil sample collection and laboratory analysis for semi-volatile organics, volatile organics, and polychlorinated bi-phenols (PCBs). Subsequent to site reconnaissance and further scope clarification, it was determined that a geophysical investigation for possible underground storage tanks (USTs) would not be conducted and no groundwater sample would be collected. CATLIN's field activities concluded on May 25, 2010. This report documents our activities and findings.

1.2 BACKGROUND INFORMATION

The site is part of an 899 acre undeveloped tract of land utilized for hunting. The property is located on the north side of Royster Road, east of Navassa Road and bordered to the east by Cape Fear River. The site area of investigation is just north of a dirt access road.

There are known petroleum soil and groundwater impacts on the High Rise Property located adjacent to the south. There are no known or suspected releases at the subject site or on the Wilmington River Club Property.

2.0 METHODS

Proposed borings were indicated on the NCDOT provided plan sheets and sent to NCDOT before finalizing the scope of work and cost estimate. During site reconnaissance the approximate proposed/planned boring locations were identified by GPS coordinate locations in the field.

Per NCDOT request, one (1) boring was advanced every 100 feet along the proposed right-of-way. A total of six (6) borings were advanced and one soil sample from each boring was collected for laboratory analysis.

For regulatory purposes, soil sample results are compared to the North Carolina Department of Environment and Natural Resources (NCDENR) Soil-to-Groundwater Maximum Contaminant Concentrations (MSCCs) and the North Carolina Inactive Hazardous Sites Branch (NC IHSB) Preliminary Health Based Preliminary Soil Remediation Goal (PSRG) and Protection of Groundwater Soil Remediation Goal (SRG), collectively, "SRGs". Samples revealing concentrations above the MSCCs or SRGs are considered impacted.

2.1 FIELD METHODS

All field work was conducted in general accordance with state and federal guidelines and industry standards.

Boring coordinates were collected utilizing a Trimble® Global Positioning System (GPS) unit. A North Carolina certified well driller advanced and properly abandoned all borings. CATLIN personnel gathered subsurface soil data at the site by Direct Push Technology (DPT) boring advancement using an AMS PowerProbe™ 9600D (PowerProbe). The borings were advanced to depth by static force and a 90-pound hydraulic percussion hammer. Two and one-quarter inch diameter by four-foot length steel is used as casing. Soil samples were continuously collected in four-foot long and one and one-half inch diameter clear liners. Liners are removed from the casing and then cut in half longitudinally to allow for visual/manual classification utilizing the Unified Soil Classification System (USCS). Soil samples were collected continuously from near the surface to boring termination. Soils were removed from the liners in two-foot intervals and placed in sealable polyethylene bags for organic vapor analysis (OVA) headspace screening. The USCS and OVA information was recorded on field logs and has been transferred to the Boring Logs provided in Appendix A.

Soil samples were collected for laboratory analysis above the water table from the two-foot interval revealing the highest OVA reading. New disposable nitrile gloves were worn during sampling activities. All samples were placed into laboratory provided glassware and packed on ice in an insulated cooler for transportation to the laboratory. Sample integrity was maintained by following proper Chain of Custody procedures. A copy of the Chain of Custody is provided following the analytical report in Appendix B.

Boreholes were abandoned to just below the surface using three-eighth inch bentonite chips. Bentonite and water were poured into the borehole simultaneously to facilitate hydration. Final borehole and sample locations were surveyed utilizing a Trimble® GPS survey instrument. Borehole locations and site features are illustrated on Figure 2.

2.2 LABORATORY TESTING

Following boring advancement, selected soils were placed in the appropriately labeled glassware. In an attempt to provide information regarding potential impact to soils with reasonable analytical expense, soil samples were analyzed for volatile and semi-volatile organics per Environmental Protection Agency (EPA) Methods 8260 and 8270, respectively. Soils were also analyzed for the presence of PCBs per EPA Method 8082.

A total of six (6) soil samples were submitted to SGS North America Inc. (NC Certification # 481). Chain of Custody documentation is included in Appendix B.

3.0 RESULTS

Silty sand soils were encountered across the project site with some clay also discovered at DPT-01 and trace clay nodules at DPT-05. No petroleum odors were noted in the borings. The DPT-01 boring was terminated in wet soils at 12 feet below land surface (BLS). The DPT-02 through DPT-06 borings were terminated at four (4) feet BLS with saturated soils encountered at approximately three (3) feet BLS. Complete boring logs are provided in Appendix A.

Summarized soil sample analytical results are provided on Tables 1 and 2. Boring logs including USCS information and OVA screening results are provided in Appendix A. Sample locations are illustrated on Figure 2. The complete analytical report is provided in Appendix B.

Results of OVA headspace screening ranged from zero to one (1) parts per million (see Boring Logs). No detectable concentrations of EPA Method 8270 semi-volatile organic compounds or PCBs (per EPA Method 8082) were revealed in any of the soil samples. Minor concentrations of three (3) EPA Method 8260 compounds were detected in all the samples but none were above the lowest corresponding standards (NCDENR MSCCs or NC IHSB SRGs). Additionally, Acetone and Methylene Chloride are common laboratory artifacts and concentrations revealed in the soil samples may not be indicative of soil impacts.

4.0 SUMMARY AND DISCUSSION

A preliminary site assessment was conducted at the subject site as requested by NCDOT. Right-of-Way acquisition for US 17 Wilmington Bypass roadway construction is proposed at the site.

Six (6) soil borings were advanced across the site for soil sample collection and laboratory analysis. Silty sand soils were encountered during boring advancement. No analyzed compounds were detected above the established MSCCs or SRGs.

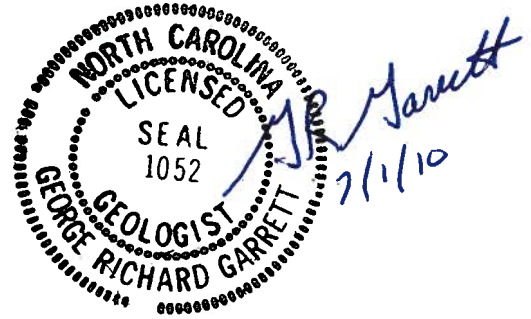
5.0 LIMITATIONS

This report is based on the agreed work scope and a review of available data from limited sampling. It is possible that this investigation may have failed to reveal the presence of contamination in the project area where such contamination may exist. Although CATLIN has used accepted methods appropriate for soil and groundwater sampling, CATLIN cannot guarantee that additional soil and/or groundwater contamination does not exist.

6.0 SIGNATURES



Benjamin J. Ashba
Project Manager



G. Richard Garrett, P.G.
Contract Manager

TABLES

**TABLE 1
 SUMMARY OF SOIL LABORATORY RESULTS - EPA METHODS 8260 AND 8270**

Parcel #59, Wilmington River Club

Sample ID	Contaminant of Concern →		Acetone	2-Butanone	Methylene Chloride	All other EPA Method 8260 Compounds	All EPA Method 8270 Compounds
	Date Collected	Sample Depth (ft. BLS)					
DPT-01 (10-11')	5/25/2010	10 - 11	0.0136 J	<0.00500	0.00349 J	BMDL	BMDL
DPT-02 (3-4')	5/25/2010	3 - 4	0.0896	0.00972 J	0.00950 J	BMDL	BMDL
DPT-03 (3-4')	5/25/2010	3 - 4	0.0266 J	<0.00489	0.00191 J	BMDL	BMDL
DPT-04 (3-4')	5/25/2010	3 - 4	0.0412 J	<0.00491	0.00576 J	BMDL	BMDL
DPT-05 (3-4')	5/25/2010	3 - 4	0.0360 J	<0.00492	0.00378 J	BMDL	BMDL
DPT-06 (3-4')	5/25/2010	3 - 4	0.0280 J	<0.00449	0.00187 J	BMDL	BMDL
Trip Blank	5/25/2010	Not Applicable	<0.00691	<0.00543	0.00495 J	BMDL	BMDL
NCDENR Soil-to-Groundwater MSCC			24	16	0.02	Varies	Varies
NC IHSB Preliminary Health Based PSRG (1)			12,000	5,600	11	Varies	Varies
NC IHSB Protection of Groundwater SRG (2)			2.8	17	0.022	Varies	Varies

All results in milligrams per kilogram (mg/kg).

† = This compound is a common laboratory solvent and its detection may be due to the background concentration found in the trip blank and not be related to soil impacts

BMDL = Below Method Detection Limit

ft. BLS = Feet Below Land Surface

< = Less than method detection limit

J = Estimated concentration, below calibration range and above method detection limit

NE = None Established

NCDENR = North Carolina Department of Environment and Natural Resources

MSCC = Maximum Soil Contaminant Concentration

NC IHSB = North Carolina Inactive Hazardous Sites Branch

(1) = Preliminary Soil Remediation Goal (PSRG) adapted from the April 2009 USEPA Regional Screening Tables. Cleanup below method detection limits using analytical methods prescribed in the guidelines, is not required.

(2) = Soil Remediation Goal (SRG) developed using a soil leachate model using default values appropriate for North Carolina.

**TABLE 2
 SUMMARY OF SOIL LABORATORY RESULTS - EPA METHOD 8082 (PCBs)**

Parcel #59, Wilmington River Club.

Sample ID	Contaminant of Concern →		All EPA Method 8082 Compounds
	Date Collected	Sample Depth (ft. BLS)	
DPT-01 (10-11')	5/25/2010	10 - 11	BMDL
DPT-02 (3-4')	5/25/2010	3 - 4	BMDL
DPT-03 (3-4')	5/25/2010	3 - 4	BMDL
DPT-04 (3-4')	5/25/2010	3 - 4	BMDL
DPT-05 (3-4')	5/25/2010	3 - 4	BMDL
DPT-06 (3-4')	5/25/2010	3 - 4	BMDL
NC IHSB Preliminary Health Based PSRG (1)			Varies
NC IHSB Protection of Groundwater SRG (2)			Varies

PCBs = Polychlorinated biphenyls

All results in micrograms per kilogram (µg/kg).

BMDL = Below Method Detection Limit

ft. BLS = Feet Below Land Surface.

NC IHSB = North Carolina Inactive Hazardous Sites Branch

(1) = Preliminary Soil Remediation Goal (PSRG) adapted from the April 2009 USEPA Regional Screening Tables. Cleanup below method detection limits using analytical methods prescribed in the guidelines, is not required.

(2) = Soil Remediation Goal (SRG) developed using a soil leachate model using default values appropriate for North Carolina.

FIGURES

DESCRIPTION:
PARCEL #59
WILMINGTON RIVER CLUB
US-17 WILMINGTON BYPASS



WBS ELEM: 34491.1.2 FIGURE No: 1
ST PROJ: R-2633B TOTAL FIGURES: 2
FA No: N/A
COUNTY: BRUNSWICK

PREPARED BY:
 **CATLIN**
Engineers and Scientists
210050

SCALE:

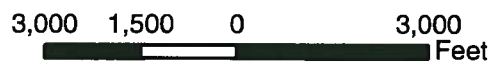
AS SHOWN

TITLE:

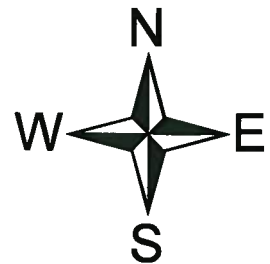
**SITE LOCATION
MAP**





Source: Adapted from Orthophotos from Brunswick County GIS Department.

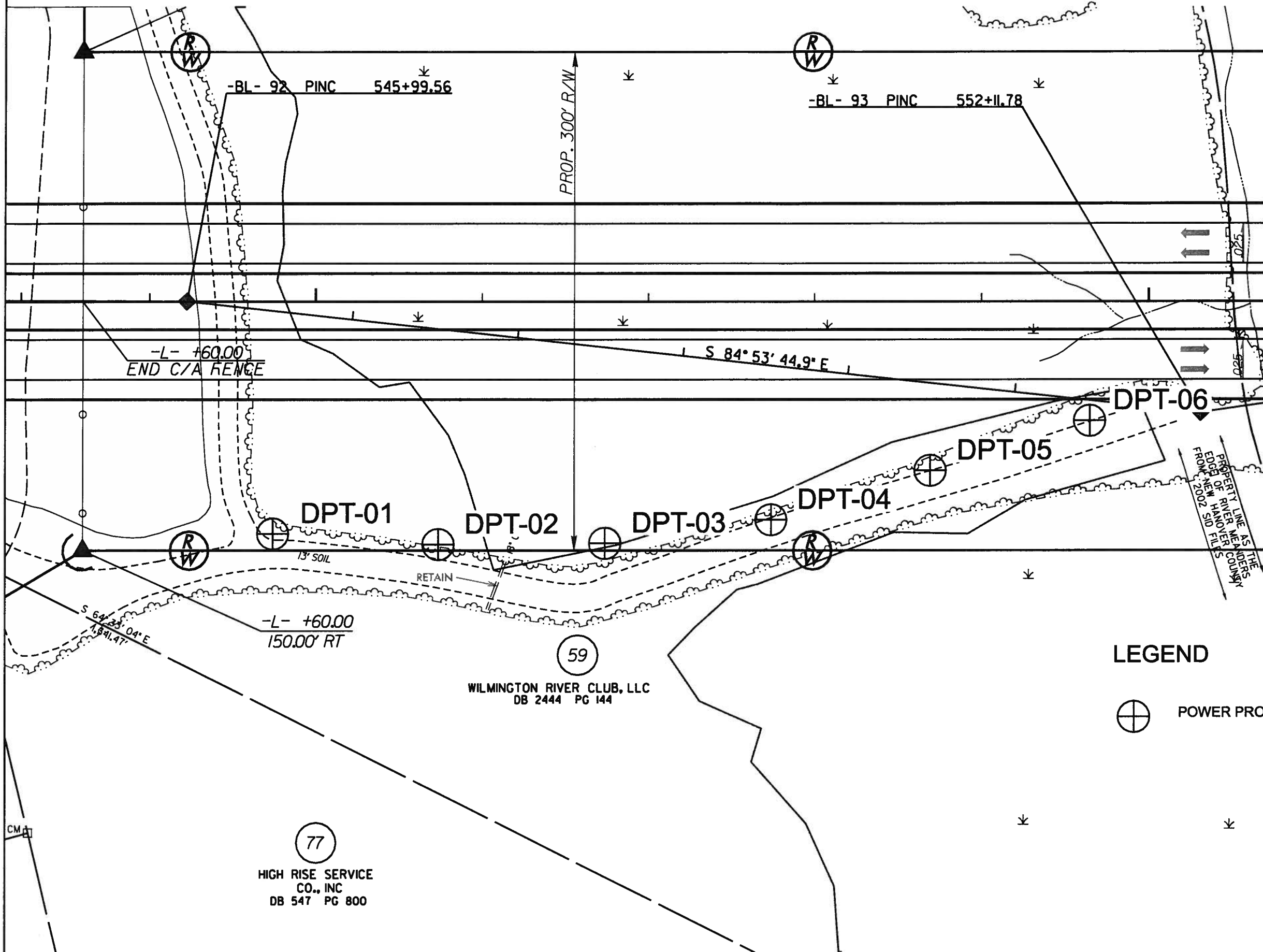


SCALE



NOTE:
 FIGURE ADAPTED FROM NCDOT SUPPLIED PLAN SHEET NO. 24

	STATE PROJ.: R-2833B	FIGURE NO. 02
	WBS ELEM.: 34491.1.2	TOTAL FIGURES: 02
	F.A. NO.: N/A	R/W FIGURE NO.:
	COUNTY: BRUNSWICK	
DESCRIPTION: US17 - WILMINGTON BYPASS PARCEL #59 WILMINGTON RIVER CLUB SITE MAP WITH POWER PROBE/SAMPLE LOCATIONS		
PREPARED BY: 	210050	



NAD 83/95

LEGEND

 POWER PROBE BORING/SAMPLE LOCATION

APPENDICES

APPENDIX A
BORING LOGS

BORING LOG



PROJECT NO.: 210050	STATE: N.C.	COUNTY: Brunswick	LOCATION: Navassa
PROJECT NAME: Parcel #59 - Wilmington River Club Property		LOGGED BY: Benjamin J. Ashba	BORING ID: DPT01
NORTHING: 12,455,628.11		EASTING: 732,855.22	CREW:
SYSTEM: UTM NAD83 (USft)		BORING LOCATION:	LAND ELEV.: NM
DRILL MACHINE: Power Probe	METHOD: Direct Push	0 HOUR DTW: 12.0	BORING DEPTH: 12.0
START DATE: 5/25/10	FINISH DATE: 5/25/10	24 HOUR DTW: N/A	ROCK DEPTH: --

