PRELIMINARY SITE ASSESSMENT
FOR
PARCEL 107, BRODY PROPERTIES
STARBUCKS
100 EAST 10TH STREET
GREENVILLE, PITT COUNTY, NORTH CAROLINA

STATE PROJECT: U-3315
WBS ELEMENT: 35781.1.2

PREPARED FOR:

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

NOVEMBER 20, 2012

PREPARED BY:

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CATLIN PROJECT NO. 212077

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

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PRELIMINARY SITE ASSESSMENT
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1.0 PURPOSE OF INVESTIGATION AND DESCRIPTION

CATLIN Engineers and Scientists (CATLIN) was 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 site. In response to a June 19, 2012 Request for Proposal (RFP) (Updated June 29, 2012) and subsequent work scope clarifications with Mr. Gordon Box, LG and Mr. Cyrus Parker, PE, LG, CATLIN submitted a proposal for conducting an investigation at the Parcel 107, Brody Properties. The parcel/property is located at 100 East 10th Street along the NCDOT Project "*Stantonsburg Road/Tenth Street Connector from Memorial Drive (US 13) to Evans Street*" in Greenville, North Carolina. Sheet 1 illustrates the general location.

The following specific parcel information was provided by NCDOT:

> *Currently this site operates as a Starbucks. Historically, the site operated as a gas station. The site is located in the southeast quadrant of West 10th Street and East Evans Street. What appears to be a former pump island was observed adjacent to Evans Street. According to NCDENR's UST Section Registry the facility ID and groundwater incidents could not be identified for this site.*

According to NCDOT acquisition of the right of way (ROW) is necessary for roadway construction (State Project U-3315) and specifically at the above referenced parcel (Parcel 107). A site investigation is requested before ROW acquisition and roadway construction. Underground storage tanks (USTs) and/or associated piping are suspected in the proposed ROW and/or easement(s).

The work scope as requested includes:

- Communicate progress reports to the GeoEnvironmental Section.
- Determine if contaminated soils or USTs are present within the NCDOT ROW, controlled access boundary (CA), or easement with particular emphasis on the vicinity of proposed excavations for drainage, utilities, and slope stake cuts.
- Estimate the quantity of impacted soils. Estimate the volume of impacted soils across the study area and the volume that will require excavation during construction. Indicate the approximate area of soil contamination on a site map and CADD file.
- Research the site for past uses and possible releases and include findings in final report.
- Report the depth to groundwater and obtain one groundwater sample from the site with emphasis on the vicinity of proposed drainage features. Test groundwater sample for contaminants relevant to the site's past use and/or possible releases.
- Provide a MicroStation file with the boring locations and estimated extent of impacted soils (if any).
- Prepare a report including field activities, findings, and recommendations and submit in triplicate and electronically to the NCDOT GeoEnvironmental Section.

This report documents our activities and findings at Parcel 107, Brody Properties property (currently Starbucks), 100 East 10th Street, Greenville, North Carolina. The site is illustrated on Sheet 2.

2.0 METHODS

Approximate proposed boring locations were discussed with NCDOT personnel before final Workplan submittal. There were no slope stake cuts identified within the subject site. Per NCDOT request, borings (soil samples) were located near known or suspect UST systems and proposed drainage features (as indicated on NCDOT provided plan sheets). The NCDOT Conventional Plan Sheet Symbols are provided on Sheet 1A. Accessible proposed drainage features at the site include drainage piping and catch basin numbers 1109, 1110, 1111, 1112, 1115, and 1116.

North Carolina Department of Environment and Natural Resources (NCDENR) UST Section personnel were interviewed and the NCDENR UST database was reviewed. NCDENR Dry-cleaning Solvent Cleanup Act (DSCA) Program personnel were also interviewed and the DSCA site list was reviewed. NCDENR file review information is provided in Appendix A.

CATLIN coordinated geophysical activities concurrently with soil boring and sampling. The geophysical investigation methods are detailed in the SCHNABEL ENGINEERING SOUTH, PC (Schnabel) geophysical report

provided in Appendix B. Final boring/sample locations were determined based on proposed drainage feature locations and elevations, geophysical results, file review information, field observations, and discussion with NCDOT personnel. CATLIN coordinated site work with Starbucks personnel so as to minimize business interruptions. The majority of field work was conducted after the "morning rush". CATLIN's field activities began at the site on July 25, 2012 and concluded on August 3, 2012.

2.1 FIELD METHODS

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

Underground utility locating was coordinated by CATLIN personnel. The North Carolina One Call Center (NC-1-Call) was contacted for underground utility location. The areas around the proposed boring locations were checked and underground utilities were indicated by NC-1-Call personnel.

CATLIN personnel gathered subsurface soil data at the site by Direct Push Technology (DPT) boring advancement using an AMS PowerProbe™ 9600D (PowerProbe). Borings were identified by the parcel number 107 followed by "DPT" and consecutive numbers starting with "01" (example: 107DPT-01). Borings were located at proposed catch basin numbers 1109, 1110, 1111, 1112, 1115, and 1116, along associated proposed piping, and near a probable UST location. 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). Soils were collected continuously from near the surface to boring termination. Borings for soil sample collection were terminated near the approximate proposed drainage feature installation elevation or six (6) to eight (8) feet below land surface (BLS). Half of the soils from the liners were removed in two-foot intervals and placed in sealable polyethylene bags for organic vapor analysis (OVA) headspace screening utilizing a photo ionization detector (PID). The USCS, OVA/PID reading, and any indication of petroleum impact were recorded on field logs and have been transferred to the Boring Logs provided in Appendix C. As illustrated on Sheet 2, nine (9) borings were advanced for soil sample collection.

Soil samples for laboratory analysis were collected from the sample interval above the water table with the highest OVA/PID reading and/or the sample interval near the bottom of the proposed drainage feature

installation elevation. The sample interval was included with the boring identification as part of the soil sample identification [example: 107DPT-01(4.5-5 ft)]. The sample identifications are included on the Boring Logs in Appendix C and the laboratory analytical Chain of Custody in Appendix D.

Eight (8) of the nine (9) PowerProbe borings were terminated at approximately six (6) to eight (8) feet BLS. The 107DPT-2 boring was terminated at 15 feet BLS for approximate depth to water (DTW) determination and groundwater sample collection. Following removal of the PowerProbe tooling, groundwater was pumped directly into the appropriate laboratory provided glassware utilizing new polypropylene tubing and a peristaltic pump.

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 D.

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. Borings located in asphalt were topped with asphalt cold patch. Final borehole and sample locations were surveyed utilizing a Trimble® GPS survey instrument.

2.2 LABORATORY TESTING

Following boring advancement, selected soils were placed in the appropriately labeled glassware. In an attempt to provide information regarding possible petroleum and/or dry cleaning solvent impact to soils and groundwater, soil samples were analyzed for volatile and semi-volatile organics by Environmental Protection Agency (EPA) Methods 8260B and 8270D Base Neutral (BN). The groundwater sample was also analyzed for volatile and semi-volatile organics per EPA Methods 8260B and 8270D BN.

A total of nine (9) soil samples and one (1) groundwater sample were submitted to SGS Analytical Perspectives (NC Certification #481). Chain of Custody documentation is included in Appendix D.

3.0 RESULTS

NCDENR Interview and File Review

NCDENR Washington Regional Office personnel were not aware of any releases on record for the site. The NCDENR UST database does not list any tanks registered at the site. NCDENR DSCA Program personnel were also interviewed. The site does not appear on the NCDENR DSCA site list. There are no UST or DSCA sites adjacent to the subject site. A DSCA site is located across 10th Street, approximately 50 feet northeast. The DSCA site across 10th Street is identified as DSCA Number 74-0007, Former One Hour Martinizing Cleaners, 111 East 10th Street. A groundwater monitoring well (MW-9) was installed at Parcel 107 during the DSCA investigation. The NCDENR DSCA Project Manager (Mr. Jay King) indicated the impacted groundwater has been delineated and impacts are not suspected at the subject site and have not been revealed in the MW-9 monitoring well groundwater samples. Groundwater flow direction is generally towards the northeast, away from the subject site. Pertinent file review information including figures showing groundwater flow contours and recent and historical groundwater contaminant concentrations are provided in Appendix A.

Historical aerial photographs were also reviewed and local "historians" were interviewed. A dry cleaner drop-off/pick-up facility is located across Evans Street to the west. According to people interviewed, a dry cleaning facility with on-site dry cleaning operations previously operated at the facility across Evans Street. Based on review of the historical aerial photographs and locals with knowledge of the area, the site was previously utilized as a gas/service station.

Geophysical Investigation

The complete geophysical investigation report by Schnabel is included in Appendix B. The ground penetrating radar (GPR) data collected near the northwest corner of the parcel indicated the presence of a probable UST. The GPR data indicated that probable UST No. 1 is buried approximately three (3) to four (4) feet BLS, and is about four (4) feet in diameter and about 10.5 feet long, equivalent to approximately 1,000 gallon capacity. The probable UST location is illustrated on Figures included in the Schnabel report and on Sheet 2.

Site Reconnaissance

CATLIN personnel identified the proposed drainage feature locations and probable UST location. Photographs of the site are provided in Appendix E. Additional photographs are included in the Schnabel report provided in Appendix B.

Soil and Groundwater

Sandy clay / clayey sand and silty sand soils with varying amounts of clean sands were encountered across the project site. No petroleum hydrocarbon odor was noted in any soils. Complete boring logs including OVA/PID results are provided in Appendix C.

Summarized soil sample analytical results are provided on Table 1. Soil sample locations and summarized soil analytical results are illustrated on Sheet 2. As indicated on Table 1 and Sheet 2, no compound concentrations were reported above the laboratory quantitation limits or UST Section Soil-To-Groundwater (STGW) Maximum Soil Contaminant Concentrations (MSCCs). Minor, estimated concentrations ("J" values) of a number of EPA Method 8260B parameters were revealed but well below the lowest MSCCs. No EPA Method 8270D Base Neutral (BN) parameters were detected above the laboratory method detection limits.

Summarized groundwater sample analytical results are provided on Table 2 and Sheet 2. As indicated on Table 2 and Sheet 2, Minor, estimated concentrations ("J" values) of a number of EPA Method 8260B parameters were revealed but well below the corresponding NCAC T15A:02L Groundwater Quality Standards (2L GWQS). No EPA Method 8270D BN parameters were detected above the laboratory reporting limits. Depth to groundwater was measured at approximately nine (9) feet BLS in the 107DPT-02 boring at the proposed catch basin number 1111 location. The complete laboratory analytical report is provided in Appendix D.

4.0 SUMMARY AND RECOMMENDATIONS

A preliminary site assessment was conducted at the subject site as requested by NCDOT. NCDOT is planning roadway construction including utility installation and ROW acquisition at the site.

No impacted soils or groundwater were revealed in samples collected from the proposed construction area. Based on geophysical survey results, site reconnaissance, and NCDENR file review information, there is one (1) probable UST location at the site and within the proposed ROW.

A DSCA site across 10th Street identified as DSCA Number 74-0007, Former One Hour Martinizing Cleaners, 111 East 10th Street is located northeast of the site, across 10th Street. The NCDENR DSCA Project Manager (Mr. Jay King) indicated the impacted groundwater has been delineated and impacts are not suspected at the subject site. Groundwater flow direction is generally towards the northeast, away from Parcel 107.

According to local "historians", a dry cleaning facility with on site dry cleaning operations previously operated across Evans Street on Parcel 105. Analytical

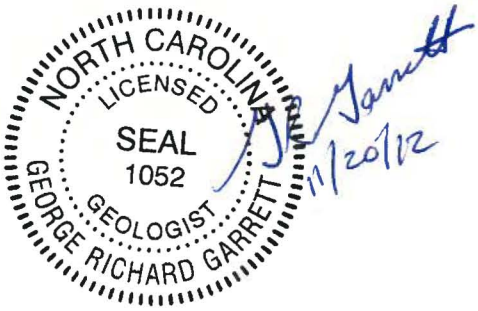
results do not indicate the presence of dry cleaning contamination from this off site source.

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, P.G.
Project Manager



G. Richard Garrett, P.G.
Senior Project Manager

TABLES

TABLE 1
SUMMARY OF SOIL LABORATORY RESULTS - EPA METHODS 8260B AND 8270D BASE NEUTRAL
Parcel 107, Brody Properties –Starbucks
100 E. 10th Street

Sample ID	Method →		EPA Method 8260B							EPA Method 8270D BN
	Contaminant of Concern →		1,2,4-Trimethylbenzene	Acetone	Benzene	Methylene chloride	Toluene	Xylene (total)	All other EPA Method 8260B Parameters	All EPA Method 8270D Base Neutral (BN) Parameters
	Date Collected	Location								
107DPT-01 (4.5-5ft)	7/25/12	@ CB 1115	<0.982	<1.14	<0.820	1.00 J	<0.743	<1.62	BMDL	BMDL
107DPT-02 (5-5.7ft)	7/25/12	@ CB 1111	<1.07	<1.24	<0.894	1.44 J	<0.811	<1.77	BMDL	BMDL
107DPT-03 (5.5-6ft)	7/25/12	@ CB 1110	<1.06	16.7 J	<0.888	1.30 J	<0.806	<1.76	BMDL	BMDL
107DPT-04 (4.5-5ft)	8/3/12	@ CB 1109	0.723 J	34.9 J	1.85 J	<0.949	1.64 J	2.45 J	BMDL	BMDL
107DPT-05 (5-6ft)	8/3/12	East of Probable UST ≈ 18' Southeast of CB 1109 and DPT-04	<0.534	<3.36	<0.595	1.35 J	<0.576	<1.48	BMDL	BMDL
107DPT-06 (4.5-5ft)	8/3/12	@ CB 1116	<0.661	<4.16	<0.738	1.58 J	<0.714	<1.84	BMDL	BMDL
107DPT-07 (7-8ft)	8/3/12	≈ 22' South-southeast of CB 1110 (DPT-03) and ≈ 22' North-northeast of CB 1109 (DPT-04)	<0.648	<4.08	<0.723	1.67 J	<0.700	<1.80	BMDL	BMDL
107DPT-08 (6-7ft)	8/3/12	Along proposed construction easement ≈ 30' SE of CB 1111 (DPT-02) and ≈ 30' SW of CB 1112 (DPT-09)	<0.493	<3.10	<0.551	2.04 J	<0.533	<1.37	BMDL	BMDL
107DPT-09 (4.5-5ft)	8/3/12	@ CB 1112	<0.588	<3.70	<0.656	1.50 J	<0.635	<1.63	BMDL	BMDL
		Residential MSCC (ug/kg)	782,000	14,000,000	18,000	85,000	1,200,000	3,129,000	Varies	Varies
		Industrial/Commercial MSCC (ug/kg)	20,440,000	360,000,000	164,000	763,000	32,000,000	81,760,000	Varies	Varies
		STGW MSCC (ug/kg)	8,500	24,000	5.6	20	4,300	4,600	Varies	Varies

All results in micrograms per kilogram (ug/kg).
Sample depth below land surface provided in parenthesis as part of the sample identification.
BMDL = Below Method Detection Limit, refer to analytical report for a complete list of parameters and detection limits
< = Less than method detection limit
J = Estimated Concentration
CB = Proposed Catch Basin

TABLE 2
SUMMARY OF GROUNDWATER LABORATORY RESULTS - EPA METHODS 8260B AND 8270D BASE NEUTRAL
Parcel 107, Brody Properties –Starbucks
100 E. 10th Street

Sample ID	Method →		EPA Method 8260B				EPA Method 8270D Base Neutral	
	Contaminant of Concern →		Acetone	Toluene	Xylene (total)	All other EPA Method 8260B Parameters	Bis(2-Ethylhexyl) phthalate	All other EPA Method 8270D Base Neutral Parameters
	Date Collected	Location						
107DPT-02	7/26/12	@ CB 1111	5.29 J	0.310 J	0.370 J	BMDL	2.75 J	BMDL
2L GWQS (ug/L)			6,000	600	500	Varies	3	Varies

All results in micrograms per liter (ug/L).
BMDL = Below Method Detection Limit, refer to analytical report for a complete list of parameters and detection limits
J = Estimated Concentration
2L GWQS = NCAC T15A:02L Groundwater Quality Standards
CB = Proposed Catch Basin
< = Less than method detection limit

SHEETS

PROJECT REFERENCE NO.	SHEET
35781.1.2 (U-3315)	1

GeoEnvironmental

0 2,000 4,000

FEET

PARCEL 107

PROJECT REFERENCE NO.	SHEET NO.
U-[illegible]	1-A

Note: Not to Scale

**S.U.E. = Subsurface Utility Engineering*

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

CONVENTIONAL PLAN SHEET SYMBOLS

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

BOUNDARIES AND PROPERTY:

- State Line
- County Line
- Township Line
- City Line
- Reservation Line
- Property Line
- Existing Iron Pin
- Property Corner
- Property Monument
- Parcel/Sequence Number
- Existing Fence Line
- Proposed Woven Wire Fence
- Proposed Chain Link Fence
- Proposed Barbed Wire Fence
- Existing Wetland Boundary
- Proposed Wetland Boundary
- Existing Endangered Animal Boundary
- Existing Endangered Plant Boundary
- Known Soil Contamination: Area or Site
- Potential Soil Contamination: Area or Site

BUILDINGS AND OTHER CULTURE:

- Gas Pump Vent or U/G Tank Cap
- Sign
- Well
- Small Mine
- Foundation
- Area Outline
- Cemetery
- Building
- School
- Church
- Dam

HYDROLOGY:

- Stream or Body of Water
- Hydro, Pool or Reservoir
- Jurisdictional Stream — JS
- Buffer Zone 1 — BZ 1
- Buffer Zone 2 — BZ 2
- Flow Arrow
- Disappearing Stream
- Spring
- Wetland
- Proposed Lateral, Tail, Head Ditch
- False Sump

RAILROADS:

- Standard Gauge — CSX TRANSPORTATION
- RR Signal Milepost — MILEPOST 35
- Switch — SWITCH
- RR Abandoned
- RR Dismantled

RIGHT OF WAY:

- Baseline Control Point
- Existing Right of Way Marker
- Existing Right of Way Line
- Proposed Right of Way Line
- Proposed Right of Way Line with Iron Pin and Cap Marker
- Proposed Right of Way Line with Concrete or Granite Marker
- Existing Control of Access
- Proposed Control of Access
- Existing Easement Line — E
- Proposed Temporary Construction Easement — E
- Proposed Temporary Drainage Easement — TDE
- Proposed Permanent Drainage Easement — PDE
- Proposed Permanent Drainage / Utility Easement — DUE
- Proposed Permanent Utility Easement — PUE
- Proposed Temporary Utility Easement — TUE
- Proposed Aerial Utility Easement — AUE
- Proposed Permanent Easement with Iron Pin and Cap Marker

ROADS AND RELATED FEATURES:

- Existing Edge of Pavement
- Existing Curb
- Proposed Slope Stakes Cut
- Proposed Slope Stakes Fill
- Proposed Curb Ramp — CR
- Curb Cut Future Ramp — CCR
- Existing Metal Guardrail
- Proposed Guardrail
- Existing Cable Guiderail
- Proposed Cable Guiderail
- Equality Symbol
- Pavement Removal

VEGETATION:

- Single Tree
- Single Shrub
- Hedge
- Woods Line
- Orchard
- Vineyard — Vineyard

EXISTING STRUCTURES:

MAJOR:
- Bridge, Tunnel or Box Culvert — CONC
- Bridge Wing Wall, Head Wall and End Wall — CONC WW

MINOR:
- Head and End Wall — CONC HW
- Pipe Culvert
- Footbridge
- Drainage Box: Catch Basin, DI or JB — CB
- Paved Ditch Gutter
- Storm Sewer Manhole — S
- Storm Sewer — S

UTILITIES:

POWER:
- Existing Power Pole
- Proposed Power Pole
- Existing Joint Use Pole
- Proposed Joint Use Pole
- Power Manhole
- Power Line Tower
- Power Transformer
- U/G Power Cable Hand Hole
- H-Frame Pole
- Recorded U/G Power Line
- Designated U/G Power Line (S.U.E.*)

TELEPHONE:
- Existing Telephone Pole
- Proposed Telephone Pole
- Telephone Manhole
- Telephone Booth
- Telephone Pedestal
- Telephone Cell Tower
- U/G Telephone Cable Hand Hole
- Recorded U/G Telephone Cable
- Designated U/G Telephone Cable (S.U.E.*)
- Recorded U/G Telephone Conduit
- Designated U/G Telephone Conduit (S.U.E.*)
- Recorded U/G Fiber Optics Cable — FO
- Designated U/G Fiber Optics Cable (S.U.E.*) — FO

WATER:
- Water Manhole
- Water Meter
- Water Valve
- Water Hydrant
- Recorded U/G Water Line
- Designated U/G Water Line (S.U.E.*)
- Above Ground Water Line — A/G Water

TV:
- TV Satellite Dish
- TV Pedestal
- TV Tower
- U/G TV Cable Hand Hole
- Recorded U/G TV Cable — TV
- Designated U/G TV Cable (S.U.E.*) — TV
- Recorded U/G Fiber Optic Cable — TV FO
- Designated U/G Fiber Optic Cable (S.U.E.*) — TV FO

GAS:
- Gas Valve
- Gas Meter
- Recorded U/G Gas Line
- Designated U/G Gas Line (S.U.E.*)
- Above Ground Gas Line — A/G Gas

SANITARY SEWER:
- Sanitary Sewer Manhole
- Sanitary Sewer Cleanout
- U/G Sanitary Sewer Line
- Above Ground Sanitary Sewer — A/G Sanitary Sewer
- Recorded SS Forced Main Line — FM
- Designated SS Forced Main Line (S.U.E.*) — FM

MISCELLANEOUS:
- Utility Pole
- Utility Pole with Base
- Utility Located Object
- Utility Traffic Signal Box
- Utility Unknown U/G Line — ??U
- U/G Tank; Water, Gas, Oil
- Underground Storage Tank, Approx. Loc. — UST
- A/G Tank; Water, Gas, Oil
- Geoenvironmental Boring
- U/G Test Hole (S.U.E.*)
- Abandoned According to Utility Records — AATUR
- End of Information — E.O.I.

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Parcel 107, Brody Properties –Starbucks
100 E. 10th Street

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All results in micrograms per liter (ug/L).
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< = Less than method detection limit

PROJECT REFERENCE NO.	SHEET
35781.1.2 (U-3315)	2

GeoEnvironmental

0 20 40
FEET

LEGEND
- ID. SOIL BORING/SAMPLE
- ID. SOIL BORING/SAMPLE & GROUNDWATER SAMPLE
- ID. "HOT" SAMPLE

E. 10TH ST.
DPT-01
DPT-02
DPT-03
DPT-04
DPT-05
DPT-06
DPT-07
DPT-08
DPT-09
105DPT-09
105DPT-10
105DPT-12
105DPT-13
195DPT-01
196DPT-01
197DPT-01
APPROXIMATE LOCATION SUSPECTED UST
BRODY PROPERTIES, LLC
100 E 10TH STREET
107
VINCENT PEELE PROPERTIES LLC
WARD HOLDINGS, LLC
S. EVANS ST.
20+00
21+00

NOTES:
- BORING ID'S PREFACED WITH "107" UNLESS OTHERWISE NOTED
- DARK GRAYSCALE BORINGS ASSOCIATED WITH NEARBY PROJECTS
- AERIAL PHOTOGRAPHS OBTAINED FROM NCDOT
- PROPOSED DETAILS OBTAINED FROM NCDOT

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107DPT-03 (5.5-6ft)	7/25/12	@ CB 1110	<1.06	16.7 J	<0.888	1.30 J	<0.806	<1.76	BMDL	BMDL
107DPT-04 (4.5-5ft)	8/3/12	@ CB 1109	0.723 J	34.9 J	1.85 J	<0.949	1.64 J	2.45 J	BMDL	BMDL
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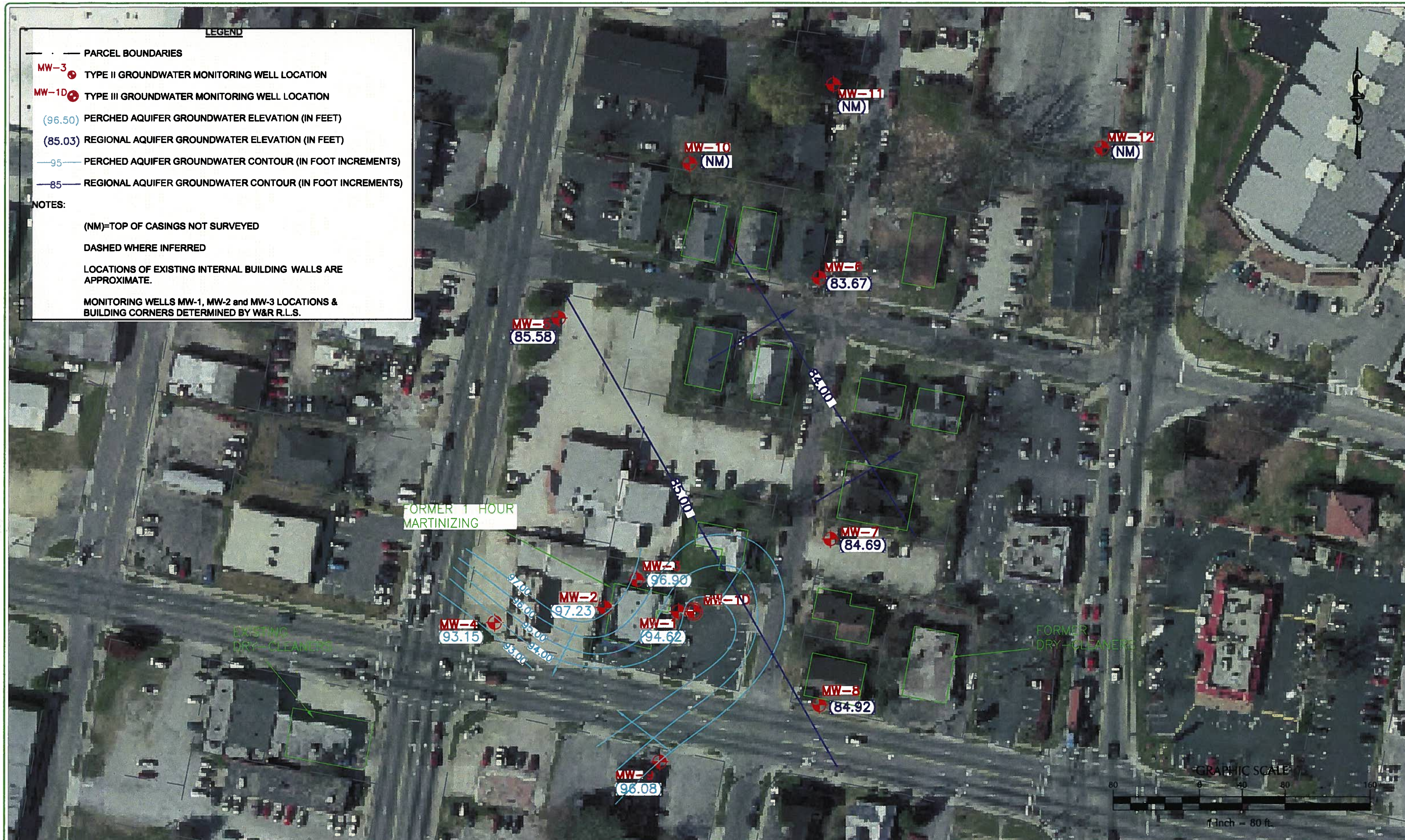
107DPT-08 (6-7ft)	8/3/12	Along proposed construction easement ≈ 30' SE of CB 1111 (DPT-02) and ≈ 30' SW of CB 1112 (DPT-	<0.493	<3.10	<0.551	2.04 J	<0.533	<1.37	BMDL	BMDL
107DPT-09 (4.5-5ft)	8/3/12	@ CB 1112	<0.588	<3.70	<0.656	1.50 J	<0.635	<1.63	BMDL	BMDL
		Residential MSCC (ug/kg)	782,000	14,000,000	18,000	85,000	1,200,000	3,129,000	Varies	Varies
		Industrial/Commercial MSCC (ug/kg)	20,440,000	360,000,000	164,000	763,000	32,000,000	81,760,000	Varies	Varies
		STGW MSCC (ug/kg)	8,500	24,000	5.6	20	4,300	4,600	Varies	Varies

All results in micrograms per kilogram (ug/kg).
Sample depth below land surface provided in parenthesis as part of the sample identification.
BMDL = Below Method Detection Limit, refer to analytical report for a complete list of parameters and detection limits
< = Less than method detection limit
J = Estimated Concentration
CB = Proposed Catch Basin

APPENDICES

APPENDIX A

FILE REVIEW INFORMATION



LEGEND
PARCEL BOUNDARIES
MW-3 TYPE II GROUNDWATER MONITORING WELL LOCATION
MW-1D TYPE III GROUNDWATER MONITORING WELL LOCATION
(96.50) PERCHED AQUIFER GROUNDWATER ELEVATION (IN FEET)
(85.03) REGIONAL AQUIFER GROUNDWATER ELEVATION (IN FEET)
95 PERCHED AQUIFER GROUNDWATER CONTOUR (IN FOOT INCREMENTS)
85 REGIONAL AQUIFER GROUNDWATER CONTOUR (IN FOOT INCREMENTS)
NOTES:
(NM)=TOP OF CASINGS NOT SURVEYED
DASHED WHERE INFERRED
LOCATIONS OF EXISTING INTERNAL BUILDING WALLS ARE APPROXIMATE.
MONITORING WELLS MW-1, MW-2 and MW-3 LOCATIONS & BUILDING CORNERS DETERMINED BY W&R R.L.S.
MW-11 (NM)
MW-10 (NM)
MW-12 (NM)
MW-6 83.67
MW-5 85.58
84.00
85.00
FORMER 1 HOUR MARTINIZING
MW-7 84.69
MW-3 96.90
MW-2 97.23
MW-1D
MW-1 94.62
MW-4 93.15
97.00
96.00
95.00
94.00
93.00
EXISTING DRY-CLEANERS
FORMER DRY-CLEANERS
MW-8 84.92
MW-9 96.08
GRAPHIC SCALE
80 0 40 80 160
1 inch = 80 ft.