DEPTH	BLOW COUNT 0.5 0.5 0.5 0.5	MOI.	OVA RESULTS (ppm) 0 1000 2000 3000 4000	LAB.	USCS	LOG	SOIL AND ROCK DESCRIPTION	
							DEPTH	ELEVATION
0.0							0.0	LAND SURFACE
1.0	DIRECT PUSH	D	▲0.0		SM		1.0	Organic-rich dark brown SILTY SAND.
2.0	DIRECT PUSH	D	▲0.0		SM			Orange-brown SILTY SAND.
4.0	DIRECT PUSH	D	▲0.0		CL		4.0	Gray w/ mottling medium stiff and medium plasticity CLAY.
6.0	DIRECT PUSH	D	▲0.0		CL		6.0	SANDY CLAY, grading from clay to sand.
8.0	DIRECT PUSH	D	▲0.0		CL			
10.0	DIRECT PUSH	M	▲0.0	DPT01 (10-11')	SC/SM		10.0	Orange-brown SILTY to CLAYEY SAND. Wet at 12' BLS.
12.0							12.0	Boring Terminated at Depth 12.0 ft

CATLIN ENVIRO. LOG 210050_NCDOT-PARCEL-59.GPJ_CATLIN.GDT 6/29/10

▽ = 0hr. DTW

▼ = 24hr. DTW

BORING LOG



PROJECT NO.: 210050	STATE: N.C.	COUNTY: Brunswick	LOCATION: Navassa
PROJECT NAME: Parcel #59 - Wilmington River Club Property		LOGGED BY: Benjamin J. Ashba	BORING ID: DPT02
		DRILLER: William J. Miller	
NORTHING: 12,455,619.77	EASTING: 732,954.72	CREW:	
SYSTEM: UTM NAD83 (USft)	BORING LOCATION:		LAND ELEV.: NM
DRILL MACHINE: Power Probe	METHOD: Direct Push	0 HOUR DTW: 3.5	BORING DEPTH: 4.0
START DATE: 5/25/10	FINISH DATE: 5/25/10	24 HOUR DTW: N/A	ROCK DEPTH: --

DEPTH	BLOW COUNT 0.5 0.5 0.5 0.5	MOI.	OVA RESULTS (ppm) 0 1000 2000 3000 4000	LAB.	U S C S	L O G	SOIL AND ROCK		
							DEPTH	DESCRIPTION	ELEVATION
0.0							0.0	LAND SURFACE	
2.0	DIRECT PUSH	M	▲0.0					Light yellowish orange and brown SILTY SAND. Saturated at 3.5' BLS.	
4.0	DIRECT PUSH	Sat.	▲1.0	DPT02 (3-4')	SM	▽	4.0		
							Boring Terminated at Depth 4.0 ft		

CATLIN.ENVIRO.LOG.210050.NC.DOT.PARCEL-59.GEL.CATLIN.GDT.6/29/10

▽ = 0hr. DTW ▼ = 24hr. DTW

BORING LOG



PROJECT NO.: 210050	STATE: N.C.	COUNTY: Brunswick	LOCATION: Navassa
PROJECT NAME: Parcel #59 - Wilmington River Club Property		LOGGED BY: Benjamin J. Ashba	BORING ID: DPT03
		DRILLER: William J. Miller	
NORTHING: 12,455,618.59	EASTING: 733,055.21	CREW:	
SYSTEM: UTM NAD83 (USft)	BORING LOCATION:		LAND ELEV.: NM
DRILL MACHINE: Power Probe	METHOD: Direct Push	0 HOUR DTW: 2.5	BORING DEPTH: 4.0
START DATE: 5/25/10	FINISH DATE: 5/25/10	24 HOUR DTW: N/A	ROCK DEPTH: --

DEPTH	BLOW COUNT 0.5 0.5 0.5 0.5	MOI.	OVA RESULTS (ppm) 0 1000 2000 3000 4000	LAB.	USCS	LOG	SOIL AND ROCK		
							DEPTH	DESCRIPTION	ELEVATION
0.0							0.0	LAND SURFACE	
2.0	DIRECT PUSH	M	▲1.0			SM		Varying brown SILTY SAND. Saturated at 2.5' BLS.	
4.0	DIRECT PUSH	Sat.	▲1.0	DPT03 (3-4')			4.0		
								Boring Terminated at Depth 4.0 ft	

CATLIN\ENVIRO.LOG_210050_NCDOT-PARCEL_59.GPJ_CATLIN.GDT_6/29/10

▽ = 0hr. DTW

▼ = 24hr. DTW

BORING LOG



CATLIN
Engineers and Scientists

WBS Element: 34491.1.2
State Project: R-2633B

Wilmington, NC

PROJECT NO.: 210050	STATE: N.C.	COUNTY: Brunswick	LOCATION: Navassa
PROJECT NAME: Parcel #59 - Wilmington River Club Property		LOGGED BY: Benjamin J. Ashba	BORING ID: DPT04
		DRILLER: William J. Miller	
NORTHING: 12,455,630.76	EASTING: 733,155.12	CREW:	
SYSTEM: UTM NAD83 (USft)	BORING LOCATION:		LAND ELEV.: NM
DRILL MACHINE: Power Probe	METHOD: Direct Push	0 HOUR DTW: 3.0	BORING DEPTH: 4.0
START DATE: 5/25/10	FINISH DATE: 5/25/10	24 HOUR DTW: N/A	ROCK DEPTH: --

DEPTH	BLOW COUNT 0.5 0.5 0.5 0.5	MOI.	OVA RESULTS (ppm) 0 1000 2000 3000 4000	LAB.	U S C S	L O G	SOIL AND ROCK		
							DEPTH	DESCRIPTION	ELEVATION
0.0							0.0	LAND SURFACE	
2.0	DIRECT PUSH	M	▲0.0					Varying brown SILTY SAND. Saturated at 3' BLS.	
4.0	DIRECT PUSH	Sat.	▲0.0	DPT04 (3-4')	SM	▽	4.0	Boring Terminated at Depth 4.0 ft	

CATLIN ENVIRO. LOG 210050_NCDOT-PARCEL-59_GBL_CATLIN.GDT_6/29/10

▽ = 0hr. DTW

▼ = 24hr. DTW

BORING LOG



CATLIN
Engineers and Scientists

WBS Element: 34491.1.2
State Project: R-2633B

Wilmington, NC

PROJECT NO.: 210050	STATE: N.C.	COUNTY: Brunswick	LOCATION: Navassa
PROJECT NAME: Parcel #59 - Wilmington River Club Property		LOGGED BY: Benjamin J. Ashba	BORING ID: DPT05
		DRILLER: William J. Miller	
NORTHING: 12,455,658.69	EASTING: 733,251.35	CREW:	
SYSTEM: UTM NAD83 (USft)	BORING LOCATION:		LAND ELEV.: NM
DRILL MACHINE: Power Probe	METHOD: Direct Push	0 HOUR DTW: 3.0	BORING DEPTH: 4.0
START DATE: 5/25/10	FINISH DATE: 5/25/10	24 HOUR DTW: N/A	ROCK DEPTH: --

DEPTH	BLOW COUNT 0.5 0.5 0.5 0.5	MOI.	OVA RESULTS (ppm) 0 1000 2000 3000 4000	LAB.	U S C S	L O G	SOIL AND ROCK	
							DEPTH	DESCRIPTION
0.0							0.0	LAND SURFACE
2.0	DIRECT PUSH	M	▲0.0					Brown grading to grayish-brown and tan SILTY SAND w/ trace CLAY nodules at 3.5' BLS. Saturated at 3.0' BLS.
4.0	DIRECT PUSH	Sat.	▲0.0	DPT05 (3-4')	SM	▽	4.0	
								Boring Terminated at Depth 4.0 ft

CATLIN\ENVIRO.LOG_210050_NGDOT-PARCEL-59.GPJ_CATLIN.GDT_6/29/10

▽ = 0hr. DTW

▼ = 24hr. DTW

BORING LOG



CATLIN
Engineers and Scientists

WBS Element: 34491.1.2
State Project: R-2633B

Wilmington, NC

PROJECT NO.: 210050	STATE: N.C.	COUNTY: Brunswick	LOCATION: Navassa
PROJECT NAME: Parcel #59 - Wilmington River Club Property		LOGGED BY: Benjamin J. Ashba	BORING ID: DPT06
		DRILLER: William J. Miller	
NORTHING: 12,455,686.93	EASTING: 733,347.29	CREW:	
SYSTEM: UTM NAD83 (USft)	BORING LOCATION:		LAND ELEV.: NM
DRILL MACHINE: Power Probe	METHOD: Direct Push	0 HOUR DTW: 3.5	BORING DEPTH: 4.0
START DATE: 5/25/10	FINISH DATE: 5/25/10	24 HOUR DTW: N/A	ROCK DEPTH: --

DEPTH	BLOW COUNT 0.5 0.5 0.5 0.5	MOI.	OVA RESULTS (ppm) 0 1000 2000 3000 4000	LAB.	U S C S	L O G	SOIL AND ROCK DESCRIPTION		
							DEPTH	ELEVATION	
0.0							0.0	LAND SURFACE	
2.0	DIRECT PUSH	M	▲0.0		SM	[Vertical hatching]		Brown to dark brown SILTY SAND. Grades to grayish-brown at 3' BLS. Wet at 3' BLS.	
4.0	DIRECT PUSH	W	▲0.0	DPT06 (3-4')	▽		4.0		
								Boring Terminated at Depth 4.0 ft	

CATLIN ENVIRO. LOG 210050_NCDOT-PARCEL-59.GPJ_CATLIN.GDT_6/29/10

▽ = 0hr. DTW

▼ = 24hr. DTW

APPENDIX B

LABORATORY REPORT AND CHAIN OF CUSTODY RECORD



Ben Ashba
Richard Catlin & Associates
P.O. Box 10279
Wilmington, NC 28404-0279

Report Number: G128-2536

Client Project: NCDOT US 17 ILM Bypass Parcel #59


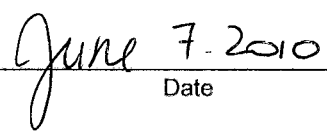
Dear Ben Ashba,

Enclosed are the results of the analytical services performed under the referenced project for the received samples and associated QC as applicable. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of five years in the event they are required for future reference. Any samples submitted to our laboratory will be retained for a maximum of thirty (30) days from the date of this report unless other arrangements are requested.

If there are any questions about the report or services performed during this project, please call Barbara Hager at (910) 350-1903. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS North America, Inc. for your analytical services. We look forward to working with you again on any additional analytical needs.

Sincerely,
SGS North America, Inc.

 
Project Manager Date
Barbara Hager

Case Narrative

Catlin

SGS Project: **G128-3536**

Project Name: **NCDOT US 17 ILM Bypass Parcel #59**

SGS North America Inc.

June 7th, 2010

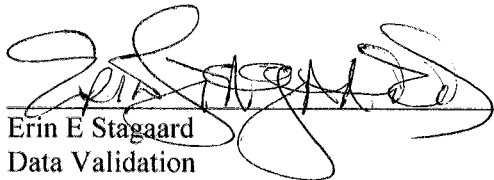
- Six soil samples were accepted into the laboratory on May 28th, 2010 at 1100 for analyses as indicated on the chain of custody. The samples were received in good condition, with a temperature of 5.7°C.
- All extractions and analyses were completed within holding time limits, with the following quality control exceptions.

8260 Analyses

- Methylene Chloride was detected in the associated trip blank below the reporting limit, but above the method detection limit. It was detected in the samples at similar concentrations. This compound is a common laboratory solvent and its detection may be due to the background concentration found in the trip blank.

8270 Analyses

- The LCS associated with batch 16726 has reported recoveries for 2- and 4-Nitroaniline that are below the QC limit, but within 10% of the lower recovery point. These compounds were not detected in the associated sample and have been appropriately 'UJ' flagged on the data.


Erin E Stagaard
Data Validation

Date 07 JUNE 10

SGS North America, Inc.

List of Reporting Abbreviations
And Data Qualifiers

B = Compound also detected in batch blank

BQL = Below Quantification Limit (RL or MDL)

DF = Dilution Factor

Dup = Duplicate

D = Detected, but RPD is > 40% between results in dual column method.

E = Estimated concentration, exceeds calibration range.

J = Estimated concentration, below calibration range and above MDL

LCS(D) = Laboratory Control Spike (Duplicate)

MDL = Method Detection Limit

MS(D) = Matrix Spike (Duplicate)

PQL = Practical Quantitation Limit

RL/CL = Reporting Limit / Control Limit

RPD = Relative Percent Difference

UJ = Target analytes with recoveries that are $10\% < \%R < LCL$; # of MEs are allowable and compounds are not detected in the sample.

mg/kg = milligram per kilogram, ppm, parts per million

ug/kg = micrograms per kilogram, ppb, parts per billion

mg/L = milligram per liter, ppm, parts per million

ug/L = micrograms per liter, ppb, parts per billion

% Rec = Percent Recovery

% solids = Percent Solids

Special Notes:

- 1) Metals and mercury samples are digested with a hot block; see the standard operating procedure document for details.
- 2) Uncertainty for all reported data is less than or equal to 30 percent.

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: DPT-01 (10-11')
 Client Project ID: NCDOT US 17 ILM Bypass Parcel #59
 Lab Sample ID G128-2536-1A
 Lab Project ID: G128-2536
 Report Basis: Dry Weight

Analyzed By: DVO
 Date Collected: 05-25-2010 10:45
 Date Received: 5/28/2010
 Matrix: Soil
 Sample Amount: 6.51 g
 %Solids: 83.5

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	MDL MG/KG	Dilution Factor	Date Analyzed	Flag
Acetone	0.0136	0.0460	0.00636	1	6/5/2010	J
Benzene	BQL	0.00460	0.00098	1	6/5/2010	
Bromobenzene	BQL	0.00460	0.00095	1	6/5/2010	
Bromochloromethane	BQL	0.00460	0.00158	1	6/5/2010	
Bromodichloromethane	BQL	0.00460	0.00091	1	6/5/2010	
Bromoform	BQL	0.00460	0.00092	1	6/5/2010	
Bromomethane	BQL	0.00460	0.00097	1	6/5/2010	
2-Butanone	BQL	0.0230	0.00500	1	6/5/2010	
n-Butylbenzene	BQL	0.00460	0.00088	1	6/5/2010	
sec-Butylbenzene	BQL	0.00460	0.00093	1	6/5/2010	
tert-Butylbenzene	BQL	0.00460	0.00103	1	6/5/2010	
Carbon disulfide	BQL	0.00460	0.00247	1	6/5/2010	
Carbon tetrachloride	BQL	0.00460	0.00094	1	6/5/2010	
Chlorobenzene	BQL	0.00460	0.00109	1	6/5/2010	
Chloroethane	BQL	0.00460	0.00146	1	6/5/2010	
Chloroform	BQL	0.00460	0.00110	1	6/5/2010	
Chloromethane	BQL	0.00460	0.00104	1	6/5/2010	
2-Chlorotoluene	BQL	0.00460	0.00093	1	6/5/2010	
4-Chlorotoluene	BQL	0.00460	0.00115	1	6/5/2010	
Dibromochloromethane	BQL	0.00460	0.00127	1	6/5/2010	
1,2-Dibromo-3-chloropropane	BQL	0.0230	0.00133	1	6/5/2010	
Dibromomethane	BQL	0.00460	0.00139	1	6/5/2010	
1,2-Dibromoethane (EDB)	BQL	0.00460	0.00104	1	6/5/2010	
1,2-Dichlorobenzene	BQL	0.00460	0.00119	1	6/5/2010	
1,3-Dichlorobenzene	BQL	0.00460	0.00118	1	6/5/2010	
1,4-Dichlorobenzene	BQL	0.00460	0.00097	1	6/5/2010	
trans-1,4-Dichloro-2-butene	BQL	0.0230	0.00127	1	6/5/2010	
1,1-Dichloroethane	BQL	0.00460	0.00098	1	6/5/2010	
1,1-Dichloroethene	BQL	0.00460	0.00136	1	6/5/2010	
1,2-Dichloroethane	BQL	0.00460	0.00121	1	6/5/2010	
cis-1,2-Dichloroethene	BQL	0.00460	0.00118	1	6/5/2010	
trans-1,2-dichloroethene	BQL	0.00460	0.00104	1	6/5/2010	
1,2-Dichloropropane	BQL	0.00460	0.00109	1	6/5/2010	
1,3-Dichloropropane	BQL	0.00460	0.00103	1	6/5/2010	
2,2-Dichloropropane	BQL	0.00460	0.00110	1	6/5/2010	
1,1-Dichloropropene	BQL	0.00460	0.00144	1	6/5/2010	
cis-1,3-Dichloropropene	BQL	0.00460	0.00077	1	6/5/2010	
trans-1,3-Dichloropropene	BQL	0.00460	0.00089	1	6/5/2010	
Dichlorodifluoromethane	BQL	0.00460	0.00121	1	6/5/2010	
Diisopropyl ether (DIPE)	BQL	0.00460	0.00104	1	6/5/2010	
Ethylbenzene	BQL	0.00460	0.00080	1	6/5/2010	

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: DPT-01 (10-11')
 Client Project ID: NCDOT US 17 ILM Bypass Parcel #59
 Lab Sample ID G128-2536-1A
 Lab Project ID: G128-2536
 Report Basis: Dry Weight

Analyzed By: DVO
 Date Collected: 05-25-2010 10:45
 Date Received: 5/28/2010
 Matrix: Soil
 Sample Amount: 6.51 g
 %Solids: 83.5

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	MDL MG/KG	Dilution Factor	Date Analyzed	Flag
Hexachlorobutadiene	BQL	0.00460	0.00090	1	6/5/2010	
2-Hexanone	BQL	0.0115	0.00298	1	6/5/2010	
Iodomethane	BQL	0.00460	0.00099	1	6/5/2010	
Isopropylbenzene	BQL	0.00460	0.00082	1	6/5/2010	
4-Isopropyltoluene	BQL	0.00460	0.00098	1	6/5/2010	
Methylene chloride	0.00349	0.0184	0.00109	1	6/5/2010	J
4-Methyl-2-pentanone	BQL	0.0115	0.00426	1	6/5/2010	
Methyl-tert-butyl ether (MTBE)	BQL	0.00460	0.00102	1	6/5/2010	
Naphthalene	BQL	0.00460	0.00078	1	6/5/2010	
n-Propyl benzene	BQL	0.00460	0.00062	1	6/5/2010	
Styrene	BQL	0.00460	0.00101	1	6/5/2010	
1,1,1,2-Tetrachloroethane	BQL	0.00460	0.00094	1	6/5/2010	
1,1,2,2-Tetrachloroethane	BQL	0.00460	0.00104	1	6/5/2010	
Tetrachloroethene	BQL	0.00460	0.00084	1	6/5/2010	
Toluene	BQL	0.00460	0.00092	1	6/5/2010	
1,2,3-Trichlorobenzene	BQL	0.00460	0.00096	1	6/5/2010	
1,2,4-Trichlorobenzene	BQL	0.00460	0.00095	1	6/5/2010	
Trichloroethene	BQL	0.00460	0.00088	1	6/5/2010	
1,1,1-Trichloroethane	BQL	0.00460	0.00104	1	6/5/2010	
1,1,2-Trichloroethane	BQL	0.00460	0.00151	1	6/5/2010	
Trichlorofluoromethane	BQL	0.00460	0.00095	1	6/5/2010	
1,2,3-Trichloropropane	BQL	0.00460	0.00114	1	6/5/2010	
1,2,4-Trimethylbenzene	BQL	0.00460	0.00116	1	6/5/2010	
1,3,5-Trimethylbenzene	BQL	0.00460	0.00105	1	6/5/2010	
Vinyl chloride	BQL	0.00460	0.00125	1	6/5/2010	
m-,p-Xylene	BQL	0.00920	0.00177	1	6/5/2010	
o-Xylene	BQL	0.00460	0.00089	1	6/5/2010	

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	0.05	0.0545	109
Toluene-d8	0.05	0.0502	100
4-Bromofluorobenzene	0.05	0.0439	88

Comments:

Flags:

BQL = Below Quantitation Limits.
 J = Detected below the quantitation limit.

Analyst: DVO

Reviewed By: 

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: DPT-02 (3-4')

Analyzed By: DVO

Client Project ID: NCDOT US 17 ILM Bypass Parcel #59

Date Collected: 05-25-2010 10:30

Lab Sample ID G128-2536-2A

Date Received: 5/28/2010

Lab Project ID: G128-2536

Matrix: Soil

Report Basis: Dry Weight

Sample Amount: 6.34 g

%Solids: 84.0

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	MDL MG/KG	Dilution Factor	Date Analyzed	Flag
Acetone	0.0896	0.0469	0.00648	1	6/5/2010	
Benzene	BQL	0.00469	0.00100	1	6/5/2010	
Bromobenzene	BQL	0.00469	0.00097	1	6/5/2010	
Bromochloromethane	BQL	0.00469	0.00161	1	6/5/2010	
Bromodichloromethane	BQL	0.00469	0.00093	1	6/5/2010	
Bromoform	BQL	0.00469	0.00094	1	6/5/2010	
Bromomethane	BQL	0.00469	0.00099	1	6/5/2010	
2-Butanone	0.00972	0.0234	0.00509	1	6/5/2010	J
n-Butylbenzene	BQL	0.00469	0.00090	1	6/5/2010	
sec-Butylbenzene	BQL	0.00469	0.00095	1	6/5/2010	
tert-Butylbenzene	BQL	0.00469	0.00105	1	6/5/2010	
Carbon disulfide	BQL	0.00469	0.00251	1	6/5/2010	
Carbon tetrachloride	BQL	0.00469	0.00096	1	6/5/2010	
Chlorobenzene	BQL	0.00469	0.00112	1	6/5/2010	
Chloroethane	BQL	0.00469	0.00149	1	6/5/2010	
Chloroform	BQL	0.00469	0.00113	1	6/5/2010	
Chloromethane	BQL	0.00469	0.00106	1	6/5/2010	
2-Chlorotoluene	BQL	0.00469	0.00095	1	6/5/2010	
4-Chlorotoluene	BQL	0.00469	0.00117	1	6/5/2010	
Dibromochloromethane	BQL	0.00469	0.00129	1	6/5/2010	
1,2-Dibromo-3-chloropropane	BQL	0.0234	0.00136	1	6/5/2010	
Dibromomethane	BQL	0.00469	0.00142	1	6/5/2010	
1,2-Dibromoethane (EDB)	BQL	0.00469	0.00106	1	6/5/2010	
1,2-Dichlorobenzene	BQL	0.00469	0.00121	1	6/5/2010	
1,3-Dichlorobenzene	BQL	0.00469	0.00120	1	6/5/2010	
1,4-Dichlorobenzene	BQL	0.00469	0.00099	1	6/5/2010	
trans-1,4-Dichloro-2-butene	BQL	0.0234	0.00129	1	6/5/2010	
1,1-Dichloroethane	BQL	0.00469	0.00099	1	6/5/2010	
1,1-Dichloroethene	BQL	0.00469	0.00139	1	6/5/2010	
1,2-Dichloroethane	BQL	0.00469	0.00124	1	6/5/2010	
cis-1,2-Dichloroethene	BQL	0.00469	0.00120	1	6/5/2010	
trans-1,2-dichloroethene	BQL	0.00469	0.00106	1	6/5/2010	
1,2-Dichloropropane	BQL	0.00469	0.00111	1	6/5/2010	
1,3-Dichloropropane	BQL	0.00469	0.00105	1	6/5/2010	
2,2-Dichloropropane	BQL	0.00469	0.00113	1	6/5/2010	
1,1-Dichloropropene	BQL	0.00469	0.00147	1	6/5/2010	
cis-1,3-Dichloropropene	BQL	0.00469	0.00078	1	6/5/2010	
trans-1,3-Dichloropropene	BQL	0.00469	0.00090	1	6/5/2010	
Dichlorodifluoromethane	BQL	0.00469	0.00124	1	6/5/2010	
Diisopropyl ether (DIPE)	BQL	0.00469	0.00106	1	6/5/2010	
Ethylbenzene	BQL	0.00469	0.00081	1	6/5/2010	

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: DPT-02 (3-4')
 Client Project ID: NCDOT US 17 ILM Bypass Parcel #59
 Lab Sample ID G128-2536-2A
 Lab Project ID: G128-2536
 Report Basis: Dry Weight

Analyzed By: DVO
 Date Collected: 05-25-2010 10:30
 Date Received: 5/28/2010
 Matrix: Soil
 Sample Amount: 6.34 g
 %Solids: 84.0

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	MDL MG/KG	Dilution Factor	Date Analyzed	Flag
Hexachlorobutadiene	BQL	0.00469	0.00091	1	6/5/2010	
2-Hexanone	BQL	0.0117	0.00304	1	6/5/2010	
Iodomethane	BQL	0.00469	0.00101	1	6/5/2010	
Isopropylbenzene	BQL	0.00469	0.00083	1	6/5/2010	
4-Isopropyltoluene	BQL	0.00469	0.00100	1	6/5/2010	
Methylene chloride	0.00950	0.0188	0.00112	1	6/5/2010	J
4-Methyl-2-pentanone	BQL	0.0117	0.00434	1	6/5/2010	
Methyl-tert-butyl ether (MTBE)	BQL	0.00469	0.00104	1	6/5/2010	
Naphthalene	BQL	0.00469	0.00080	1	6/5/2010	
n-Propyl benzene	BQL	0.00469	0.00064	1	6/5/2010	
Styrene	BQL	0.00469	0.00103	1	6/5/2010	
1,1,1,2-Tetrachloroethane	BQL	0.00469	0.00096	1	6/5/2010	
1,1,2,2-Tetrachloroethane	BQL	0.00469	0.00106	1	6/5/2010	
Tetrachloroethene	BQL	0.00469	0.00086	1	6/5/2010	
Toluene	BQL	0.00469	0.00094	1	6/5/2010	
1,2,3-Trichlorobenzene	BQL	0.00469	0.00098	1	6/5/2010	
1,2,4-Trichlorobenzene	BQL	0.00469	0.00097	1	6/5/2010	
Trichloroethene	BQL	0.00469	0.00090	1	6/5/2010	
1,1,1-Trichloroethane	BQL	0.00469	0.00106	1	6/5/2010	
1,1,2-Trichloroethane	BQL	0.00469	0.00154	1	6/5/2010	
Trichlorofluoromethane	BQL	0.00469	0.00097	1	6/5/2010	
1,2,3-Trichloropropane	BQL	0.00469	0.00116	1	6/5/2010	
1,2,4-Trimethylbenzene	BQL	0.00469	0.00118	1	6/5/2010	
1,3,5-Trimethylbenzene	BQL	0.00469	0.00107	1	6/5/2010	
Vinyl chloride	BQL	0.00469	0.00128	1	6/5/2010	
m-,p-Xylene	BQL	0.00938	0.00180	1	6/5/2010	
o-Xylene	BQL	0.00469	0.00091	1	6/5/2010	

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	0.05	0.053	106
Toluene-d8	0.05	0.0483	97
4-Bromofluorobenzene	0.05	0.0439	88

Comments:

Flags:

BQL = Below Quantitation Limits.
 J = Detected below the quantitation limit.

Analyst: DVO

Reviewed By: [Signature]

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: DPT-03 (3-4')
 Client Project ID: NCDOT US 17 ILM Bypass Parcel #59
 Lab Sample ID G128-2536-3A
 Lab Project ID: G128-2536
 Report Basis: Dry Weight

Analyzed By: DVO
 Date Collected: 05-25-2010 10:15
 Date Received: 5/28/2010
 Matrix: Soil
 Sample Amount: 6.67 g
 %Solids: 83.3

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	MDL MG/KG	Dilution Factor	Date Analyzed	Flag
Acetone	0.0266	0.0450	0.00622	1	6/5/2010	J
Benzene	BQL	0.00450	0.00096	1	6/5/2010	
Bromobenzene	BQL	0.00450	0.00093	1	6/5/2010	
Bromochloromethane	BQL	0.00450	0.00155	1	6/5/2010	
Bromodichloromethane	BQL	0.00450	0.00089	1	6/5/2010	
Bromoform	BQL	0.00450	0.00090	1	6/5/2010	
Bromomethane	BQL	0.00450	0.00095	1	6/5/2010	
2-Butanone	BQL	0.0225	0.00489	1	6/5/2010	
n-Butylbenzene	BQL	0.00450	0.00086	1	6/5/2010	
sec-Butylbenzene	BQL	0.00450	0.00091	1	6/5/2010	
tert-Butylbenzene	BQL	0.00450	0.00101	1	6/5/2010	
Carbon disulfide	BQL	0.00450	0.00241	1	6/5/2010	
Carbon tetrachloride	BQL	0.00450	0.00092	1	6/5/2010	
Chlorobenzene	BQL	0.00450	0.00107	1	6/5/2010	
Chloroethane	BQL	0.00450	0.00143	1	6/5/2010	
Chloroform	BQL	0.00450	0.00108	1	6/5/2010	
Chloromethane	BQL	0.00450	0.00102	1	6/5/2010	
2-Chlorotoluene	BQL	0.00450	0.00091	1	6/5/2010	
4-Chlorotoluene	BQL	0.00450	0.00112	1	6/5/2010	
Dibromochloromethane	BQL	0.00450	0.00124	1	6/5/2010	
1,2-Dibromo-3-chloropropane	BQL	0.0225	0.00130	1	6/5/2010	
Dibromomethane	BQL	0.00450	0.00136	1	6/5/2010	
1,2-Dibromoethane (EDB)	BQL	0.00450	0.00102	1	6/5/2010	
1,2-Dichlorobenzene	BQL	0.00450	0.00116	1	6/5/2010	
1,3-Dichlorobenzene	BQL	0.00450	0.00115	1	6/5/2010	
1,4-Dichlorobenzene	BQL	0.00450	0.00095	1	6/5/2010	
trans-1,4-Dichloro-2-butene	BQL	0.0225	0.00124	1	6/5/2010	
1,1-Dichloroethane	BQL	0.00450	0.00095	1	6/5/2010	
1,1-Dichloroethene	BQL	0.00450	0.00133	1	6/5/2010	
1,2-Dichloroethane	BQL	0.00450	0.00119	1	6/5/2010	
cis-1,2-Dichloroethene	BQL	0.00450	0.00115	1	6/5/2010	
trans-1,2-dichloroethene	BQL	0.00450	0.00102	1	6/5/2010	
1,2-Dichloropropane	BQL	0.00450	0.00106	1	6/5/2010	
1,3-Dichloropropane	BQL	0.00450	0.00101	1	6/5/2010	
2,2-Dichloropropane	BQL	0.00450	0.00108	1	6/5/2010	
1,1-Dichloropropene	BQL	0.00450	0.00141	1	6/5/2010	
cis-1,3-Dichloropropene	BQL	0.00450	0.00075	1	6/5/2010	
trans-1,3-Dichloropropene	BQL	0.00450	0.00087	1	6/5/2010	
Dichlorodifluoromethane	BQL	0.00450	0.00119	1	6/5/2010	
Diisopropyl ether (DIPE)	BQL	0.00450	0.00102	1	6/5/2010	
Ethylbenzene	BQL	0.00450	0.00078	1	6/5/2010	

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: DPT-03 (3-4')
 Client Project ID: NCDOT US 17 ILM Bypass Parcel #59
 Lab Sample ID G128-2536-3A
 Lab Project ID: G128-2536
 Report Basis: Dry Weight

Analyzed By: DVO
 Date Collected: 05-25-2010 10:15
 Date Received: 5/28/2010
 Matrix: Soil
 Sample Amount: 6.67 g
 %Solids: 83.3

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	MDL MG/KG	Dilution Factor	Date Analyzed	Flag
Hexachlorobutadiene	BQL	0.00450	0.00088	1	6/5/2010	
2-Hexanone	BQL	0.0112	0.00292	1	6/5/2010	
Iodomethane	BQL	0.00450	0.00097	1	6/5/2010	
Isopropylbenzene	BQL	0.00450	0.00080	1	6/5/2010	
4-Isopropyltoluene	BQL	0.00450	0.00096	1	6/5/2010	
Methylene chloride	0.00191	0.0180	0.00107	1	6/5/2010	J
4-Methyl-2-pentanone	BQL	0.0112	0.00417	1	6/5/2010	
Methyl-tert-butyl ether (MTBE)	BQL	0.00450	0.00100	1	6/5/2010	
Naphthalene	BQL	0.00450	0.00077	1	6/5/2010	
n-Propyl benzene	BQL	0.00450	0.00061	1	6/5/2010	
Styrene	BQL	0.00450	0.00099	1	6/5/2010	
1,1,1,2-Tetrachloroethane	BQL	0.00450	0.00092	1	6/5/2010	
1,1,2,2-Tetrachloroethane	BQL	0.00450	0.00102	1	6/5/2010	
Tetrachloroethene	BQL	0.00450	0.00082	1	6/5/2010	
Toluene	BQL	0.00450	0.00090	1	6/5/2010	
1,2,3-Trichlorobenzene	BQL	0.00450	0.00094	1	6/5/2010	
1,2,4-Trichlorobenzene	BQL	0.00450	0.00093	1	6/5/2010	
Trichloroethene	BQL	0.00450	0.00086	1	6/5/2010	
1,1,1-Trichloroethane	BQL	0.00450	0.00102	1	6/5/2010	
1,1,2-Trichloroethane	BQL	0.00450	0.00148	1	6/5/2010	
Trichlorofluoromethane	BQL	0.00450	0.00093	1	6/5/2010	
1,2,3-Trichloropropane	BQL	0.00450	0.00112	1	6/5/2010	
1,2,4-Trimethylbenzene	BQL	0.00450	0.00113	1	6/5/2010	
1,3,5-Trimethylbenzene	BQL	0.00450	0.00103	1	6/5/2010	
Vinyl chloride	BQL	0.00450	0.00122	1	6/5/2010	
m-,p-Xylene	BQL	0.00900	0.00173	1	6/5/2010	
o-Xylene	BQL	0.00450	0.00087	1	6/5/2010	


	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	0.05	0.0541	108
Toluene-d8	0.05	0.0485	97
4-Bromofluorobenzene	0.05	0.0424	85

Comments:

Flags:

BQL = Below Quantitation Limits.
 J = Detected below the quantitation limit.