WITHERS & RAVENEL
ENGINEERS | PLANNERS | SURVEYORS

Revisions			
No.	Description	Date	By

DSCA # 74-0007
FORMER ONE HOUR MARTINIZING FACILITY
GREENVILLE, PITT COUNTY, NORTH CAROLINA

GROUNDWATER CONTOUR MAP
APRIL, 12, 2011

Drawn By: CF | Scale: 1"=80' | Checked By: BJB | Date: 8/12/10 | Job No. 02060496.42 | Sheet No. 6

LEGEND

— · — PARCEL BOUNDARIES

MW-3 TYPE II GROUNDWATER MONITORING WELL LOCATION

MW-1D TYPE III GROUNDWATER MONITORING WELL LOCATION

(0.560) PCE CONCENTRATION IN GROUNDWATER (IN mg/L)

—1.0— PCE ISOCONCENTRATION LINE (DASHED WHERE INFERRED)

TW-17 / 0.048 2008 TEMPORARY GROUNDWATER WELL WITH PCE RESULTS IN mg/L

GP-27 / 0.0495 2009 TEMPORARY GROUNDWATER WELL WITH PCE RESULTS IN mg/L

NOTES ALL ANALYTICAL RESULTS IN mg/L.

LOCATIONS OF EXISTING INTERNAL BUILDING WALLS ARE APPROXIMATE.

MONITORING WELLS MW-1, MW-2 and MW-3 LOCATIONS & BUILDING CORNERS DETERMINED BY W&R R.L.S.

0.0007

0.1

1.0

MW-6 (1.9)

MW-5 (<0.500)

TW-19 0.0037

GP-34 / 0.23

GP-27 0.0495

TW-17 0.048

TW-18 0.168

FORMER 1 HOUR MARTINIZING

TW-1 0.0082

TW-12 0.076

TW-11 2.19

TW-2 <0.001

TW-3 <0.001

TW-D 3.586

MW-3 (0.560)

MW-2 (9.2)

TW-10 1.08

MW-4 (<0.001)

TW-4 <0.001

TW-16 0.849

MW-1 (<0.001)

TW-9 0.704

TW-5 2.42

TW-6 0.036

TW-7 0.629

TW-8 2.16

MW-7 (1.5)

GP-28 0.00083 J

GP-32 0.1

GP-31 0.27

EXISTING DRY-CLEANERS

FORMER DRY-CLEANERS

MW-8 (<0.001)

GP-29 0.09

GP-30 0.0116

GP-18 BDL

MW-9 (<0.001)

GP-19 BDL

GP-20 (<0.001)

GRAPHIC SCALE

80 0 40 80 160

1 inch = 80 ft.

WITHERS & RAVENEL
ENGINEERS | PLANNERS | SURVEYORS

Revisions			
No.	Description	Date	By

DSCA # 74-0007
FORMER ONE HOUR MARTINIZING FACILITY
GREENVILLE, PITT COUNTY, NORTH CAROLINA

PCE IN GROUNDWATER ISOCONCENTRATION MAP

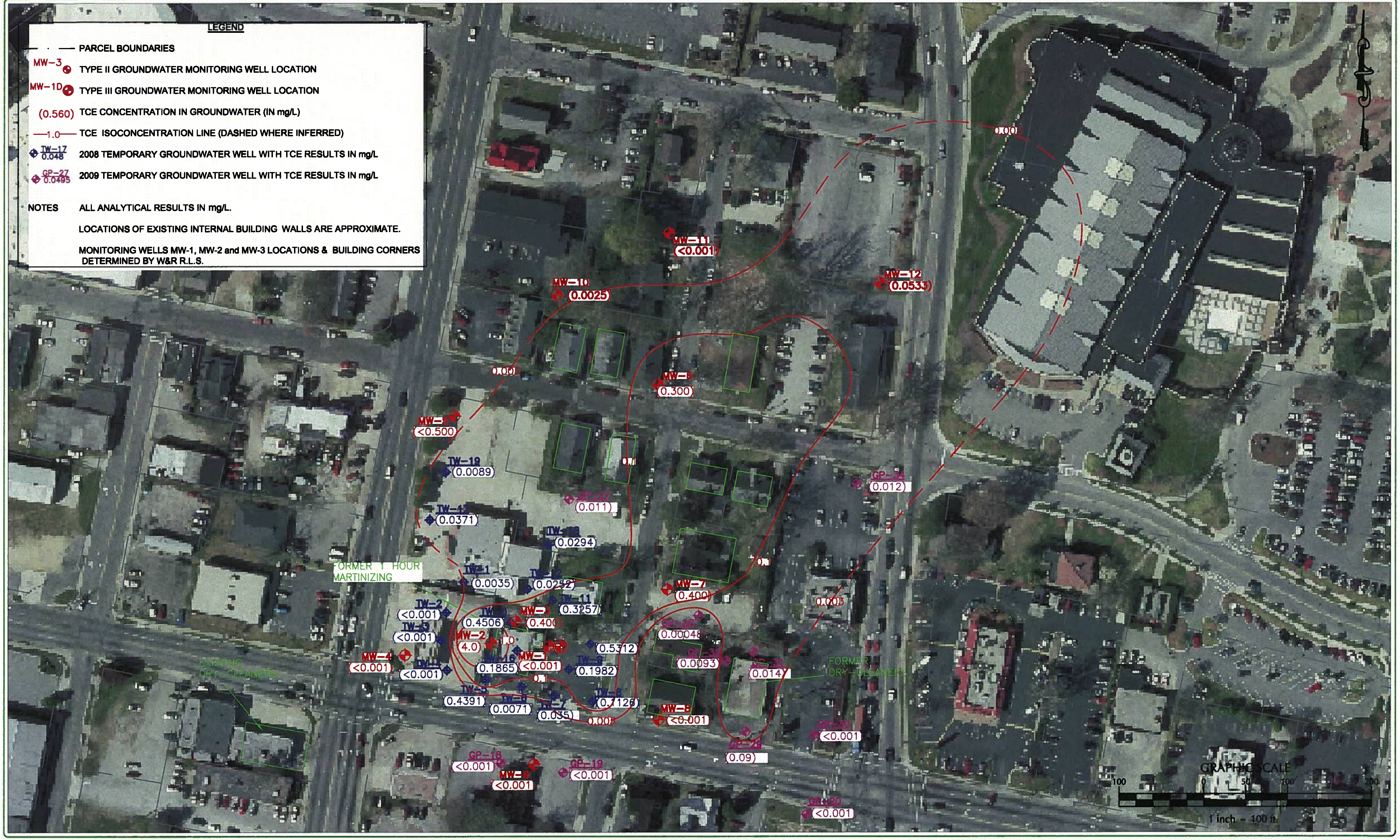
Drawn By: CF	Scale: 1"=80'
Checked By: BJB	Date: 8/11/10

Job No. 02080498.42
Sheet No. 7a


LEGEND
PARCEL BOUNDARIES
MW-3 TYPE II GROUNDWATER MONITORING WELL LOCATION
MW-1D TYPE III GROUNDWATER MONITORING WELL LOCATION
(0.560) PCE CONCENTRATION IN GROUNDWATER (IN mg/L)
1.0 PCE ISOCONCENTRATION LINE (DASHED WHERE INFERRED)
TW-17 0.048 2008 TEMPORARY GROUNDWATER WELL WITH TCE RESULTS IN mg/L
GP-27 0.0495 2009 TEMPORARY GROUNDWATER WELL WITH TCE RESULTS IN mg/L
NOTES ALL ANALYTICAL RESULTS IN mg/L.
LOCATIONS OF EXISTING INTERNAL BUILDING WALLS ARE APPROXIMATE.
MONITORING WELLS MW-1, MW-2 and MW-3 LOCATIONS & BUILDING CORNERS DETERMINED BY W&R R.L.S.
MW-11 (0.0073)
MW-12 (0.0086)
MW-10 (<0.001)
MW-7 (1.5)
MW-2 (9.2)
MW-4 (<0.001)
MW-8 (<0.001)
MW-9 (<0.001)
TW-19 0.0037
TW-17 0.048
TW-1 0.0082
FORMER 1 HOUR MARTINIZING
EXISTING DRY CLEANERS
FORMER DRY CLEANERS
GRAPHIC SCALE
1 inch = 100 ft.

WITHERS & RAVENEL ENGINEERS I PLANNERS I SURVEYORS	DSCA # 74-0007 FORMER ONE HOUR MARTINIZING FACILITY GREENVILLE, PITT COUNTY, NORTH CAROLINA	HISTORICAL RESULTS FOR PCE IN GROUNDWATER ISOCONCENTRATION MAP	Drawn By: CF Checked By: BJB	Scale: 1"=100' Date: 8/11/10	Job No. 02060496.42 Sheet No. 7a

Revisions			
No.	Description	Date	By



WITHERS & RAVENEL
ENGINEERS | PLANNERS | SURVEYORS

Revisions			
No.	Description	Date	By

DSCA # 74-0007
FORMER ONE HOUR MARTINIZING FACILITY
GREENVILLE, PITT COUNTY, NORTH CAROLINA

HISTORICAL RESULTS FOR TCE IN GROUNDWATER ISOCONCENTRATION MAP

Drawn By CF	Scale 1"=100'
Checked By BJB	Date 8/11/10

Sheet No. 7b

WITHERS & RAVENEL
ENGINEERS | PLANNERS | SURVEYORS

Revisions			
No.	Description	Date	By

DSCA # 74-0007
FORMER ONE HOUR MARTINIZING FACILITY
GREENVILLE, PITT COUNTY, NORTH CAROLINA

HISTORICAL RESULTS FOR cis 1,2 DCE IN GROUNDWATER ISOCONCENTRATION MAP

Drawn By	Scale
CF	1"=80'
Checked By	Date
BJB	6/11/10

Job No. 03060496.42
Sheet No. 7c

W:\ENVIRONMENTAL\DSCA\060496.42-1 HR MARTINIZING (074-0007)\CAD\03060496.42_BASE_2011-03.DWG 5/5/2011 12:23 PM FAY, CHRISTOPHER T.

WITHERS & RAVENEL
ENGINEERS | PLANNERS | SURVEYORS

Revisions			
No.	Description	Date	By

DSCA # 74-0007
FORMER ONE HOUR MARTINIZING FACILITY
GREENVILLE, PITT COUNTY, NORTH CAROLINA

HISTORICAL RESULTS FOR VINYL CHLORIDE IN GROUNDWATER
ISOCONCENTRATION MAP

Drawn By	Scale
CF	1"=100'
Checked By	Date
BJB	8/11/10

Job No. 02060496.42
Sheet No. 7d

W:\ENVIRONMENTAL\DSCA\060496.42-1 HR MARTINIZING (074-0007)\CAD\02060496.42_BASE_2011-03.DWG 5/5/2011 12:25 PM FAY,

APPENDIX B
SCHNABEL GEOPHYSICAL REPORT

Schnabel
ENGINEERING

August 15, 2012

Mr. Richard Garrett, LG, Project Manager
Catlin Engineers and Scientists, Inc.
P.O. Box 10279
Wilmington, NC 28404-0279

RE:
State Project: U-3315
WBS Element: 35781.1.2
County: Pitt
Description: Stantonsburg Road/Tenth Street Connector from Memorial Drive (US 13) to Evans Street

Subject: **Project 11821014.17, Report on Geophysical Surveys**
Parcel 107, Brody Properties, Greenville, North Carolina

Dear Mr. Garrett:

SCHNABEL ENGINEERING SOUTH, PC (Schnabel) is pleased to present this report on the geophysical surveys we performed on the subject property. The report includes two 11x17 color figures and three 8.5x11 color figures.

INTRODUCTION

The work described in this report was performed on July 13 and 26, 2012, by Schnabel under our 2011 contract with the NCDOT. The surveys were performed over the accessible areas of the property as indicated by the NCDOT to support their environmental assessment of the subject property. Photographs of the property are included on Figure 1. The property is located on the southeast quadrant of W 10th Street and E Evans Street in Greenville, NC. The purpose of the geophysical surveys was to investigate the presence of metal underground storage tanks (USTs) in the accessible areas of the right-of-way and/or easement.

The geophysical surveys consisted of an electromagnetic (EM) induction survey and a ground penetrating radar (GPR) survey. The EM survey was performed using a Geonics EM61-MK2 instrument. The EM61 is a time domain metal detector that is used to locate metal objects buried up to about eight feet below ground surface. When collecting EM61 data, three or four time gates are recorded of the response decay rate. The GPR survey was performed over selected EM61 anomalies, including areas of reinforced

concrete, using a Geophysical Survey Systems SIR-3000 system equipped with a 400 MHz antenna. Photographs of the equipment used are shown on Figure 2.

FIELD METHODOLOGY

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

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

DISCUSSION OF RESULTS

The contoured EM61 data collected over Parcel 107 are shown on Figures 3 and 4. The EM61 early time gate data are plotted on Figure 3. The early time gate data provide a more sensitive detection of metal objects than the later time gate data. Figure 4 shows the differential response between the top and bottom coils of the EM61 instrument. The differential response data filters out the effect of surface and very shallowly buried metallic objects. Typically, the differential response emphasizes anomalies from deeper and larger objects such as USTs.

The early time gate and differential results show an anomaly of unknown cause, in addition to those apparently caused by buried utilities or known site features (Figures 3 and 4). The GPR data collected near the western edge of the parcel over the anomaly of unknown cause indicate the presence of a probable UST, as shown on Figures 3 and 4. Example GPR images showing the reflections from the probable UST are shown on Figures 3 and 4. The GPR data indicate that probable UST No. 1 is buried approximately 3.0 to 4.0 feet below ground surface, and is about 4 feet in diameter and about 10.5 feet long, equivalent to a capacity of about 1000 gallons. Photographs of the approximate location of the probable UST that was marked in the field are included on Figure 5.

CONCLUSIONS

Our evaluation of the geophysical data collected on the subject property on Project U-3315 in Greenville, NC indicates the following:

The geophysical data indicate the presence of a probable UST within the right-of-way/easement on Parcel 107. Probable UST No. 1 is about 1000-gallon capacity and is buried about 3.0 to 4.0 feet below ground surface.

LIMITATIONS

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

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

Sincerely,

SCHNABEL ENGINEERING SOUTH, PC

James W. Whitt, LG
Senior Staff Geophysicist

Jeremy S. Strohmeyer, LG
Project Manager

JW:JS
Attachments: Figures (5)
CC: NCDOT, Gordon Box
FILE: G:\2011-SDE-JOBS\11821014_00_NCDOT_2011_GEOTECHNICAL_UNIT_SERVICES\11821014_17_U-3315_PITT_COUNTY\REPORT\PARCEL 107\SCHNABEL GEOPHYSICAL REPORT ON PARCEL 107 (U-3315).DOCX

Parcel 107 (Brody Properties), looking south

Parcel 107 (Brody Properties), looking south

Schnabel ENGINEERING	STATE PROJECT U-3315 NC DEPT. OF TRANSPORTATION PITT COUNTY, NORTH CAROLINA PROJECT NO. 11821014.17	PARCEL 107 SITE PHOTOS FIGURE 1

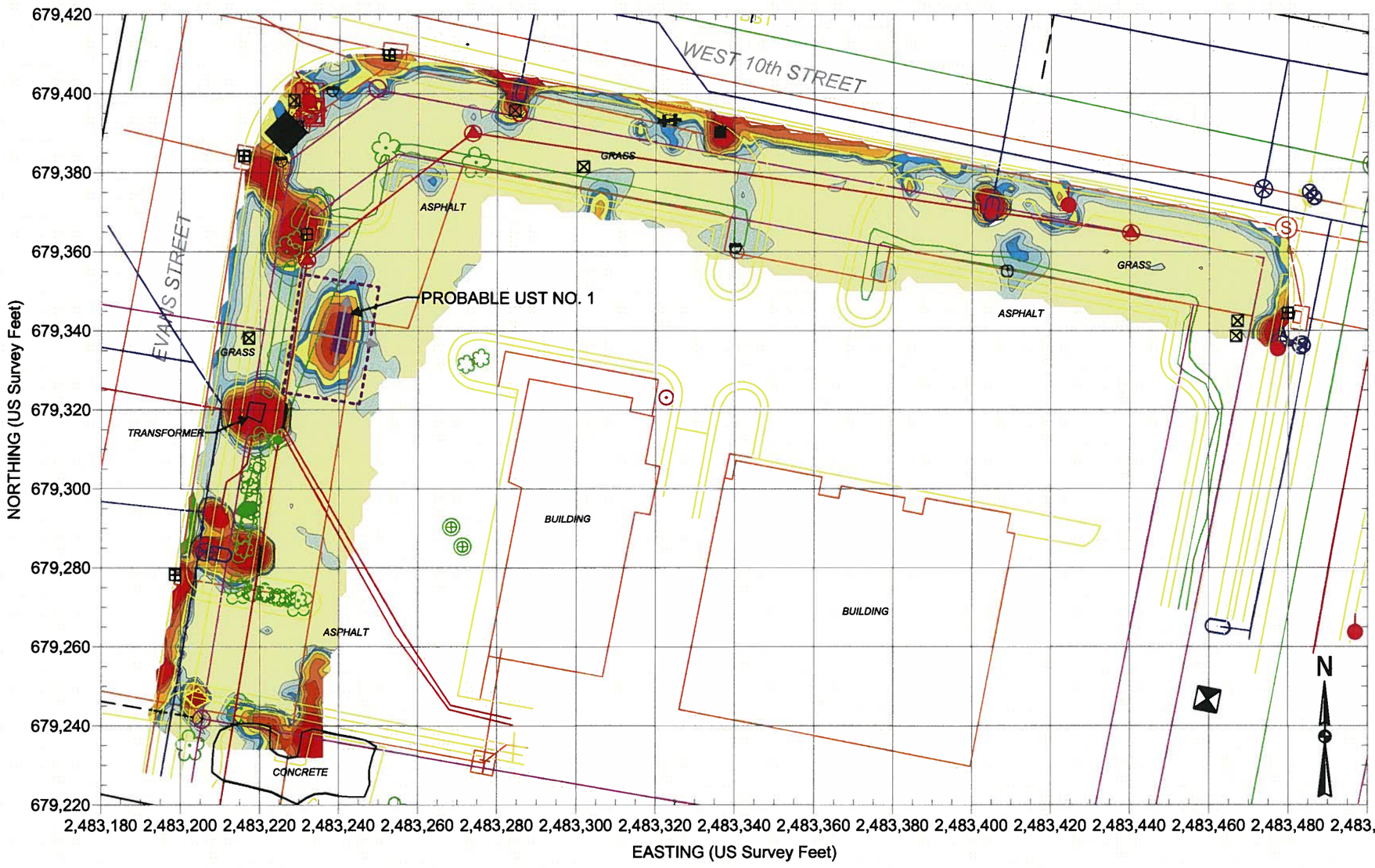
Geonics EM61-MK2 Metal Detector with Trimble DGPS Unit

GSSI SIR-3000 Ground-Penetrating Radar with 400 MHz Antenna

Note: Stock photographs – not taken on site.

Schnabel ENGINEERING	STATE PROJECT U-3315 NC DEPT. OF TRANSPORTATION PITT COUNTY, NORTH CAROLINA PROJECT NO. 11821014.17	PHOTOS OF GEOPHYSICAL EQUIPMENT USED FIGURE 2

PARCEL 107

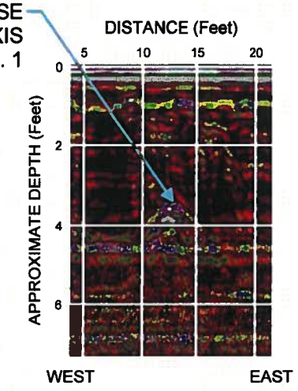


EXPLANATION

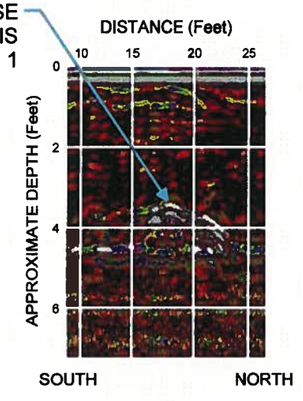
- SIGN
- MISCELLANEOUS METALLIC OBJECT
- UTILITY MANHOLE, METER, BOX, ETC.
- STORMSEWER INLET
- GUY WIRE
- EDGE OF NCDOT PROPOSED R/W
- PROPERTY LINE
- EXAMPLE GPR LINE LOCATION
- GPR SURVEY AREA
- LOCATION OF KNOWN OR SUSPECT USTS MARKED ON SITE

REF.: NCDOT FILE: u3315_rdy_psh11.dgn
(FOR SOME SITE FEATURES)

EXAMPLE GPR RESPONSE FROM THE SHORT AXIS OF PROBABLE UST NO. 1



EXAMPLE GPR RESPONSE FROM THE LONG AXIS OF PROBABLE UST NO. 1



Scale in US Survey Feet

0 30 60 90

EM61 Early Time Gate Response (mV)

-15000 -100 0 50 100 150 200 300 500 750 1000 2000

Note: The contour plot shows the earliest and more sensitive time gate of the EM61 bottom coil/channel in millivolts (mV). The EM data were collected on July 13, 2012, using a Geonics EM61-MK2 instrument. Positioning for the EM61 survey was provided using a submeter Trimble ProXRS DGPS system. Coordinates are in the US State Plane 1983 System, North Carolina Zone 3200, using the NAD 1983 datum. GPR data were acquired on July 26, 2012, using a Geophysical Survey Systems SIR 3000 equipped with a 400 MHz antenna.

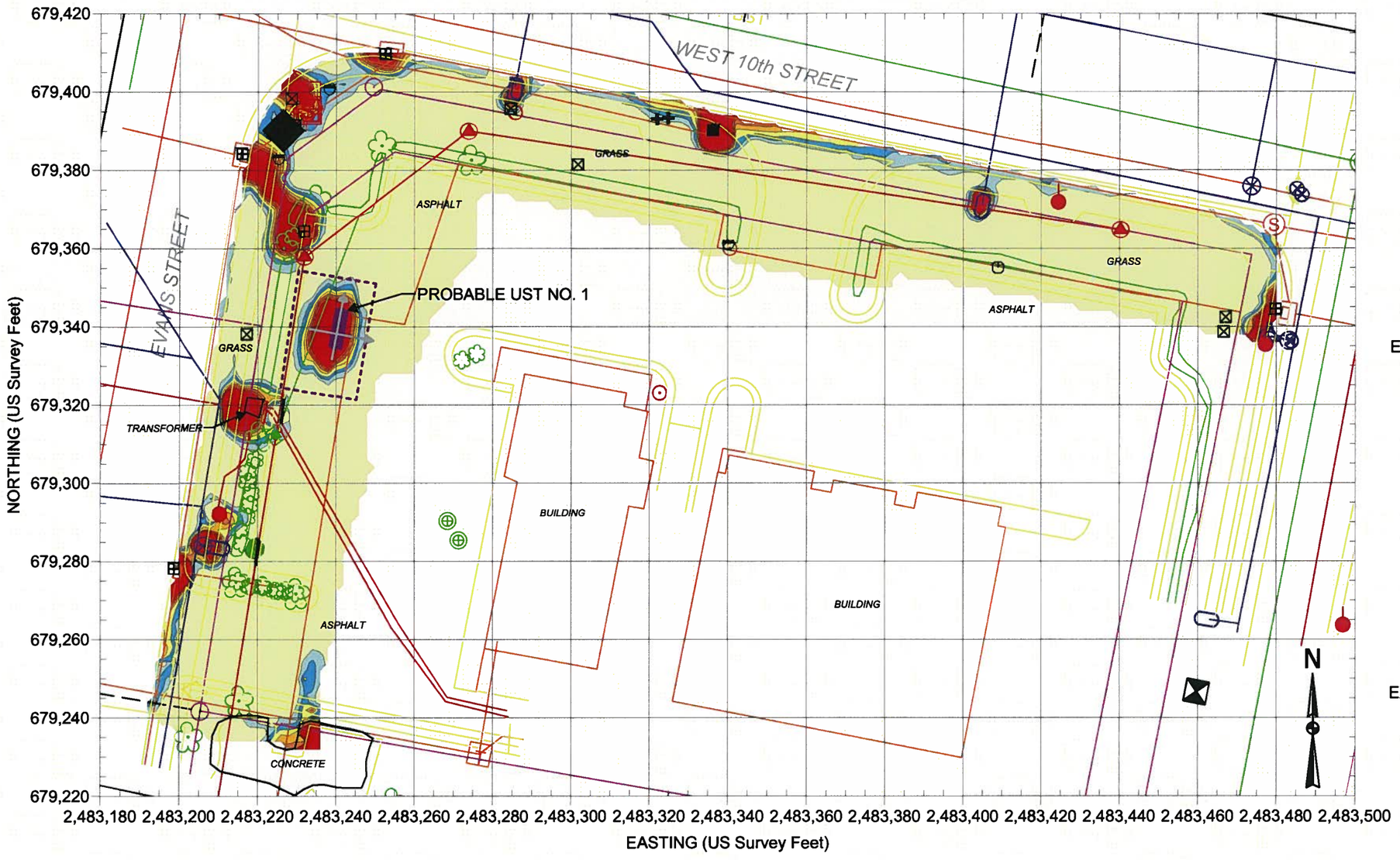
Schnabel ENGINEERING

STATE PROJECT U-3315
NC DEPARTMENT OF TRANSPORTATION
PITT COUNTY, NORTH CAROLINA
PROJECT NO. 11821014.17

EM61
EARLY TIME GATE
RESPONSE

FIGURE 3

PARCEL 107

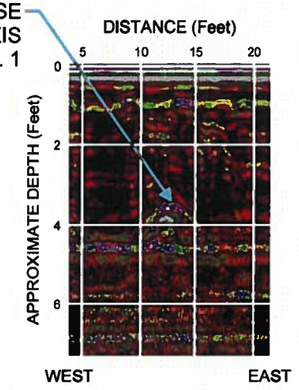


EXPLANATION

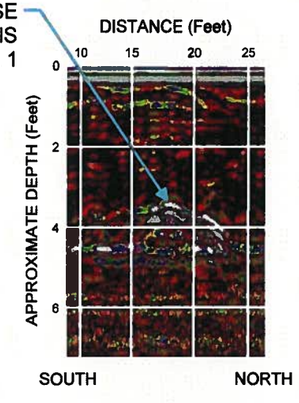
- SIGN
- MISCELLANEOUS METALLIC OBJECT
- UTILITY MANHOLE, METER, BOX, ETC.
- STORMSEWER INLET
- GUY WIRE
- EDGE OF NCDOT PROPOSED R/W
- PROPERTY LINE
- EXAMPLE GPR LINE LOCATION
- GPR SURVEY AREA
- LOCATION OF KNOWN OR SUSPECT USTS MARKED ON SITE

REF.: NCDOT FILE: u3315_rdy_psh11.dgn
(FOR SOME SITE FEATURES)

EXAMPLE GPR RESPONSE FROM THE SHORT AXIS OF PROBABLE UST NO. 1



EXAMPLE GPR RESPONSE FROM THE LONG AXIS OF PROBABLE UST NO. 1



Scale in US Survey Feet

0 30 60 90

EM61 Differential Response (mV)

-20000 -100 0 40 60 80 100 120 140 160 200

Note: The contour plot shows the difference, in millivolts (mV), between the readings from the top and bottom coils of the EM61. The difference is taken to reduce the effect of shallow metal objects and emphasize anomalies caused by deeper metallic objects, such as drums and tanks. The EM data were collected on July 13, 2012, using a Geonics EM61-MK2 instrument. Positioning for the EM61 survey was provided using a submeter Trimble ProXRS DGPS system. Coordinates are in the US State Plane 1983 System, North Carolina 3200 Zone, using the NAD 1983 datum. GPR data were acquired on July 26, 2012, using a Geophysical Survey Systems SIR 3000 equipped with a 400 MHz antenna.