Analyst: DVO

Reviewed By: 

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: DPT-04 (3-4')

Analyzed By: DVO

Client Project ID: NCDOT US 17 ILM Bypass Parcel #59

Date Collected: 05-25-2010 10:00

Lab Sample ID G128-2536-4A

Date Received: 5/28/2010

Lab Project ID: G128-2536

Matrix: Soil

Report Basis: Dry Weight

Sample Amount: 6.57 g

%Solids: 84.1

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	MDL MG/KG	Dilution Factor	Date Analyzed	Flag
Acetone	0.0412	0.0452	0.00625	1	6/5/2010	J
Benzene	BQL	0.00452	0.00097	1	6/5/2010	
Bromobenzene	BQL	0.00452	0.00093	1	6/5/2010	
Bromochloromethane	BQL	0.00452	0.00155	1	6/5/2010	
Bromodichloromethane	BQL	0.00452	0.00090	1	6/5/2010	
Bromoform	BQL	0.00452	0.00090	1	6/5/2010	
Bromomethane	BQL	0.00452	0.00095	1	6/5/2010	
2-Butanone	BQL	0.0226	0.00491	1	6/5/2010	
n-Butylbenzene	BQL	0.00452	0.00086	1	6/5/2010	
sec-Butylbenzene	BQL	0.00452	0.00091	1	6/5/2010	
tert-Butylbenzene	BQL	0.00452	0.00101	1	6/5/2010	
Carbon disulfide	BQL	0.00452	0.00242	1	6/5/2010	
Carbon tetrachloride	BQL	0.00452	0.00092	1	6/5/2010	
Chlorobenzene	BQL	0.00452	0.00108	1	6/5/2010	
Chloroethane	BQL	0.00452	0.00144	1	6/5/2010	
Chloroform	BQL	0.00452	0.00108	1	6/5/2010	
Chloromethane	BQL	0.00452	0.00102	1	6/5/2010	
2-Chlorotoluene	BQL	0.00452	0.00091	1	6/5/2010	
4-Chlorotoluene	BQL	0.00452	0.00113	1	6/5/2010	
Dibromochloromethane	BQL	0.00452	0.00125	1	6/5/2010	
1,2-Dibromo-3-chloropropane	BQL	0.0226	0.00131	1	6/5/2010	
Dibromomethane	BQL	0.00452	0.00136	1	6/5/2010	
1,2-Dibromoethane (EDB)	BQL	0.00452	0.00102	1	6/5/2010	
1,2-Dichlorobenzene	BQL	0.00452	0.00117	1	6/5/2010	
1,3-Dichlorobenzene	BQL	0.00452	0.00116	1	6/5/2010	
1,4-Dichlorobenzene	BQL	0.00452	0.00095	1	6/5/2010	
trans-1,4-Dichloro-2-butene	BQL	0.0226	0.00125	1	6/5/2010	
1,1-Dichloroethane	BQL	0.00452	0.00096	1	6/5/2010	
1,1-Dichloroethene	BQL	0.00452	0.00134	1	6/5/2010	
1,2-Dichloroethane	BQL	0.00452	0.00119	1	6/5/2010	
cis-1,2-Dichloroethene	BQL	0.00452	0.00116	1	6/5/2010	
trans-1,2-dichloroethene	BQL	0.00452	0.00102	1	6/5/2010	
1,2-Dichloropropane	BQL	0.00452	0.00107	1	6/5/2010	
1,3-Dichloropropane	BQL	0.00452	0.00101	1	6/5/2010	
2,2-Dichloropropane	BQL	0.00452	0.00108	1	6/5/2010	
1,1-Dichloropropene	BQL	0.00452	0.00142	1	6/5/2010	
cis-1,3-Dichloropropene	BQL	0.00452	0.00075	1	6/5/2010	
trans-1,3-Dichloropropene	BQL	0.00452	0.00087	1	6/5/2010	
Dichlorodifluoromethane	BQL	0.00452	0.00119	1	6/5/2010	
Diisopropyl ether (DIPE)	BQL	0.00452	0.00102	1	6/5/2010	
Ethylbenzene	BQL	0.00452	0.00078	1	6/5/2010	

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: DPT-04 (3-4')
 Client Project ID: NCDOT US 17 ILM Bypass Parcel #59
 Lab Sample ID G128-2536-4A
 Lab Project ID: G128-2536
 Report Basis: Dry Weight

Analyzed By: DVO
 Date Collected: 05-25-2010 10:00
 Date Received: 5/28/2010
 Matrix: Soil
 Sample Amount: 6.57 g
 %Solids: 84.1

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	MDL MG/KG	Dilution Factor	Date Analyzed	Flag
Hexachlorobutadiene	BQL	0.00452	0.00088	1	6/5/2010	
2-Hexanone	BQL	0.0113	0.00293	1	6/5/2010	
Iodomethane	BQL	0.00452	0.00098	1	6/5/2010	
Isopropylbenzene	BQL	0.00452	0.00080	1	6/5/2010	
4-Isopropyltoluene	BQL	0.00452	0.00097	1	6/5/2010	
Methylene chloride	0.00576	0.0181	0.00108	1	6/5/2010	J
4-Methyl-2-pentanone	BQL	0.0113	0.00418	1	6/5/2010	
Methyl-tert-butyl ether (MTBE)	BQL	0.00452	0.00100	1	6/5/2010	
Naphthalene	BQL	0.00452	0.00077	1	6/5/2010	
n-Propyl benzene	BQL	0.00452	0.00061	1	6/5/2010	
Styrene	BQL	0.00452	0.00099	1	6/5/2010	
1,1,1,2-Tetrachloroethane	BQL	0.00452	0.00092	1	6/5/2010	
1,1,2,2-Tetrachloroethane	BQL	0.00452	0.00102	1	6/5/2010	
Tetrachloroethene	BQL	0.00452	0.00083	1	6/5/2010	
Toluene	BQL	0.00452	0.00090	1	6/5/2010	
1,2,3-Trichlorobenzene	BQL	0.00452	0.00094	1	6/5/2010	
1,2,4-Trichlorobenzene	BQL	0.00452	0.00093	1	6/5/2010	
Trichloroethene	BQL	0.00452	0.00086	1	6/5/2010	
1,1,1-Trichloroethane	BQL	0.00452	0.00102	1	6/5/2010	
1,1,2-Trichloroethane	BQL	0.00452	0.00148	1	6/5/2010	
Trichlorofluoromethane	BQL	0.00452	0.00093	1	6/5/2010	
1,2,3-Trichloropropane	BQL	0.00452	0.00112	1	6/5/2010	
1,2,4-Trimethylbenzene	BQL	0.00452	0.00114	1	6/5/2010	
1,3,5-Trimethylbenzene	BQL	0.00452	0.00103	1	6/5/2010	
Vinyl chloride	BQL	0.00452	0.00123	1	6/5/2010	
m-,p-Xylene	BQL	0.00904	0.00174	1	6/5/2010	
o-Xylene	BQL	0.00452	0.00088	1	6/5/2010	

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	0.05	0.055	110
Toluene-d8	0.05	0.0494	99
4-Bromofluorobenzene	0.05	0.0427	85

Comments:

Flags:

BQL = Below Quantitation Limits.
 J = Detected below the quantitation limit.

Analyst: DVO

Reviewed By: [Signature]

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: DPT-05 (3-4')
 Client Project ID: NCDOT US 17 ILM Bypass Parcel #59
 Lab Sample ID G128-2536-5A
 Lab Project ID: G128-2536
 Report Basis: Dry Weight

Analyzed By: DVO
 Date Collected: 05-25-2010 09:45
 Date Received: 5/28/2010
 Matrix: Soil
 Sample Amount: 6.48 g
 %Solids: 85.0

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	MDL MG/KG	Dilution Factor	Date Analyzed	Flag
Acetone	0.0360	0.0453	0.00626	1	6/5/2010	J
Benzene	BQL	0.00453	0.00097	1	6/5/2010	
Bromobenzene	BQL	0.00453	0.00093	1	6/5/2010	
Bromochloromethane	BQL	0.00453	0.00156	1	6/5/2010	
Bromodichloromethane	BQL	0.00453	0.00090	1	6/5/2010	
Bromoform	BQL	0.00453	0.00091	1	6/5/2010	
Bromomethane	BQL	0.00453	0.00095	1	6/5/2010	
2-Butanone	BQL	0.0227	0.00492	1	6/5/2010	
n-Butylbenzene	BQL	0.00453	0.00087	1	6/5/2010	
sec-Butylbenzene	BQL	0.00453	0.00092	1	6/5/2010	
tert-Butylbenzene	BQL	0.00453	0.00102	1	6/5/2010	
Carbon disulfide	BQL	0.00453	0.00243	1	6/5/2010	
Carbon tetrachloride	BQL	0.00453	0.00092	1	6/5/2010	
Chlorobenzene	BQL	0.00453	0.00108	1	6/5/2010	
Chloroethane	BQL	0.00453	0.00144	1	6/5/2010	
Chloroform	BQL	0.00453	0.00109	1	6/5/2010	
Chloromethane	BQL	0.00453	0.00102	1	6/5/2010	
2-Chlorotoluene	BQL	0.00453	0.00092	1	6/5/2010	
4-Chlorotoluene	BQL	0.00453	0.00113	1	6/5/2010	
Dibromochloromethane	BQL	0.00453	0.00125	1	6/5/2010	
1,2-Dibromo-3-chloropropane	BQL	0.0227	0.00131	1	6/5/2010	
Dibromomethane	BQL	0.00453	0.00137	1	6/5/2010	
1,2-Dibromoethane (EDB)	BQL	0.00453	0.00102	1	6/5/2010	
1,2-Dichlorobenzene	BQL	0.00453	0.00117	1	6/5/2010	
1,3-Dichlorobenzene	BQL	0.00453	0.00116	1	6/5/2010	
1,4-Dichlorobenzene	BQL	0.00453	0.00095	1	6/5/2010	
trans-1,4-Dichloro-2-butene	BQL	0.0227	0.00125	1	6/5/2010	
1,1-Dichloroethane	BQL	0.00453	0.00096	1	6/5/2010	
1,1-Dichloroethene	BQL	0.00453	0.00134	1	6/5/2010	
1,2-Dichloroethane	BQL	0.00453	0.00120	1	6/5/2010	
cis-1,2-Dichloroethene	BQL	0.00453	0.00116	1	6/5/2010	
trans-1,2-dichloroethene	BQL	0.00453	0.00102	1	6/5/2010	
1,2-Dichloropropane	BQL	0.00453	0.00107	1	6/5/2010	
1,3-Dichloropropane	BQL	0.00453	0.00102	1	6/5/2010	
2,2-Dichloropropane	BQL	0.00453	0.00109	1	6/5/2010	
1,1-Dichloropropene	BQL	0.00453	0.00142	1	6/5/2010	
cis-1,3-Dichloropropene	BQL	0.00453	0.00076	1	6/5/2010	
trans-1,3-Dichloropropene	BQL	0.00453	0.00087	1	6/5/2010	
Dichlorodifluoromethane	BQL	0.00453	0.00120	1	6/5/2010	
Diisopropyl ether (DIPE)	BQL	0.00453	0.00102	1	6/5/2010	
Ethylbenzene	BQL	0.00453	0.00079	1	6/5/2010	

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: DPT-05 (3-4')
 Client Project ID: NCDOT US 17 ILM Bypass Parcel #59
 Lab Sample ID G128-2536-5A
 Lab Project ID: G128-2536
 Report Basis: Dry Weight

Analyzed By: DVO
 Date Collected: 05-25-2010 09:45
 Date Received: 5/28/2010
 Matrix: Soil
 Sample Amount: 6.48 g
 %Solids: 85.0

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	MDL MG/KG	Dilution Factor	Date Analyzed	Flag
Hexachlorobutadiene	BQL	0.00453	0.00088	1	6/5/2010	
2-Hexanone	BQL	0.0113	0.00294	1	6/5/2010	
Iodomethane	BQL	0.00453	0.00098	1	6/5/2010	
Isopropylbenzene	BQL	0.00453	0.00081	1	6/5/2010	
4-Isopropyltoluene	BQL	0.00453	0.00097	1	6/5/2010	
Methylene chloride	0.00378	0.0181	0.00108	1	6/5/2010	J
4-Methyl-2-pentanone	BQL	0.0113	0.00420	1	6/5/2010	
Methyl-tert-butyl ether (MTBE)	BQL	0.00453	0.00101	1	6/5/2010	
Naphthalene	BQL	0.00453	0.00077	1	6/5/2010	
n-Propyl benzene	BQL	0.00453	0.00061	1	6/5/2010	
Styrene	BQL	0.00453	0.00100	1	6/5/2010	
1,1,1,2-Tetrachloroethane	BQL	0.00453	0.00092	1	6/5/2010	
1,1,2,2-Tetrachloroethane	BQL	0.00453	0.00102	1	6/5/2010	
Tetrachloroethene	BQL	0.00453	0.00083	1	6/5/2010	
Toluene	BQL	0.00453	0.00090	1	6/5/2010	
1,2,3-Trichlorobenzene	BQL	0.00453	0.00094	1	6/5/2010	
1,2,4-Trichlorobenzene	BQL	0.00453	0.00093	1	6/5/2010	
Trichloroethene	BQL	0.00453	0.00087	1	6/5/2010	
1,1,1-Trichloroethane	BQL	0.00453	0.00102	1	6/5/2010	
1,1,2-Trichloroethane	BQL	0.00453	0.00149	1	6/5/2010	
Trichlorofluoromethane	BQL	0.00453	0.00093	1	6/5/2010	
1,2,3-Trichloropropane	BQL	0.00453	0.00112	1	6/5/2010	
1,2,4-Trimethylbenzene	BQL	0.00453	0.00114	1	6/5/2010	
1,3,5-Trimethylbenzene	BQL	0.00453	0.00103	1	6/5/2010	
Vinyl chloride	BQL	0.00453	0.00123	1	6/5/2010	
m-,p-Xylene	BQL	0.00906	0.00174	1	6/5/2010	
o-Xylene	BQL	0.00453	0.00088	1	6/5/2010	


	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	0.05	0.0541	108
Toluene-d8	0.05	0.0496	99
4-Bromofluorobenzene	0.05	0.044	88

Comments:

Flags:

BQL = Below Quantitation Limits.
 J = Detected below the quantitation limit.

Analyst: DVO

Reviewed By: 

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: DPT-06 (3-4')
 Client Project ID: NCDOT US 17 ILM Bypass Parcel #59
 Lab Sample ID G128-2536-6B
 Lab Project ID: G128-2536
 Report Basis: Dry Weight

Analyzed By: DVO
 Date Collected: 05-25-2010 09:30
 Date Received: 5/28/2010
 Matrix: Soil
 Sample Amount: 7.21 g
 %Solids: 83.8

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	MDL MG/KG	Dilution Factor	Date Analyzed	Flag
Acetone	0.0280	0.0413	0.00571	1	6/7/2010	J
Benzene	BQL	0.00413	0.00088	1	6/7/2010	
Bromobenzene	BQL	0.00413	0.00085	1	6/7/2010	
Bromochloromethane	BQL	0.00413	0.00142	1	6/7/2010	
Bromodichloromethane	BQL	0.00413	0.00082	1	6/7/2010	
Bromoform	BQL	0.00413	0.00083	1	6/7/2010	
Bromomethane	BQL	0.00413	0.00087	1	6/7/2010	
2-Butanone	BQL	0.0207	0.00449	1	6/7/2010	
n-Butylbenzene	BQL	0.00413	0.00079	1	6/7/2010	
sec-Butylbenzene	BQL	0.00413	0.00084	1	6/7/2010	
tert-Butylbenzene	BQL	0.00413	0.00093	1	6/7/2010	
Carbon disulfide	BQL	0.00413	0.00221	1	6/7/2010	
Carbon tetrachloride	BQL	0.00413	0.00084	1	6/7/2010	
Chlorobenzene	BQL	0.00413	0.00098	1	6/7/2010	
Chloroethane	BQL	0.00413	0.00131	1	6/7/2010	
Chloroform	BQL	0.00413	0.00099	1	6/7/2010	
Chloromethane	BQL	0.00413	0.00093	1	6/7/2010	
2-Chlorotoluene	BQL	0.00413	0.00084	1	6/7/2010	
4-Chlorotoluene	BQL	0.00413	0.00103	1	6/7/2010	
Dibromochloromethane	BQL	0.00413	0.00114	1	6/7/2010	
1,2-Dibromo-3-chloropropane	BQL	0.0207	0.00120	1	6/7/2010	
Dibromomethane	BQL	0.00413	0.00125	1	6/7/2010	
1,2-Dibromoethane (EDB)	BQL	0.00413	0.00093	1	6/7/2010	
1,2-Dichlorobenzene	BQL	0.00413	0.00107	1	6/7/2010	
1,3-Dichlorobenzene	BQL	0.00413	0.00106	1	6/7/2010	
1,4-Dichlorobenzene	BQL	0.00413	0.00087	1	6/7/2010	
trans-1,4-Dichloro-2-butene	BQL	0.0207	0.00114	1	6/7/2010	
1,1-Dichloroethane	BQL	0.00413	0.00088	1	6/7/2010	
1,1-Dichloroethene	BQL	0.00413	0.00122	1	6/7/2010	
1,2-Dichloroethane	BQL	0.00413	0.00109	1	6/7/2010	
cis-1,2-Dichloroethene	BQL	0.00413	0.00106	1	6/7/2010	
trans-1,2-dichloroethene	BQL	0.00413	0.00093	1	6/7/2010	
1,2-Dichloropropane	BQL	0.00413	0.00098	1	6/7/2010	
1,3-Dichloropropane	BQL	0.00413	0.00093	1	6/7/2010	
2,2-Dichloropropane	BQL	0.00413	0.00099	1	6/7/2010	
1,1-Dichloropropene	BQL	0.00413	0.00130	1	6/7/2010	
cis-1,3-Dichloropropene	BQL	0.00413	0.00069	1	6/7/2010	
trans-1,3-Dichloropropene	BQL	0.00413	0.00080	1	6/7/2010	
Dichlorodifluoromethane	BQL	0.00413	0.00109	1	6/7/2010	
Diisopropyl ether (DIPE)	BQL	0.00413	0.00093	1	6/7/2010	
Ethylbenzene	BQL	0.00413	0.00072	1	6/7/2010	

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: DPT-06 (3-4')
 Client Project ID: NCDOT US 17 ILM Bypass Parcel #59
 Lab Sample ID G128-2536-6B
 Lab Project ID: G128-2536
 Report Basis: Dry Weight

Analyzed By: DVO
 Date Collected: 05-25-2010 09:30
 Date Received: 5/28/2010
 Matrix: Soil
 Sample Amount: 7.21 g
 %Solids: 83.8

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	MDL MG/KG	Dilution Factor	Date Analyzed	Flag
Hexachlorobutadiene	BQL	0.00413	0.00081	1	6/7/2010	
2-Hexanone	BQL	0.0103	0.00268	1	6/7/2010	
Iodomethane	BQL	0.00413	0.00089	1	6/7/2010	
Isopropylbenzene	BQL	0.00413	0.00073	1	6/7/2010	
4-Isopropyltoluene	BQL	0.00413	0.00088	1	6/7/2010	
Methylene chloride	0.00187	0.0165	0.00098	1	6/7/2010	J
4-Methyl-2-pentanone	BQL	0.0103	0.00383	1	6/7/2010	
Methyl-tert-butyl ether (MTBE)	BQL	0.00413	0.00092	1	6/7/2010	
Naphthalene	BQL	0.00413	0.00070	1	6/7/2010	
n-Propyl benzene	BQL	0.00413	0.00056	1	6/7/2010	
Styrene	BQL	0.00413	0.00091	1	6/7/2010	
1,1,1,2-Tetrachloroethane	BQL	0.00413	0.00084	1	6/7/2010	
1,1,2,2-Tetrachloroethane	BQL	0.00413	0.00093	1	6/7/2010	
Tetrachloroethene	BQL	0.00413	0.00076	1	6/7/2010	
Toluene	BQL	0.00413	0.00082	1	6/7/2010	
1,2,3-Trichlorobenzene	BQL	0.00413	0.00086	1	6/7/2010	
1,2,4-Trichlorobenzene	BQL	0.00413	0.00085	1	6/7/2010	
Trichloroethene	BQL	0.00413	0.00079	1	6/7/2010	
1,1,1-Trichloroethane	BQL	0.00413	0.00093	1	6/7/2010	
1,1,2-Trichloroethane	BQL	0.00413	0.00136	1	6/7/2010	
Trichlorofluoromethane	BQL	0.00413	0.00085	1	6/7/2010	
1,2,3-Trichloropropane	BQL	0.00413	0.00102	1	6/7/2010	
1,2,4-Trimethylbenzene	BQL	0.00413	0.00104	1	6/7/2010	
1,3,5-Trimethylbenzene	BQL	0.00413	0.00094	1	6/7/2010	
Vinyl chloride	BQL	0.00413	0.00112	1	6/7/2010	
m-,p-Xylene	BQL	0.00826	0.00159	1	6/7/2010	
o-Xylene	BQL	0.00413	0.00080	1	6/7/2010	


	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	0.05	0.0547	109
Toluene-d8	0.05	0.0502	100
4-Bromofluorobenzene	0.05	0.0426	85

Comments:

Flags:

BQL = Below Quantitation Limits.
 J = Detected below the quantitation limit.

Analyst: DVO

Reviewed By: 

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: Trip Blank (Not on COC)

Analyzed By: DVO

Client Project ID: NCDOT US 17 ILM Bypass Parcel #59

Date Collected: 05-25-2010 00:00

Lab Sample ID G128-2536-7A

Date Received: 5/28/2010

Lab Project ID: G128-2536

Matrix: Soil

Report Basis: 0.0

Sample Amount: 5 g

%Solids: 100.0

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	MDL MG/KG	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	0.0500	0.00691	1	6/5/2010	
Benzene	BQL	0.00500	0.00107	1	6/5/2010	
Bromobenzene	BQL	0.00500	0.00103	1	6/5/2010	
Bromochloromethane	BQL	0.00500	0.00172	1	6/5/2010	
Bromodichloromethane	BQL	0.00500	0.00099	1	6/5/2010	
Bromoform	BQL	0.00500	0.00100	1	6/5/2010	
Bromomethane	BQL	0.00500	0.00105	1	6/5/2010	
2-Butanone	BQL	0.0250	0.00543	1	6/5/2010	
n-Butylbenzene	BQL	0.00500	0.00096	1	6/5/2010	
sec-Butylbenzene	BQL	0.00500	0.00101	1	6/5/2010	
tert-Butylbenzene	BQL	0.00500	0.00112	1	6/5/2010	
Carbon disulfide	BQL	0.00500	0.00268	1	6/5/2010	
Carbon tetrachloride	BQL	0.00500	0.00102	1	6/5/2010	
Chlorobenzene	BQL	0.00500	0.00119	1	6/5/2010	
Chloroethane	BQL	0.00500	0.00159	1	6/5/2010	
Chloroform	BQL	0.00500	0.00120	1	6/5/2010	
Chloromethane	BQL	0.00500	0.00113	1	6/5/2010	
2-Chlorotoluene	BQL	0.00500	0.00101	1	6/5/2010	
4-Chlorotoluene	BQL	0.00500	0.00125	1	6/5/2010	
Dibromochloromethane	BQL	0.00500	0.00138	1	6/5/2010	
1,2-Dibromo-3-chloropropane	BQL	0.0250	0.00145	1	6/5/2010	
Dibromomethane	BQL	0.00500	0.00151	1	6/5/2010	
1,2-Dibromoethane (EDB)	BQL	0.00500	0.00113	1	6/5/2010	
1,2-Dichlorobenzene	BQL	0.00500	0.00129	1	6/5/2010	
1,3-Dichlorobenzene	BQL	0.00500	0.00128	1	6/5/2010	
1,4-Dichlorobenzene	BQL	0.00500	0.00105	1	6/5/2010	
trans-1,4-Dichloro-2-butene	BQL	0.0250	0.00138	1	6/5/2010	
1,1-Dichloroethane	BQL	0.00500	0.00106	1	6/5/2010	
1,1-Dichloroethene	BQL	0.00500	0.00148	1	6/5/2010	
1,2-Dichloroethane	BQL	0.00500	0.00132	1	6/5/2010	
cis-1,2-Dichloroethene	BQL	0.00500	0.00128	1	6/5/2010	
trans-1,2-dichloroethene	BQL	0.00500	0.00113	1	6/5/2010	
1,2-Dichloropropane	BQL	0.00500	0.00118	1	6/5/2010	
1,3-Dichloropropane	BQL	0.00500	0.00112	1	6/5/2010	
2,2-Dichloropropane	BQL	0.00500	0.00120	1	6/5/2010	
1,1-Dichloropropene	BQL	0.00500	0.00157	1	6/5/2010	
cis-1,3-Dichloropropene	BQL	0.00500	0.00083	1	6/5/2010	
trans-1,3-Dichloropropene	BQL	0.00500	0.00096	1	6/5/2010	
Dichlorodifluoromethane	BQL	0.00500	0.00132	1	6/5/2010	
Diisopropyl ether (DIPE)	BQL	0.00500	0.00113	1	6/5/2010	
Ethylbenzene	BQL	0.00500	0.00087	1	6/5/2010	

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: Trip Blank (Not on COC)
 Client Project ID: NCDOT US 17 ILM Bypass Parcel #59
 Lab Sample ID G128-2536-7A
 Lab Project ID: G128-2536
 Report Basis: 0.0

Analyzed By: DVO
 Date Collected: 05-25-2010 00:00
 Date Received: 5/28/2010
 Matrix: Soil
 Sample Amount: 5 g
 %Solids: 100.0

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	MDL MG/KG	Dilution Factor	Date Analyzed	Flag
Hexachlorobutadiene	BQL	0.00500	0.00098	1	6/5/2010	
2-Hexanone	BQL	0.0125	0.00324	1	6/5/2010	
Iodomethane	BQL	0.00500	0.00108	1	6/5/2010	
Isopropylbenzene	BQL	0.00500	0.00089	1	6/5/2010	
4-Isopropyltoluene	BQL	0.00500	0.00107	1	6/5/2010	
Methylene chloride	0.00495	0.0200	0.00119	1	6/5/2010	J
4-Methyl-2-pentanone	BQL	0.0125	0.00463	1	6/5/2010	
Methyl-tert-butyl ether (MTBE)	BQL	0.00500	0.00111	1	6/5/2010	
Naphthalene	BQL	0.00500	0.00085	1	6/5/2010	
n-Propyl benzene	BQL	0.00500	0.00068	1	6/5/2010	
Styrene	BQL	0.00500	0.00110	1	6/5/2010	
1,1,1,2-Tetrachloroethane	BQL	0.00500	0.00102	1	6/5/2010	
1,1,2,2-Tetrachloroethane	BQL	0.00500	0.00113	1	6/5/2010	
Tetrachloroethene	BQL	0.00500	0.00092	1	6/5/2010	
Toluene	BQL	0.00500	0.00100	1	6/5/2010	
1,2,3-Trichlorobenzene	BQL	0.00500	0.00104	1	6/5/2010	
1,2,4-Trichlorobenzene	BQL	0.00500	0.00103	1	6/5/2010	
Trichloroethene	BQL	0.00500	0.00095	1	6/5/2010	
1,1,1-Trichloroethane	BQL	0.00500	0.00113	1	6/5/2010	
1,1,2-Trichloroethane	BQL	0.00500	0.00164	1	6/5/2010	
Trichlorofluoromethane	BQL	0.00500	0.00103	1	6/5/2010	
1,2,3-Trichloropropane	BQL	0.00500	0.00124	1	6/5/2010	
1,2,4-Trimethylbenzene	BQL	0.00500	0.00126	1	6/5/2010	
1,3,5-Trimethylbenzene	BQL	0.00500	0.00114	1	6/5/2010	
Vinyl chloride	BQL	0.00500	0.00136	1	6/5/2010	
m-,p-Xylene	BQL	0.0100	0.00192	1	6/5/2010	
o-Xylene	BQL	0.00500	0.00097	1	6/5/2010	

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	0.05	0.0532	106
Toluene-d8	0.05	0.0493	99
4-Bromofluorobenzene	0.05	0.0429	86

Comments:

Flags:

BQL = Below Quantitation Limits.
 J = Detected below the quantitation limit.