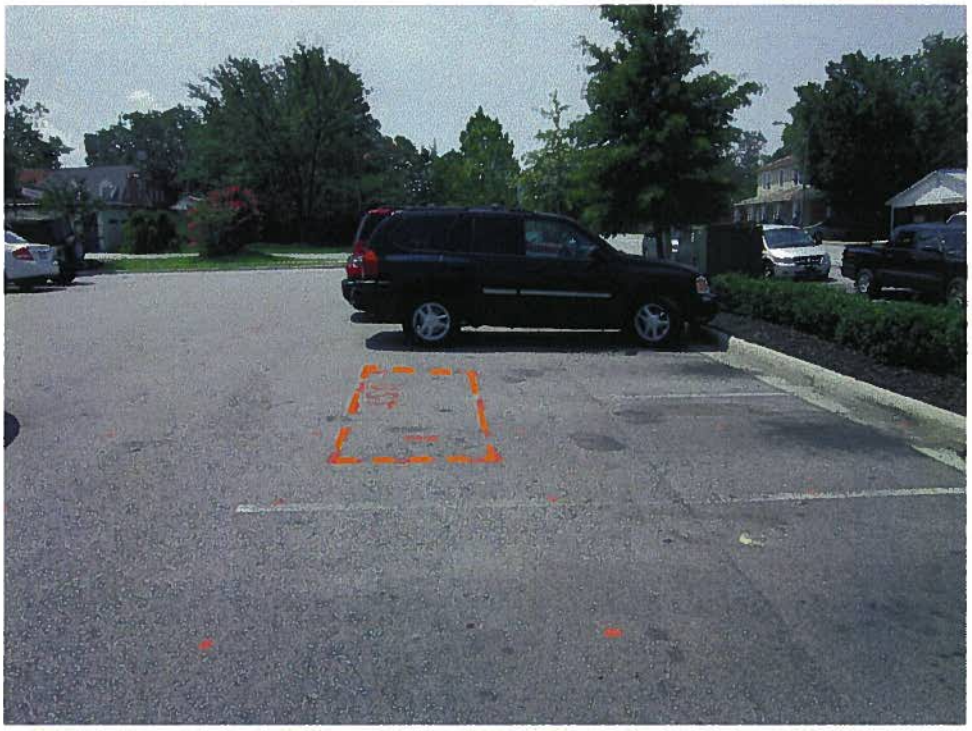
Schnabel ENGINEERING

STATE PROJECT U-3315
NC DEPARTMENT OF TRANSPORTATION
PITT COUNTY, NORTH CAROLINA
PROJECT NO. 11821014.17

EM61
DIFFERENTIAL
RESPONSE

FIGURE 4

Parcel 107 (Brody Properties), looking west. Photo shows approximate marked location of probable UST No. 1 near the western edge of the parcel.



Parcel 107 (Brody Properties), looking south. Photo shows approximate marked location of probable UST No. 1 near the western edge of the parcel.

Schnabel ENGINEERING

STATE PROJECT U-3315
NC DEPT. OF TRANSPORTATION
PITT COUNTY, NORTH CAROLINA
PROJECT NO. 11821014.17

PHOTOS OF
UST LOCATIONS

FIGURE 5

APPENDIX C
BORING LOGS

BORING LOG

CATLIN Engineers and Scientists
Wilmington, NC
WBS Element: 35781.1.2
State Project: U-3315

PROJECT NO.: 212077	STATE: NC	COUNTY: Pitt	LOCATION: Greenville
PROJECT NAME: Parcel 107 - Brody Properties - Starbucks		LOGGED BY: Ben Ashba	BORING ID: 107DPT-01
		DRILLER: William J. Miller	
NORTHING: 679,393.00	EASTING: 2,483,308.00	CREW: Corey Futral	
SYSTEM: NCSP NAD 83 (USft)	BORING LOCATION: @ CB 1115 - Grass @ edge of concrete sidewalk		LAND ELEV.: NM
DRILL MACHINE: Power Probe	METHOD: CPT / DPT	0 HOUR DTW: N/A	BORING DEPTH: 6.0
START DATE: 07/25/12	FINISH DATE: 07/25/12	24 HOUR DTW: N/A	ROCK DEPTH: --

DEPTH	BLOW COUNT 0.5 0.5 0.5 0.5	MOI.	PID RESULTS (ppm) 0 250 500 750 1,000	LAB.	USCS	LOG	SOIL AND ROCK DESCRIPTION	DEPTH	ELEVATION
							LAND SURFACE	0.0	
0.0					SM		TOPSOIL.	0.5	
			▲0		SM		Brown, Silty SAND.		
2.0									
			▲0					3.0	
					CL		Brown, Sandy CLAY.	4.0	
4.0			▲0						
4.5			▲0	DPT-01 (4.5-5')	CH		Tannish-gray w/slight orange mottling, CLAY w/tr. sand ~5.5' BLS.		
5.0			▲0					6.0	
6.0							Boring Terminated at Depth 6.0 ft		

▽ = 0hr. DTW ▼ = 24hr. DTW

CATLIN ENVIRO LOG 212077_GREENVILLE-PSAS_U3315.GPJ CATLIN.GDT 10/09/12

BORING LOG

CATLIN Engineers and Scientists
Wilmington, NC
WBS Element: 35781.1.2
State Project: U-3315

PROJECT NO.: 212077	STATE: NC	COUNTY: Pitt	LOCATION: Greenville
PROJECT NAME: Parcel 107 - Brody Properties - Starbucks	LOGGED BY: Ben Ashba	DRILLER: William J. Miller	BORING ID: 107DPT-02
NORTHING: 679,397.00	EASTING: 2,483,284.00	CREW: Corey Futral	
SYSTEM: NCSP NAD 83 (USft)	BORING LOCATION: @ CB 1111 - Grass @ edge of sidewalk		LAND ELEV.: NM
DRILL MACHINE: Power Probe	METHOD: CPT / DPT	0 HOUR DTW: 9.0	BORING DEPTH: 15.0
START DATE: 07/25/12	FINISH DATE: 07/25/12	24 HOUR DTW: N/A	ROCK DEPTH: --

DEPTH	BLOW COUNT 0.5 0.5 0.5 0.5	MOI.	PID RESULTS (ppm) 0 250 500 750 1,000	LAB.	USCS	LOG	DEPTH	SOIL AND ROCK DESCRIPTION	ELEVATION
							0.0	LAND SURFACE	
0.0					SM		0.3	TOPSOIL.	
			▲0						
2.0					SM			Brown, Silty SAND w/tr. clay ~4' BLS.	
			▲0						
4.0									
			▲0						
5.0							5.0		
			▲0	DPT-02 (5-5.7')	CH			Gray and brown, CLAY. Orange mottling.	
5.7			▲0						
6.0							6.0		
								Blind Point pushed to 15' for GW sample.	
15.0							15.0		
								Boring Terminated at Depth 15.0 ft	

▽ = 0hr. DTW ▼ = 24hr. DTW

CATLIN ENVIRO LOG 212077_GREENVILLE-PSAS_U3315.GPJ_CATLIN.GDT 10/09/12

BORING LOG

CATLIN Engineers and Scientists
Wilmington, NC

WBS Element: 35781.1.2
State Project: U-3315

PROJECT NO.: 212077	STATE: NC	COUNTY: Pitt	LOCATION: Greenville
PROJECT NAME: Parcel 107 - Brody Properties - Starbucks		LOGGED BY: Ben Ashba	BORING ID: 107DPT-03
		DRILLER: William J. Miller	
NORTHING: 679,374.00	EASTING: 2,483,230.00	CREW: Corey Futral	
SYSTEM: NCSP NAD 83 (USft)	BORING LOCATION: @ CB 1110 - corner of mulch and parking lot		LAND ELEV.: NM
DRILL MACHINE: Power Probe	METHOD: CPT / DPT	0 HOUR DTW: N/A	BORING DEPTH: 7.0
START DATE: 07/25/12	FINISH DATE: 07/25/12	24 HOUR DTW: N/A	ROCK DEPTH: --

DEPTH	BLOW COUNT 0.5 0.5 0.5 0.5	MOI.	PID RESULTS (ppm) 0 250 500 750 1,000	LAB.	USCS	LOG	DEPTH	SOIL AND ROCK DESCRIPTION	ELEVATION
							0.0	LAND SURFACE	
0.0					SM		0.3	TOPSOIL.	
			▲0		SP			Brown, SAND w/tr. silt.	
2.0							2.5		
			▲0		SC			Brown, Clayey SAND.	
4.0							4.5		
			▲0						
5.5									
			▲0	DPT-03 (5.5-6')	CH			Lt gray, CLAY. Some orange mottling.	
6.0									
7.0							7.0	Boring Terminated at Depth 7.0 ft	

▽ = 0hr. DTW ▼ = 24hr. DTW

CATLIN ENVIRO LOG 212077_GREENVILLE-PSAS_U3315.GPJ CATLIN.GDT 10/09/12

BORING LOG

CATLIN Engineers and Scientists
Wilmington, NC
WBS Element: 35781.1.2
State Project: U-3315

PROJECT NO.: 212077	STATE: NC	COUNTY: Pitt	LOCATION: Greenville
PROJECT NAME: Parcel 107 - Brody Properties - Starbucks	LOGGED BY: Ben Ashba		BORING ID: 107DPT-04
	DRILLER: William J. Miller		
NORTHING: 679,355.00	EASTING: 2,483,230.00	CREW: Corey Futral	
SYSTEM: NCSP NAD 83 (USft)	BORING LOCATION: @ CB 1109		LAND ELEV.: NM
DRILL MACHINE: Power Probe	METHOD: CPT / DPT	0 HOUR DTW: N/A	BORING DEPTH: 6.0
START DATE: 08/03/12	FINISH DATE: 08/03/12	24 HOUR DTW: N/A	ROCK DEPTH: --

DEPTH	BLOW COUNT 0.5 0.5 0.5 0.5	MOI.	PID RESULTS (ppm) 0 250 500 750 1,000	LAB.	USCS	LOG	DEPTH	SOIL AND ROCK DESCRIPTION	ELEVATION
							0.0	LAND SURFACE	
0.0					GW			ASPHALT and GRAVEL fill.	
			▲0				1.0		
2.0					SP/ CL			Med. tan to gray to brown, f. SAND interbedded w/Sandy CLAY throughout. Mottled below 3ft.	
			▲1						
4.0			▲0						
4.5			▲0	DPT-04 (4.5-5')					
5.0			▲0				5.5		
					CH			Med. gray, CLAY.	
6.0							6.0	Boring Terminated at Depth 6.0 ft	

▽ = 0hr. DTW ▼ = 24hr. DTW

CATLIN ENVIRO LOG 212077_GREENVILLE-PSAS_U3315.GPJ CATLIN.GDT 10/09/12

BORING LOG

CATLIN Engineers and Scientists
Wilmington, NC
WBS Element: 35781.1.2
State Project: U-3315

PROJECT NO.: 212077	STATE: NC	COUNTY: Pitt	LOCATION: Greenville
PROJECT NAME: Parcel 107 - Brody Properties - Starbucks	LOGGED BY: Ben Ashba	DRILLER: William J. Miller	BORING ID: 107DPT-05
NORTHING: 679,342.00	EASTING: 2,483,237.00	CREW: Corey Futral	
SYSTEM: NCSP NAD 83 (USft)	BORING LOCATION: 25' S. of 107DPT-04		LAND ELEV.: NM
DRILL MACHINE: Power Probe	METHOD: CPT / DPT	0 HOUR DTW: N/A	BORING DEPTH: 6.0
START DATE: 08/03/12	FINISH DATE: 08/03/12	24 HOUR DTW: N/A	ROCK DEPTH: --

DEPTH	BLOW COUNT 0.5 0.5 0.5 0.5	MOI.	PID RESULTS (ppm) 0 250 500 750 1,000	LAB.	USCS	LOG	DEPTH	SOIL AND ROCK DESCRIPTION	ELEVATION
							0.0	LAND SURFACE	
0.0					GW		0.5	ASPHALT and GRAVEL fill.	
			▲0		SP		2.0	Dk brown, f. SAND.	
2.0			▲0		CL		4.0	Med. gray and brown w/tr. orange mottling, Sandy CLAY.	
4.0			▲2		SW		5.0	Brown to tan, med. SAND. Well-graded.	
5.0			▲2	DPT-05 (5-6')	CL		6.0	Dk gray to med. brown, Sandy CLAY.	
6.0								Boring Terminated at Depth 6.0 ft	

▽ = 0hr. DTW ▼ = 24hr. DTW

CATLIN ENVIRO LOG 212077_GREENVILLE-PSAS_U3315.GPJ CATLIN.GDT 10/09/12

BORING LOG

CATLIN Engineers and Scientists
Wilmington, NC

WBS Element: 35781.1.2
State Project: U-3315

PROJECT NO.: 212077	STATE: NC	COUNTY: Pitt	LOCATION: Greenville
PROJECT NAME: Parcel 107 - Brody Properties - Starbucks	LOGGED BY: Ben Ashba	DRILLER: William J. Miller	BORING ID: 107DPT-06
NORTHING: 679,326.00	EASTING: 2,483,219.00	CREW: Corey Futral	
SYSTEM: NCSP NAD 83 (USft)	BORING LOCATION: @ CB 1116		LAND ELEV.: NM
DRILL MACHINE: Power Probe	METHOD: CPT / DPT	0 HOUR DTW: N/A	BORING DEPTH: 6.0
START DATE: 08/03/12	FINISH DATE: 08/03/12	24 HOUR DTW: N/A	ROCK DEPTH: --

DEPTH	BLOW COUNT 0.5 0.5 0.5 0.5	MOI.	PID RESULTS (ppm) 0 250 500 750 1,000	LAB.	USCS	LOG	DEPTH	SOIL AND ROCK DESCRIPTION	ELEVATION
							0.0	LAND SURFACE	
0.0					SW		0.5	TOPSOIL and MULCH.	
			▲0		CL		1.5	Brown, Sandy CLAY.	
					SM		2.0	Lt tan, Silty SAND.	
2.0			▲0		CL		4.5	Lt brown w/orange mottling, Sandy CLAY.	
4.0			▲2						
4.5			▲2	DPT-06 (4.5-5')					
5.0			▲2		CH		6.0	Med. gray w/orange mottling, CLAY.	
6.0								Boring Terminated at Depth 6.0 ft	

▽ = 0hr. DTW ▼ = 24hr. DTW

CATLIN ENVIRO LOG 212077_GREENVILLE-PSAS_U3315.GPJ CATLIN.GDT 10/09/12

BORING LOG

CATLIN Engineers and Scientists
Wilmington, NC

WBS Element: 35781.1.2
State Project: U-3315

PROJECT NO.: 212077	STATE: NC	COUNTY: Pitt	LOCATION: Greenville
PROJECT NAME: Parcel 107 - Brody Properties - Starbucks	LOGGED BY: Ben Ashba		BORING ID: 107DPT-07
	DRILLER: William J. Miller		
NORTHING: 679,366.00	EASTING: 2,483,250.00	CREW: Corey Futral	
SYSTEM: NCSP NAD 83 (USft)	BORING LOCATION: NW corner of parcel		LAND ELEV.: NM
DRILL MACHINE: Power Probe	METHOD: CPT / DPT	0 HOUR DTW: N/A	BORING DEPTH: 8.0
START DATE: 08/03/12	FINISH DATE: 08/03/12	24 HOUR DTW: N/A	ROCK DEPTH: --

DEPTH	BLOW COUNT 0.5 0.5 0.5 0.5	MOI.	PID RESULTS (ppm) 0 250 500 750 1,000	LAB.	USCS	LOG	DEPTH	SOIL AND ROCK DESCRIPTION	ELEVATION
							0.0	LAND SURFACE	
0.0					GW		0.5	ASPHALT and GRAVEL.	
			▲2		SP		2.0	Lt tan, v.f. SAND.	
2.0									
			▲2		CL		4.5	Brown w/lt gray, Sandy CLAY.	
4.0									
			▲2		SC		5.5	Brown and lt gray w/orange mottling, Clayey SAND.	
6.0									
			▲2		CH			Lt gray w/orange mottling, CLAY. Gray ~ 6' BLS.	
7.0									
			▲2	DPT-07 (7-8')			8.0		
8.0								Boring Terminated at Depth 8.0 ft	

▽ = 0hr. DTW ▼ = 24hr. DTW

CATLIN ENVIRO LOG 212077_GREENVILLE-PSAS_U3315.GPJ_CATLIN.GDT 10/09/12

BORING LOG

CATLIN Engineers and Scientists
Wilmington, NC

WBS Element: 35781.1.2
State Project: U-3315

PROJECT NO.: 212077	STATE: NC	COUNTY: Pitt	LOCATION: Greenville
PROJECT NAME: Parcel 107 - Brody Properties - Starbucks	LOGGED BY: Ben Ashba	DRILLER: William J. Miller	BORING ID: 107DPT-08
NORTHING: 679,375.00	EASTING: 2,483,305.00	CREW: Corey Futral	
SYSTEM: NCSP NAD 83 (USft)	BORING LOCATION: N. of front of Starbucks		LAND ELEV.: NM
DRILL MACHINE: Power Probe	METHOD: CPT / DPT	0 HOUR DTW: N/A	BORING DEPTH: 8.0
START DATE: 08/03/12	FINISH DATE: 08/03/12	24 HOUR DTW: N/A	ROCK DEPTH: --

DEPTH	BLOW COUNT 0.5 0.5 0.5 0.5	MOI.	PID RESULTS (ppm) 0 250 500 750 1,000	LAB.	USCS	LOG	DEPTH	SOIL AND ROCK DESCRIPTION	ELEVATION
							0.0	LAND SURFACE	
0.0					SW		0.5	TOPSOIL and MULCH w/red bricks at bottom.	
			▲3		SP			Lt brown, f. SAND.	
2.0							3.0		
			▲3		SM			Lt gray, Silty SAND.	
4.0							4.0		
			▲3		CL			Med. gray w/orange mottling, Sandy CLAY.	
6.0				DPT-08 (6-7')					
7.0							7.0		
					CH			Lt gray w/orange mottling, CLAY.	
8.0							8.0		
								Boring Terminated at Depth 8.0 ft	

▽ = 0hr. DTW ▼ = 24hr. DTW

CATLIN ENVIRO LOG 212077_GREENVILLE-PSAS_U3315.GPJ CATLIN.GDT 10/09/12

BORING LOG

CATLIN Engineers and Scientists
Wilmington, NC
WBS Element: 35781.1.2
State Project: U-3315

PROJECT NO.: 212077	STATE: NC	COUNTY: Pitt	LOCATION: Greenville
PROJECT NAME: Parcel 107 - Brody Properties - Starbucks	LOGGED BY: Ben Ashba	DRILLER: William J. Miller	BORING ID: 107DPT-09
NORTHING: 679,390.00	EASTING: 2,483,330.00	CREW: Corey Futral	
SYSTEM: NCSP NAD 83 (USft)	BORING LOCATION: @ CB 1115		LAND ELEV.: NM
DRILL MACHINE: Power Probe	METHOD: CPT / DPT	0 HOUR DTW: N/A	BORING DEPTH: 8.0
START DATE: 08/03/12	FINISH DATE: 08/03/12	24 HOUR DTW: N/A	ROCK DEPTH: --

DEPTH	BLOW COUNT 0.5 0.5 0.5 0.5	MOI.	PID RESULTS (ppm) 0 250 500 750 1,000	LAB.	USCS	LOG	DEPTH	SOIL AND ROCK DESCRIPTION	ELEVATION
							0.0	LAND SURFACE	
0.0					SW		0.5	TOPSOIL.	
			▲3						
2.0					SM			Dk brown w/black, Silty SAND.	
			▲3						
4.0							4.0		
			▲3						
4.5				DPT-09 (4.5-5')					
5.0			▲3		CL			Gray w/tr. orange mottling, Sandy CLAY..	
							6.0		
6.0					CH			Gray w/tr. orange mottling, CLAY.	
			▲1						
8.0							8.0		
								Boring Terminated at Depth 8.0 ft	

▽ = 0hr. DTW ▼ = 24hr. DTW

CATLIN ENVIRO LOG 212077_GREENVILLE-PSAS_U3315.GPJ_CATLIN.GDT 10/09/12

APPENDIX D

LABORATORY REPORT AND CHAIN OF CUSTODY RECORD

Laboratory Report of Analysis

To: Ben Ashba
RICHARD CATLIN & ASSOCIATES
P.O. Box 10279
Wilmington, NC 28404

Report Number: **31202488**

Client Project: **NCDOT Parcel 107**

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. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. 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 A. 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.

Barbara A. Hager
2012.08.16 14:13:47 -05'00'

Barbara A. Hager — Date
Project Manager
barbara.hager@sgs.com

Print Date: 08/16/2012 N.C. Certification # 481

ANALYTICAL PERSPECTIVES IS NOW PART OF SGS, THE WORLD'S LEADING INSPECTION, VERIFICATION, TESTING AND CERTIFICATION COMPANY.

Laboratory Qualifiers

Report Definitions

DL	Method, Instrument, or Estimated Detection Limit per Analytical Method
CL	Control Limits for the recovery result of a parameter
LOQ	Reporting Limit
DF	Dilution Factor
RPD	Relative Percent Difference
LCS(D)	Laboratory Control Spike (Duplicate)
MS(D)	Matrix Spike (Duplicate)
MB	Method Blank

Qualifier Definitions

*	Recovery or RPD outside of control limits
B	Analyte was detected in the Lab Method Blank at a level above the LOQ
U	Undetected (Reported as ND or < DL)
V	Recovery is below quality control limit. The data has been validated based on a favorable signal-to-noise and detection limit
A	Amount detected is less than the Lower Method Calibration Limit
J	Estimated Concentration.
O	The recovery of this analyte in the OPR is above the Method QC Limits and the reported concentration in the sample may be biased high
E	Amount detected is greater than the Upper Calibration Limit
S	The amount of analyte present has saturated the detector. This situation results in an underestimation of the affected analyte(s)
Q	Indicates the presence of a quantitative interference. This situation may result in an underestimation of the affected analyte(s)
I	Indicates the presence of a qualitative interference that could cause a false positive or an overestimation of the affected analyte(s)
DPE	Indicates the presence of a peak in the polychlorinated diphenylether channel that could cause a false positive or an overestimation of the affected analyte(s)
TIC	Tentatively Identified Compound
EMPC	Estimated Maximum possible Concentration due to ion ratio failure
ND	Not Detected
K	Result is estimated due to ion ratio failure in High Resolution PCB Analysis
P	RPD > 40% between results of dual columns
D	Spike or surrogate was diluted out in order to achieve a parameter result within instrument calibration range

Samples requiring manual integrations for various congeners and/or standards are marked and dated by the analyst. A code definition is provided below:

M1	Mis-identified peak
M2	Software did not integrate peak
M3	Incorrect baseline construction (i.e. not all of peak included; two peaks integrated as one)
M4	Pattern integration required (i.e. DRO, GRO, PCB, Toxaphene and Technical Chlordane)
M5	Other - Explained in case narrative

Note Results pages that include a value for "Solids (%)" have been adjusted for moisture content.

Print Date: 08/16/2012 N.C. Certification # 481

Sample Summary

Client Sample ID	Lab Sample ID	Collected	Received	Matrix
107DPT-04 (4.5-5ft)	31202488001	08/03/2012 08:30	08/03/2012 15:00	Soil-Solid as dry weight
107DPT-05 (5-6ft)	31202488002	08/03/2012 09:10	08/03/2012 15:00	Soil-Solid as dry weight
107DPT-06 (4.5-5ft)	31202488003	08/03/2012 09:30	08/03/2012 15:00	Soil-Solid as dry weight
107DPT-07 (7-8ft)	31202488004	08/03/2012 09:40	08/03/2012 15:00	Soil-Solid as dry weight
107DPT-08 (6-7ft)	31202488005	08/03/2012 10:00	08/03/2012 15:00	Soil-Solid as dry weight
107DPT-09 (4.5-5ft)	31202488006	08/03/2012 10:10	08/03/2012 15:00	Soil-Solid as dry weight

Case Narrative

104DPT-02 (6-6.5ft)(83859MS)
8260 - The method blank associated with batch VMS2454 has a reported 'J' concentration for Methylene Chloride.

107DPT-04 (4.5-5ft)
8260 - An MS and DUP were not analyzed with batch VMS2451 due to an autosampler error.

107DPT-05 (5-6ft)
8260 - An MS and DUP were not analyzed with batch VMS2451 due to an autosampler error.

107DPT-06 (4.5-5ft)
8260 - An MS and DUP were not analyzed with batch VMS2451 due to an autosampler error.

107DPT-07 (7-8ft)
8260 - An MS and DUP were not analyzed with batch VMS2451 due to an autosampler error.

107DPT-08 (6-7ft)
8260 - The method blank associated with batch VMS2454 has a reported 'J' concentration for Methylene Chloride.

107DPT-09 (4.5-5ft)
8260 - The method blank associated with batch VMS2454 has a reported 'J' concentration for Methylene Chloride.

LCSD-S for HBN 26796 [VXX/3769
8260 - An MS and DUP were not analyzed with batch VMS2451 due to an autosampler error.

LCSD-S for HBN 26841 [VXX/3778
8260 - The method blank associated with batch VMS2454 has a reported 'J' concentration for Methylene Chloride.

LCS-S for HBN 26796 [VXX/3769]
8260 - An MS and DUP were not analyzed with batch VMS2451 due to an autosampler error.

LCS-S for HBN 26841 [VXX/3778]
8260 - The method blank associated with batch VMS2454 has a reported 'J' concentration for Methylene Chloride.

MB-S for HBN 26796 [VXX/3769]
8260 - An MS and DUP were not analyzed with batch VMS2451 due to an autosampler error.

MB-S for HBN 26841 [VXX/3778]
8260 - The method blank associated with batch VMS2454 has a reported 'J' concentration for Methylene Chloride.

Detectable Results Summary

Client Sample ID: **107DPT-04 (4.5-5ft)**
Lab Sample ID: 31202488001-A

	Parameter	Result	Units	
SW-846 8260B	1,2,4-Trimethylbenzene	0.723	ug/Kg	J
	Acetone	34.9	ug/Kg	J
	Benzene	1.85	ug/Kg	J
	Toluene	1.64	ug/Kg	J
	Xylene (total)	2.45	ug/Kg	J
	m,p-Xylene	2.45	ug/Kg	J

Client Sample ID: **107DPT-05 (5-6ft)**
Lab Sample ID: 31202488002-A

	Parameter	Result	Units	
SW-846 8260B	Methylene chloride	1.35	ug/Kg	J

Client Sample ID: **107DPT-06 (4.5-5ft)**
Lab Sample ID: 31202488003-A

	Parameter	Result	Units	
SW-846 8260B	Methylene chloride	1.58	ug/Kg	J

Client Sample ID: **107DPT-07 (7-8ft)**
Lab Sample ID: 31202488004-A

	Parameter	Result	Units	
SW-846 8260B	Methylene chloride	1.67	ug/Kg	J

Client Sample ID: **107DPT-08 (6-7ft)**
Lab Sample ID: 31202488005-A

	Parameter	Result	Units	
SW-846 8260B	Methylene chloride	2.04	ug/Kg	J

Client Sample ID: **107DPT-09 (4.5-5ft)**
Lab Sample ID: 31202488006-A

	Parameter	Result	Units	
SW-846 8260B	Methylene chloride	1.50	ug/Kg	J

Quality Control Samples

Client Sample ID: **MB-S for HBN 26841 [VXX/3778]**
Lab Sample ID: 84243

	Parameter	Result	Units	
SW-846 8260B	Methylene chloride	3.48	ug/Kg	J

SGS ANALYTICAL PERSPECTIVES

Results of 107DPT-04 (4.5-5ft)

Client Sample ID: **107DPT-04 (4.5-5ft)**
Client Project ID: **NCDOT Parcel 107**
Lab Sample ID: 31202488001-A
Lab Project ID: 31202488

Collection Date: 08/03/2012 08:30
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 81.60

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	U	0.641	4.52	ug/Kg	1	08/7/2012 17:00
1,1,1-Trichloroethane	ND	U	0.681	4.52	ug/Kg	1	08/7/2012 17:00
1,1,2,2-Tetrachloroethane	ND	U	1.06	4.52	ug/Kg	1	08/7/2012 17:00
1,1,2-Trichloroethane	ND	U	0.940	4.52	ug/Kg	1	08/7/2012 17:00
1,1-Dichloroethane	ND	U	0.486	4.52	ug/Kg	1	08/7/2012 17:00
1,1-Dichloroethene	ND	U	1.05	4.52	ug/Kg	1	08/7/2012 17:00
1,1-Dichloropropene	ND	U	0.611	4.52	ug/Kg	1	08/7/2012 17:00
1,2,3-Trichlorobenzene	ND	U	0.752	4.52	ug/Kg	1	08/7/2012 17:00
1,2,3-Trichloropropane	ND	U	0.931	4.52	ug/Kg	1	08/7/2012 17:00
1,2,4-Trichlorobenzene	ND	U	0.659	4.52	ug/Kg	1	08/7/2012 17:00
1,2,4-Trimethylbenzene	**0.723**	J	0.576	4.52	ug/Kg	1	08/7/2012 17:00
1,2-Dibromo-3-chloropropane	ND	U	6.70	27.1	ug/Kg	1	08/7/2012 17:00
1,2-Dibromoethane	ND	U	1.18	4.52	ug/Kg	1	08/7/2012 17:00
1,2-Dichlorobenzene	ND	U	0.643	4.52	ug/Kg	1	08/7/2012 17:00
1,2-Dichloroethane	ND	U	0.825	4.52	ug/Kg	1	08/7/2012 17:00
1,2-Dichloropropane	ND	U	1.04	4.52	ug/Kg	1	08/7/2012 17:00
1,3,5-Trimethylbenzene	ND	U	0.550	4.52	ug/Kg	1	08/7/2012 17:00
1,3-Dichlorobenzene	ND	U	0.650	4.52	ug/Kg	1	08/7/2012 17:00
1,3-Dichloropropane	ND	U	0.794	4.52	ug/Kg	1	08/7/2012 17:00
1,4-Dichlorobenzene	ND	U	0.610	4.52	ug/Kg	1	08/7/2012 17:00
2,2-Dichloropropane	ND	U	0.667	4.52	ug/Kg	1	08/7/2012 17:00
2-Butanone	ND	U	3.05	22.6	ug/Kg	1	08/7/2012 17:00
2-Chlorotoluene	ND	U	0.847	4.52	ug/Kg	1	08/7/2012 17:00
2-Hexanone	ND	U	2.91	11.3	ug/Kg	1	08/7/2012 17:00
4-Chlorotoluene	ND	U	0.683	4.52	ug/Kg	1	08/7/2012 17:00
4-Isopropyltoluene	ND	U	0.583	4.52	ug/Kg	1	08/7/2012 17:00
4-Methyl-2-pentanone	ND	U	3.38	11.3	ug/Kg	1	08/7/2012 17:00
Acetone	**34.9**	J	3.62	45.2	ug/Kg	1	08/7/2012 17:00
Benzene	**1.85**	J	0.643	4.52	ug/Kg	1	08/7/2012 17:00
Bromobenzene	ND	U	0.630	4.52	ug/Kg	1	08/7/2012 17:00
Bromochloromethane	ND	U	0.850	4.52	ug/Kg	1	08/7/2012 17:00
Bromodichloromethane	ND	U	0.636	4.52	ug/Kg	1	08/7/2012 17:00
Bromoform	ND	U	0.654	4.52	ug/Kg	1	08/7/2012 17:00
Bromomethane	ND	U	1.31	4.52	ug/Kg	1	08/7/2012 17:00
n-Butylbenzene	ND	U	0.594	4.52	ug/Kg	1	08/7/2012 17:00
Carbon disulfide	ND	U	0.473	4.52	ug/Kg	1	08/7/2012 17:00
Carbon tetrachloride	ND	U	0.514	4.52	ug/Kg	1	08/7/2012 17:00
Chlorobenzene	ND	U	0.631	4.52	ug/Kg	1	08/7/2012 17:00
Chloroethane	ND	U	0.904	4.52	ug/Kg	1	08/7/2012 17:00
Chloroform	ND	U	0.576	4.52	ug/Kg	1	08/7/2012 17:00
Chloromethane	ND	U	1.29	4.52	ug/Kg	1	08/7/2012 17:00
Dibromochloromethane	ND	U	1.00	4.52	ug/Kg	1	08/7/2012 17:00
Dibromomethane	ND	U	0.797	4.52	ug/Kg	1	08/7/2012 17:00
Dichlorodifluoromethane	ND	U	0.949	4.52	ug/Kg	1	08/7/2012 17:00

Print Date: 08/16/2012

N.C. Certification # 481

Results of 107DPT-04 (4.5-5ft)

Client Sample ID: **107DPT-04 (4.5-5ft)**
Client Project ID: **NCDOT Parcel 107**
Lab Sample ID: 31202488001-A
Lab Project ID: 31202488

Collection Date: 08/03/2012 08:30
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 81.60

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	U	0.931	4.52	ug/Kg	1	08/7/2012 17:00
trans-1,3-Dichloropropene	ND	U	0.853	4.52	ug/Kg	1	08/7/2012 17:00
Diisopropyl Ether	ND	U	0.742	4.52	ug/Kg	1	08/7/2012 17:00
Ethyl Benzene	ND	U	0.637	4.52	ug/Kg	1	08/7/2012 17:00
Hexachlorobutadiene	ND	U	0.621	4.52	ug/Kg	1	08/7/2012 17:00
Isopropylbenzene (Cumene)	ND	U	0.562	4.52	ug/Kg	1	08/7/2012 17:00
Methyl iodide	ND	U	0.692	4.52	ug/Kg	1	08/7/2012 17:00
Methylene chloride	ND	U	0.949	18.1	ug/Kg	1	08/7/2012 17:00
Naphthalene	ND	U	0.822	4.52	ug/Kg	1	08/7/2012 17:00
Styrene	ND	U	0.521	4.52	ug/Kg	1	08/7/2012 17:00
Tetrachloroethene	ND	U	0.679	4.52	ug/Kg	1	08/7/2012 17:00
Toluene	**1.64**	J	0.622	4.52	ug/Kg	1	08/7/2012 17:00
Trichloroethene	ND	U	0.761	4.52	ug/Kg	1	08/7/2012 17:00
Trichlorofluoromethane	ND	U	0.913	4.52	ug/Kg	1	08/7/2012 17:00
Vinyl chloride	ND	U	0.859	4.52	ug/Kg	1	08/7/2012 17:00
Xylene (total)	**2.45**	J	1.60	9.04	ug/Kg	1	08/7/2012 17:00
cis-1,2-Dichloroethene	ND	U	0.552	4.52	ug/Kg	1	08/7/2012 17:00
m,p-Xylene	**2.45**	J	1.53	9.04	ug/Kg	1	08/7/2012 17:00
n-Propylbenzene	ND	U	0.662	4.52	ug/Kg	1	08/7/2012 17:00
o-Xylene	ND	U	0.692	4.52	ug/Kg	1	08/7/2012 17:00
sec-Butylbenzene	ND	U	0.542	4.52	ug/Kg	1	08/7/2012 17:00
tert-Butyl methyl ether (MTBE)	ND	U	0.719	4.52	ug/Kg	1	08/7/2012 17:00
tert-Butylbenzene	ND	U	0.608	4.52	ug/Kg	1	08/7/2012 17:00
trans-1,2-Dichloroethene	ND	U	0.660	4.52	ug/Kg	1	08/7/2012 17:00
trans-1,4-Dichloro-2-butene	ND	U	3.80	22.6	ug/Kg	1	08/7/2012 17:00
Surrogates							
1,2-Dichloroethane-d4	130			55.0-173	%	1	08/7/2012 17:00
4-Bromofluorobenzene	83.0			23.0-141	%	1	08/7/2012 17:00
Toluene d8	102			57.0-134	%	1	08/7/2012 17:00

Batch Information

Analytical Batch: **VMS2451**
Analytical Method: **SW-846 8260B**
Instrument: **MSD9**
Analyst: **DVO**
Analytical Date/Time: **08/07/2012 17:00**

Prep Batch: **VXX3769**
Prep Method: **SW-846 5035 SL**
Prep Date/Time: **08/06/2012 16:12**
Prep Initial Wt./Vol.: **6.78 g**
Prep Extract Vol: **5 mL**

Print Date: 08/16/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 107DPT-04 (4.5-5ft)

Client Sample ID: **107DPT-04 (4.5-5ft)**
Client Project ID: **NCDOT Parcel 107**
Lab Sample ID: 31202488001-E
Lab Project ID: 31202488

Collection Date: 08/03/2012 08:30
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 81.60

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,2,4-Trichlorobenzene	ND	U	33.2	377	ug/Kg	1	08/8/2012 14:27
1,2-Dichlorobenzene	ND	U	18.8	377	ug/Kg	1	08/8/2012 14:27
1,3-Dichlorobenzene	ND	U	25.4	377	ug/Kg	1	08/8/2012 14:27
1,4-Dichlorobenzene	ND	U	26.6	377	ug/Kg	1	08/8/2012 14:27
2,4,5-Trichlorophenol	ND	U	25.2	377	ug/Kg	1	08/8/2012 14:27
2,4,6-Trichlorophenol	ND	U	25.5	377	ug/Kg	1	08/8/2012 14:27
2,4-Dichlorophenol	ND	U	21.8	377	ug/Kg	1	08/8/2012 14:27
2,4-Dinitrophenol	ND	U	34.9	752	ug/Kg	1	08/8/2012 14:27
2,4-Dinitrotoluene	ND	U	19.0	377	ug/Kg	1	08/8/2012 14:27
2,6-Dinitrotoluene	ND	U	27.0	377	ug/Kg	1	08/8/2012 14:27
2-Chloronaphthalene	ND	U	22.1	377	ug/Kg	1	08/8/2012 14:27
2-Chlorophenol	ND	U	20.0	377	ug/Kg	1	08/8/2012 14:27
2-Methylnaphthalene	ND	U	30.5	377	ug/Kg	1	08/8/2012 14:27
2-Methylphenol	ND	U	20.8	377	ug/Kg	1	08/8/2012 14:27
2-Nitroaniline	ND	U	24.8	377	ug/Kg	1	08/8/2012 14:27
2-Nitrophenol	ND	U	18.1	377	ug/Kg	1	08/8/2012 14:27
3 and/or 4-Methylphenol	ND	U	24.4	377	ug/Kg	1	08/8/2012 14:27
3,3'-Dichlorobenzidine	ND	U	18.1	377	ug/Kg	1	08/8/2012 14:27
3-Nitroaniline	ND	U	17.0	377	ug/Kg	1	08/8/2012 14:27
4,6-Dinitro-2-methylphenol	ND	U	17.7	377	ug/Kg	1	08/8/2012 14:27
4-Chloro-3-methylphenol	ND	U	18.8	377	ug/Kg	1	08/8/2012 14:27
4-Chloroaniline	ND	U	30.1	377	ug/Kg	1	08/8/2012 14:27
4-Chlorophenyl phenyl ether	ND	U	40.2	377	ug/Kg	1	08/8/2012 14:27
Acenaphthene	ND	U	17.1	377	ug/Kg	1	08/8/2012 14:27
Acenaphthylene	ND	U	15.9	377	ug/Kg	1	08/8/2012 14:27
Anthracene	ND	U	16.7	377	ug/Kg	1	08/8/2012 14:27
Benzo(a)anthracene	ND	U	20.7	377	ug/Kg	1	08/8/2012 14:27
Benzo(a)pyrene	ND	U	21.3	377	ug/Kg	1	08/8/2012 14:27
Benzo(b)fluoranthene	ND	U	21.7	377	ug/Kg	1	08/8/2012 14:27
Benzo(g,h,i)perylene	ND	U	59.9	377	ug/Kg	1	08/8/2012 14:27
Benzo(k)fluoranthene	ND	U	45.1	377	ug/Kg	1	08/8/2012 14:27
Benzoic acid	ND	U	8.35	377	ug/Kg	1	08/8/2012 14:27
Bis(2-Chloroethoxy)methane	ND	U	17.0	377	ug/Kg	1	08/8/2012 14:27
Bis(2-Chloroethyl)ether	ND	U	35.1	377	ug/Kg	1	08/8/2012 14:27
Bis(2-Chloroisopropyl)ether	ND	U	32.9	377	ug/Kg	1	08/8/2012 14:27
Bis(2-Ethylhexyl)phthalate	ND	U	18.1	377	ug/Kg	1	08/8/2012 14:27
4-Bromophenyl phenyl ether	ND	U	24.8	377	ug/Kg	1	08/8/2012 14:27
Butyl benzyl phthalate	ND	U	32.7	377	ug/Kg	1	08/8/2012 14:27
Chrysene	ND	U	43.8	377	ug/Kg	1	08/8/2012 14:27
Di-n-butyl phthalate	ND	U	17.8	377	ug/Kg	1	08/8/2012 14:27
Di-n-octyl phthalate	ND	U	20.8	377	ug/Kg	1	08/8/2012 14:27
Dibenz(a,h)anthracene	ND	U	17.0	377	ug/Kg	1	08/8/2012 14:27
Dibenzofuran	ND	U	29.5	377	ug/Kg	1	08/8/2012 14:27
Diethyl phthalate	ND	U	20.3	377	ug/Kg	1	08/8/2012 14:27

Print Date: 08/16/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 107DPT-04 (4.5-5ft)

Client Sample ID: **107DPT-04 (4.5-5ft)**
Client Project ID: **NCDOT Parcel 107**
Lab Sample ID: 31202488001-E
Lab Project ID: 31202488

Collection Date: 08/03/2012 08:30
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 81.60

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
Dimethyl phthalate	ND	U	28.9	377	ug/Kg	1	08/8/2012 14:27
2,4-Dimethylphenol	ND	U	27.6	377	ug/Kg	1	08/8/2012 14:27
Diphenylamine	ND	U	17.0	377	ug/Kg	1	08/8/2012 14:27
Fluoranthene	ND	U	35.4	377	ug/Kg	1	08/8/2012 14:27
Fluorene	ND	U	20.0	377	ug/Kg	1	08/8/2012 14:27
Hexachlorobenzene	ND	U	35.6	377	ug/Kg	1	08/8/2012 14:27
Hexachlorobutadiene	ND	U	22.5	377	ug/Kg	1	08/8/2012 14:27
Hexachlorocyclopentadiene	ND	U	114	377	ug/Kg	1	08/8/2012 14:27
Hexachloroethane	ND	U	21.7	377	ug/Kg	1	08/8/2012 14:27
Indeno(1,2,3-cd)pyrene	ND	U	29.4	377	ug/Kg	1	08/8/2012 14:27
Isophorone	ND	U	17.1	377	ug/Kg	1	08/8/2012 14:27
Naphthalene	ND	U	32.5	377	ug/Kg	1	08/8/2012 14:27
4-Nitroaniline	ND	U	21.7	377	ug/Kg	1	08/8/2012 14:27
Nitrobenzene	ND	U	21.7	377	ug/Kg	1	08/8/2012 14:27
4-Nitrophenol	ND	U	37.1	377	ug/Kg	1	08/8/2012 14:27
Pentachlorophenol	ND	U	30.1	377	ug/Kg	1	08/8/2012 14:27
Phenanthrene	ND	U	24.8	377	ug/Kg	1	08/8/2012 14:27
Phenol	ND	U	35.1	377	ug/Kg	1	08/8/2012 14:27
Pyrene	ND	U	15.9	377	ug/Kg	1	08/8/2012 14:27
n-Nitrosodi-n-propylamine	ND	U	108	377	ug/Kg	1	08/8/2012 14:27
Surrogates							
2,4,6-Tribromophenol	84.0			41.0-129	%	1	08/8/2012 14:27
2-Fluorobiphenyl	78.0			48.0-123	%	1	08/8/2012 14:27
2-Fluorophenol	80.0			42.0-123	%	1	08/8/2012 14:27
Nitrobenzene-d5	83.0			46.0-117	%	1	08/8/2012 14:27
Phenol-d6	91.0			48.0-125	%	1	08/8/2012 14:27
Terphenyl-d14	89.0			44.0-140	%	1	08/8/2012 14:27

Batch Information

Analytical Batch: **XMS1628**
Analytical Method: **SW-846 8270D**
Instrument: **MSD10**
Analyst: **CMP**
Analytical Date/Time: **08/08/2012 14:27**

Prep Batch: **XXX2895**
Prep Method: **SW-846 3541**
Prep Date/Time: **08/07/2012 15:37**
Prep Initial Wt./Vol.: **32.58 g**
Prep Extract Vol: **10 mL**

Print Date: 08/16/2012

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SGS ANALYTICAL PERSPECTIVES

Results of 107DPT-05 (5-6ft)

Client Sample ID: **107DPT-05 (5-6ft)**
Client Project ID: **NCDOT Parcel 107**
Lab Sample ID: 31202488002-A
Lab Project ID: 31202488

Collection Date: 08/03/2012 09:10
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 90.50

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	U	0.594	4.19	ug/Kg	1	08/7/2012 17:27
1,1,1-Trichloroethane	ND	U	0.632	4.19	ug/Kg	1	08/7/2012 17:27
1,1,2,2-Tetrachloroethane	ND	U	0.980	4.19	ug/Kg	1	08/7/2012 17:27
1,1,2-Trichloroethane	ND	U	0.871	4.19	ug/Kg	1	08/7/2012 17:27
1,1-Dichloroethane	ND	U	0.451	4.19	ug/Kg	1	08/7/2012 17:27
1,1-Dichloroethene	ND	U	0.972	4.19	ug/Kg	1	08/7/2012 17:27
1,1-Dichloropropene	ND	U	0.566	4.19	ug/Kg	1	08/7/2012 17:27
1,2,3-Trichlorobenzene	ND	U	0.697	4.19	ug/Kg	1	08/7/2012 17:27
1,2,3-Trichloropropane	ND	U	0.863	4.19	ug/Kg	1	08/7/2012 17:27
1,2,4-Trichlorobenzene	ND	U	0.611	4.19	ug/Kg	1	08/7/2012 17:27
1,2,4-Trimethylbenzene	ND	U	0.534	4.19	ug/Kg	1	08/7/2012 17:27
1,2-Dibromo-3-chloropropane	ND	U	6.21	25.1	ug/Kg	1	08/7/2012 17:27
1,2-Dibromoethane	ND	U	1.10	4.19	ug/Kg	1	08/7/2012 17:27
1,2-Dichlorobenzene	ND	U	0.595	4.19	ug/Kg	1	08/7/2012 17:27
1,2-Dichloroethane	ND	U	0.765	4.19	ug/Kg	1	08/7/2012 17:27
1,2-Dichloropropane	ND	U	0.963	4.19	ug/Kg	1	08/7/2012 17:27
1,3,5-Trimethylbenzene	ND	U	0.509	4.19	ug/Kg	1	08/7/2012 17:27
1,3-Dichlorobenzene	ND	U	0.602	4.19	ug/Kg	1	08/7/2012 17:27
1,3-Dichloropropane	ND	U	0.736	4.19	ug/Kg	1	08/7/2012 17:27
1,4-Dichlorobenzene	ND	U	0.565	4.19	ug/Kg	1	08/7/2012 17:27
2,2-Dichloropropane	ND	U	0.618	4.19	ug/Kg	1	08/7/2012 17:27
2-Butanone	ND	U	2.83	20.9	ug/Kg	1	08/7/2012 17:27
2-Chlorotoluene	ND	U	0.785	4.19	ug/Kg	1	08/7/2012 17:27
2-Hexanone	ND	U	2.70	10.5	ug/Kg	1	08/7/2012 17:27
4-Chlorotoluene	ND	U	0.633	4.19	ug/Kg	1	08/7/2012 17:27
4-Isopropyltoluene	ND	U	0.540	4.19	ug/Kg	1	08/7/2012 17:27
4-Methyl-2-pentanone	ND	U	3.13	10.5	ug/Kg	1	08/7/2012 17:27
Acetone	ND	U	3.36	41.9	ug/Kg	1	08/7/2012 17:27
Benzene	ND	U	0.595	4.19	ug/Kg	1	08/7/2012 17:27
Bromobenzene	ND	U	0.584	4.19	ug/Kg	1	08/7/2012 17:27
Bromochloromethane	ND	U	0.787	4.19	ug/Kg	1	08/7/2012 17:27
Bromodichloromethane	ND	U	0.590	4.19	ug/Kg	1	08/7/2012 17:27
Bromoform	ND	U	0.606	4.19	ug/Kg	1	08/7/2012 17:27
Bromomethane	ND	U	1.21	4.19	ug/Kg	1	08/7/2012 17:27
n-Butylbenzene	ND	U	0.550	4.19	ug/Kg	1	08/7/2012 17:27
Carbon disulfide	ND	U	0.438	4.19	ug/Kg	1	08/7/2012 17:27
Carbon tetrachloride	ND	U	0.477	4.19	ug/Kg	1	08/7/2012 17:27
Chlorobenzene	ND	U	0.585	4.19	ug/Kg	1	08/7/2012 17:27
Chloroethane	ND	U	0.838	4.19	ug/Kg	1	08/7/2012 17:27
Chloroform	ND	U	0.534	4.19	ug/Kg	1	08/7/2012 17:27
Chloromethane	ND	U	1.20	4.19	ug/Kg	1	08/7/2012 17:27
Dibromochloromethane	ND	U	0.930	4.19	ug/Kg	1	08/7/2012 17:27
Dibromomethane	ND	U	0.739	4.19	ug/Kg	1	08/7/2012 17:27
Dichlorodifluoromethane	ND	U	0.879	4.19	ug/Kg	1	08/7/2012 17:27

Print Date: 08/16/2012

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SGS ANALYTICAL PERSPECTIVES

Results of 107DPT-05 (5-6ft)

Client Sample ID: **107DPT-05 (5-6ft)**
Client Project ID: **NCDOT Parcel 107**
Lab Sample ID: 31202488002-A
Lab Project ID: 31202488

Collection Date: 08/03/2012 09:10
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 90.50

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	U	0.863	4.19	ug/Kg	1	08/7/2012 17:27
trans-1,3-Dichloropropene	ND	U	0.791	4.19	ug/Kg	1	08/7/2012 17:27
Diisopropyl Ether	ND	U	0.688	4.19	ug/Kg	1	08/7/2012 17:27
Ethyl Benzene	ND	U	0.590	4.19	ug/Kg	1	08/7/2012 17:27
Hexachlorobutadiene	ND	U	0.575	4.19	ug/Kg	1	08/7/2012 17:27
Isopropylbenzene (Cumene)	ND	U	0.521	4.19	ug/Kg	1	08/7/2012 17:27
Methyl iodide	ND	U	0.642	4.19	ug/Kg	1	08/7/2012 17:27
Methylene chloride	1.35	J	0.879	16.8	ug/Kg	1	08/7/2012 17:27
Naphthalene	ND	U	0.761	4.19	ug/Kg	1	08/7/2012 17:27
Styrene	ND	U	0.482	4.19	ug/Kg	1	08/7/2012 17:27
Tetrachloroethene	ND	U	0.629	4.19	ug/Kg	1	08/7/2012 17:27
Toluene	ND	U	0.576	4.19	ug/Kg	1	08/7/2012 17:27
Trichloroethene	ND	U	0.705	4.19	ug/Kg	1	08/7/2012 17:27
Trichlorofluoromethane	ND	U	0.846	4.19	ug/Kg	1	08/7/2012 17:27
Vinyl chloride	ND	U	0.796	4.19	ug/Kg	1	08/7/2012 17:27
Xylene (total)	ND	U	1.48	8.38	ug/Kg	1	08/7/2012 17:27
cis-1,2-Dichloroethene	ND	U	0.512	4.19	ug/Kg	1	08/7/2012 17:27
m,p-Xylene	ND	U	1.42	8.38	ug/Kg	1	08/7/2012 17:27
n-Propylbenzene	ND	U	0.613	4.19	ug/Kg	1	08/7/2012 17:27
o-Xylene	ND	U	0.642	4.19	ug/Kg	1	08/7/2012 17:27
sec-Butylbenzene	ND	U	0.503	4.19	ug/Kg	1	08/7/2012 17:27
tert-Butyl methyl ether (MTBE)	ND	U	0.666	4.19	ug/Kg	1	08/7/2012 17:27
tert-Butylbenzene	ND	U	0.564	4.19	ug/Kg	1	08/7/2012 17:27
trans-1,2-Dichloroethene	ND	U	0.611	4.19	ug/Kg	1	08/7/2012 17:27
trans-1,4-Dichloro-2-butene	ND	U	3.52	20.9	ug/Kg	1	08/7/2012 17:27
Surrogates							
1,2-Dichloroethane-d4	113			55.0-173	%	1	08/7/2012 17:27
4-Bromofluorobenzene	98.0			23.0-141	%	1	08/7/2012 17:27
Toluene d8	99.0			57.0-134	%	1	08/7/2012 17:27

Batch Information

Analytical Batch: **VMS2451**
Analytical Method: **SW-846 8260B**
Instrument: **MSD9**
Analyst: **DVO**
Analytical Date/Time: **08/07/2012 17:27**

Prep Batch: **VXX3769**
Prep Method: **SW-846 5035 SL**
Prep Date/Time: **08/06/2012 16:13**
Prep Initial Wt./Vol.: **6.6 g**
Prep Extract Vol: **5 mL**

Print Date: 08/16/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 107DPT-05 (5-6ft)

Client Sample ID: **107DPT-05 (5-6ft)**
Client Project ID: **NCDOT Parcel 107**
Lab Sample ID: 31202488002-E
Lab Project ID: 31202488

Collection Date: 08/03/2012 09:10
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 90.50

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,2,4-Trichlorobenzene	ND	U	30.8	350	ug/Kg	1	08/10/2012 1:50
1,2-Dichlorobenzene	ND	U	17.4	350	ug/Kg	1	08/10/2012 1:50
1,3-Dichlorobenzene	ND	U	23.6	350	ug/Kg	1	08/10/2012 1:50
1,4-Dichlorobenzene	ND	U	24.7	350	ug/Kg	1	08/10/2012 1:50
2,4,5-Trichlorophenol	ND	U	23.4	350	ug/Kg	1	08/10/2012 1:50
2,4,6-Trichlorophenol	ND	U	23.7	350	ug/Kg	1	08/10/2012 1:50
2,4-Dichlorophenol	ND	U	20.2	350	ug/Kg	1	08/10/2012 1:50
2,4-Dinitrophenol	ND	U	32.4	698	ug/Kg	1	08/10/2012 1:50
2,4-Dinitrotoluene	ND	U	17.7	350	ug/Kg	1	08/10/2012 1:50
2,6-Dinitrotoluene	ND	U	25.0	350	ug/Kg	1	08/10/2012 1:50
2-Chloronaphthalene	ND	U	20.6	350	ug/Kg	1	08/10/2012 1:50
2-Chlorophenol	ND	U	18.5	350	ug/Kg	1	08/10/2012 1:50
2-Methylnaphthalene	ND	U	28.3	350	ug/Kg	1	08/10/2012 1:50
2-Methylphenol	ND	U	19.3	350	ug/Kg	1	08/10/2012 1:50
2-Nitroaniline	ND	U	23.0	350	ug/Kg	1	08/10/2012 1:50
2-Nitrophenol	ND	U	16.8	350	ug/Kg	1	08/10/2012 1:50
3 and/or 4-Methylphenol	ND	U	22.7	350	ug/Kg	1	08/10/2012 1:50
3,3'-Dichlorobenzidine	ND	U	16.8	350	ug/Kg	1	08/10/2012 1:50
3-Nitroaniline	ND	U	15.8	350	ug/Kg	1	08/10/2012 1:50
4,6-Dinitro-2-methylphenol	ND	U	16.4	350	ug/Kg	1	08/10/2012 1:50
4-Chloro-3-methylphenol	ND	U	17.4	350	ug/Kg	1	08/10/2012 1:50
4-Chloroaniline	ND	U	27.9	350	ug/Kg	1	08/10/2012 1:50
4-Chlorophenyl phenyl ether	ND	U	37.3	350	ug/Kg	1	08/10/2012 1:50
Acenaphthene	ND	U	15.9	350	ug/Kg	1	08/10/2012 1:50
Acenaphthylene	ND	U	14.8	350	ug/Kg	1	08/10/2012 1:50
Anthracene	ND	U	15.5	350	ug/Kg	1	08/10/2012 1:50
Benzo(a)anthracene	ND	U	19.2	350	ug/Kg	1	08/10/2012 1:50
Benzo(a)pyrene	ND	U	19.8	350	ug/Kg	1	08/10/2012 1:50
Benzo(b)fluoranthene	ND	U	20.1	350	ug/Kg	1	08/10/2012 1:50
Benzo(g,h,i)perylene	ND	U	55.6	350	ug/Kg	1	08/10/2012 1:50
Benzo(k)fluoranthene	ND	U	41.9	350	ug/Kg	1	08/10/2012 1:50
Benzoic acid	ND	U	7.75	350	ug/Kg	1	08/10/2012 1:50
Bis(2-Chloroethoxy)methane	ND	U	15.8	350	ug/Kg	1	08/10/2012 1:50
Bis(2-Chloroethyl)ether	ND	U	32.6	350	ug/Kg	1	08/10/2012 1:50
Bis(2-Chloroisopropyl)ether	ND	U	30.5	350	ug/Kg	1	08/10/2012 1:50
Bis(2-Ethylhexyl)phthalate	ND	U	16.8	350	ug/Kg	1	08/10/2012 1:50
4-Bromophenyl phenyl ether	ND	U	23.0	350	ug/Kg	1	08/10/2012 1:50
Butyl benzyl phthalate	ND	U	30.4	350	ug/Kg	1	08/10/2012 1:50
Chrysene	ND	U	40.7	350	ug/Kg	1	08/10/2012 1:50
Di-n-butyl phthalate	ND	U	16.5	350	ug/Kg	1	08/10/2012 1:50
Di-n-octyl phthalate	ND	U	19.3	350	ug/Kg	1	08/10/2012 1:50
Dibenz(a,h)anthracene	ND	U	15.8	350	ug/Kg	1	08/10/2012 1:50
Dibenzofuran	ND	U	27.4	350	ug/Kg	1	08/10/2012 1:50
Diethyl phthalate	ND	U	18.9	350	ug/Kg	1	08/10/2012 1:50

Print Date: 08/16/2012

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SGS ANALYTICAL PERSPECTIVES

Results of 107DPT-05 (5-6ft)

Client Sample ID: **107DPT-05 (5-6ft)**
Client Project ID: **NCDOT Parcel 107**
Lab Sample ID: 31202488002-E
Lab Project ID: 31202488

Collection Date: 08/03/2012 09:10
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 90.50

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
Dimethyl phthalate	ND	U	26.8	350	ug/Kg	1	08/10/2012 1:50
2,4-Dimethylphenol	ND	U	25.6	350	ug/Kg	1	08/10/2012 1:50
Diphenylamine	ND	U	15.8	350	ug/Kg	1	08/10/2012 1:50
Fluoranthene	ND	U	32.9	350	ug/Kg	1	08/10/2012 1:50
Fluorene	ND	U	18.5	350	ug/Kg	1	08/10/2012 1:50
Hexachlorobenzene	ND	U	33.1	350	ug/Kg	1	08/10/2012 1:50
Hexachlorobutadiene	ND	U	20.9	350	ug/Kg	1	08/10/2012 1:50
Hexachlorocyclopentadiene	ND	U	106	350	ug/Kg	1	08/10/2012 1:50
Hexachloroethane	ND	U	20.1	350	ug/Kg	1	08/10/2012 1:50
Indeno(1,2,3-cd)pyrene	ND	U	27.3	350	ug/Kg	1	08/10/2012 1:50
Isophorone	ND	U	15.9	350	ug/Kg	1	08/10/2012 1:50
Naphthalene	ND	U	30.2	350	ug/Kg	1	08/10/2012 1:50
4-Nitroanilline	ND	U	20.1	350	ug/Kg	1	08/10/2012 1:50
Nitrobenzene	ND	U	20.1	350	ug/Kg	1	08/10/2012 1:50
4-Nitrophenol	ND	U	34.4	350	ug/Kg	1	08/10/2012 1:50
Pentachlorophenol	ND	U	27.9	350	ug/Kg	1	08/10/2012 1:50
Phenanthrene	ND	U	23.0	350	ug/Kg	1	08/10/2012 1:50
Phenol	ND	U	32.6	350	ug/Kg	1	08/10/2012 1:50
Pyrene	ND	U	14.8	350	ug/Kg	1	08/10/2012 1:50
n-Nitrosodi-n-propylamine	ND	U	100	350	ug/Kg	1	08/10/2012 1:50
Surrogates							
2,4,6-Tribromophenol	111			41.0-129	%	1	08/10/2012 1:50
2-Fluorobiphenyl	98.0			48.0-123	%	1	08/10/2012 1:50
2-Fluorophenol	88.0			42.0-123	%	1	08/10/2012 1:50
Nitrobenzene-d5	96.0			46.0-117	%	1	08/10/2012 1:50
Phenol-d6	100			48.0-125	%	1	08/10/2012 1:50
Terphenyl-d14	104			44.0-140	%	1	08/10/2012 1:50