Analyst: DVO

Reviewed By: 

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: DPT-01 (10-11')
 Client Project ID: NCDOT US 17 ILM Bypass Parcel #59
 Lab Sample ID: G128-2536-11
 Lab Project ID: G128-2536
 Report Basis: Dry weight
 Initial Weight: 32.85 g

Analyzed By: DCS
 Date Collected: 5/25/2010 10:45
 Date Received: 5/28/2010
 Date Extracted: 6/2/2010
 Matrix: Soil
 % Solids: 83.49

Compound	Result mg/Kg	RL mg/Kg	MDL mg/Kg	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	0.365	0.056	1	6/3/2010	
Acenaphthylene	BQL	0.365	0.051	1	6/3/2010	
Anthracene	BQL	0.365	0.050	1	6/3/2010	
Benzo[a]anthracene	BQL	0.365	0.050	1	6/3/2010	
Benzo[a]pyrene	BQL	0.365	0.053	1	6/3/2010	
Benzo[b]fluoranthene	BQL	0.365	0.051	1	6/3/2010	
Benzo[g,h,i]perylene	BQL	0.365	0.063	1	6/3/2010	
Benzo[k]fluoranthene	BQL	0.365	0.052	1	6/3/2010	
Benzoic Acid	BQL	0.729	0.450	1	6/3/2010	
Bis(2-chloroethoxy)methane	BQL	0.365	0.054	1	6/3/2010	
Bis(2-chloroethyl)ether	BQL	0.365	0.074	1	6/3/2010	
Bis(2-chloroisopropyl)ether	BQL	0.365	0.059	1	6/3/2010	
Bis(2-ethylhexyl)phthalate	BQL	0.365	0.056	1	6/3/2010	
4-bromophenyl phenyl ether	BQL	0.365	0.065	1	6/3/2010	
Butylbenzylphthalate	BQL	0.365	0.054	1	6/3/2010	
2-Chloronaphthalene	BQL	0.365	0.051	1	6/3/2010	
2-Chlorophenol	BQL	0.365	0.046	1	6/3/2010	
4-Chloro-3-methylphenol	BQL	0.365	0.053	1	6/3/2010	
4-Chloroaniline	BQL	1.82	0.059	1	6/3/2010	
4-Chlorophenyl phenyl ether	BQL	0.365	0.054	1	6/3/2010	
Chrysene	BQL	0.365	0.035	1	6/3/2010	
Dibenzo[a,h]anthracene	BQL	0.365	0.047	1	6/3/2010	
Dibenzofuran	BQL	0.365	0.051	1	6/3/2010	
Di-n-Butylphthalate	BQL	0.365	0.053	1	6/3/2010	
1,2-Dichlorobenzene	BQL	0.365	0.062	1	6/3/2010	
1,3-Dichlorobenzene	BQL	0.365	0.059	1	6/3/2010	
1,4-Dichlorobenzene	BQL	0.365	0.053	1	6/3/2010	
3,3'-Dichlorobenzidine	BQL	0.729	0.060	1	6/3/2010	
2,4-Dichlorophenol	BQL	0.365	0.040	1	6/3/2010	
Diethylphthalate	BQL	0.365	0.049	1	6/3/2010	
Dimethylphthalate	BQL	0.365	0.057	1	6/3/2010	
2,4-Dimethylphenol	BQL	0.365	0.066	1	6/3/2010	
Di-n-octylphthalate	BQL	0.365	0.056	1	6/3/2010	
4,6-Dinitro-2-methylphenol	BQL	1.82	0.043	1	6/3/2010	
2,4-Dinitrophenol	BQL	1.82	0.047	1	6/3/2010	
2,4-Dinitrotoluene	BQL	0.365	0.055	1	6/3/2010	
2,6-Dinitrotoluene	BQL	0.365	0.060	1	6/3/2010	
Fluoranthene	BQL	0.365	0.059	1	6/3/2010	
Fluorene	BQL	0.365	0.057	1	6/3/2010	
Hexachlorobenzene	BQL	0.365	0.079	1	6/3/2010	
Hexachlorobutadiene	BQL	0.365	0.066	1	6/3/2010	
Hexachlorocyclopentadiene	BQL	0.729	0.071	1	6/3/2010	
Hexachloroethane	BQL	0.365	0.057	1	6/3/2010	
Indeno(1,2,3-c,d)pyrene	BQL	0.365	0.043	1	6/3/2010	
Isophorone	BQL	0.365	0.053	1	6/3/2010	
2-Methylnaphthalene	BQL	0.365	0.059	1	6/3/2010	
2-Methylphenol	BQL	0.365	0.056	1	6/3/2010	

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: DPT-01 (10-11')
 Client Project ID: NCDOT US 17 ILM Bypass Parcel #59
 Lab Sample ID: G128-2536-1I
 Lab Project ID: G128-2536
 Report Basis: Dry weight
 Initial Weight: 32.85 g

Analyzed By: DCS
 Date Collected: 5/25/2010 10:45
 Date Received: 5/28/2010
 Date Extracted: 6/2/2010
 Matrix: Soil
 % Solids: 83.49

Compound	Result mg/Kg	RL mg/Kg	MDL mg/Kg	Dilution Factor	Date Analyzed	Flag
3- & 4-Methylphenol	BQL	0.365	0.047	1	6/3/2010	
Naphthalene	BQL	0.365	0.051	1	6/3/2010	
2-Nitroaniline	BQL	0.365	0.049	1	6/3/2010	UJ
3-Nitroaniline	BQL	1.82	0.054	1	6/3/2010	
4-Nitroaniline	BQL	1.82	0.049	1	6/3/2010	UJ
Nitrobenzene	BQL	0.365	0.049	1	6/3/2010	
2-Nitrophenol	BQL	0.365	0.053	1	6/3/2010	
4-Nitrophenol	BQL	1.82	0.063	1	6/3/2010	
Diphenylamine *	BQL	0.365	0.059	1	6/3/2010	
Pentachlorophenol	BQL	1.82	0.034	1	6/3/2010	
Phenanthrene	BQL	0.365	0.051	1	6/3/2010	
Phenol	BQL	0.365	0.050	1	6/3/2010	
Pyrene	BQL	0.365	0.050	1	6/3/2010	
1,2,4-Trichlorobenzene	BQL	0.365	0.066	1	6/3/2010	
2,4,5-Trichlorophenol	BQL	0.365	0.054	1	6/3/2010	
2,4,6-Trichlorophenol	BQL	0.365	0.033	1	6/3/2010	

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	9	90
2-Fluorophenol	10	9	90
Nitrobenzene-d5	10	9.1	91
Phenol-d6	10	9.4	94
2,4,6-Tribromophenol	10	10.4	104
4-Terphenyl-d14	10	10.3	103

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

J = Detected below the quantitation limit.

Reviewed By: 

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: DPT-02 (3-4')
 Client Project ID: NCDOT US 17 ILM Bypass Parcel #59
 Lab Sample ID: G128-2536-2I
 Lab Project ID: G128-2536
 Report Basis: Dry weight
 Initial Weight: 32.87 g

Analyzed By: DCS
 Date Collected: 5/25/2010 10:30
 Date Received: 5/28/2010
 Date Extracted: 6/2/2010
 Matrix: Soil
 % Solids: 83.95

Compound	Result mg/Kg	RL mg/Kg	MDL mg/Kg	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	0.362	0.055	1	6/3/2010	
Acenaphthylene	BQL	0.362	0.051	1	6/3/2010	
Anthracene	BQL	0.362	0.049	1	6/3/2010	
Benzo[a]anthracene	BQL	0.362	0.050	1	6/3/2010	
Benzo[a]pyrene	BQL	0.362	0.052	1	6/3/2010	
Benzo[b]fluoranthene	BQL	0.362	0.050	1	6/3/2010	
Benzo[g,h,i]perylene	BQL	0.362	0.063	1	6/3/2010	
Benzo[k]fluoranthene	BQL	0.362	0.052	1	6/3/2010	
Benzoic Acid	BQL	0.725	0.448	1	6/3/2010	
Bis(2-chloroethoxy)methane	BQL	0.362	0.053	1	6/3/2010	
Bis(2-chloroethyl)ether	BQL	0.362	0.074	1	6/3/2010	
Bis(2-chloroisopropyl)ether	BQL	0.362	0.058	1	6/3/2010	
Bis(2-ethylhexyl)phthalate	BQL	0.362	0.055	1	6/3/2010	
4-bromophenyl phenyl ether	BQL	0.362	0.064	1	6/3/2010	
Butylbenzylphthalate	BQL	0.362	0.054	1	6/3/2010	
2-Chloronaphthalene	BQL	0.362	0.050	1	6/3/2010	
2-Chlorophenol	BQL	0.362	0.046	1	6/3/2010	
4-Chloro-3-methylphenol	BQL	0.362	0.053	1	6/3/2010	
4-Chloroaniline	BQL	1.81	0.059	1	6/3/2010	
4-Chlorophenyl phenyl ether	BQL	0.362	0.053	1	6/3/2010	
Chrysene	BQL	0.362	0.035	1	6/3/2010	
Dibenzo[a,h]anthracene	BQL	0.362	0.046	1	6/3/2010	
Dibenzofuran	BQL	0.362	0.051	1	6/3/2010	
Di-n-Butylphthalate	BQL	0.362	0.053	1	6/3/2010	
1,2-Dichlorobenzene	BQL	0.362	0.061	1	6/3/2010	
1,3-Dichlorobenzene	BQL	0.362	0.059	1	6/3/2010	
1,4-Dichlorobenzene	BQL	0.362	0.053	1	6/3/2010	
3,3'-Dichlorobenzidine	BQL	0.725	0.060	1	6/3/2010	
2,4-Dichlorophenol	BQL	0.362	0.040	1	6/3/2010	
Diethylphthalate	BQL	0.362	0.049	1	6/3/2010	
Dimethylphthalate	BQL	0.362	0.056	1	6/3/2010	
2,4-Dimethylphenol	BQL	0.362	0.066	1	6/3/2010	
Di-n-octylphthalate	BQL	0.362	0.056	1	6/3/2010	
4,6-Dinitro-2-methylphenol	BQL	1.81	0.043	1	6/3/2010	
2,4-Dinitrophenol	BQL	1.81	0.047	1	6/3/2010	
2,4-Dinitrotoluene	BQL	0.362	0.055	1	6/3/2010	
2,6-Dinitrotoluene	BQL	0.362	0.060	1	6/3/2010	
Fluoranthene	BQL	0.362	0.058	1	6/3/2010	
Fluorene	BQL	0.362	0.057	1	6/3/2010	
Hexachlorobenzene	BQL	0.362	0.079	1	6/3/2010	
Hexachlorobutadiene	BQL	0.362	0.066	1	6/3/2010	
Hexachlorocyclopentadiene	BQL	0.725	0.071	1	6/3/2010	
Hexachloroethane	BQL	0.362	0.057	1	6/3/2010	
Indeno(1,2,3-c,d)pyrene	BQL	0.362	0.043	1	6/3/2010	
Isophorone	BQL	0.362	0.053	1	6/3/2010	
2-Methylnaphthalene	BQL	0.362	0.059	1	6/3/2010	
2-Methylphenol	BQL	0.362	0.055	1	6/3/2010	

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: DPT-02 (3-4')
 Client Project ID: NCDOT US 17 ILM Bypass Parcel #59
 Lab Sample ID: G128-2536-2I
 Lab Project ID: G128-2536
 Report Basis: Dry weight
 Initial Weight: 32.87 g

Analyzed By: DCS
 Date Collected: 5/25/2010 10:30
 Date Received: 5/28/2010
 Date Extracted: 6/2/2010
 Matrix: Soil
 % Solids: 83.95

Compound	Result mg/Kg	RL mg/Kg	MDL mg/Kg	Dilution Factor	Date Analyzed	Flag
3- & 4-Methylphenol	BQL	0.362	0.047	1	6/3/2010	
Naphthalene	BQL	0.362	0.051	1	6/3/2010	
2-Nitroaniline	BQL	0.362	0.049	1	6/3/2010	UJ
3-Nitroaniline	BQL	1.81	0.053	1	6/3/2010	
4-Nitroaniline	BQL	1.81	0.049	1	6/3/2010	UJ
Nitrobenzene	BQL	0.362	0.048	1	6/3/2010	
2-Nitrophenol	BQL	0.362	0.053	1	6/3/2010	
4-Nitrophenol	BQL	1.81	0.063	1	6/3/2010	
Diphenylamine *	BQL	0.362	0.058	1	6/3/2010	
Pentachlorophenol	BQL	1.81	0.033	1	6/3/2010	
Phenanthrene	BQL	0.362	0.051	1	6/3/2010	
Phenol	BQL	0.362	0.049	1	6/3/2010	
Pyrene	BQL	0.362	0.049	1	6/3/2010	
1,2,4-Trichlorobenzene	BQL	0.362	0.065	1	6/3/2010	
2,4,5-Trichlorophenol	BQL	0.362	0.054	1	6/3/2010	
2,4,6-Trichlorophenol	BQL	0.362	0.032	1	6/3/2010	
		Spike Added	Spike Result	Percent Recovered		
2-Fluorobiphenyl		10	9.1	91		
2-Fluorophenol		10	9	90		
Nitrobenzene-d5		10	9	90		
Phenol-d6		10	9.2	92		
2,4,6-Tribromophenol		10	10.6	106		
4-Terphenyl-d14		10	10.2	102		

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.
 J = Detected below the quantitation limit.

Reviewed By: 

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: DPT-03 (3-4')
 Client Project ID: NCDOT US 17 ILM Bypass Parcel #59
 Lab Sample ID: G128-2536-3K
 Lab Project ID: G128-2536
 Report Basis: Dry weight
 Initial Weight: 32.24 g

Analyzed By: DCS
 Date Collected: 5/25/2010 10:15
 Date Received: 5/28/2010
 Date Extracted: 6/2/2010
 Matrix: Soil
 % Solids: 83.32

Compound	Result mg/Kg	RL mg/Kg	MDL mg/Kg	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	0.372	0.057	1	6/3/2010	
Acenaphthylene	BQL	0.372	0.052	1	6/3/2010	
Anthracene	BQL	0.372	0.051	1	6/3/2010	
Benzo[a]anthracene	BQL	0.372	0.051	1	6/3/2010	
Benzo[a]pyrene	BQL	0.372	0.054	1	6/3/2010	
Benzo[b]fluoranthene	BQL	0.372	0.052	1	6/3/2010	
Benzo[g,h,i]perylene	BQL	0.372	0.065	1	6/3/2010	
Benzo[k]fluoranthene	BQL	0.372	0.053	1	6/3/2010	
Benzoic Acid	BQL	0.745	0.460	1	6/3/2010	
Bis(2-chloroethoxy)methane	BQL	0.372	0.055	1	6/3/2010	
Bis(2-chloroethyl)ether	BQL	0.372	0.076	1	6/3/2010	
Bis(2-chloroisopropyl)ether	BQL	0.372	0.060	1	6/3/2010	
Bis(2-ethylhexyl)phthalate	BQL	0.372	0.057	1	6/3/2010	
4-bromophenyl phenyl ether	BQL	0.372	0.066	1	6/3/2010	
Butylbenzylphthalate	BQL	0.372	0.055	1	6/3/2010	
2-Chloronaphthalene	BQL	0.372	0.052	1	6/3/2010	
2-Chlorophenol	BQL	0.372	0.047	1	6/3/2010	
4-Chloro-3-methylphenol	BQL	0.372	0.054	1	6/3/2010	
4-Chloroaniline	BQL	1.86	0.061	1	6/3/2010	
4-Chlorophenyl phenyl ether	BQL	0.372	0.055	1	6/3/2010	
Chrysene	BQL	0.372	0.036	1	6/3/2010	
Dibenzo[a,h]anthracene	BQL	0.372	0.048	1	6/3/2010	
Dibenzofuran	BQL	0.372	0.053	1	6/3/2010	
Di-n-Butylphthalate	BQL	0.372	0.054	1	6/3/2010	
1,2-Dichlorobenzene	BQL	0.372	0.063	1	6/3/2010	
1,3-Dichlorobenzene	BQL	0.372	0.060	1	6/3/2010	
1,4-Dichlorobenzene	BQL	0.372	0.054	1	6/3/2010	
3,3'-Dichlorobenzidine	BQL	0.745	0.061	1	6/3/2010	
2,4-Dichlorophenol	BQL	0.372	0.041	1	6/3/2010	
Diethylphthalate	BQL	0.372	0.050	1	6/3/2010	
Dimethylphthalate	BQL	0.372	0.058	1	6/3/2010	
2,4-Dimethylphenol	BQL	0.372	0.067	1	6/3/2010	
Di-n-octylphthalate	BQL	0.372	0.057	1	6/3/2010	
4,6-Dinitro-2-methylphenol	BQL	1.86	0.044	1	6/3/2010	
2,4-Dinitrophenol	BQL	1.86	0.048	1	6/3/2010	
2,4-Dinitrotoluene	BQL	0.372	0.057	1	6/3/2010	
2,6-Dinitrotoluene	BQL	0.372	0.061	1	6/3/2010	
Fluoranthene	BQL	0.372	0.060	1	6/3/2010	
Fluorene	BQL	0.372	0.058	1	6/3/2010	
Hexachlorobenzene	BQL	0.372	0.081	1	6/3/2010	
Hexachlorobutadiene	BQL	0.372	0.068	1	6/3/2010	
Hexachlorocyclopentadiene	BQL	0.745	0.073	1	6/3/2010	
Hexachloroethane	BQL	0.372	0.058	1	6/3/2010	
Indeno(1,2,3-c,d)pyrene	BQL	0.372	0.044	1	6/3/2010	
Isophorone	BQL	0.372	0.054	1	6/3/2010	
2-Methylnaphthalene	BQL	0.372	0.061	1	6/3/2010	
2-Methylphenol	BQL	0.372	0.057	1	6/3/2010	

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: DPT-03 (3-4')
 Client Project ID: NCDOT US 17 ILM Bypass Parcel #59
 Lab Sample ID: G128-2536-3K
 Lab Project ID: G128-2536
 Report Basis: Dry weight
 Initial Weight: 32.24 g

Analyzed By: DCS
 Date Collected: 5/25/2010 10:15
 Date Received: 5/28/2010
 Date Extracted: 6/2/2010
 Matrix: Soil
 % Solids: 83.32


Compound	Result mg/Kg	RL mg/Kg	MDL mg/Kg	Dilution Factor	Date Analyzed	Flag
3- & 4-Methylphenol	BQL	0.372	0.048	1	6/3/2010	
Naphthalene	BQL	0.372	0.052	1	6/3/2010	
2-Nitroaniline	BQL	0.372	0.050	1	6/3/2010	UJ
3-Nitroaniline	BQL	1.86	0.055	1	6/3/2010	
4-Nitroaniline	BQL	1.86	0.050	1	6/3/2010	UJ
Nitrobenzene	BQL	0.372	0.050	1	6/3/2010	
2-Nitrophenol	BQL	0.372	0.054	1	6/3/2010	
4-Nitrophenol	BQL	1.86	0.065	1	6/3/2010	
Diphenylamine *	BQL	0.372	0.060	1	6/3/2010	
Pentachlorophenol	BQL	1.86	0.034	1	6/3/2010	
Phenanthrene	BQL	0.372	0.052	1	6/3/2010	
Phenol	BQL	0.372	0.051	1	6/3/2010	
Pyrene	BQL	0.372	0.051	1	6/3/2010	
1,2,4-Trichlorobenzene	BQL	0.372	0.067	1	6/3/2010	
2,4,5-Trichlorophenol	BQL	0.372	0.056	1	6/3/2010	
2,4,6-Trichlorophenol	BQL	0.372	0.033	1	6/3/2010	
		Spike Added	Spike Result	Percent Recovered		
2-Fluorobiphenyl		10	9.1	91		
2-Fluorophenol		10	8.9	89		
Nitrobenzene-d5		10	9.1	91		
Phenol-d6		10	9.1	91		
2,4,6-Tribromophenol		10	10	100		
4-Terphenyl-d14		10	10	100		

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.
 J = Detected below the quantitation limit.