Batch Information

Analytical Batch: **XMS1630**
Analytical Method: **SW-846 8270D**
Instrument: **MSD10**
Analyst: **CMP**
Analytical Date/Time: **08/10/2012 01:50**

Prep Batch: **XXX2895**
Prep Method: **SW-846 3541**
Prep Date/Time: **08/07/2012 15:37**
Prep Initial Wt./Vol.: **31.66 g**
Prep Extract Vol: **10 mL**

Print Date: 08/16/2012

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SGS ANALYTICAL PERSPECTIVES

Results of 107DPT-06 (4.5-5ft)

Client Sample ID: **107DPT-06 (4.5-5ft)**
Client Project ID: **NCDOT Parcel 107**
Lab Sample ID: 31202488003-A
Lab Project ID: 31202488

Collection Date: 08/03/2012 09:30
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 76.70

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	U	0.736	5.19	ug/Kg	1	08/7/2012 17:53
1,1,1-Trichloroethane	ND	U	0.782	5.19	ug/Kg	1	08/7/2012 17:53
1,1,2,2-Tetrachloroethane	ND	U	1.21	5.19	ug/Kg	1	08/7/2012 17:53
1,1,2-Trichloroethane	ND	U	1.08	5.19	ug/Kg	1	08/7/2012 17:53
1,1-Dichloroethane	ND	U	0.558	5.19	ug/Kg	1	08/7/2012 17:53
1,1-Dichloroethene	ND	U	1.20	5.19	ug/Kg	1	08/7/2012 17:53
1,1-Dichloropropene	ND	U	0.702	5.19	ug/Kg	1	08/7/2012 17:53
1,2,3-Trichlorobenzene	ND	U	0.863	5.19	ug/Kg	1	08/7/2012 17:53
1,2,3-Trichloropropane	ND	U	1.07	5.19	ug/Kg	1	08/7/2012 17:53
1,2,4-Trichlorobenzene	ND	U	0.757	5.19	ug/Kg	1	08/7/2012 17:53
1,2,4-Trimethylbenzene	ND	U	0.661	5.19	ug/Kg	1	08/7/2012 17:53
1,2-Dibromo-3-chloropropane	ND	U	7.69	31.1	ug/Kg	1	08/7/2012 17:53
1,2-Dibromoethane	ND	U	1.36	5.19	ug/Kg	1	08/7/2012 17:53
1,2-Dichlorobenzene	ND	U	0.738	5.19	ug/Kg	1	08/7/2012 17:53
1,2-Dichloroethane	ND	U	0.947	5.19	ug/Kg	1	08/7/2012 17:53
1,2-Dichloropropane	ND	U	1.19	5.19	ug/Kg	1	08/7/2012 17:53
1,3,5-Trimethylbenzene	ND	U	0.631	5.19	ug/Kg	1	08/7/2012 17:53
1,3-Dichlorobenzene	ND	U	0.746	5.19	ug/Kg	1	08/7/2012 17:53
1,3-Dichloropropane	ND	U	0.912	5.19	ug/Kg	1	08/7/2012 17:53
1,4-Dichlorobenzene	ND	U	0.700	5.19	ug/Kg	1	08/7/2012 17:53
2,2-Dichloropropane	ND	U	0.766	5.19	ug/Kg	1	08/7/2012 17:53
2-Butanone	ND	U	3.51	25.9	ug/Kg	1	08/7/2012 17:53
2-Chlorotoluene	ND	U	0.972	5.19	ug/Kg	1	08/7/2012 17:53
2-Hexanone	ND	U	3.34	13.0	ug/Kg	1	08/7/2012 17:53
4-Chlorotoluene	ND	U	0.785	5.19	ug/Kg	1	08/7/2012 17:53
4-Isopropyltoluene	ND	U	0.669	5.19	ug/Kg	1	08/7/2012 17:53
4-Methyl-2-pentanone	ND	U	3.88	13.0	ug/Kg	1	08/7/2012 17:53
Acetone	ND	U	4.16	51.9	ug/Kg	1	08/7/2012 17:53
Benzene	ND	U	0.738	5.19	ug/Kg	1	08/7/2012 17:53
Bromobenzene	ND	U	0.723	5.19	ug/Kg	1	08/7/2012 17:53
Bromochloromethane	ND	U	0.975	5.19	ug/Kg	1	08/7/2012 17:53
Bromodichloromethane	ND	U	0.731	5.19	ug/Kg	1	08/7/2012 17:53
Bromoform	ND	U	0.751	5.19	ug/Kg	1	08/7/2012 17:53
Bromomethane	ND	U	1.50	5.19	ug/Kg	1	08/7/2012 17:53
n-Butylbenzene	ND	U	0.682	5.19	ug/Kg	1	08/7/2012 17:53
Carbon disulfide	ND	U	0.543	5.19	ug/Kg	1	08/7/2012 17:53
Carbon tetrachloride	ND	U	0.590	5.19	ug/Kg	1	08/7/2012 17:53
Chlorobenzene	ND	U	0.724	5.19	ug/Kg	1	08/7/2012 17:53
Chloroethane	ND	U	1.04	5.19	ug/Kg	1	08/7/2012 17:53
Chloroform	ND	U	0.661	5.19	ug/Kg	1	08/7/2012 17:53
Chloromethane	ND	U	1.48	5.19	ug/Kg	1	08/7/2012 17:53
Dibromochloromethane	ND	U	1.15	5.19	ug/Kg	1	08/7/2012 17:53
Dibromomethane	ND	U	0.915	5.19	ug/Kg	1	08/7/2012 17:53
Dichlorodifluoromethane	ND	U	1.09	5.19	ug/Kg	1	08/7/2012 17:53

Print Date: 08/16/2012

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SGS ANALYTICAL PERSPECTIVES

Results of 107DPT-06 (4.5-5ft)

Client Sample ID: **107DPT-06 (4.5-5ft)**
Client Project ID: **NCDOT Parcel 107**
Lab Sample ID: 31202488003-A
Lab Project ID: 31202488

Collection Date: 08/03/2012 09:30
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 76.70

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	U	1.07	5.19	ug/Kg	1	08/7/2012 17:53
trans-1,3-Dichloropropene	ND	U	0.980	5.19	ug/Kg	1	08/7/2012 17:53
Diisopropyl Ether	ND	U	0.852	5.19	ug/Kg	1	08/7/2012 17:53
Ethyl Benzene	ND	U	0.732	5.19	ug/Kg	1	08/7/2012 17:53
Hexachlorobutadiene	ND	U	0.713	5.19	ug/Kg	1	08/7/2012 17:53
Isopropylbenzene (Cumene)	ND	U	0.645	5.19	ug/Kg	1	08/7/2012 17:53
Methyl iodide	ND	U	0.795	5.19	ug/Kg	1	08/7/2012 17:53
Methylene chloride	**1.58**	J	1.09	20.8	ug/Kg	1	08/7/2012 17:53
Naphthalene	ND	U	0.943	5.19	ug/Kg	1	08/7/2012 17:53
Styrene	ND	U	0.598	5.19	ug/Kg	1	08/7/2012 17:53
Tetrachloroethene	ND	U	0.779	5.19	ug/Kg	1	08/7/2012 17:53
Toluene	ND	U	0.714	5.19	ug/Kg	1	08/7/2012 17:53
Trichloroethene	ND	U	0.874	5.19	ug/Kg	1	08/7/2012 17:53
Trichlorofluoromethane	ND	U	1.05	5.19	ug/Kg	1	08/7/2012 17:53
Vinyl chloride	ND	U	0.986	5.19	ug/Kg	1	08/7/2012 17:53
Xylene (total)	ND	U	1.84	10.4	ug/Kg	1	08/7/2012 17:53
cis-1,2-Dichloroethene	ND	U	0.634	5.19	ug/Kg	1	08/7/2012 17:53
m,p-Xylene	ND	U	1.75	10.4	ug/Kg	1	08/7/2012 17:53
n-Propylbenzene	ND	U	0.760	5.19	ug/Kg	1	08/7/2012 17:53
o-Xylene	ND	U	0.795	5.19	ug/Kg	1	08/7/2012 17:53
sec-Butylbenzene	ND	U	0.623	5.19	ug/Kg	1	08/7/2012 17:53
tert-Butyl methyl ether (MTBE)	ND	U	0.825	5.19	ug/Kg	1	08/7/2012 17:53
tert-Butylbenzene	ND	U	0.698	5.19	ug/Kg	1	08/7/2012 17:53
trans-1,2-Dichloroethene	ND	U	0.758	5.19	ug/Kg	1	08/7/2012 17:53
trans-1,4-Dichloro-2-butene	ND	U	4.36	25.9	ug/Kg	1	08/7/2012 17:53
Surrogates							
1,2-Dichloroethane-d4	113			55.0-173	%	1	08/7/2012 17:53
4-Bromofluorobenzene	97.0			23.0-141	%	1	08/7/2012 17:53
Toluene d8	102			57.0-134	%	1	08/7/2012 17:53

Batch Information

Analytical Batch: **VMS2451**
Analytical Method: **SW-846 8260B**
Instrument: **MSD9**
Analyst: **DVO**
Analytical Date/Time: **08/07/2012 17:53**

Prep Batch: **VXX3769**
Prep Method: **SW-846 5035 SL**
Prep Date/Time: **08/06/2012 16:13**
Prep Initial Wt./Vol.: **6.28 g**
Prep Extract Vol: **5 mL**

Print Date: 08/16/2012

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SGS ANALYTICAL PERSPECTIVES

Results of 107DPT-06 (4.5-5ft)

Client Sample ID: **107DPT-06 (4.5-5ft)**
Client Project ID: **NCDOT Parcel 107**
Lab Sample ID: 31202488003-E
Lab Project ID: 31202488

Collection Date: 08/03/2012 09:30
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 76.70

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,2,4-Trichlorobenzene	ND	U	35.1	398	ug/Kg	1	08/8/2012 14:50
1,2-Dichlorobenzene	ND	U	19.8	398	ug/Kg	1	08/8/2012 14:50
1,3-Dichlorobenzene	ND	U	26.8	398	ug/Kg	1	08/8/2012 14:50
1,4-Dichlorobenzene	ND	U	28.1	398	ug/Kg	1	08/8/2012 14:50
2,4,5-Trichlorophenol	ND	U	26.6	398	ug/Kg	1	08/8/2012 14:50
2,4,6-Trichlorophenol	ND	U	27.0	398	ug/Kg	1	08/8/2012 14:50
2,4-Dichlorophenol	ND	U	23.0	398	ug/Kg	1	08/8/2012 14:50
2,4-Dinitrophenol	ND	U	36.9	795	ug/Kg	1	08/8/2012 14:50
2,4-Dinitrotoluene	ND	U	20.1	398	ug/Kg	1	08/8/2012 14:50
2,6-Dinitrotoluene	ND	U	28.5	398	ug/Kg	1	08/8/2012 14:50
2-Chloronaphthalene	ND	U	23.4	398	ug/Kg	1	08/8/2012 14:50
2-Chlorophenol	ND	U	21.1	398	ug/Kg	1	08/8/2012 14:50
2-Methylnaphthalene	ND	U	32.2	398	ug/Kg	1	08/8/2012 14:50
2-Methylphenol	ND	U	22.0	398	ug/Kg	1	08/8/2012 14:50
2-Nitroanlline	ND	U	26.2	398	ug/Kg	1	08/8/2012 14:50
2-Nitrophenol	ND	U	19.1	398	ug/Kg	1	08/8/2012 14:50
3 and/or 4-Methylphenol	ND	U	25.8	398	ug/Kg	1	08/8/2012 14:50
3,3'-Dichlorobenzidine	ND	U	19.1	398	ug/Kg	1	08/8/2012 14:50
3-Nitroaniline	ND	U	17.9	398	ug/Kg	1	08/8/2012 14:50
4,6-Dinitro-2-methylphenol	ND	U	18.7	398	ug/Kg	1	08/8/2012 14:50
4-Chloro-3-methylphenol	ND	U	19.8	398	ug/Kg	1	08/8/2012 14:50
4-Chloroanillne	ND	U	31.8	398	ug/Kg	1	08/8/2012 14:50
4-Chlorophenyl phenyl ether	ND	U	42.5	398	ug/Kg	1	08/8/2012 14:50
Acenaphthene	ND	U	18.1	398	ug/Kg	1	08/8/2012 14:50
Acenaphthylene	ND	U	16.8	398	ug/Kg	1	08/8/2012 14:50
Anthracene	ND	U	17.7	398	ug/Kg	1	08/8/2012 14:50
Benzo(a)anthracene	ND	U	21.9	398	ug/Kg	1	08/8/2012 14:50
Benzo(a)pyrene	ND	U	22.5	398	ug/Kg	1	08/8/2012 14:50
Benzo(b)fluoranthene	ND	U	22.9	398	ug/Kg	1	08/8/2012 14:50
Benzo(g,h,i)perylene	ND	U	63.3	398	ug/Kg	1	08/8/2012 14:50
Benzo(k)fluoranthene	ND	U	47.7	398	ug/Kg	1	08/8/2012 14:50
Benzoic acid	ND	U	8.83	398	ug/Kg	1	08/8/2012 14:50
Bis(2-Chloroethoxy)methane	ND	U	17.9	398	ug/Kg	1	08/8/2012 14:50
Bis(2-Chloroethyl)ether	ND	U	37.1	398	ug/Kg	1	08/8/2012 14:50
Bis(2-Chloroisopropyl)ether	ND	U	34.7	398	ug/Kg	1	08/8/2012 14:50
Bis(2-Ethylhexyl)phthalate	ND	U	19.1	398	ug/Kg	1	08/8/2012 14:50
4-Bromophenyl phenyl ether	ND	U	26.2	398	ug/Kg	1	08/8/2012 14:50
Butyl benzyl phthalate	ND	U	34.6	398	ug/Kg	1	08/8/2012 14:50
Chrysene	ND	U	46.3	398	ug/Kg	1	08/8/2012 14:50
Di-n-butyl phthalate	ND	U	18.8	398	ug/Kg	1	08/8/2012 14:50
Di-n-octyl phthalate	ND	U	22.0	398	ug/Kg	1	08/8/2012 14:50
Dibenz(a,h)anthracene	ND	U	17.9	398	ug/Kg	1	08/8/2012 14:50
Dibenzofuran	ND	U	31.2	398	ug/Kg	1	08/8/2012 14:50
Diethyl phthalate	ND	U	21.5	398	ug/Kg	1	08/8/2012 14:50

Print Date: 08/16/2012

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Results of 107DPT-06 (4.5-5ft)

Client Sample ID: **107DPT-06 (4.5-5ft)**
Client Project ID: **NCDOT Parcel 107**
Lab Sample ID: 31202488003-E
Lab Project ID: 31202488

Collection Date: 08/03/2012 09:30
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 76.70

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
Dimethyl phthalate	ND	U	30.5	398	ug/Kg	1	08/8/2012 14:50
2,4-Dimethylphenol	ND	U	29.1	398	ug/Kg	1	08/8/2012 14:50
Diphenylamine	ND	U	17.9	398	ug/Kg	1	08/8/2012 14:50
Fluoranthene	ND	U	37.4	398	ug/Kg	1	08/8/2012 14:50
Fluorene	ND	U	21.1	398	ug/Kg	1	08/8/2012 14:50
Hexachlorobenzene	ND	U	37.6	398	ug/Kg	1	08/8/2012 14:50
Hexachlorobutadiene	ND	U	23.8	398	ug/Kg	1	08/8/2012 14:50
Hexachlorocyclopentadiene	ND	U	120	398	ug/Kg	1	08/8/2012 14:50
Hexachloroethane	ND	U	22.9	398	ug/Kg	1	08/8/2012 14:50
Indeno(1,2,3-cd)pyrene	ND	U	31.0	398	ug/Kg	1	08/8/2012 14:50
Isophorone	ND	U	18.1	398	ug/Kg	1	08/8/2012 14:50
Naphthalene	ND	U	34.3	398	ug/Kg	1	08/8/2012 14:50
4-Nitroaniline	ND	U	22.9	398	ug/Kg	1	08/8/2012 14:50
Nitrobenzene	ND	U	22.9	398	ug/Kg	1	08/8/2012 14:50
4-Nitrophenol	ND	U	39.2	398	ug/Kg	1	08/8/2012 14:50
Pentachlorophenol	ND	U	31.8	398	ug/Kg	1	08/8/2012 14:50
Phenanthrene	ND	U	26.2	398	ug/Kg	1	08/8/2012 14:50
Phenol	ND	U	37.1	398	ug/Kg	1	08/8/2012 14:50
Pyrene	ND	U	16.8	398	ug/Kg	1	08/8/2012 14:50
n-Nitrosodi-n-propylamine	ND	U	114	398	ug/Kg	1	08/8/2012 14:50
Surrogates							
2,4,6-Tribromophenol	96.0			41.0-129	%	1	08/8/2012 14:50
2-Fluorobiphenyl	92.0			48.0-123	%	1	08/8/2012 14:50
2-Fluorophenol	88.0			42.0-123	%	1	08/8/2012 14:50
Nitrobenzene-d5	95.0			46.0-117	%	1	08/8/2012 14:50
Phenol-d6	102			48.0-125	%	1	08/8/2012 14:50
Terphenyl-d14	104			44.0-140	%	1	08/8/2012 14:50

Batch Information

Analytical Batch: **XMS1628**
Analytical Method: **SW-846 8270D**
Instrument: **MSD10**
Analyst: **CMP**
Analytical Date/Time: **08/08/2012 14:50**

Prep Batch: **XXX2895**
Prep Method: **SW-846 3541**
Prep Date/Time: **08/07/2012 15:37**
Prep Initial Wt./Vol.: **32.8 g**
Prep Extract Vol: **10 mL**

Print Date: 08/16/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 107DPT-07 (7-8ft)

Client Sample ID: **107DPT-07 (7-8ft)**
Client Project ID: **NCDOT Parcel 107**
Lab Sample ID: 31202488004-A
Lab Project ID: 31202488

Collection Date: 08/03/2012 09:40
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 74.60

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	U	0.721	5.09	ug/Kg	1	08/7/2012 18:19
1,1,1-Trichloroethane	ND	U	0.767	5.09	ug/Kg	1	08/7/2012 18:19
1,1,2,2-Tetrachloroethane	ND	U	1.19	5.09	ug/Kg	1	08/7/2012 18:19
1,1,2-Trichloroethane	ND	U	1.06	5.09	ug/Kg	1	08/7/2012 18:19
1,1-Dichloroethane	ND	U	0.547	5.09	ug/Kg	1	08/7/2012 18:19
1,1-Dichloroethene	ND	U	1.18	5.09	ug/Kg	1	08/7/2012 18:19
1,1-Dichloropropene	ND	U	0.688	5.09	ug/Kg	1	08/7/2012 18:19
1,2,3-Trichlorobenzene	ND	U	0.847	5.09	ug/Kg	1	08/7/2012 18:19
1,2,3-Trichloropropane	ND	U	1.05	5.09	ug/Kg	1	08/7/2012 18:19
1,2,4-Trichlorobenzene	ND	U	0.742	5.09	ug/Kg	1	08/7/2012 18:19
1,2,4-Trimethylbenzene	ND	U	0.648	5.09	ug/Kg	1	08/7/2012 18:19
1,2-Dibromo-3-chloropropane	ND	U	7.54	30.5	ug/Kg	1	08/7/2012 18:19
1,2-Dibromoethane	ND	U	1.33	5.09	ug/Kg	1	08/7/2012 18:19
1,2-Dichlorobenzene	ND	U	0.723	5.09	ug/Kg	1	08/7/2012 18:19
1,2-Dichloroethane	ND	U	0.929	5.09	ug/Kg	1	08/7/2012 18:19
1,2-Dichloropropane	ND	U	1.17	5.09	ug/Kg	1	08/7/2012 18:19
1,3,5-Trimethylbenzene	ND	U	0.619	5.09	ug/Kg	1	08/7/2012 18:19
1,3-Dichlorobenzene	ND	U	0.732	5.09	ug/Kg	1	08/7/2012 18:19
1,3-Dichloropropane	ND	U	0.894	5.09	ug/Kg	1	08/7/2012 18:19
1,4-Dichlorobenzene	ND	U	0.687	5.09	ug/Kg	1	08/7/2012 18:19
2,2-Dichloropropane	ND	U	0.751	5.09	ug/Kg	1	08/7/2012 18:19
2-Butanone	ND	U	3.44	25.4	ug/Kg	1	08/7/2012 18:19
2-Chlorotoluene	ND	U	0.953	5.09	ug/Kg	1	08/7/2012 18:19
2-Hexanone	ND	U	3.28	12.7	ug/Kg	1	08/7/2012 18:19
4-Chlorotoluene	ND	U	0.769	5.09	ug/Kg	1	08/7/2012 18:19
4-Isopropyltoluene	ND	U	0.656	5.09	ug/Kg	1	08/7/2012 18:19
4-Methyl-2-pentanone	ND	U	3.81	12.7	ug/Kg	1	08/7/2012 18:19
Acetone	ND	U	4.08	50.9	ug/Kg	1	08/7/2012 18:19
Benzene	ND	U	0.723	5.09	ug/Kg	1	08/7/2012 18:19
Bromobenzene	ND	U	0.709	5.09	ug/Kg	1	08/7/2012 18:19
Bromochloromethane	ND	U	0.956	5.09	ug/Kg	1	08/7/2012 18:19
Bromodichloromethane	ND	U	0.716	5.09	ug/Kg	1	08/7/2012 18:19
Bromoform	ND	U	0.737	5.09	ug/Kg	1	08/7/2012 18:19
Bromomethane	ND	U	1.48	5.09	ug/Kg	1	08/7/2012 18:19
n-Butylbenzene	ND	U	0.668	5.09	ug/Kg	1	08/7/2012 18:19
Carbon disulfide	ND	U	0.532	5.09	ug/Kg	1	08/7/2012 18:19
Carbon tetrachloride	ND	U	0.579	5.09	ug/Kg	1	08/7/2012 18:19
Chlorobenzene	ND	U	0.710	5.09	ug/Kg	1	08/7/2012 18:19
Chloroethane	ND	U	1.02	5.09	ug/Kg	1	08/7/2012 18:19
Chloroform	ND	U	0.648	5.09	ug/Kg	1	08/7/2012 18:19
Chloromethane	ND	U	1.45	5.09	ug/Kg	1	08/7/2012 18:19
Dibromochloromethane	ND	U	1.13	5.09	ug/Kg	1	08/7/2012 18:19
Dibromomethane	ND	U	0.897	5.09	ug/Kg	1	08/7/2012 18:19
Dichlorodifluoromethane	ND	U	1.07	5.09	ug/Kg	1	08/7/2012 18:19

Print Date: 08/16/2012

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Results of 107DPT-07 (7-8ft)

Client Sample ID: **107DPT-07 (7-8ft)**
Client Project ID: **NCDOT Parcel 107**
Lab Sample ID: 31202488004-A
Lab Project ID: 31202488

Collection Date: 08/03/2012 09:40
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 74.60

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	U	1.05	5.09	ug/Kg	1	08/7/2012 18:19
trans-1,3-Dichloropropene	ND	U	0.960	5.09	ug/Kg	1	08/7/2012 18:19
Diisopropyl Ether	ND	U	0.835	5.09	ug/Kg	1	08/7/2012 18:19
Ethyl Benzene	ND	U	0.717	5.09	ug/Kg	1	08/7/2012 18:19
Hexachlorobutadiene	ND	U	0.699	5.09	ug/Kg	1	08/7/2012 18:19
Isopropylbenzene (Cumene)	ND	U	0.633	5.09	ug/Kg	1	08/7/2012 18:19
Methyl iodide	ND	U	0.779	5.09	ug/Kg	1	08/7/2012 18:19
Methylene chloride	**1.67**	J	1.07	20.3	ug/Kg	1	08/7/2012 18:19
Naphthalene	ND	U	0.925	5.09	ug/Kg	1	08/7/2012 18:19
Styrene	ND	U	0.586	5.09	ug/Kg	1	08/7/2012 18:19
Tetrachloroethene	ND	U	0.764	5.09	ug/Kg	1	08/7/2012 18:19
Toluene	ND	U	0.700	5.09	ug/Kg	1	08/7/2012 18:19
Trichloroethene	ND	U	0.857	5.09	ug/Kg	1	08/7/2012 18:19
Trichlorofluoromethane	ND	U	1.03	5.09	ug/Kg	1	08/7/2012 18:19
Vinyl chloride	ND	U	0.967	5.09	ug/Kg	1	08/7/2012 18:19
Xylene (total)	ND	U	1.80	10.2	ug/Kg	1	08/7/2012 18:19
cis-1,2-Dichloroethene	ND	U	0.622	5.09	ug/Kg	1	08/7/2012 18:19
m,p-Xylene	ND	U	1.72	10.2	ug/Kg	1	08/7/2012 18:19
n-Propylbenzene	ND	U	0.745	5.09	ug/Kg	1	08/7/2012 18:19
o-Xylene	ND	U	0.779	5.09	ug/Kg	1	08/7/2012 18:19
sec-Butylbenzene	ND	U	0.610	5.09	ug/Kg	1	08/7/2012 18:19
tert-Butyl methyl ether (MTBE)	ND	U	0.809	5.09	ug/Kg	1	08/7/2012 18:19
tert-Butylbenzene	ND	U	0.685	5.09	ug/Kg	1	08/7/2012 18:19
trans-1,2-Dichloroethene	ND	U	0.743	5.09	ug/Kg	1	08/7/2012 18:19
trans-1,4-Dichloro-2-butene	ND	U	4.27	25.4	ug/Kg	1	08/7/2012 18:19
Surrogates							
1,2-Dichloroethane-d4	112			55.0-173	%	1	08/7/2012 18:19
4-Bromofluorobenzene	94.0			23.0-141	%	1	08/7/2012 18:19
Toluene d8	92.0			57.0-134	%	1	08/7/2012 18:19

Batch Information

Analytical Batch: **VMS2451**
Analytical Method: **SW-846 8260B**
Instrument: **MSD9**
Analyst: **DVO**
Analytical Date/Time: **08/07/2012 18:19**

Prep Batch: **VXX3769**
Prep Method: **SW-846 5035 SL**
Prep Date/Time: **08/06/2012 16:14**
Prep Initial Wt./Vol.: **6.59 g**
Prep Extract Vol: **5 mL**

Print Date: 08/16/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 107DPT-07 (7-8ft)

Client Sample ID: **107DPT-07 (7-8ft)**
Client Project ID: **NCDOT Parcel 107**
Lab Sample ID: 31202488004-E
Lab Project ID: 31202488

Collection Date: 08/03/2012 09:40
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 74.60

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,2,4-Trichlorobenzene	ND	U	38.2	434	ug/Kg	1	08/8/2012 15:13
1,2-Dichlorobenzene	ND	U	21.6	434	ug/Kg	1	08/8/2012 15:13
1,3-Dichlorobenzene	ND	U	29.2	434	ug/Kg	1	08/8/2012 15:13
1,4-Dichlorobenzene	ND	U	30.6	434	ug/Kg	1	08/8/2012 15:13
2,4,5-Trichlorophenol	ND	U	29.0	434	ug/Kg	1	08/8/2012 15:13
2,4,6-Trichlorophenol	ND	U	29.4	434	ug/Kg	1	08/8/2012 15:13
2,4-Dichlorophenol	ND	U	25.1	434	ug/Kg	1	08/8/2012 15:13
2,4-Dinitrophenol	ND	U	40.2	866	ug/Kg	1	08/8/2012 15:13
2,4-Dinitrotoluene	ND	U	21.9	434	ug/Kg	1	08/8/2012 15:13
2,6-Dinitrotoluene	ND	U	31.0	434	ug/Kg	1	08/8/2012 15:13
2-Chloronaphthalene	ND	U	25.5	434	ug/Kg	1	08/8/2012 15:13
2-Chlorophenol	ND	U	23.0	434	ug/Kg	1	08/8/2012 15:13
2-Methylnaphthalene	ND	U	35.1	434	ug/Kg	1	08/8/2012 15:13
2-Methylphenol	ND	U	24.0	434	ug/Kg	1	08/8/2012 15:13
2-Nitroaniline	ND	U	28.5	434	ug/Kg	1	08/8/2012 15:13
2-Nitrophenol	ND	U	20.8	434	ug/Kg	1	08/8/2012 15:13
3 and/or 4-Methylphenol	ND	U	28.1	434	ug/Kg	1	08/8/2012 15:13
3,3'-Dichlorobenzidine	ND	U	20.8	434	ug/Kg	1	08/8/2012 15:13
3-Nitroaniline	ND	U	19.5	434	ug/Kg	1	08/8/2012 15:13
4,6-Dinitro-2-methylphenol	ND	U	20.4	434	ug/Kg	1	08/8/2012 15:13
4-Chloro-3-methylphenol	ND	U	21.6	434	ug/Kg	1	08/8/2012 15:13
4-Chloroaniline	ND	U	34.6	434	ug/Kg	1	08/8/2012 15:13
4-Chlorophenyl phenyl ether	ND	U	46.3	434	ug/Kg	1	08/8/2012 15:13
Acenaphthene	ND	U	19.7	434	ug/Kg	1	08/8/2012 15:13
Acenaphthylene	ND	U	18.3	434	ug/Kg	1	08/8/2012 15:13
Anthracene	ND	U	19.3	434	ug/Kg	1	08/8/2012 15:13
Benzo(a)anthracene	ND	U	23.8	434	ug/Kg	1	08/8/2012 15:13
Benzo(a)pyrene	ND	U	24.5	434	ug/Kg	1	08/8/2012 15:13
Benzo(b)fluoranthene	ND	U	24.9	434	ug/Kg	1	08/8/2012 15:13
Benzo(g,h,i)perylene	ND	U	69.0	434	ug/Kg	1	08/8/2012 15:13
Benzo(k)fluoranthene	ND	U	52.0	434	ug/Kg	1	08/8/2012 15:13
Benzoic acid	ND	U	9.62	434	ug/Kg	1	08/8/2012 15:13
Bis(2-Chloroethoxy)methane	ND	U	19.5	434	ug/Kg	1	08/8/2012 15:13
Bis(2-Chloroethyl)ether	ND	U	40.5	434	ug/Kg	1	08/8/2012 15:13
Bis(2-Chloroisopropyl)ether	ND	U	37.8	434	ug/Kg	1	08/8/2012 15:13
Bis(2-Ethylhexyl)phthalate	ND	U	20.8	434	ug/Kg	1	08/8/2012 15:13
4-Bromophenyl phenyl ether	ND	U	28.5	434	ug/Kg	1	08/8/2012 15:13
Butyl benzyl phthalate	ND	U	37.7	434	ug/Kg	1	08/8/2012 15:13
Chrysene	ND	U	50.4	434	ug/Kg	1	08/8/2012 15:13
Di-n-butyl phthalate	ND	U	20.5	434	ug/Kg	1	08/8/2012 15:13
Di-n-octyl phthalate	ND	U	24.0	434	ug/Kg	1	08/8/2012 15:13
Dibenz(a,h)anthracene	ND	U	19.5	434	ug/Kg	1	08/8/2012 15:13
Dibenzofuran	ND	U	33.9	434	ug/Kg	1	08/8/2012 15:13
Diethyl phthalate	ND	U	23.4	434	ug/Kg	1	08/8/2012 15:13