Reviewed By: 

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: DPT-04 (3-4')
 Client Project ID: NCDOT US 17 ILM Bypass Parcel #59
 Lab Sample ID: G128-2536-4I
 Lab Project ID: G128-2536
 Report Basis: Dry weight
 Initial Weight: 32.3 g

Analyzed By: DCS
 Date Collected: 5/25/2010 10:00
 Date Received: 5/28/2010
 Date Extracted: 6/2/2010
 Matrix: Soil
 % Solids: 84.07

Compound	Result mg/Kg	RL mg/Kg	MDL mg/Kg	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	0.368	0.056	1	6/3/2010	
Acenaphthylene	BQL	0.368	0.052	1	6/3/2010	
Anthracene	BQL	0.368	0.050	1	6/3/2010	
Benzo[a]anthracene	BQL	0.368	0.051	1	6/3/2010	
Benzo[a]pyrene	BQL	0.368	0.053	1	6/3/2010	
Benzo[b]fluoranthene	BQL	0.368	0.051	1	6/3/2010	
Benzo[g,h,i]perylene	BQL	0.368	0.064	1	6/3/2010	
Benzo[k]fluoranthene	BQL	0.368	0.052	1	6/3/2010	
Benzoic Acid	BQL	0.737	0.455	1	6/3/2010	
Bis(2-chloroethoxy)methane	BQL	0.368	0.054	1	6/3/2010	
Bis(2-chloroethyl)ether	BQL	0.368	0.075	1	6/3/2010	
Bis(2-chloroisopropyl)ether	BQL	0.368	0.059	1	6/3/2010	
Bis(2-ethylhexyl)phthalate	BQL	0.368	0.056	1	6/3/2010	
4-bromophenyl phenyl ether	BQL	0.368	0.065	1	6/3/2010	
Butylbenzylphthalate	BQL	0.368	0.055	1	6/3/2010	
2-Chloronaphthalene	BQL	0.368	0.051	1	6/3/2010	
2-Chlorophenol	BQL	0.368	0.047	1	6/3/2010	
4-Chloro-3-methylphenol	BQL	0.368	0.054	1	6/3/2010	
4-Chloroaniline	BQL	1.84	0.060	1	6/3/2010	
4-Chlorophenyl phenyl ether	BQL	0.368	0.054	1	6/3/2010	
Chrysene	BQL	0.368	0.035	1	6/3/2010	
Dibenzo[a,h]anthracene	BQL	0.368	0.047	1	6/3/2010	
Dibenzofuran	BQL	0.368	0.052	1	6/3/2010	
Di-n-Butylphthalate	BQL	0.368	0.054	1	6/3/2010	
1,2-Dichlorobenzene	BQL	0.368	0.062	1	6/3/2010	
1,3-Dichlorobenzene	BQL	0.368	0.060	1	6/3/2010	
1,4-Dichlorobenzene	BQL	0.368	0.053	1	6/3/2010	
3,3'-Dichlorobenzidine	BQL	0.737	0.061	1	6/3/2010	
2,4-Dichlorophenol	BQL	0.368	0.040	1	6/3/2010	
Diethylphthalate	BQL	0.368	0.049	1	6/3/2010	
Dimethylphthalate	BQL	0.368	0.057	1	6/3/2010	
2,4-Dimethylphenol	BQL	0.368	0.067	1	6/3/2010	
Di-n-octylphthalate	BQL	0.368	0.057	1	6/3/2010	
4,6-Dinitro-2-methylphenol	BQL	1.84	0.044	1	6/3/2010	
2,4-Dinitrophenol	BQL	1.84	0.048	1	6/3/2010	
2,4-Dinitrotoluene	BQL	0.368	0.056	1	6/3/2010	
2,6-Dinitrotoluene	BQL	0.368	0.061	1	6/3/2010	
Fluoranthene	BQL	0.368	0.059	1	6/3/2010	
Fluorene	BQL	0.368	0.057	1	6/3/2010	
Hexachlorobenzene	BQL	0.368	0.080	1	6/3/2010	
Hexachlorobutadiene	BQL	0.368	0.067	1	6/3/2010	
Hexachlorocyclopentadiene	BQL	0.737	0.072	1	6/3/2010	
Hexachloroethane	BQL	0.368	0.057	1	6/3/2010	
Indeno(1,2,3-c,d)pyrene	BQL	0.368	0.044	1	6/3/2010	
Isophorone	BQL	0.368	0.054	1	6/3/2010	
2-Methylnaphthalene	BQL	0.368	0.060	1	6/3/2010	
2-Methylphenol	BQL	0.368	0.056	1	6/3/2010	

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: DPT-04 (3-4')
 Client Project ID: NCDOT US 17 ILM Bypass Parcel #59
 Lab Sample ID: G128-2536-4I
 Lab Project ID: G128-2536
 Report Basis: Dry weight
 Initial Weight: 32.3 g

Analyzed By: DCS
 Date Collected: 5/25/2010 10:00
 Date Received: 5/28/2010
 Date Extracted: 6/2/2010
 Matrix: Soil
 % Solids: 84.07

Compound	Result mg/Kg	RL mg/Kg	MDL mg/Kg	Dilution Factor	Date Analyzed	Flag
3- & 4-Methylphenol	BQL	0.368	0.048	1	6/3/2010	
Naphthalene	BQL	0.368	0.052	1	6/3/2010	
2-Nitroaniline	BQL	0.368	0.049	1	6/3/2010	UJ
3-Nitroaniline	BQL	1.84	0.054	1	6/3/2010	
4-Nitroaniline	BQL	1.84	0.049	1	6/3/2010	UJ
Nitrobenzene	BQL	0.368	0.049	1	6/3/2010	
2-Nitrophenol	BQL	0.368	0.054	1	6/3/2010	
4-Nitrophenol	BQL	1.84	0.064	1	6/3/2010	
Diphenylamine *	BQL	0.368	0.059	1	6/3/2010	
Pentachlorophenol	BQL	1.84	0.034	1	6/3/2010	
Phenanthrene	BQL	0.368	0.052	1	6/3/2010	
Phenol	BQL	0.368	0.050	1	6/3/2010	
Pyrene	BQL	0.368	0.050	1	6/3/2010	
1,2,4-Trichlorobenzene	BQL	0.368	0.066	1	6/3/2010	
2,4,5-Trichlorophenol	BQL	0.368	0.055	1	6/3/2010	
2,4,6-Trichlorophenol	BQL	0.368	0.033	1	6/3/2010	
		Spike Added	Spike Result	Percent Recovered		
2-Fluorobiphenyl		10	9.4	94		
2-Fluorophenol		10	9.4	94		
Nitrobenzene-d5		10	9.6	96		
Phenol-d6		10	9.6	96		
2,4,6-Tribromophenol		10	10.2	102		
4-Terphenyl-d14		10	10.6	106		

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.
 J = Detected below the quantitation limit.

Reviewed By: 

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: DPT-05 (3-4')
 Client Project ID: NCDOT US 17 ILM Bypass Parcel #59
 Lab Sample ID: G128-2536-5I
 Lab Project ID: G128-2536
 Report Basis: Dry weight
 Initial Weight: 32.05 g

Analyzed By: DCS
 Date Collected: 5/25/2010 9:45
 Date Received: 5/28/2010
 Date Extracted: 6/2/2010
 Matrix: Soil
 % Solids: 85

Compound	Result mg/Kg	RL mg/Kg	MDL mg/Kg	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	0.367	0.056	1	6/3/2010	
Acenaphthylene	BQL	0.367	0.051	1	6/3/2010	
Anthracene	BQL	0.367	0.050	1	6/3/2010	
Benzo[a]anthracene	BQL	0.367	0.050	1	6/3/2010	
Benzo[a]pyrene	BQL	0.367	0.053	1	6/3/2010	
Benzo[b]fluoranthene	BQL	0.367	0.051	1	6/3/2010	
Benzo[g,h,i]perylene	BQL	0.367	0.064	1	6/3/2010	
Benzo[k]fluoranthene	BQL	0.367	0.052	1	6/3/2010	
Benzoic Acid	BQL	0.734	0.453	1	6/3/2010	
Bis(2-chloroethoxy)methane	BQL	0.367	0.054	1	6/3/2010	
Bis(2-chloroethyl)ether	BQL	0.367	0.075	1	6/3/2010	
Bis(2-chloroisopropyl)ether	BQL	0.367	0.059	1	6/3/2010	
Bis(2-ethylhexyl)phthalate	BQL	0.367	0.056	1	6/3/2010	
4-bromophenyl phenyl ether	BQL	0.367	0.065	1	6/3/2010	
Butylbenzylphthalate	BQL	0.367	0.054	1	6/3/2010	
2-Chloronaphthalene	BQL	0.367	0.051	1	6/3/2010	
2-Chlorophenol	BQL	0.367	0.047	1	6/3/2010	
4-Chloro-3-methylphenol	BQL	0.367	0.054	1	6/3/2010	
4-Chloroaniline	BQL	1.84	0.060	1	6/3/2010	
4-Chlorophenyl phenyl ether	BQL	0.367	0.054	1	6/3/2010	
Chrysene	BQL	0.367	0.035	1	6/3/2010	
Dibenzo[a,h]anthracene	BQL	0.367	0.047	1	6/3/2010	
Dibenzofuran	BQL	0.367	0.052	1	6/3/2010	
Di-n-Butylphthalate	BQL	0.367	0.054	1	6/3/2010	
1,2-Dichlorobenzene	BQL	0.367	0.062	1	6/3/2010	
1,3-Dichlorobenzene	BQL	0.367	0.060	1	6/3/2010	
1,4-Dichlorobenzene	BQL	0.367	0.053	1	6/3/2010	
3,3'-Dichlorobenzidine	BQL	0.734	0.061	1	6/3/2010	
2,4-Dichlorophenol	BQL	0.367	0.040	1	6/3/2010	
Diethylphthalate	BQL	0.367	0.049	1	6/3/2010	
Dimethylphthalate	BQL	0.367	0.057	1	6/3/2010	
2,4-Dimethylphenol	BQL	0.367	0.066	1	6/3/2010	
Di-n-octylphthalate	BQL	0.367	0.057	1	6/3/2010	
4,6-Dinitro-2-methylphenol	BQL	1.84	0.044	1	6/3/2010	
2,4-Dinitrophenol	BQL	1.84	0.048	1	6/3/2010	
2,4-Dinitrotoluene	BQL	0.367	0.056	1	6/3/2010	
2,6-Dinitrotoluene	BQL	0.367	0.061	1	6/3/2010	
Fluoranthene	BQL	0.367	0.059	1	6/3/2010	
Fluorene	BQL	0.367	0.057	1	6/3/2010	
Hexachlorobenzene	BQL	0.367	0.080	1	6/3/2010	
Hexachlorobutadiene	BQL	0.367	0.067	1	6/3/2010	
Hexachlorocyclopentadiene	BQL	0.734	0.072	1	6/3/2010	
Hexachloroethane	BQL	0.367	0.057	1	6/3/2010	
Indeno(1,2,3-c,d)pyrene	BQL	0.367	0.043	1	6/3/2010	
Isophorone	BQL	0.367	0.054	1	6/3/2010	
2-Methylnaphthalene	BQL	0.367	0.060	1	6/3/2010	
2-Methylphenol	BQL	0.367	0.056	1	6/3/2010	

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: DPT-05 (3-4')
 Client Project ID: NCDOT US 17 ILM Bypass Parcel #59
 Lab Sample ID: G128-2536-5I
 Lab Project ID: G128-2536
 Report Basis: Dry weight
 Initial Weight: 32.05 g

Analyzed By: DCS
 Date Collected: 5/25/2010 9:45
 Date Received: 5/28/2010
 Date Extracted: 6/2/2010
 Matrix: Soil
 % Solids: 85


Compound	Result mg/Kg	RL mg/Kg	MDL mg/Kg	Dilution Factor	Date Analyzed	Flag
3- & 4-Methylphenol	BQL	0.367	0.048	1	6/3/2010	
Naphthalene	BQL	0.367	0.051	1	6/3/2010	
2-Nitroaniline	BQL	0.367	0.049	1	6/3/2010	UJ
3-Nitroaniline	BQL	1.84	0.054	1	6/3/2010	
4-Nitroaniline	BQL	1.84	0.049	1	6/3/2010	UJ
Nitrobenzene	BQL	0.367	0.049	1	6/3/2010	
2-Nitrophenol	BQL	0.367	0.054	1	6/3/2010	
4-Nitrophenol	BQL	1.84	0.064	1	6/3/2010	
Diphenylamine *	BQL	0.367	0.059	1	6/3/2010	
Pentachlorophenol	BQL	1.84	0.034	1	6/3/2010	
Phenanthrene	BQL	0.367	0.051	1	6/3/2010	
Phenol	BQL	0.367	0.050	1	6/3/2010	
Pyrene	BQL	0.367	0.050	1	6/3/2010	
1,2,4-Trichlorobenzene	BQL	0.367	0.066	1	6/3/2010	
2,4,5-Trichlorophenol	BQL	0.367	0.055	1	6/3/2010	
2,4,6-Trichlorophenol	BQL	0.367	0.033	1	6/3/2010	
		Spike Added	Spike Result	Percent Recovered		
2-Fluorobiphenyl		10	9.2	92		
2-Fluorophenol		10	8.7	87		
Nitrobenzene-d5		10	9.2	92		
Phenol-d6		10	9	90		
2,4,6-Tribromophenol		10	10.3	103		
4-Terphenyl-d14		10	10	100		

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.
 J = Detected below the quantitation limit.

Reviewed By: 

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: DPT-06 (3-4')
 Client Project ID: NCDOT US 17 ILM Bypass Parcel #59
 Lab Sample ID: G128-2536-6M
 Lab Project ID: G128-2536
 Report Basis: Dry weight
 Initial Weight: 26.49 g

Analysed By: DCS
 Date Collected: 5/25/2010 9:30
 Date Received: 5/28/2010
 Date Extracted: 6/2/2010
 Matrix: Soil
 % Solids: 83.81

Compound	Result mg/Kg	RL mg/Kg	MDL mg/Kg	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	0.450	0.069	1	6/3/2010	
Acenaphthylene	BQL	0.450	0.063	1	6/3/2010	
Anthracene	BQL	0.450	0.061	1	6/3/2010	
Benzo[a]anthracene	BQL	0.450	0.062	1	6/3/2010	
Benzo[a]pyrene	BQL	0.450	0.065	1	6/3/2010	
Benzo[b]fluoranthene	BQL	0.450	0.063	1	6/3/2010	
Benzo[g,h,i]perylene	BQL	0.450	0.078	1	6/3/2010	
Benzo[k]fluoranthene	BQL	0.450	0.064	1	6/3/2010	
Benzoic Acid	BQL	0.901	0.556	1	6/3/2010	
Bis(2-chloroethoxy)methane	BQL	0.450	0.066	1	6/3/2010	
Bis(2-chloroethyl)ether	BQL	0.450	0.091	1	6/3/2010	
Bis(2-chloroisopropyl)ether	BQL	0.450	0.073	1	6/3/2010	
Bis(2-ethylhexyl)phthalate	BQL	0.450	0.069	1	6/3/2010	
4-bromophenyl phenyl ether	BQL	0.450	0.080	1	6/3/2010	
Butylbenzylphthalate	BQL	0.450	0.067	1	6/3/2010	
2-Chloronaphthalene	BQL	0.450	0.063	1	6/3/2010	
2-Chlorophenol	BQL	0.450	0.057	1	6/3/2010	
4-Chloro-3-methylphenol	BQL	0.450	0.066	1	6/3/2010	
4-Chloroaniline	BQL	2.25	0.073	1	6/3/2010	
4-Chlorophenyl phenyl ether	BQL	0.450	0.066	1	6/3/2010	
Chrysene	BQL	0.450	0.043	1	6/3/2010	
Dibenzo[a,h]anthracene	BQL	0.450	0.058	1	6/3/2010	
Dibenzofuran	BQL	0.450	0.064	1	6/3/2010	
Di-n-Butylphthalate	BQL	0.450	0.066	1	6/3/2010	
1,2-Dichlorobenzene	BQL	0.450	0.076	1	6/3/2010	
1,3-Dichlorobenzene	BQL	0.450	0.073	1	6/3/2010	
1,4-Dichlorobenzene	BQL	0.450	0.065	1	6/3/2010	
3,3'-Dichlorobenzidine	BQL	0.901	0.074	1	6/3/2010	
2,4-Dichlorophenol	BQL	0.450	0.049	1	6/3/2010	
Diethylphthalate	BQL	0.450	0.060	1	6/3/2010	
Dimethylphthalate	BQL	0.450	0.070	1	6/3/2010	
2,4-Dimethylphenol	BQL	0.450	0.082	1	6/3/2010	
Di-n-octylphthalate	BQL	0.450	0.069	1	6/3/2010	
4,6-Dinitro-2-methylphenol	BQL	2.25	0.054	1	6/3/2010	
2,4-Dinitrophenol	BQL	2.25	0.059	1	6/3/2010	
2,4-Dinitrotoluene	BQL	0.450	0.069	1	6/3/2010	
2,6-Dinitrotoluene	BQL	0.450	0.074	1	6/3/2010	
Fluoranthene	BQL	0.450	0.073	1	6/3/2010	
Fluorene	BQL	0.450	0.070	1	6/3/2010	
Hexachlorobenzene	BQL	0.450	0.098	1	6/3/2010	
Hexachlorobutadiene	BQL	0.450	0.082	1	6/3/2010	
Hexachlorocyclopentadiene	BQL	0.901	0.088	1	6/3/2010	
Hexachloroethane	BQL	0.450	0.070	1	6/3/2010	
Indeno(1,2,3-c,d)pyrene	BQL	0.450	0.053	1	6/3/2010	
Isophorone	BQL	0.450	0.066	1	6/3/2010	
2-Methylnaphthalene	BQL	0.450	0.073	1	6/3/2010	
2-Methylphenol	BQL	0.450	0.069	1	6/3/2010	

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: DPT-06 (3-4')
 Client Project ID: NCDOT US 17 ILM Bypass Parcel #59
 Lab Sample ID: G128-2536-6M
 Lab Project ID: G128-2536
 Report Basis: Dry weight
 Initial Weight: 26.49 g

Analyzed By: DCS
 Date Collected: 5/25/2010 9:30
 Date Received: 5/28/2010
 Date Extracted: 6/2/2010
 Matrix: Soil
 % Solids: 83.81

Compound	Result mg/Kg	RL mg/Kg	MDL mg/Kg	Dilution Factor	Date Analyzed	Flag
3- & 4-Methylphenol	BQL	0.450	0.059	1	6/3/2010	
Naphthalene	BQL	0.450	0.063	1	6/3/2010	
2-Nitroaniline	BQL	0.450	0.060	1	6/3/2010	UJ
3-Nitroaniline	BQL	2.25	0.066	1	6/3/2010	
4-Nitroaniline	BQL	2.25	0.060	1	6/3/2010	UJ
Nitrobenzene	BQL	0.450	0.060	1	6/3/2010	
2-Nitrophenol	BQL	0.450	0.066	1	6/3/2010	
4-Nitrophenol	BQL	2.25	0.078	1	6/3/2010	
Diphenylamine *	BQL	0.450	0.073	1	6/3/2010	
Pentachlorophenol	BQL	2.25	0.041	1	6/3/2010	
Phenanthrene	BQL	0.450	0.063	1	6/3/2010	
Phenol	BQL	0.450	0.061	1	6/3/2010	
Pyrene	BQL	0.450	0.061	1	6/3/2010	
1,2,4-Trichlorobenzene	BQL	0.450	0.081	1	6/3/2010	
2,4,5-Trichlorophenol	BQL	0.450	0.067	1	6/3/2010	
2,4,6-Trichlorophenol	BQL	0.450	0.040	1	6/3/2010	
		Spike Added	Spike Result	Percent Recovered		
2-Fluorobiphenyl		10	8.8	88		
2-Fluorophenol		10	8.8	88		
Nitrobenzene-d5		10	9	90		
Phenol-d6		10	9.1	91		
2,4,6-Tribromophenol		10	9.7	97		
4-Terphenyl-d14		10	9.7	97		

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.
 J = Detected below the quantitation limit.

Reviewed By: 

Results for PCBs
by EPA 8082

Client Sample ID: DPT-01 (10-11')
 Client Project ID: NCDOT US 17 ILM Bypass Parcel #59
 Lab Sample ID: G128-2536-1G
 Lab Project ID: G128-2536
 Initial Wt/Vol: 33.78 g
 Final Volume: 10 mL
 ColumnID: STX-CLPest

Analyzed By: BWS
 Date Collected: 5/25/2010 10:45
 Date Received: 5/28/2010
 Date Extracted: 6/1/2010
 Matrix: Soil
 %SOLIDS: 83.5
 Report Basis: Dry Weight

Compound	Result ug/KG	Quantitation Limit ug/KG	MDL	Dilution Factor	Date Analyzed	Flags
Aroclor-1016	BQL	35.4	2.02	1	06/02/10	
Aroclor-1221	BQL	35.4	8.83	1	06/02/10	
Aroclor-1232	BQL	35.4	4.89	1	06/02/10	
Aroclor-1242	BQL	35.4	3.23	1	06/02/10	
Aroclor-1248	BQL	35.4	1.58	1	06/02/10	
Aroclor-1254	BQL	35.4	10.4	1	06/02/10	
Aroclor-1260	BQL	35.4	2.93	1	06/02/10	

Surrogate Spike Recoveries	Spike Added (ug/L)	Spike Result (ug/L)	Percent Recovered (%)
TCMX	100	88.0	88.0
DCBP	100	101	101

Comments:

BQL = Below Quantitation Limit
 NA = Not applicable, surrogate diluted out.

Reviewed By: 

Results for PCBs
by EPA 8082

Client Sample ID: DPT-02 (3-4')
 Client Project ID: NCDOT US 17 ILM Bypass Parcel #59
 Lab Sample ID: G128-2536-2G
 Lab Project ID: G128-2536
 Initial Wt/Vol: 31.99 g
 Final Volume: 10 mL
 ColumnID: STX-CLPest


Analyzed By: BWS
 Date Collected: 5/25/2010 10:30
 Date Received: 5/28/2010
 Date Extracted: 6/1/2010
 Matrix: Soil
 %SOLIDS: 84.0
 Report Basis: Dry Weight

Compound	Result ug/KG	Quantitation Limit ug/KG	MDL	Dilution Factor	Date Analyzed	Flags
Aroclor-1016	BQL	37.2	2.12	1	06/02/10	
Aroclor-1221	BQL	37.2	9.27	1	06/02/10	
Aroclor-1232	BQL	37.2	5.14	1	06/02/10	
Aroclor-1242	BQL	37.2	3.40	1	06/02/10	
Aroclor-1248	BQL	37.2	1.66	1	06/02/10	
Aroclor-1254	BQL	37.2	11.0	1	06/02/10	
Aroclor-1260	BQL	37.2	3.08	1	06/02/10	

Surrogate Spike Recoveries	Spike Added (ug/L)	Spike Result (ug/L)	Percent Recovered (%)
TCMX	100	87.5	87.5
DCBP	100	98.5	98.5

Comments:

BQL = Below Quantitation Limit
 NA = Not applicable, surrogate diluted out.

Reviewed By: 

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Results for PCBs
by EPA 8082

Client Sample ID: DPT-03 (3-4')
 Client Project ID: NCDOT US 17 ILM Bypass Parcel #59
 Lab Sample ID: G128-2536-3G
 Lab Project ID: G128-2536
 Initial Wt/Vol: 32.81 g
 Final Volume: 10 mL
 ColumnID: STX-CLPest

Analyzed By: BWS
 Date Collected: 5/25/2010 10:15
 Date Received: 5/28/2010
 Date Extracted: 6/1/2010
 Matrix: Soil
 %SOLIDS: 83.3
 Report Basis: Dry Weight

Compound	Result ug/KG	Quantitation Limit ug/KG	MDL	Dilution Factor	Date Analyzed	Flags
Aroclor-1016	BQL	36.6	2.08	1	06/02/10	
Aroclor-1221	BQL	36.6	9.11	1	06/02/10	
Aroclor-1232	BQL	36.6	5.05	1	06/02/10	
Aroclor-1242	BQL	36.6	3.34	1	06/02/10	
Aroclor-1248	BQL	36.6	1.63	1	06/02/10	
Aroclor-1254	BQL	36.6	10.8	1	06/02/10	
Aroclor-1260	BQL	36.6	3.02	1	06/02/10	

Surrogate Spike Recoveries	Spike Added (ug/L)	Spike Result (ug/L)	Percent Recovered (%)
TCMX	100	72.3	72.3
DCBP	100	79.1	79.1

Comments:

BQL = Below Quantitation Limit
 NA = Not applicable, surrogate diluted out.

Reviewed By: 

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Results for PCBs
by EPA 8082

Client Sample ID: DPT-04 (3-4')
 Client Project ID: NCDOT US 17 ILM Bypass Parcel #59
 Lab Sample ID: G128-2536-4G
 Lab Project ID: G128-2536
 Initial Wt/Vol: 33.21 g
 Final Volume: 10 mL
 ColumnID: STX-CLPest

Analyzed By: BWS
 Date Collected: 5/25/2010 10:00
 Date Received: 5/28/2010
 Date Extracted: 6/1/2010
 Matrix: Soil
 %SOLIDS: 84.1
 Report Basis: Dry Weight

Compound	Result ug/KG	Quantitation Limit ug/KG	MDL	Dilution Factor	Date Analyzed	Flags
Aroclor-1016	BQL	35.8	2.04	1	06/02/10	
Aroclor-1221	BQL	35.8	8.92	1	06/02/10	
Aroclor-1232	BQL	35.8	4.94	1	06/02/10	
Aroclor-1242	BQL	35.8	3.27	1	06/02/10	
Aroclor-1248	BQL	35.8	1.59	1	06/02/10	
Aroclor-1254	BQL	35.8	10.6	1	06/02/10	
Aroclor-1260	BQL	35.8	2.96	1	06/02/10	

Surrogate Spike Recoveries	Spike Added (ug/L)	Spike Result (ug/L)	Percent Recovered (%)
TCMX	100	78.1	78.1
DCBP	100	81.0	81.0

Comments:

BQL = Below Quantitation Limit
 NA = Not applicable, surrogate diluted out.

Reviewed By: 

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Results for PCBs
by EPA 8082

Client Sample ID: DPT-05 (3-4')
 Client Project ID: NCDOT US 17 ILM Bypass Parcel #59
 Lab Sample ID: G128-2536-5G
 Lab Project ID: G128-2536
 Initial Wt/Vol: 33.05 g
 Final Volume: 10 mL
 ColumnID: STX-CLPest

Analyzed By: BWS
 Date Collected: 5/25/2010 9:45
 Date Received: 5/28/2010
 Date Extracted: 6/1/2010
 Matrix: Soil
 %SOLIDS: 85.0
 Report Basis: Dry Weight

Compound	Result ug/KG	Quantitation Limit ug/KG	MDL	Dilution Factor	Date Analyzed	Flags
Aroclor-1016	BQL	35.6	2.03	1	06/02/10	
Aroclor-1221	BQL	35.6	8.86	1	06/02/10	
Aroclor-1232	BQL	35.6	4.91	1	06/02/10	
Aroclor-1242	BQL	35.6	3.25	1	06/02/10	
Aroclor-1248	BQL	35.6	1.58	1	06/02/10	
Aroclor-1254	BQL	35.6	10.5	1	06/02/10	
Aroclor-1260	BQL	35.6	2.94	1	06/02/10	

Surrogate Spike Recoveries	Spike Added (ug/L)	Spike Result (ug/L)	Percent Recovered (%)
TCMX	100	75.4	75.4
DCBP	100	77.4	77.4

Comments:

BQL = Below Quantitation Limit
 NA = Not applicable, surrogate diluted out.

Reviewed By: 

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Results for PCBs
by EPA 8082

Client Sample ID: DPT-06 (3-4')
 Client Project ID: NCDOT US 17 ILM Bypass Parcel #59
 Lab Sample ID: G128-2536-6I
 Lab Project ID: G128-2536
 Initial Wt/Vol: 32.35 g
 Final Volume: 10 mL
 ColumnID: STX-CLPest

Analyzed By: BWS
 Date Collected: 5/25/2010 9:30
 Date Received: 5/28/2010
 Date Extracted: 6/1/2010
 Matrix: Soil
 %SOLIDS: 83.8
 Report Basis: Dry Weight

Compound	Result ug/KG	Quantitation Limit ug/KG	MDL	Dilution Factor	Date Analyzed	Flags
Aroclor-1016	BQL	36.9	2.10	1	06/02/10	
Aroclor-1221	BQL	36.9	9.18	1	06/02/10	
Aroclor-1232	BQL	36.9	5.09	1	06/02/10	
Aroclor-1242	BQL	36.9	3.36	1	06/02/10	
Aroclor-1248	BQL	36.9	1.64	1	06/02/10	
Aroclor-1254	BQL	36.9	10.9	1	06/02/10	
Aroclor-1260	BQL	36.9	3.05	1	06/02/10	

Surrogate Spike Recoveries	Spike Added (ug/L)	Spike Result (ug/L)	Percent Recovered (%)
TCMX	100	72.5	72.5
DCBP	100	83.0	83.0

Comments:

BQL = Below Quantitation Limit
 NA = Not applicable, surrogate diluted out.

Reviewed By: 

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094614

1 CLIENT: CATUN / NCDOT

CONTACT: Ben Ashba @ CATUN PHONE NO: (910) 452-5861

PROJECT: NCDOT US 17 ILM SITE/FWSID#:

REPORTS TO: Ben Ashba @ CATUN FAX NO: ()

INVOICE TO: NCDOT

2

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	No CONTAINERS	SAMPLE TYPE	Preservatives Used	Analysis Required	REMARKS
	DPT-01 (10-11')	5-25-10	1045	SOIL	5	G			
	DPT-02 (3-4')		1030						
	DPT-03 (3-4')		1015						
	DPT-04 (3-4')		1000						
	DPT-05 (3-4')		945						
	DPT-06 (3-4')		930						

3

SGS Reference: (28-2536)

Shipping Carrier: Samples Received Cold? (Circle) YES NO

Shipping Ticket No: Temperature °C: 5.7

Special Deliverable Requirements: Chain of Custody Seal: (Circle) INTACT BROKEN

Summary EOP

Special Instructions: Please report any Low Runs Screening OK

Requested Turnaround Time: RUSH STD

4

5

Collected/Relinquished By: (1) Ben Ashba Date: 5-25-10 Time: 10:45 AM

Relinquished By: (2) [Signature] Date: 5-25-10 Time: 10:45 AM

Relinquished By: (3) Date: Time:

Relinquished By: (4) Date: Time:

White - Retained by Lab
Pink - Retained by Client

200 W. Potter Drive Anchorage, AK 99518 Tel: (907) 562-2343 Fax: (907) 561-5301
5500 Business Drive Wilmington, NC 28405 Tel: (910) 350-1903 Fax: (910) 350-1557