Print Date: 08/16/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 107DPT-07 (7-8ft)

Client Sample ID: **107DPT-07 (7-8ft)**
Client Project ID: **NCDOT Parcel 107**
Lab Sample ID: 31202488004-E
Lab Project ID: 31202488

Collection Date: 08/03/2012 09:40
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 74.60

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
Dimethyl phthalate	ND	U	33.3	434	ug/Kg	1	08/8/2012 15:13
2,4-Dimethylphenol	ND	U	31.7	434	ug/Kg	1	08/8/2012 15:13
Diphenylamine	ND	U	19.5	434	ug/Kg	1	08/8/2012 15:13
Fluoranthene	ND	U	40.7	434	ug/Kg	1	08/8/2012 15:13
Fluorene	ND	U	23.0	434	ug/Kg	1	08/8/2012 15:13
Hexachlorobenzene	ND	U	41.0	434	ug/Kg	1	08/8/2012 15:13
Hexachlorobutadiene	ND	U	25.9	434	ug/Kg	1	08/8/2012 15:13
Hexachlorocyclopentadiene	ND	U	131	434	ug/Kg	1	08/8/2012 15:13
Hexachloroethane	ND	U	24.9	434	ug/Kg	1	08/8/2012 15:13
Indeno(1,2,3-cd)pyrene	ND	U	33.8	434	ug/Kg	1	08/8/2012 15:13
Isophorone	ND	U	19.7	434	ug/Kg	1	08/8/2012 15:13
Naphthalene	ND	U	37.4	434	ug/Kg	1	08/8/2012 15:13
4-Nitroaniline	ND	U	24.9	434	ug/Kg	1	08/8/2012 15:13
Nitrobenzene	ND	U	24.9	434	ug/Kg	1	08/8/2012 15:13
4-Nitrophenol	ND	U	42.7	434	ug/Kg	1	08/8/2012 15:13
Pentachlorophenol	ND	U	34.6	434	ug/Kg	1	08/8/2012 15:13
Phenanthrene	ND	U	28.5	434	ug/Kg	1	08/8/2012 15:13
Phenol	ND	U	40.5	434	ug/Kg	1	08/8/2012 15:13
Pyrene	ND	U	18.3	434	ug/Kg	1	08/8/2012 15:13
n-Nitrosodi-n-propylamine	ND	U	124	434	ug/Kg	1	08/8/2012 15:13
Surrogates							
2,4,6-Tribromophenol	83.0			41.0-129	%	1	08/8/2012 15:13
2-Fluorobiphenyl	77.0			48.0-123	%	1	08/8/2012 15:13
2-Fluorophenol	82.0			42.0-123	%	1	08/8/2012 15:13
Nitrobenzene-d5	85.0			46.0-117	%	1	08/8/2012 15:13
Phenol-d6	95.0			48.0-125	%	1	08/8/2012 15:13
Terphenyl-d14	88.0			44.0-140	%	1	08/8/2012 15:13

Batch Information

Analytical Batch: **XMS1628**
Analytical Method: **SW-846 8270D**
Instrument: **MSD10**
Analyst: **CMP**
Analytical Date/Time: **08/08/2012 15:13**

Prep Batch: **XXX2895**
Prep Method: **SW-846 3541**
Prep Date/Time: **08/07/2012 15:37**
Prep Initial Wt./Vol.: **30.97 g**
Prep Extract Vol: **10 mL**

Print Date: 08/16/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 107DPT-08 (6-7ft)

Client Sample ID: **107DPT-08 (6-7ft)**
Client Project ID: **NCDOT Parcel 107**
Lab Sample ID: 31202488005-A
Lab Project ID: 31202488

Collection Date: 08/03/2012 10:00
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 88.30

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	U	0.549	3.87	ug/Kg	1	08/8/2012 14:59
1,1,1-Trichloroethane	ND	U	0.584	3.87	ug/Kg	1	08/8/2012 14:59
1,1,2,2-Tetrachloroethane	ND	U	0.906	3.87	ug/Kg	1	08/8/2012 14:59
1,1,2-Trichloroethane	ND	U	0.805	3.87	ug/Kg	1	08/8/2012 14:59
1,1-Dichloroethane	ND	U	0.417	3.87	ug/Kg	1	08/8/2012 14:59
1,1-Dichloroethene	ND	U	0.898	3.87	ug/Kg	1	08/8/2012 14:59
1,1-Dichloropropene	ND	U	0.523	3.87	ug/Kg	1	08/8/2012 14:59
1,2,3-Trichlorobenzene	ND	U	0.644	3.87	ug/Kg	1	08/8/2012 14:59
1,2,3-Trichloropropane	ND	U	0.798	3.87	ug/Kg	1	08/8/2012 14:59
1,2,4-Trichlorobenzene	ND	U	0.564	3.87	ug/Kg	1	08/8/2012 14:59
1,2,4-Trimethylbenzene	ND	U	0.493	3.87	ug/Kg	1	08/8/2012 14:59
1,2-Dibromo-3-chloropropane	ND	U	5.74	23.2	ug/Kg	1	08/8/2012 14:59
1,2-Dibromoethane	ND	U	1.01	3.87	ug/Kg	1	08/8/2012 14:59
1,2-Dichlorobenzene	ND	U	0.551	3.87	ug/Kg	1	08/8/2012 14:59
1,2-Dichloroethane	ND	U	0.707	3.87	ug/Kg	1	08/8/2012 14:59
1,2-Dichloropropane	ND	U	0.890	3.87	ug/Kg	1	08/8/2012 14:59
1,3,5-Trimethylbenzene	ND	U	0.471	3.87	ug/Kg	1	08/8/2012 14:59
1,3-Dichlorobenzene	ND	U	0.557	3.87	ug/Kg	1	08/8/2012 14:59
1,3-Dichloropropane	ND	U	0.681	3.87	ug/Kg	1	08/8/2012 14:59
1,4-Dichlorobenzene	ND	U	0.523	3.87	ug/Kg	1	08/8/2012 14:59
2,2-Dichloropropane	ND	U	0.571	3.87	ug/Kg	1	08/8/2012 14:59
2-Butanone	ND	U	2.62	19.4	ug/Kg	1	08/8/2012 14:59
2-Chlorotoluene	ND	U	0.725	3.87	ug/Kg	1	08/8/2012 14:59
2-Hexanone	ND	U	2.49	9.68	ug/Kg	1	08/8/2012 14:59
4-Chlorotoluene	ND	U	0.585	3.87	ug/Kg	1	08/8/2012 14:59
4-Isopropyltoluene	ND	U	0.499	3.87	ug/Kg	1	08/8/2012 14:59
4-Methyl-2-pentanone	ND	U	2.90	9.68	ug/Kg	1	08/8/2012 14:59
Acetone	ND	U	3.10	38.7	ug/Kg	1	08/8/2012 14:59
Benzene	ND	U	0.551	3.87	ug/Kg	1	08/8/2012 14:59
Bromobenzene	ND	U	0.540	3.87	ug/Kg	1	08/8/2012 14:59
Bromochloromethane	ND	U	0.728	3.87	ug/Kg	1	08/8/2012 14:59
Bromodichloromethane	ND	U	0.545	3.87	ug/Kg	1	08/8/2012 14:59
Bromoform	ND	U	0.561	3.87	ug/Kg	1	08/8/2012 14:59
Bromomethane	ND	U	1.12	3.87	ug/Kg	1	08/8/2012 14:59
n-Butylbenzene	ND	U	0.509	3.87	ug/Kg	1	08/8/2012 14:59
Carbon disulfide	ND	U	0.405	3.87	ug/Kg	1	08/8/2012 14:59
Carbon tetrachloride	ND	U	0.441	3.87	ug/Kg	1	08/8/2012 14:59
Chlorobenzene	ND	U	0.540	3.87	ug/Kg	1	08/8/2012 14:59
Chloroethane	ND	U	0.774	3.87	ug/Kg	1	08/8/2012 14:59
Chloroform	ND	U	0.493	3.87	ug/Kg	1	08/8/2012 14:59
Chloromethane	ND	U	1.11	3.87	ug/Kg	1	08/8/2012 14:59
Dibromochloromethane	ND	U	0.859	3.87	ug/Kg	1	08/8/2012 14:59
Dibromomethane	ND	U	0.683	3.87	ug/Kg	1	08/8/2012 14:59
Dichlorodifluoromethane	ND	U	0.813	3.87	ug/Kg	1	08/8/2012 14:59

Print Date: 08/16/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 107DPT-08 (6-7ft)

Client Sample ID: **107DPT-08 (6-7ft)**
Client Project ID: **NCDOT Parcel 107**
Lab Sample ID: 31202488005-A
Lab Project ID: 31202488

Collection Date: 08/03/2012 10:00
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 88.30

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	U	0.798	3.87	ug/Kg	1	08/8/2012 14:59
trans-1,3-Dichloropropene	ND	U	0.731	3.87	ug/Kg	1	08/8/2012 14:59
Diisopropyl Ether	ND	U	0.636	3.87	ug/Kg	1	08/8/2012 14:59
Ethyl Benzene	ND	U	0.546	3.87	ug/Kg	1	08/8/2012 14:59
Hexachlorobutadiene	ND	U	0.532	3.87	ug/Kg	1	08/8/2012 14:59
Isopropylbenzene (Cumene)	ND	U	0.482	3.87	ug/Kg	1	08/8/2012 14:59
Methyl iodide	ND	U	0.593	3.87	ug/Kg	1	08/8/2012 14:59
Methylene chloride	**2.04**	J	0.813	15.5	ug/Kg	1	08/8/2012 14:59
Naphthalene	ND	U	0.704	3.87	ug/Kg	1	08/8/2012 14:59
Styrene	ND	U	0.446	3.87	ug/Kg	1	08/8/2012 14:59
Tetrachloroethene	ND	U	0.581	3.87	ug/Kg	1	08/8/2012 14:59
Toluene	ND	U	0.533	3.87	ug/Kg	1	08/8/2012 14:59
Trichloroethene	ND	U	0.652	3.87	ug/Kg	1	08/8/2012 14:59
Trichlorofluoromethane	ND	U	0.782	3.87	ug/Kg	1	08/8/2012 14:59
Vinyl chloride	ND	U	0.736	3.87	ug/Kg	1	08/8/2012 14:59
Xylene (total)	ND	U	1.37	7.74	ug/Kg	1	08/8/2012 14:59
cis-1,2-Dichloroethene	ND	U	0.473	3.87	ug/Kg	1	08/8/2012 14:59
m,p-Xylene	ND	U	1.31	7.74	ug/Kg	1	08/8/2012 14:59
n-Propylbenzene	ND	U	0.567	3.87	ug/Kg	1	08/8/2012 14:59
o-Xylene	ND	U	0.593	3.87	ug/Kg	1	08/8/2012 14:59
sec-Butylbenzene	ND	U	0.465	3.87	ug/Kg	1	08/8/2012 14:59
tert-Butyl methyl ether (MTBE)	ND	U	0.616	3.87	ug/Kg	1	08/8/2012 14:59
tert-Butylbenzene	ND	U	0.521	3.87	ug/Kg	1	08/8/2012 14:59
trans-1,2-Dichloroethene	ND	U	0.565	3.87	ug/Kg	1	08/8/2012 14:59
trans-1,4-Dichloro-2-butene	ND	U	3.25	19.4	ug/Kg	1	08/8/2012 14:59
Surrogates							
1,2-Dichloroethane-d4	117			55.0-173	%	1	08/8/2012 14:59
4-Bromofluorobenzene	92.0			23.0-141	%	1	08/8/2012 14:59
Toluene d8	106			57.0-134	%	1	08/8/2012 14:59

Batch Information

Analytical Batch: **VMS2454**
Analytical Method: **SW-846 8260B**
Instrument: **MSD9**
Analyst: **DVO**
Analytical Date/Time: **08/08/2012 14:59**

Prep Batch: **VXX3778**
Prep Method: **SW-846 5035 SL**
Prep Date/Time: **08/06/2012 16:14**
Prep Initial Wt./Vol.: **7.31 g**
Prep Extract Vol: **5 mL**

Print Date: 08/16/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 107DPT-08 (6-7ft)

Client Sample ID: **107DPT-08 (6-7ft)**
Client Project ID: **NCDOT Parcel 107**
Lab Sample ID: 31202488005-E
Lab Project ID: 31202488

Collection Date: 08/03/2012 10:00
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 88.30

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,2,4-Trichlorobenzene	ND	U	32.5	369	ug/Kg	1	08/8/2012 15:35
1,2-Dichlorobenzene	ND	U	18.4	369	ug/Kg	1	08/8/2012 15:35
1,3-Dichlorobenzene	ND	U	24.9	369	ug/Kg	1	08/8/2012 15:35
1,4-Dichlorobenzene	ND	U	26.0	369	ug/Kg	1	08/8/2012 15:35
2,4,5-Trichlorophenol	ND	U	24.6	369	ug/Kg	1	08/8/2012 15:35
2,4,6-Trichlorophenol	ND	U	25.0	369	ug/Kg	1	08/8/2012 15:35
2,4-Dichlorophenol	ND	U	21.3	369	ug/Kg	1	08/8/2012 15:35
2,4-Dinitrophenol	ND	U	34.2	736	ug/Kg	1	08/8/2012 15:35
2,4-Dinitrotoluene	ND	U	18.6	369	ug/Kg	1	08/8/2012 15:35
2,6-Dinitrotoluene	ND	U	26.4	369	ug/Kg	1	08/8/2012 15:35
2-Chloronaphthalene	ND	U	21.7	369	ug/Kg	1	08/8/2012 15:35
2-Chlorophenol	ND	U	19.6	369	ug/Kg	1	08/8/2012 15:35
2-Methylnaphthalene	ND	U	29.8	369	ug/Kg	1	08/8/2012 15:35
2-Methylphenol	ND	U	20.4	369	ug/Kg	1	08/8/2012 15:35
2-Nitroaniline	ND	U	24.3	369	ug/Kg	1	08/8/2012 15:35
2-Nitrophenol	ND	U	17.7	369	ug/Kg	1	08/8/2012 15:35
3 and/or 4-Methylphenol	ND	U	23.9	369	ug/Kg	1	08/8/2012 15:35
3,3'-Dichlorobenzidine	ND	U	17.7	369	ug/Kg	1	08/8/2012 15:35
3-Nitroaniline	ND	U	16.6	369	ug/Kg	1	08/8/2012 15:35
4,6-Dinitro-2-methylphenol	ND	U	17.3	369	ug/Kg	1	08/8/2012 15:35
4-Chloro-3-methylphenol	ND	U	18.4	369	ug/Kg	1	08/8/2012 15:35
4-Chloroaniline	ND	U	29.5	369	ug/Kg	1	08/8/2012 15:35
4-Chlorophenyl phenyl ether	ND	U	39.3	369	ug/Kg	1	08/8/2012 15:35
Acenaphthene	ND	U	16.7	369	ug/Kg	1	08/8/2012 15:35
Acenaphthylene	ND	U	15.5	369	ug/Kg	1	08/8/2012 15:35
Anthracene	ND	U	16.4	369	ug/Kg	1	08/8/2012 15:35
Benzo(a)anthracene	ND	U	20.3	369	ug/Kg	1	08/8/2012 15:35
Benzo(a)pyrene	ND	U	20.9	369	ug/Kg	1	08/8/2012 15:35
Benzo(b)fluoranthene	ND	U	21.2	369	ug/Kg	1	08/8/2012 15:35
Benzo(g,h,i)perylene	ND	U	58.7	369	ug/Kg	1	08/8/2012 15:35
Benzo(k)fluoranthene	ND	U	44.2	369	ug/Kg	1	08/8/2012 15:35
Benzoic acid	ND	U	8.18	369	ug/Kg	1	08/8/2012 15:35
Bis(2-Chloroethoxy)methane	ND	U	16.6	369	ug/Kg	1	08/8/2012 15:35
Bis(2-Chloroethyl)ether	ND	U	34.4	369	ug/Kg	1	08/8/2012 15:35
Bis(2-Chloroisopropyl)ether	ND	U	32.2	369	ug/Kg	1	08/8/2012 15:35
Bis(2-Ethylhexyl)phthalate	ND	U	17.7	369	ug/Kg	1	08/8/2012 15:35
4-Bromophenyl phenyl ether	ND	U	24.3	369	ug/Kg	1	08/8/2012 15:35
Butyl benzyl phthalate	ND	U	32.0	369	ug/Kg	1	08/8/2012 15:35
Chrysene	ND	U	42.9	369	ug/Kg	1	08/8/2012 15:35
Di-n-butyl phthalate	ND	U	17.4	369	ug/Kg	1	08/8/2012 15:35
Di-n-octyl phthalate	ND	U	20.4	369	ug/Kg	1	08/8/2012 15:35
Dibenz(a,h)anthracene	ND	U	16.6	369	ug/Kg	1	08/8/2012 15:35
Dibenzofuran	ND	U	28.9	369	ug/Kg	1	08/8/2012 15:35
Diethyl phthalate	ND	U	19.9	369	ug/Kg	1	08/8/2012 15:35

Print Date: 08/16/2012

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SGS ANALYTICAL PERSPECTIVES

Results of 107DPT-08 (6-7ft)

Client Sample ID: **107DPT-08 (6-7ft)**
Client Project ID: **NCDOT Parcel 107**
Lab Sample ID: 31202488005-E
Lab Project ID: 31202488

Collection Date: 08/03/2012 10:00
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 88.30

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
Dimethyl phthalate	ND	U	28.3	369	ug/Kg	1	08/8/2012 15:35
2,4-Dimethylphenol	ND	U	27.0	369	ug/Kg	1	08/8/2012 15:35
Diphenylamine	ND	U	16.6	369	ug/Kg	1	08/8/2012 15:35
Fluoranthene	ND	U	34.6	369	ug/Kg	1	08/8/2012 15:35
Fluorene	ND	U	19.6	369	ug/Kg	1	08/8/2012 15:35
Hexachlorobenzene	ND	U	34.9	369	ug/Kg	1	08/8/2012 15:35
Hexachlorobutadiene	ND	U	22.0	369	ug/Kg	1	08/8/2012 15:35
Hexachlorocyclopentadiene	ND	U	112	369	ug/Kg	1	08/8/2012 15:35
Hexachloroethane	ND	U	21.2	369	ug/Kg	1	08/8/2012 15:35
Indeno(1,2,3-cd)pyrene	ND	U	28.7	369	ug/Kg	1	08/8/2012 15:35
Isophorone	ND	U	16.7	369	ug/Kg	1	08/8/2012 15:35
Naphthalene	ND	U	31.8	369	ug/Kg	1	08/8/2012 15:35
4-Nitroaniline	ND	U	21.2	369	ug/Kg	1	08/8/2012 15:35
Nitrobenzene	ND	U	21.2	369	ug/Kg	1	08/8/2012 15:35
4-Nitrophenol	ND	U	36.3	369	ug/Kg	1	08/8/2012 15:35
Pentachlorophenol	ND	U	29.5	369	ug/Kg	1	08/8/2012 15:35
Phenanthrene	ND	U	24.3	369	ug/Kg	1	08/8/2012 15:35
Phenol	ND	U	34.4	369	ug/Kg	1	08/8/2012 15:35
Pyrene	ND	U	15.5	369	ug/Kg	1	08/8/2012 15:35
n-Nitrosodi-n-propylamine	ND	U	106	369	ug/Kg	1	08/8/2012 15:35
Surrogates							
2,4,6-Tribromophenol	96.0			41.0-129	%	1	08/8/2012 15:35
2-Fluorobiphenyl	98.0			48.0-123	%	1	08/8/2012 15:35
2-Fluorophenol	89.0			42.0-123	%	1	08/8/2012 15:35
Nitrobenzene-d5	96.0			46.0-117	%	1	08/8/2012 15:35
Phenol-d6	102			48.0-125	%	1	08/8/2012 15:35
Terphenyl-d14	105			44.0-140	%	1	08/8/2012 15:35

Batch Information

Analytical Batch: **XMS1628**
Analytical Method: **SW-846 8270D**
Instrument: **MSD10**
Analyst: **CMP**
Analytical Date/Time: **08/08/2012 15:35**

Prep Batch: **XXX2895**
Prep Method: **SW-846 3541**
Prep Date/Time: **08/07/2012 15:37**
Prep Initial Wt./Vol.: **30.75 g**
Prep Extract Vol: **10 mL**

Print Date: 08/16/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 107DPT-09 (4.5-5ft)

Client Sample ID: **107DPT-09 (4.5-5ft)**
Client Project ID: **NCDOT Parcel 107**
Lab Sample ID: 31202488006-A
Lab Project ID: 31202488

Collection Date: 08/03/2012 10:10
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 79.00

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	U	0.654	4.61	ug/Kg	1	08/8/2012 15:26
1,1,1-Trichloroethane	ND	U	0.696	4.61	ug/Kg	1	08/8/2012 15:26
1,1,2,2-Tetrachloroethane	ND	U	1.08	4.61	ug/Kg	1	08/8/2012 15:26
1,1,2-Trichloroethane	ND	U	0.960	4.61	ug/Kg	1	08/8/2012 15:26
1,1-Dichloroethane	ND	U	0.497	4.61	ug/Kg	1	08/8/2012 15:26
1,1-Dichloroethene	ND	U	1.07	4.61	ug/Kg	1	08/8/2012 15:26
1,1-Dichloropropene	ND	U	0.624	4.61	ug/Kg	1	08/8/2012 15:26
1,2,3-Trichlorobenzene	ND	U	0.768	4.61	ug/Kg	1	08/8/2012 15:26
1,2,3-Trichloropropane	ND	U	0.951	4.61	ug/Kg	1	08/8/2012 15:26
1,2,4-Trichlorobenzene	ND	U	0.673	4.61	ug/Kg	1	08/8/2012 15:26
1,2,4-Trimethylbenzene	ND	U	0.588	4.61	ug/Kg	1	08/8/2012 15:26
1,2-Dibromo-3-chloropropane	ND	U	6.84	27.7	ug/Kg	1	08/8/2012 15:26
1,2-Dibromoethane	ND	U	1.21	4.61	ug/Kg	1	08/8/2012 15:26
1,2-Dichlorobenzene	ND	U	0.656	4.61	ug/Kg	1	08/8/2012 15:26
1,2-Dichloroethane	ND	U	0.843	4.61	ug/Kg	1	08/8/2012 15:26
1,2-Dichloropropane	ND	U	1.06	4.61	ug/Kg	1	08/8/2012 15:26
1,3,5-Trimethylbenzene	ND	U	0.561	4.61	ug/Kg	1	08/8/2012 15:26
1,3-Dichlorobenzene	ND	U	0.664	4.61	ug/Kg	1	08/8/2012 15:26
1,3-Dichloropropane	ND	U	0.811	4.61	ug/Kg	1	08/8/2012 15:26
1,4-Dichlorobenzene	ND	U	0.623	4.61	ug/Kg	1	08/8/2012 15:26
2,2-Dichloropropane	ND	U	0.681	4.61	ug/Kg	1	08/8/2012 15:26
2-Butanone	ND	U	3.12	23.1	ug/Kg	1	08/8/2012 15:26
2-Chlorotoluene	ND	U	0.865	4.61	ug/Kg	1	08/8/2012 15:26
2-Hexanone	ND	U	2.97	11.5	ug/Kg	1	08/8/2012 15:26
4-Chlorotoluene	ND	U	0.698	4.61	ug/Kg	1	08/8/2012 15:26
4-Isopropyltoluene	ND	U	0.595	4.61	ug/Kg	1	08/8/2012 15:26
4-Methyl-2-pentanone	ND	U	3.45	11.5	ug/Kg	1	08/8/2012 15:26
Acetone	ND	U	3.70	46.1	ug/Kg	1	08/8/2012 15:26
Benzene	ND	U	0.656	4.61	ug/Kg	1	08/8/2012 15:26
Bromobenzene	ND	U	0.643	4.61	ug/Kg	1	08/8/2012 15:26
Bromochloromethane	ND	U	0.868	4.61	ug/Kg	1	08/8/2012 15:26
Bromodichloromethane	ND	U	0.650	4.61	ug/Kg	1	08/8/2012 15:26
Bromoform	ND	U	0.668	4.61	ug/Kg	1	08/8/2012 15:26
Bromomethane	ND	U	1.34	4.61	ug/Kg	1	08/8/2012 15:26
n-Butylbenzene	ND	U	0.606	4.61	ug/Kg	1	08/8/2012 15:26
Carbon disulfide	ND	U	0.483	4.61	ug/Kg	1	08/8/2012 15:26
Carbon tetrachloride	ND	U	0.525	4.61	ug/Kg	1	08/8/2012 15:26
Chlorobenzene	ND	U	0.644	4.61	ug/Kg	1	08/8/2012 15:26
Chloroethane	ND	U	0.923	4.61	ug/Kg	1	08/8/2012 15:26
Chloroform	ND	U	0.588	4.61	ug/Kg	1	08/8/2012 15:26
Chloromethane	ND	U	1.32	4.61	ug/Kg	1	08/8/2012 15:26
Dibromochloromethane	ND	U	1.02	4.61	ug/Kg	1	08/8/2012 15:26
Dibromomethane	ND	U	0.814	4.61	ug/Kg	1	08/8/2012 15:26
Dichlorodifluoromethane	ND	U	0.969	4.61	ug/Kg	1	08/8/2012 15:26

Print Date: 08/16/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 107DPT-09 (4.5-5ft)

Client Sample ID: **107DPT-09 (4.5-5ft)**
Client Project ID: **NCDOT Parcel 107**
Lab Sample ID: 31202488006-A
Lab Project ID: 31202488

Collection Date: 08/03/2012 10:10
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 79.00

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	U	0.951	4.61	ug/Kg	1	08/8/2012 15:26
trans-1,3-Dichloropropene	ND	U	0.871	4.61	ug/Kg	1	08/8/2012 15:26
Diisopropyl Ether	ND	U	0.758	4.61	ug/Kg	1	08/8/2012 15:26
Ethyl Benzene	ND	U	0.651	4.61	ug/Kg	1	08/8/2012 15:26
Hexachlorobutadiene	ND	U	0.634	4.61	ug/Kg	1	08/8/2012 15:26
Isopropylbenzene (Cumene)	ND	U	0.574	4.61	ug/Kg	1	08/8/2012 15:26
Methyl Iodide	ND	U	0.707	4.61	ug/Kg	1	08/8/2012 15:26
Methylene chloride	**1.50**	J	0.969	18.5	ug/Kg	1	08/8/2012 15:26
Naphthalene	ND	U	0.839	4.61	ug/Kg	1	08/8/2012 15:26
Styrene	ND	U	0.532	4.61	ug/Kg	1	08/8/2012 15:26
Tetrachloroethene	ND	U	0.693	4.61	ug/Kg	1	08/8/2012 15:26
Toluene	ND	U	0.635	4.61	ug/Kg	1	08/8/2012 15:26
Trichloroethene	ND	U	0.777	4.61	ug/Kg	1	08/8/2012 15:26
Trichlorofluoromethane	ND	U	0.932	4.61	ug/Kg	1	08/8/2012 15:26
Vinyl chloride	ND	U	0.877	4.61	ug/Kg	1	08/8/2012 15:26
Xylene (total)	ND	U	1.63	9.23	ug/Kg	1	08/8/2012 15:26
cis-1,2-Dichloroethene	ND	U	0.564	4.61	ug/Kg	1	08/8/2012 15:26
m,p-Xylene	ND	U	1.56	9.23	ug/Kg	1	08/8/2012 15:26
n-Propylbenzene	ND	U	0.676	4.61	ug/Kg	1	08/8/2012 15:26
o-Xylene	ND	U	0.707	4.61	ug/Kg	1	08/8/2012 15:26
sec-Butylbenzene	ND	U	0.554	4.61	ug/Kg	1	08/8/2012 15:26
tert-Butyl methyl ether (MTBE)	ND	U	0.734	4.61	ug/Kg	1	08/8/2012 15:26
tert-Butylbenzene	ND	U	0.621	4.61	ug/Kg	1	08/8/2012 15:26
trans-1,2-Dichloroethene	ND	U	0.674	4.61	ug/Kg	1	08/8/2012 15:26
trans-1,4-Dichloro-2-butene	ND	U	3.88	23.1	ug/Kg	1	08/8/2012 15:26
Surrogates							
1,2-Dichloroethane-d4	121			55.0-173	%	1	08/8/2012 15:26
4-Bromofluorobenzene	98.0			23.0-141	%	1	08/8/2012 15:26
Toluene d8	105			57.0-134	%	1	08/8/2012 15:26

Batch Information

Analytical Batch: **VMS2454**
Analytical Method: **SW-846 8260B**
Instrument: **MSD9**
Analyst: **DVO**
Analytical Date/Time: **08/08/2012 15:26**

Prep Batch: **VXX3778**
Prep Method: **SW-846 5035 SL**
Prep Date/Time: **08/06/2012 16:14**
Prep Initial Wt./Vol.: **6.86 g**
Prep Extract Vol: **5 mL**

Print Date: 08/16/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of **107DPT-09 (4.5-5ft)**

Client Sample ID: **107DPT-09 (4.5-5ft)**
Client Project ID: **NCDOT Parcel 107**
Lab Sample ID: 31202488006-E
Lab Project ID: 31202488

Collection Date: 08/03/2012 10:10
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 79.00

Results by **SW-846 8270D**

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,2,4-Trichlorobenzene	ND	U	34.6	392	ug/Kg	1	08/8/2012 15:58
1,2-Dichlorobenzene	ND	U	19.5	392	ug/Kg	1	08/8/2012 15:58
1,3-Dichlorobenzene	ND	U	26.4	392	ug/Kg	1	08/8/2012 15:58
1,4-Dichlorobenzene	ND	U	27.7	392	ug/Kg	1	08/8/2012 15:58
2,4,5-Trichlorophenol	ND	U	26.2	392	ug/Kg	1	08/8/2012 15:58
2,4,6-Trichlorophenol	ND	U	26.5	392	ug/Kg	1	08/8/2012 15:58
2,4-Dichlorophenol	ND	U	22.7	392	ug/Kg	1	08/8/2012 15:58
2,4-Dinitrophenol	ND	U	36.3	783	ug/Kg	1	08/8/2012 15:58
2,4-Dinitrotoluene	ND	U	19.8	392	ug/Kg	1	08/8/2012 15:58
2,6-Dinitrotoluene	ND	U	28.0	392	ug/Kg	1	08/8/2012 15:58
2-Chloronaphthalene	ND	U	23.0	392	ug/Kg	1	08/8/2012 15:58
2-Chlorophenol	ND	U	20.8	392	ug/Kg	1	08/8/2012 15:58
2-Methylnaphthalene	ND	U	31.7	392	ug/Kg	1	08/8/2012 15:58
2-Methylphenol	ND	U	21.7	392	ug/Kg	1	08/8/2012 15:58
2-Nitroaniline	ND	U	25.8	392	ug/Kg	1	08/8/2012 15:58
2-Nitrophenol	ND	U	18.8	392	ug/Kg	1	08/8/2012 15:58
3 and/or 4-Methylphenol	ND	U	25.4	392	ug/Kg	1	08/8/2012 15:58
3,3'-Dichlorobenzidine	ND	U	18.8	392	ug/Kg	1	08/8/2012 15:58
3-Nitroaniline	ND	U	17.7	392	ug/Kg	1	08/8/2012 15:58
4,6-Dinitro-2-methylphenol	ND	U	18.4	392	ug/Kg	1	08/8/2012 15:58
4-Chloro-3-methylphenol	ND	U	19.5	392	ug/Kg	1	08/8/2012 15:58
4-Chloroaniline	ND	U	31.3	392	ug/Kg	1	08/8/2012 15:58
4-Chlorophenyl phenyl ether	ND	U	41.8	392	ug/Kg	1	08/8/2012 15:58
Acenaphthene	ND	U	17.8	392	ug/Kg	1	08/8/2012 15:58
Acenaphthylene	ND	U	16.5	392	ug/Kg	1	08/8/2012 15:58
Anthracene	ND	U	17.4	392	ug/Kg	1	08/8/2012 15:58
Benzo(a)anthracene	ND	U	21.5	392	ug/Kg	1	08/8/2012 15:58
Benzo(a)pyrene	ND	U	22.2	392	ug/Kg	1	08/8/2012 15:58
Benzo(b)fluoranthene	ND	U	22.5	392	ug/Kg	1	08/8/2012 15:58
Benzo(g,h,i)perylene	ND	U	62.4	392	ug/Kg	1	08/8/2012 15:58
Benzo(k)fluoranthene	ND	U	47.0	392	ug/Kg	1	08/8/2012 15:58
Benzoic acid	ND	U	8.69	392	ug/Kg	1	08/8/2012 15:58
Bis(2-Chloroethoxy)methane	ND	U	17.7	392	ug/Kg	1	08/8/2012 15:58
Bis(2-Chloroethyl)ether	ND	U	36.6	392	ug/Kg	1	08/8/2012 15:58
Bis(2-Chloroisopropyl)ether	ND	U	34.2	392	ug/Kg	1	08/8/2012 15:58
Bis(2-Ethylhexyl)phthalate	ND	U	18.8	392	ug/Kg	1	08/8/2012 15:58
4-Bromophenyl phenyl ether	ND	U	25.8	392	ug/Kg	1	08/8/2012 15:58
Butyl benzyl phthalate	ND	U	34.1	392	ug/Kg	1	08/8/2012 15:58
Chrysene	ND	U	45.6	392	ug/Kg	1	08/8/2012 15:58
Di-n-butyl phthalate	ND	U	18.5	392	ug/Kg	1	08/8/2012 15:58
Di-n-octyl phthalate	ND	U	21.7	392	ug/Kg	1	08/8/2012 15:58
Dibenz(a,h)anthracene	ND	U	17.7	392	ug/Kg	1	08/8/2012 15:58
Dibenzofuran	ND	U	30.7	392	ug/Kg	1	08/8/2012 15:58
Diethyl phthalate	ND	U	21.2	392	ug/Kg	1	08/8/2012 15:58

Print Date: 08/16/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 107DPT-09 (4.5-5ft)

Client Sample ID: **107DPT-09 (4.5-5ft)**
Client Project ID: **NCDOT Parcel 107**
Lab Sample ID: 31202488006-E
Lab Project ID: 31202488

Collection Date: 08/03/2012 10:10
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 79.00

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
Dimethyl phthalate	ND	U	30.1	392	ug/Kg	1	08/8/2012 15:58
2,4-Dimethylphenol	ND	U	28.7	392	ug/Kg	1	08/8/2012 15:58
Diphenylamine	ND	U	17.7	392	ug/Kg	1	08/8/2012 15:58
Fluoranthene	ND	U	36.8	392	ug/Kg	1	08/8/2012 15:58
Fluorene	ND	U	20.8	392	ug/Kg	1	08/8/2012 15:58
Hexachlorobenzene	ND	U	37.1	392	ug/Kg	1	08/8/2012 15:58
Hexachlorobutadiene	ND	U	23.4	392	ug/Kg	1	08/8/2012 15:58
Hexachlorocyclopentadiene	ND	U	119	392	ug/Kg	1	08/8/2012 15:58
Hexachloroethane	ND	U	22.5	392	ug/Kg	1	08/8/2012 15:58
Indeno(1,2,3-cd)pyrene	ND	U	30.6	392	ug/Kg	1	08/8/2012 15:58
Isophorone	ND	U	17.8	392	ug/Kg	1	08/8/2012 15:58
Naphthalene	ND	U	33.8	392	ug/Kg	1	08/8/2012 15:58
4-Nitroaniline	ND	U	22.5	392	ug/Kg	1	08/8/2012 15:58
Nitrobenzene	ND	U	22.5	392	ug/Kg	1	08/8/2012 15:58
4-Nitrophenol	ND	U	38.6	392	ug/Kg	1	08/8/2012 15:58
Pentachlorophenol	ND	U	31.3	392	ug/Kg	1	08/8/2012 15:58
Phenanthrene	ND	U	25.8	392	ug/Kg	1	08/8/2012 15:58
Phenol	ND	U	36.6	392	ug/Kg	1	08/8/2012 15:58
Pyrene	ND	U	16.5	392	ug/Kg	1	08/8/2012 15:58
n-Nitrosodi-n-propylamine	ND	U	112	392	ug/Kg	1	08/8/2012 15:58
Surrogates							
2,4,6-Tribromophenol	62.0			41.0-129	%	1	08/8/2012 15:58
2-Fluorobiphenyl	61.0			48.0-123	%	1	08/8/2012 15:58
2-Fluorophenol	65.0			42.0-123	%	1	08/8/2012 15:58
Nitrobenzene-d5	68.0			46.0-117	%	1	08/8/2012 15:58
Phenol-d6	74.0			48.0-125	%	1	08/8/2012 15:58
Terphenyl-d14	79.0			44.0-140	%	1	08/8/2012 15:58

Batch Information

Analytical Batch: **XMS1628**
Analytical Method: **SW-846 8270D**
Instrument: **MSD10**
Analyst: **CMP**
Analytical Date/Time: **08/08/2012 15:58**

Prep Batch: **XXX2895**
Prep Method: **SW-846 3541**
Prep Date/Time: **08/07/2012 15:37**
Prep Initial Wt./Vol.: **32.36 g**
Prep Extract Vol: **10 mL**

Print Date: 08/16/2012

N.C. Certification # 481

Batch Summary

Analytical Method: SW-846 8260B

Prep Method: SW-846 5035 SL
Prep Batch: VXX3769
Prep Date: 08/07/2012 08:17

Client Sample ID	Lab Sample ID	Analysis Date	Analytical Batch	Instrument	Analyst
LCS-S for HBN 26796 [VXX/3769]	84022	08/07/2012 09:31	VMS2451	MSD9	DVO
LCSD-S for HBN 26796 [VXX/3769	84023	08/07/2012 09:58	VMS2451	MSD9	DVO
MB-S for HBN 26796 [VXX/3769]	84024	08/07/2012 10:51	VMS2451	MSD9	DVO
107DPT-04 (4.5-5ft)	31202488001	08/07/2012 17:00	VMS2451	MSD9	DVO
107DPT-05 (5-6ft)	31202488002	08/07/2012 17:27	VMS2451	MSD9	DVO
107DPT-06 (4.5-5ft)	31202488003	08/07/2012 17:53	VMS2451	MSD9	DVO
107DPT-07 (7-8ft)	31202488004	08/07/2012 18:19	VMS2451	MSD9	DVO

Print Date: 08/16/2012

N.C. Certification # 481

Method Blank

Blank ID: MB-S for HBN 26796 [VXX/3769]
Blank Lab ID: 84024
QC for Samples:
31202488001, 31202488002, 31202488003, 31202488004

Matrix: Soil-Solid as dry weight

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF
Dichlorodifluoromethane	ND	U	1.05	5.00	ug/Kg	1
Chloromethane	ND	U	1.43	5.00	ug/Kg	1
Vinyl chloride	ND	U	0.950	5.00	ug/Kg	1
Bromomethane	ND	U	1.45	5.00	ug/Kg	1
Chloroethane	ND	U	1.00	5.00	ug/Kg	1
Trichlorofluoromethane	ND	U	1.01	5.00	ug/Kg	1
1,1-Dichloroethene	ND	U	1.16	5.00	ug/Kg	1
Acetone	ND	U	4.01	50.0	ug/Kg	1
Methylene chloride	ND	U	1.05	20.0	ug/Kg	1
trans-1,2-Dichloroethene	ND	U	0.730	5.00	ug/Kg	1
tert-Butyl methyl ether (MTBE)	ND	U	0.795	5.00	ug/Kg	1
1,1-Dichloroethane	ND	U	0.538	5.00	ug/Kg	1
Diisopropyl Ether	ND	U	0.821	5.00	ug/Kg	1
2,2-Dichloropropane	ND	U	0.738	5.00	ug/Kg	1
cis-1,2-Dichloroethene	ND	U	0.611	5.00	ug/Kg	1
2-Butanone	ND	U	3.38	25.0	ug/Kg	1
Bromochloromethane	ND	U	0.940	5.00	ug/Kg	1
Chloroform	ND	U	0.637	5.00	ug/Kg	1
1,1,1-Trichloroethane	ND	U	0.754	5.00	ug/Kg	1
Carbon tetrachloride	ND	U	0.569	5.00	ug/Kg	1
1,1-Dichloropropene	ND	U	0.676	5.00	ug/Kg	1
Benzene	ND	U	0.711	5.00	ug/Kg	1
1,2-Dichloroethane	ND	U	0.913	5.00	ug/Kg	1
Trichloroethene	ND	U	0.842	5.00	ug/Kg	1
1,2-Dichloropropane	ND	U	1.15	5.00	ug/Kg	1
Dibromomethane	ND	U	0.882	5.00	ug/Kg	1
Bromodichloromethane	ND	U	0.704	5.00	ug/Kg	1
cis-1,3-Dichloropropene	ND	U	1.03	5.00	ug/Kg	1
4-Methyl-2-pentanone	ND	U	3.74	12.5	ug/Kg	1
Toluene	ND	U	0.688	5.00	ug/Kg	1
Methyl iodide	ND	U	0.766	5.00	ug/Kg	1
trans-1,3-Dichloropropene	ND	U	0.944	5.00	ug/Kg	1
Carbon disulfide	ND	U	0.523	5.00	ug/Kg	1
1,1,2-Trichloroethane	ND	U	1.04	5.00	ug/Kg	1
Tetrachloroethene	ND	U	0.751	5.00	ug/Kg	1
1,3-Dichloropropane	ND	U	0.879	5.00	ug/Kg	1
2-Hexanone	ND	U	3.22	12.5	ug/Kg	1
Dibromochloromethane	ND	U	1.11	5.00	ug/Kg	1
1,2-Dibromoethane	ND	U	1.31	5.00	ug/Kg	1
Chlorobenzene	ND	U	0.698	5.00	ug/Kg	1
1,1,1,2-Tetrachloroethane	ND	U	0.709	5.00	ug/Kg	1
Bromoform	ND	U	0.724	5.00	ug/Kg	1

Print Date: 08/16/2012

N.C. Certification # 481

Method Blank

Blank ID: MB-S for HBN 26796 [VXX/3769]
Blank Lab ID: 84024
QC for Samples:
31202488001, 31202488002, 31202488003, 31202488004

Matrix: Soil-Solid as dry weight

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF
Bromobenzene	ND	U	0.697	5.00	ug/Kg	1
1,1,2,2-Tetrachloroethane	ND	U	1.17	5.00	ug/Kg	1
1,2,3-Trichloropropane	ND	U	1.03	5.00	ug/Kg	1
Ethyl Benzene	ND	U	0.705	5.00	ug/Kg	1
m,p-Xylene	ND	U	1.69	10.0	ug/Kg	1
Styrene	ND	U	0.576	5.00	ug/Kg	1
o-Xylene	ND	U	0.766	5.00	ug/Kg	1
Xylene (total)	ND	U	1.77	10.0	ug/Kg	1
Isopropylbenzene (Cumene)	ND	U	0.622	5.00	ug/Kg	1
n-Propylbenzene	ND	U	0.732	5.00	ug/Kg	1
2-Chlorotoluene	ND	U	0.937	5.00	ug/Kg	1
4-Chlorotoluene	ND	U	0.756	5.00	ug/Kg	1
1,3,5-Trimethylbenzene	ND	U	0.608	5.00	ug/Kg	1
tert-Butylbenzene	ND	U	0.673	5.00	ug/Kg	1
1,2,4-Trimethylbenzene	ND	U	0.637	5.00	ug/Kg	1
sec-Butylbenzene	ND	U	0.600	5.00	ug/Kg	1
1,3-Dichlorobenzene	ND	U	0.719	5.00	ug/Kg	1
4-Isopropyltoluene	ND	U	0.645	5.00	ug/Kg	1
1,4-Dichlorobenzene	ND	U	0.675	5.00	ug/Kg	1
1,2-Dichlorobenzene	ND	U	0.711	5.00	ug/Kg	1
n-Butylbenzene	ND	U	0.657	5.00	ug/Kg	1
1,2-Dibromo-3-chloropropane	ND	U	7.41	30.0	ug/Kg	1
1,2,4-Trichlorobenzene	ND	U	0.729	5.00	ug/Kg	1
Hexachlorobutadiene	ND	U	0.687	5.00	ug/Kg	1
Naphthalene	ND	U	0.909	5.00	ug/Kg	1
trans-1,4-Dichloro-2-butene	ND	U	4.20	25.0	ug/Kg	1
1,2,3-Trichlorobenzene	ND	U	0.832	5.00	ug/Kg	1
Surrogates						
1,2-Dichloroethane-d4	109			55.0-173	%	1
Toluene d8	104			57.0-134	%	1
4-Bromofluorobenzene	97.0			23.0-141	%	1

Batch Information

Analytical Batch: VMS2451
Analytical Method: SW-846 8260B
Instrument: MSD9
Analyst: DVO
Analytical Date/Time: 8/7/2012 10:51:00AM

Prep Batch: VXX3769
Prep Method: SW-846 5035 SL
Prep Date/Time: 8/7/2012 8:17:56AM
Prep Initial Wt./Vol.: 5 g
Prep Extract Vol: 5 mL

Print Date: 08/16/2012

N.C. Certification # 481

Blank Spike Summary

Blank Spike ID: LCS-S for HBN 26796 [VXX/3769]
Blank Spike Lab ID: 84022
Date Analyzed: 08/07/2012 09:31

Spike Duplicate ID: LCSD-S for HBN 26796 [VXX/3769
Spike Duplicate Lab ID: 84023
Matrix: Soil-Solid as dry weight

QC for Samples: 31202488001, 31202488002, 31202488003, 31202488004

Results by SW-846 8260B

	Blank Spike (ug/Kg)			Spike Duplicate (ug/Kg)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Dichlorodifluoromethane	30.0	30.4	101	30.0	31.0	103	52.0-133	2.0	30.00
Chloromethane	30.0	30.3	101	30.0	29.7	99	64.0-126	2.0	30.00
Vinyl chloride	30.0	30.6	102	30.0	30.5	102	69.0-120	0.33	30.00
Bromomethane	30.0	35.8	119	30.0	29.9	100	41.0-160	18	30.00
Chloroethane	30.0	31.6	105	30.0	30.8	103	69.0-126	2.6	30.00
Trichlorofluoromethane	30.0	31.1	104	30.0	31.6	105	72.0-123	1.6	30.00
1,1-Dichloroethene	30.0	29.9	100	30.0	30.0	100	78.0-113	0.33	30.00
Acetone	75.0	85.3	114	75.0	94.3	126	0.00-243	10	30.00
Methylene chloride	30.0	27.3	91	30.0	27.3	91	40.0-156	0.0	30.00
trans-1,2-Dichloroethene	30.0	29.7	99	30.0	29.6	99	78.0-111	0.34	30.00
tert-Butyl methyl ether (MTBE)	30.0	29.9	100	30.0	31.0	103	68.0-138	3.6	30.00
1,1-Dichloroethane	30.0	25.1	84	30.0	29.1	97	71.0-121	15	30.00
Diisopropyl Ether	30.0	21.3	71	30.0	30.0	100	60.0-141	34*	30.00
2,2-Dichloropropane	30.0	26.7	89	30.0	27.5	92	79.0-127	3.0	30.00
cis-1,2-Dichloroethene	30.0	29.8	99	30.0	30.0	100	80.0-114	0.67	30.00
2-Butanone	75.0	78.1	104	75.0	84.5	113	31.0-189	7.9	30.00
Bromochloromethane	30.0	31.0	103	30.0	31.9	106	81.0-115	2.9	30.00
Chloroform	30.0	29.7	99	30.0	29.1	97	76.0-114	2.0	30.00
1,1,1-Trichloroethane	30.0	28.4	95	30.0	28.2	94	79.0-117	0.71	30.00
Carbon tetrachloride	30.0	27.4	91	30.0	27.7	92	82.0-119	1.1	30.00
1,1-Dichloropropene	30.0	28.6	95	30.0	28.8	96	82.0-114	0.70	30.00
Benzene	30.0	28.4	95	30.0	28.5	95	82.0-113	0.35	30.00
1,2-Dichloroethane	30.0	30.1	100	30.0	30.8	103	72.0-126	2.3	30.00
Trichloroethene	30.0	28.7	96	30.0	27.8	93	82.0-108	3.2	30.00
1,2-Dichloropropane	30.0	27.7	92	30.0	27.4	91	78.0-116	1.1	30.00
Dibromomethane	30.0	30.3	101	30.0	31.0	103	79.0-125	2.3	30.00
Bromodichloromethane	30.0	27.6	92	30.0	28.3	94	79.0-122	2.5	30.00
cis-1,3-Dichloropropene	30.0	25.5	85	30.0	27.1	90	75.0-127	6.1	30.00
4-Methyl-2-pentanone	75.0	75.5	101	75.0	83.3	111	57.0-159	9.8	30.00
Toluene	30.0	26.8	89	30.0	29.1	97	83.0-111	8.2	30.00
Methyl iodide	30.0	29.2	97	30.0	30.3	101	63.0-137	3.7	30.00
trans-1,3-Dichloropropene	30.0	24.9	83	30.0	27.0	90	75.0-134	8.1	30.00
Carbon disulfide	30.0	26.7	89	30.0	27.3	91	72.0-116	2.2	30.00
1,1,2-Trichloroethane	30.0	31.7	106	30.0	30.9	103	73.0-121	2.6	30.00

Blank Spike Summary

Blank Spike ID: LCS-S for HBN 26796 [VXX/3769]
Blank Spike Lab ID: 84022
Date Analyzed: 08/07/2012 09:31

Spike Duplicate ID: LCSD-S for HBN 26796 [VXX/3769
Spike Duplicate Lab ID: 84023
Matrix: Soil-Solid as dry weight

QC for Samples: 31202488001, 31202488002, 31202488003, 31202488004

Results by SW-846 8260B

	Blank Spike (ug/Kg)			Spike Duplicate (ug/Kg)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Tetrachloroethene	30.0	28.8	96	30.0	28.8	96	60.0-118	0.0	30.00
1,3-Dichloropropane	30.0	30.6	102	30.0	30.4	101	76.0-121	0.66	30.00
2-Hexanone	75.0	82.0	109	75.0	83.3	111	41.0-171	1.6	30.00
Dibromochloromethane	30.0	30.7	102	30.0	27.4	91	77.0-126	11	30.00
1,2-Dibromoethane	30.0	31.6	105	30.0	31.7	106	76.0-125	0.32	30.00
Chlorobenzene	30.0	29.7	99	30.0	28.8	96	78.0-109	3.1	30.00
1,1,1,2-Tetrachloroethane	30.0	32.3	108	30.0	27.1	90	81.0-117	18	30.00
Bromoform	30.0	35.0	117	30.0	28.9	96	72.0-134	19	30.00
Bromobenzene	30.0	32.2	107	30.0	29.1	97	76.0-113	10	30.00
1,1,2,2-Tetrachloroethane	30.0	34.4	115	30.0	32.2	107	76.0-129	6.6	30.00
1,2,3-Trichloropropane	30.0	34.6	115	30.0	32.9	110	70.0-145	5.0	30.00
Ethyl Benzene	30.0	26.6	89	30.0	27.4	91	72.0-115	3.0	30.00
m,p-Xylene	60.0	54.8	91	60.0	56.1	94	73.0-114	2.3	30.00
Styrene	30.0	27.3	91	30.0	27.7	92	74.0-114	1.5	30.00
o-Xylene	30.0	27.4	91	30.0	28.3	94	74.0-113	3.2	30.00
Isopropylbenzene (Cumene)	30.0	27.4	91	30.0	28.1	94	72.0-115	2.5	30.00
n-Propylbenzene	30.0	28.9	96	30.0	27.8	93	71.0-117	3.9	30.00
2-Chlorotoluene	30.0	29.0	97	30.0	28.0	93	76.0-111	3.5	30.00
4-Chlorotoluene	30.0	28.5	95	30.0	28.2	94	75.0-113	1.1	30.00
1,3,5-Trimethylbenzene	30.0	28.1	94	30.0	27.6	92	72.0-115	1.8	30.00
tert-Butylbenzene	30.0	28.2	94	30.0	27.0	90	74.0-112	4.3	30.00
1,2,4-Trimethylbenzene	30.0	28.8	96	30.0	27.5	92	73.0-114	4.6	30.00
sec-Butylbenzene	30.0	28.0	93	30.0	26.9	90	72.0-115	4.0	30.00
1,3-Dichlorobenzene	30.0	29.1	97	30.0	28.8	96	75.0-110	1.0	30.00
4-Isopropyltoluene	30.0	28.4	95	30.0	27.1	90	73.0-114	4.7	30.00
1,4-Dichlorobenzene	30.0	29.2	97	30.0	28.9	96	76.0-110	1.0	30.00
1,2-Dichlorobenzene	30.0	29.6	99	30.0	29.5	98	77.0-109	0.34	30.00
n-Butylbenzene	30.0	28.5	95	30.0	27.4	91	72.0-118	3.9	30.00
1,2-Dibromo-3-chloropropane	180	197	109	180	191	106	54.0-166	3.1	30.00
1,2,4-Trichlorobenzene	30.0	29.5	98	30.0	27.2	91	76.0-115	8.1	30.00
Hexachlorobutadiene	30.0	26.3	88	30.0	23.4	78	70.0-111	12	30.00
Naphthalene	30.0	31.6	105	30.0	30.6	102	71.0-129	3.2	30.00
trans-1,4-Dichloro-2-butene	150	153	102	150	159	106	62.0-164	3.8	30.00
1,2,3-Trichlorobenzene	30.0	29.2	97	30.0	27.0	90	78.0-115	7.8	30.00

Print Date: 08/16/2012

N.C. Certification # 481

Blank Spike Summary

Blank Spike ID: LCS-S for HBN 26796 [VXX/3769]
Blank Spike Lab ID: 84022
Date Analyzed: 08/07/2012 09:31

Spike Duplicate ID: LCSD-S for HBN 26796 [VXX/3769
Spike Duplicate Lab ID: 84023
Matrix: Soil-Solid as dry weight

QC for Samples: 31202488001, 31202488002, 31202488003, 31202488004

Results by SW-846 8260B

	Blank Spike (%)			Spike Duplicate (%)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Surrogates									
1,2-Dichloroethane-d4			104			108	55.0-173		
Toluene d8			92			101	57.0-134		
4-Bromofluorobenzene			109			98	23.0-141		

Batch Information

Analytical Batch: VMS2451
Analytical Method: SW-846 8260B
Instrument: MSD9
Analyst: DVO

Prep Batch: VXX3769
Prep Method: SW-846 5035 SL
Prep Date/Time: 08/07/2012 08:17
Spike Init Wt./Vol.: 5 g Extract Vol: 5 mL
Dupe Init Wt./Vol.: 5 g Extract Vol: 5 mL

Batch Summary

Analytical Method: SW-846 8260B

Prep Method: SW-846 5035 SL
Prep Batch: VXX3778
Prep Date: 08/08/2012 08:22

Client Sample ID	Lab Sample ID	Analysis Date	Analytical Batch	Instrument	Analyst
LCS-S for HBN 26841 [VXX/3778]	84241	08/08/2012 09:28	VMS2454	MSD9	DVO
LCSD-S for HBN 26841 [VXX/3778	84242	08/08/2012 09:55	VMS2454	MSD9	DVO
MB-S for HBN 26841 [VXX/3778]	84243	08/08/2012 10:48	VMS2454	MSD9	DVO
107DPT-08 (6-7ft)	31202488005	08/08/2012 14:59	VMS2454	MSD9	DVO
107DPT-09 (4.5-5ft)	31202488006	08/08/2012 15:26	VMS2454	MSD9	DVO
104DPT-02 (6-6.5ft)(83859MS)	84615	08/08/2012 17:35	VMS2454	MSD9	DVO

Print Date: 08/16/2012

N.C. Certification # 481

Method Blank

Blank ID: MB-S for HBN 26841 [VXX/3778]
Blank Lab ID: 84243
QC for Samples:
31202488005, 31202488006

Matrix: Soil-Solid as dry weight

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF
Dichlorodifluoromethane	ND	U	1.05	5.00	ug/Kg	1
Chloromethane	ND	U	1.43	5.00	ug/Kg	1
Vinyl chloride	ND	U	0.950	5.00	ug/Kg	1
Bromomethane	ND	U	1.45	5.00	ug/Kg	1
Chloroethane	ND	U	1.00	5.00	ug/Kg	1
Trichlorofluoromethane	ND	U	1.01	5.00	ug/Kg	1
1,1-Dichloroethene	ND	U	1.16	5.00	ug/Kg	1
Acetone	ND	U	4.01	50.0	ug/Kg	1
Methylene chloride	3.48	J	1.05	20.0	ug/Kg	1
trans-1,2-Dichloroethene	ND	U	0.730	5.00	ug/Kg	1
tert-Butyl methyl ether (MTBE)	ND	U	0.795	5.00	ug/Kg	1
1,1-Dichloroethane	ND	U	0.538	5.00	ug/Kg	1
Diisopropyl Ether	ND	U	0.821	5.00	ug/Kg	1
2,2-Dichloropropane	ND	U	0.738	5.00	ug/Kg	1
cis-1,2-Dichloroethene	ND	U	0.611	5.00	ug/Kg	1
2-Butanone	ND	U	3.38	25.0	ug/Kg	1
Bromochloromethane	ND	U	0.940	5.00	ug/Kg	1
Chloroform	ND	U	0.637	5.00	ug/Kg	1
1,1,1-Trichloroethane	ND	U	0.754	5.00	ug/Kg	1
Carbon tetrachloride	ND	U	0.569	5.00	ug/Kg	1
1,1-Dichloropropene	ND	U	0.676	5.00	ug/Kg	1
Benzene	ND	U	0.711	5.00	ug/Kg	1
1,2-Dichloroethane	ND	U	0.913	5.00	ug/Kg	1
Trichloroethene	ND	U	0.842	5.00	ug/Kg	1
1,2-Dichloropropane	ND	U	1.15	5.00	ug/Kg	1
Dibromomethane	ND	U	0.882	5.00	ug/Kg	1
Bromodichloromethane	ND	U	0.704	5.00	ug/Kg	1
cis-1,3-Dichloropropene	ND	U	1.03	5.00	ug/Kg	1
4-Methyl-2-pentanone	ND	U	3.74	12.5	ug/Kg	1
Toluene	ND	U	0.688	5.00	ug/Kg	1
Methyl iodide	ND	U	0.766	5.00	ug/Kg	1
trans-1,3-Dichloropropene	ND	U	0.944	5.00	ug/Kg	1
Carbon disulfide	ND	U	0.523	5.00	ug/Kg	1
1,1,2-Trichloroethane	ND	U	1.04	5.00	ug/Kg	1
Tetrachloroethene	ND	U	0.751	5.00	ug/Kg	1
1,3-Dichloropropane	ND	U	0.879	5.00	ug/Kg	1
2-Hexanone	ND	U	3.22	12.5	ug/Kg	1
Dibromochloromethane	ND	U	1.11	5.00	ug/Kg	1
1,2-Dibromoethane	ND	U	1.31	5.00	ug/Kg	1
Chlorobenzene	ND	U	0.698	5.00	ug/Kg	1
1,1,1,2-Tetrachloroethane	ND	U	0.709	5.00	ug/Kg	1
Bromoform	ND	U	0.724	5.00	ug/Kg	1

Print Date: 08/16/2012

N.C. Certification # 481

Method Blank

Blank ID: MB-S for HBN 26841 [VXX/3778]
Blank Lab ID: 84243
QC for Samples:
31202488005, 31202488006

Matrix: Soil-Solid as dry weight

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF
Bromobenzene	ND	U	0.697	5.00	ug/Kg	1
1,1,2,2-Tetrachloroethane	ND	U	1.17	5.00	ug/Kg	1
1,2,3-Trichloropropane	ND	U	1.03	5.00	ug/Kg	1
Ethyl Benzene	ND	U	0.705	5.00	ug/Kg	1
m,p-Xylene	ND	U	1.69	10.0	ug/Kg	1
Styrene	ND	U	0.576	5.00	ug/Kg	1
o-Xylene	ND	U	0.766	5.00	ug/Kg	1
Xylene (total)	ND	U	1.77	10.0	ug/Kg	1
Isopropylbenzene (Cumene)	ND	U	0.622	5.00	ug/Kg	1
n-Propylbenzene	ND	U	0.732	5.00	ug/Kg	1
2-Chlorotoluene	ND	U	0.937	5.00	ug/Kg	1
4-Chlorotoluene	ND	U	0.756	5.00	ug/Kg	1
1,3,5-Trimethylbenzene	ND	U	0.608	5.00	ug/Kg	1
tert-Butylbenzene	ND	U	0.673	5.00	ug/Kg	1
1,2,4-Trimethylbenzene	ND	U	0.637	5.00	ug/Kg	1
sec-Butylbenzene	ND	U	0.600	5.00	ug/Kg	1
1,3-Dichlorobenzene	ND	U	0.719	5.00	ug/Kg	1
4-Isopropyltoluene	ND	U	0.645	5.00	ug/Kg	1
1,4-Dichlorobenzene	ND	U	0.675	5.00	ug/Kg	1
1,2-Dichlorobenzene	ND	U	0.711	5.00	ug/Kg	1
n-Butylbenzene	ND	U	0.657	5.00	ug/Kg	1
1,2-Dibromo-3-chloropropane	ND	U	7.41	30.0	ug/Kg	1
1,2,4-Trichlorobenzene	ND	U	0.729	5.00	ug/Kg	1
Hexachlorobutadiene	ND	U	0.687	5.00	ug/Kg	1
Naphthalene	ND	U	0.909	5.00	ug/Kg	1
trans-1,4-Dichloro-2-butene	ND	U	4.20	25.0	ug/Kg	1
1,2,3-Trichlorobenzene	ND	U	0.832	5.00	ug/Kg	1
Surrogates						
1,2-Dichloroethane-d4	107			55.0-173	%	1
Toluene d8	106			57.0-134	%	1
4-Bromofluorobenzene	97.0			23.0-141	%	1

Batch Information

Analytical Batch: VMS2454
Analytical Method: SW-846 8260B
Instrument: MSD9
Analyst: DVO
Analytical Date/Time: 8/8/2012 10:48:00AM

Prep Batch: VXX3778
Prep Method: SW-846 5035 SL
Prep Date/Time: 8/8/2012 8:22:20AM
Prep Initial Wt./Vol.: 5 g
Prep Extract Vol: 5 mL

Print Date: 08/16/2012

N.C. Certification # 481

Blank Spike Summary

Blank Spike ID: LCS-S for HBN 26841 [VXX/3778]
Blank Spike Lab ID: 84241
Date Analyzed: 08/08/2012 09:28

Spike Duplicate ID: LCSD-S for HBN 26841 [VXX/3778
Spike Duplicate Lab ID: 84242
Matrix: Soil-Solid as dry weight

QC for Samples: 31202488005, 31202488006

Results by SW-846 8260B

	Blank Spike (ug/Kg)			Spike Duplicate (ug/Kg)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Dichlorodifluoromethane	30.0	32.1	107	30.0	31.9	106	52.0-133	0.63	30.00
Chloromethane	30.0	30.0	100	30.0	30.9	103	64.0-126	3.0	30.00
Vinyl chloride	30.0	30.5	102	30.0	31.5	105	69.0-120	3.2	30.00
Bromomethane	30.0	22.1	74	30.0	34.9	116	41.0-160	45*	30.00
Chloroethane	30.0	34.6	115	30.0	36.9	123	69.0-126	6.4	30.00
Trichlorofluoromethane	30.0	33.3	111	30.0	32.9	110	72.0-123	1.2	30.00
1,1-Dichloroethene	30.0	30.2	101	30.0	30.2	101	78.0-113	0.0	30.00
Acetone	75.0	80.8	108	75.0	71.1	95	0.00-243	13	30.00
Methylene chloride	30.0	28.1	94	30.0	28.3	94	40.0-156	0.71	30.00
trans-1,2-Dichloroethene	30.0	29.8	99	30.0	29.5	98	78.0-111	1.0	30.00
tert-Butyl methyl ether (MTBE)	30.0	29.0	97	30.0	27.4	91	68.0-138	5.7	30.00
1,1-Dichloroethane	30.0	29.1	97	30.0	29.5	98	71.0-121	1.4	30.00
Diisopropyl Ether	30.0	29.5	98	30.0	29.3	98	60.0-141	0.68	30.00
2,2-Dichloropropane	30.0	27.6	92	30.0	27.6	92	79.0-127	0.0	30.00
cis-1,2-Dichloroethene	30.0	30.7	102	30.0	31.1	104	80.0-114	1.3	30.00
2-Butanone	75.0	80.6	108	75.0	62.6	83	31.0-189	25	30.00
Bromochloromethane	30.0	31.3	104	30.0	30.0	100	81.0-115	4.2	30.00
Chloroform	30.0	29.6	99	30.0	30.5	102	76.0-114	3.0	30.00
1,1,1-Trichloroethane	30.0	29.1	97	30.0	29.3	98	79.0-117	0.68	30.00
Carbon tetrachloride	30.0	28.4	95	30.0	28.3	94	82.0-119	0.35	30.00
1,1-Dichloropropene	30.0	29.1	97	30.0	29.4	98	82.0-114	1.0	30.00
Benzene	30.0	29.1	97	30.0	29.2	97	82.0-113	0.34	30.00
1,2-Dichloroethane	30.0	30.1	100	30.0	28.8	96	72.0-126	4.4	30.00
Trichloroethene	30.0	28.9	96	30.0	29.3	98	82.0-108	1.4	30.00
1,2-Dichloropropane	30.0	28.3	94	30.0	28.4	95	78.0-116	0.35	30.00
Dibromomethane	30.0	29.9	100	30.0	28.1	94	79.0-125	6.2	30.00
Bromodichloromethane	30.0	28.0	93	30.0	28.1	94	79.0-122	0.36	30.00
cis-1,3-Dichloropropene	30.0	26.8	89	30.0	25.7	86	75.0-127	4.2	30.00
4-Methyl-2-pentanone	75.0	76.3	102	75.0	61.2	82	57.0-159	22	30.00
Toluene	30.0	29.4	98	30.0	29.8	99	83.0-111	1.4	30.00
Methyl iodide	30.0	19.2	64	30.0	23.3	78	63.0-137	19	30.00
trans-1,3-Dichloropropene	30.0	26.8	89	30.0	25.0	83	75.0-134	6.9	30.00
Carbon disulfide	30.0	27.1	90	30.0	28.3	94	72.0-116	4.3	30.00
1,1,2-Trichloroethane	30.0	30.1	100	30.0	27.7	92	73.0-121	8.3	30.00

Blank Spike Summary

Blank Spike ID: LCS-S for HBN 26841 [VXX/3778]
Blank Spike Lab ID: 84241
Date Analyzed: 08/08/2012 09:28

Spike Duplicate ID: LCSD-S for HBN 26841 [VXX/3778
Spike Duplicate Lab ID: 84242
Matrix: Soil-Solid as dry weight

QC for Samples: 31202488005, 31202488006

Results by SW-846 8260B

	Blank Spike (ug/Kg)			Spike Duplicate (ug/Kg)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Tetrachloroethene	30.0	28.4	95	30.0	28.9	96	60.0-118	1.7	30.00
1,3-Dichloropropane	30.0	29.8	99	30.0	27.8	93	76.0-121	6.9	30.00
2-Hexanone	75.0	74.6	99	75.0	59.0	79	41.0-171	23	30.00
Dibromochloromethane	30.0	27.9	93	30.0	25.2	84	77.0-126	10	30.00
1,2-Dibromoethane	30.0	30.6	102	30.0	26.3	88	76.0-125	15	30.00
Chlorobenzene	30.0	28.2	94	30.0	28.4	95	78.0-109	0.71	30.00
1,1,1,2-Tetrachloroethane	30.0	27.3	91	30.0	26.9	90	81.0-117	1.5	30.00
Bromoform	30.0	27.1	90	30.0	23.5	78	72.0-134	14	30.00
Bromobenzene	30.0	28.2	94	30.0	28.4	95	76.0-113	0.71	30.00
1,1,2,2-Tetrachloroethane	30.0	30.4	101	30.0	26.0	87	76.0-129	16	30.00
1,2,3-Trichloropropane	30.0	30.8	103	30.0	26.8	89	70.0-145	14	30.00
Ethyl Benzene	30.0	29.0	97	30.0	28.1	94	72.0-115	3.2	30.00
m,p-Xylene	60.0	59.1	99	60.0	57.7	96	73.0-114	2.4	30.00
Styrene	30.0	29.6	99	30.0	28.4	95	74.0-114	4.1	30.00
o-Xylene	30.0	29.8	99	30.0	28.9	96	74.0-113	3.1	30.00
Isopropylbenzene (Cumene)	30.0	29.3	98	30.0	28.7	96	72.0-115	2.1	30.00
n-Propylbenzene	30.0	29.7	99	30.0	29.0	97	71.0-117	2.4	30.00
2-Chlorotoluene	30.0	29.5	98	30.0	28.7	96	76.0-111	2.7	30.00
4-Chlorotoluene	30.0	29.6	99	30.0	29.5	98	75.0-113	0.34	30.00
1,3,5-Trimethylbenzene	30.0	29.0	97	30.0	28.4	95	72.0-115	2.1	30.00
tert-Butylbenzene	30.0	28.7	96	30.0	28.1	94	74.0-112	2.1	30.00
1,2,4-Trimethylbenzene	30.0	29.2	97	30.0	28.3	94	73.0-114	3.1	30.00
sec-Butylbenzene	30.0	28.5	95	30.0	27.9	93	72.0-115	2.1	30.00
1,3-Dichlorobenzene	30.0	29.1	97	30.0	28.2	94	75.0-110	3.1	30.00
4-Isopropyltoluene	30.0	28.5	95	30.0	28.0	93	73.0-114	1.8	30.00
1,4-Dichlorobenzene	30.0	29.6	99	30.0	28.9	96	76.0-110	2.4	30.00
1,2-Dichlorobenzene	30.0	30.1	100	30.0	28.6	95	77.0-109	5.1	30.00
n-Butylbenzene	30.0	28.7	96	30.0	28.4	95	72.0-118	1.1	30.00
1,2-Dibromo-3-chloropropane	180	182	101	180	138	77	54.0-166	28	30.00
1,2,4-Trichlorobenzene	30.0	28.1	94	30.0	26.3	88	76.0-115	6.6	30.00
Hexachlorobutadiene	30.0	26.4	88	30.0	25.3	84	70.0-111	4.3	30.00
Naphthalene	30.0	30.3	101	30.0	24.7	82	71.0-129	20	30.00
trans-1,4-Dichloro-2-butene	150	155	103	150	123	82	62.0-164	23	30.00
1,2,3-Trichlorobenzene	30.0	27.9	93	30.0	26.0	87	78.0-115	7.1	30.00

Print Date: 08/16/2012

N.C. Certification # 481

Blank Spike Summary

Blank Spike ID: LCS-S for HBN 26841 [VXX/3778]
Blank Spike Lab ID: 84241
Date Analyzed: 08/08/2012 09:28

Spike Duplicate ID: LCSD-S for HBN 26841 [VXX/3778
Spike Duplicate Lab ID: 84242
Matrix: Soil-Solid as dry weight

QC for Samples: 31202488005, 31202488006

Results by SW-846 8260B

	Blank Spike (%)			Spike Duplicate (%)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Surrogates									
1,2-Dichloroethane-d4			106			103	55.0-173		
Toluene d8			100			101	57.0-134		
4-Bromofluorobenzene			99			99	23.0-141		

Batch Information

Analytical Batch: VMS2454
Analytical Method: SW-846 8260B
Instrument: MSD9
Analyst: DVO

Prep Batch: VXX3778
Prep Method: SW-846 5035 SL
Prep Date/Time: 08/08/2012 08:22
Spike Init Wt./Vol.: 5 g Extract Vol: 5 mL
Dupe Init Wt./Vol.: 5 g Extract Vol: 5 mL

Batch Summary

Analytical Method: SW-846 8270D

Prep Method: SW-846 3541
Prep Batch: XXX2895
Prep Date: 08/07/2012 15:37

Client Sample ID	Lab Sample ID	Analysis Date	Analytical Batch	Instrument	Analyst
MB for HBN 26827 [XXX/2895]	84201	08/08/2012 11:24	XMS1628	MSD10	CMP
LCS for HBN 26827 [XXX/2895]	84202	08/08/2012 11:47	XMS1628	MSD10	CMP
103DPT-04 (5-5.5ft)(83842MS)	84203	08/08/2012 12:33	XMS1628	MSD10	CMP
103DPT-04 (5-5.5ft)(83842MSD)	84204	08/08/2012 12:56	XMS1628	MSD10	CMP
107DPT-04 (4.5-5ft)	31202488001	08/08/2012 14:27	XMS1628	MSD10	CMP
107DPT-06 (4.5-5ft)	31202488003	08/08/2012 14:50	XMS1628	MSD10	CMP
107DPT-07 (7-8ft)	31202488004	08/08/2012 15:13	XMS1628	MSD10	CMP
107DPT-08 (6-7ft)	31202488005	08/08/2012 15:35	XMS1628	MSD10	CMP
107DPT-09 (4.5-5ft)	31202488006	08/08/2012 15:58	XMS1628	MSD10	CMP
107DPT-05 (5-6ft)	31202488002	08/10/2012 01:50	XMS1630	MSD10	CMP

Print Date: 08/16/2012

N.C. Certification # 481

Method Blank

Blank ID: MB for HBN 26827 [XXX/2895] Matrix: Soil-Solid as dry weight
Blank Lab ID: 84201
QC for Samples:
31202488001, 31202488002, 31202488003, 31202488004, 31202488005, 31202488006

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF
Phenol	ND	U	29.2	313	ug/Kg	1
Bis(2-Chloroethyl)ether	ND	U	29.2	313	ug/Kg	1
2-Chlorophenol	ND	U	16.6	313	ug/Kg	1
1,3-Dichlorobenzene	ND	U	21.1	313	ug/Kg	1
1,4-Dichlorobenzene	ND	U	22.1	313	ug/Kg	1
1,2-Dichlorobenzene	ND	U	15.6	313	ug/Kg	1
2-Methylphenol	ND	U	17.3	313	ug/Kg	1
3 and/or 4-Methylphenol	ND	U	20.3	313	ug/Kg	1
Bis(2-Chloroisopropyl)ether	ND	U	27.3	313	ug/Kg	1
n-Nitrosodi-n-propylamine	ND	U	89.6	313	ug/Kg	1
Hexachloroethane	ND	U	18.0	313	ug/Kg	1
Nitrobenzene	ND	U	18.0	313	ug/Kg	1
Isophorone	ND	U	14.2	313	ug/Kg	1
2-Nitrophenol	ND	U	15.0	313	ug/Kg	1
2,4-Dimethylphenol	ND	U	22.9	313	ug/Kg	1
Bis(2-Chloroethoxy)methane	ND	U	14.1	313	ug/Kg	1
2,4-Dichlorophenol	ND	U	18.1	313	ug/Kg	1
1,2,4-Trichlorobenzene	ND	U	27.6	313	ug/Kg	1
Naphthalene	ND	U	27.0	313	ug/Kg	1
4-Chloroaniline	ND	U	25.0	313	ug/Kg	1
Hexachlorobutadiene	ND	U	18.7	313	ug/Kg	1
4-Chloro-3-methylphenol	ND	U	15.6	313	ug/Kg	1
2-Methylnaphthalene	ND	U	25.3	313	ug/Kg	1
Hexachlorocyclopentadiene	ND	U	94.7	313	ug/Kg	1
2,4,5-Trichlorophenol	ND	U	20.9	313	ug/Kg	1
2,4,6-Trichlorophenol	ND	U	21.2	313	ug/Kg	1
2-Chloronaphthalene	ND	U	18.4	313	ug/Kg	1
2-Nitroaniline	ND	U	20.6	313	ug/Kg	1
3-Nitroaniline	ND	U	14.1	313	ug/Kg	1
Dimethyl phthalate	ND	U	24.0	313	ug/Kg	1
2,6-Dinitrotoluene	ND	U	22.4	313	ug/Kg	1
Acenaphthene	ND	U	14.2	313	ug/Kg	1
2,4-Dinitrophenol	ND	U	29.0	625	ug/Kg	1
4-Nitrophenol	ND	U	30.8	313	ug/Kg	1
Dibenzofuran	ND	U	24.5	313	ug/Kg	1
2,4-Dinitrotoluene	ND	U	15.8	313	ug/Kg	1
Fluorene	ND	U	16.6	313	ug/Kg	1
Diethyl phthalate	ND	U	16.9	313	ug/Kg	1
4-Chlorophenyl phenyl ether	ND	U	33.4	313	ug/Kg	1
4-Nitroaniline	ND	U	18.0	313	ug/Kg	1
4,6-Dinitro-2-methylphenol	ND	U	14.7	313	ug/Kg	1
Diphenylamine	ND	U	14.1	313	ug/Kg	1

Print Date: 08/16/2012 N.C. Certification # 481

Method Blank

Blank ID: MB for HBN 26827 [XXX/2895]
Blank Lab ID: 84201
Matrix: Soil-Solid as dry weight
QC for Samples:
31202488001, 31202488002, 31202488003, 31202488004, 31202488005, 31202488006

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF
4-Bromophenyl phenyl ether	ND	U	20.6	313	ug/Kg	1
Hexachlorobenzene	ND	U	29.6	313	ug/Kg	1
Pentachlorophenol	ND	U	25.0	313	ug/Kg	1
Phenanthrene	ND	U	20.6	313	ug/Kg	1
Anthracene	ND	U	13.9	313	ug/Kg	1
Di-n-butyl phthalate	ND	U	14.8	313	ug/Kg	1
Fluoranthene	ND	U	29.4	313	ug/Kg	1
Pyrene	ND	U	13.2	313	ug/Kg	1
Butyl benzyl phthalate	ND	U	27.2	313	ug/Kg	1
Benzo(a)anthracene	ND	U	17.2	313	ug/Kg	1
3,3'-Dichlorobenzidine	ND	U	15.0	313	ug/Kg	1
Chrysene	ND	U	36.4	313	ug/Kg	1
Bis(2-Ethylhexyl)phthalate	ND	U	15.0	313	ug/Kg	1
Di-n-octyl phthalate	ND	U	17.3	313	ug/Kg	1
Benzo(b)fluoranthene	ND	U	18.0	313	ug/Kg	1
Benzo(k)fluoranthene	ND	U	37.5	313	ug/Kg	1
Benzo(a)pyrene	ND	U	17.7	313	ug/Kg	1
Indeno(1,2,3-cd)pyrene	ND	U	24.4	313	ug/Kg	1
Dibenz(a,h)anthracene	ND	U	14.1	313	ug/Kg	1
Benzo(g,h,i)perylene	ND	U	49.8	313	ug/Kg	1
Benzoic acid	ND	U	6.94	313	ug/Kg	1
Acenaphthylene	ND	U	13.2	313	ug/Kg	1
Surrogates						
2-Fluorophenol	84.0			42.0-123	%	1
Phenol-d6	97.0			48.0-125	%	1
Nitrobenzene-d5	92.0			46.0-117	%	1
2-Fluorobiphenyl	102			48.0-123	%	1
2,4,6-Tribromophenol	99.0			41.0-129	%	1
Terphenyl-d14	103			44.0-140	%	1

Batch Information

Analytical Batch: XMS1628
Analytical Method: SW-846 8270D
Instrument: MSD10
Analyst: CMP
Analytical Date/Time: 8/8/2012 11:24:00AM

Prep Batch: XXX2895
Prep Method: SW-846 3541
Prep Date/Time: 8/7/2012 3:37:46PM
Prep Initial Wt./Vol.: 32 g
Prep Extract Vol: 10 mL

Print Date: 08/16/2012
N.C. Certification # 481

Blank Spike Summary

Blank Spike ID: LCS for HBN 26827 [XXX/2895]
Blank Spike Lab ID: 84202
Date Analyzed: 08/08/2012 11:47

Matrix: Soil-Solid as dry weight

QC for Samples: 31202488001, 31202488002, 31202488003, 31202488004, 31202488005, 31202488006

Results by SW-846 8270D

	Blank Spike (ug/Kg)			
Parameter	Spike	Result	Rec (%)	CL
Phenol	3130	2880	92	67.0-112
Bis(2-Chloroethyl)ether	3130	2650	85	63.0-116
2-Chlorophenol	3130	2940	94	67.0-109
1,3-Dichlorobenzene	3130	2860	91	66.0-109
1,4-Dichlorobenzene	3130	2880	92	65.0-112
1,2-Dichlorobenzene	3130	2900	93	67.0-110
2-Methylphenol	3130	2950	94	68.0-110
3 and/or 4-Methylphenol	6250	6100	98	66.0-113
Bis(2-Chloroisopropyl)ether	3130	2380	76	64.0-114
n-Nitrosodi-n-propylamine	3130	2570	82	66.0-111
Hexachloroethane	3130	2850	91	64.0-110
Nitrobenzene	3130	2760	88	69.0-112
Isophorone	3130	2860	91	69.0-108
2-Nitrophenol	3130	3060	98	65.0-117
2,4-Dimethylphenol	3130	3020	97	69.0-112
Bis(2-Chloroethoxy)methane	3130	2890	93	68.0-112
Benzoic acid	3130	2020	65	0.00-203
2,4-Dichlorophenol	3130	3160	101	67.0-118
1,2,4-Trichlorobenzene	3130	3080	98	65.0-114
Naphthalene	3130	3000	96	70.0-111
4-Chloroaniline	3130	2300	74	41.0-93.0
Hexachlorobutadiene	3130	3100	99	63.0-124
4-Chloro-3-methylphenol	3130	3140	100	70.0-114
2-Methylnaphthalene	3130	3000	96	69.0-110
Hexachlorocyclopentadiene	3130	3220	103	0.00-1080
2,4,5-Trichlorophenol	3130	3350	107	66.0-119
2,4,6-Trichlorophenol	3130	3160	101	67.0-119
2-Chloronaphthalene	3130	2720	87	57.0-96.0
2-Nitroaniline	3130	2390	77	61.0-100
3-Nitroaniline	3130	2610	83	48.0-103
Dimethyl phthalate	3130	2930	94	69.0-118
2,6-Dinitrotoluene	3130	3050	98	69.0-122
Acenaphthene	3130	2970	95	68.0-111
2,4-Dinitrophenol	3130	2810	90	12.0-125

Print Date: 08/16/2012

N.C. Certification # 481

Blank Spike Summary

Blank Spike ID: LCS for HBN 26827 [XXX/2895]
Blank Spike Lab ID: 84202
Date Analyzed: 08/08/2012 11:47

Matrix: Soil-Solid as dry weight

QC for Samples: 31202488001, 31202488002, 31202488003, 31202488004, 31202488005, 31202488006

Results by SW-846 8270D

	Blank Spike (ug/Kg)			
Parameter	Spike	Result	Rec (%)	CL
4-Nitrophenol	3130	2970	95	45.0-120
Dibenzofuran	3130	2980	95	71.0-114
2,4-Dinitrotoluene	3130	3020	97	68.0-123
Fluorene	3130	2990	96	66.0-116
Diethyl phthalate	3130	2870	92	68.0-114
4-Chlorophenyl phenyl ether	3130	3090	99	66.0-120
4-Nitroaniline	3130	2810	90	66.0-114
4,6-Dinitro-2-methylphenol	3130	3130	100	24.0-123
Diphenylamine	3130	2930	94	60.0-118
4-Bromophenyl phenyl ether	3130	3090	99	63.0-118
Hexachlorobenzene	3130	2850	91	62.0-112
Pentachlorophenol	3130	2990	96	34.0-125
Phenanthrene	3130	3080	99	60.0-122
Anthracene	3130	3150	101	63.0-113
Di-n-butyl phthalate	3130	3210	103	64.0-121
Fluoranthene	3130	3290	105	64.0-118
Pyrene	3130	2980	95	67.0-116
Butyl benzyl phthalate	3130	2740	88	68.0-118
Benzo(a)anthracene	3130	2940	94	65.0-118
3,3'-Dichlorobenzidine	3130	2890	92	54.0-118
Chrysene	3130	2950	94	66.0-118
Bis(2-Ethylhexyl)phthalate	3130	2810	90	67.0-123
Di-n-octyl phthalate	3130	3060	98	62.0-131
Benzo(b)fluoranthene	3130	2860	91	63.0-119
Benzo(k)fluoranthene	3130	3060	98	69.0-118
Benzo(a)pyrene	3130	3120	100	69.0-113
Indeno(1,2,3-cd)pyrene	3130	3310	106	64.0-123
Dibenz(a,h)anthracene	3130	3360	107	64.0-123
Benzo(g,h,i)perylene	3130	3420	110	57.0-128
Acenaphthylene	3130	3160	101	72.0-115
Surrogates				
2-Fluorophenol			85	42.0-123
Phenol-d6			97	48.0-125
Nitrobenzene-d5			93	46.0-117

Print Date: 08/16/2012

N.C. Certification # 481

Blank Spike Summary

Blank Spike ID: LCS for HBN 26827 [XXX/2895]
Blank Spike Lab ID: 84202
Date Analyzed: 08/08/2012 11:47

Matrix: Soil-Solid as dry weight

QC for Samples: 31202488001, 31202488002, 31202488003, 31202488004, 31202488005, 31202488006

Results by SW-846 8270D

	Blank Spike (%)			
Parameter	Spike	Result	Rec (%)	CL
2-Fluorobiphenyl			101	48.0-123
2,4,6-Tribromophenol			112	41.0-129
Terphenyl-d14			96	44.0-140

Batch Information

Analytical Batch: XMS1628
Analytical Method: SW-846 8270D
Instrument: MSD10
Analyst: CMP

Prep Batch: XXX2895
Prep Method: SW-846 3541
Prep Date/Time: 08/07/2012 15:37
Spike Init Wt./Vol.: 32 g Extract Vol: 10 mL
Dupe Init Wt./Vol.: Extract Vol:

CHAIN OF CUSTODY

SGS | ANALYTICAL PERSPECTIVES

SGS ANALYTICAL PERSPECTIVES
5500 Business Drive
Wilmington, NC 28405
+1 910 350 1903
WWW.SGS.COM

CLIENT: CATLIN / NCDOT
CONTACT: Ben Ashbaecatlin PHONE NO: (910) 452-5861
PROJECT: NCDOT Parcel 107 SITE / PWSID / WBS #: 35781.1.2
REPORTS TO: U-3315 Pitt County
EMAIL: ben.ashba@catlinusa.com
INVOICE TO: NCDOT QUOTE # P.O. NUMBER: NCDOT

SGS Reference #: 3120248

PRESERVATIVES USED: MeOH + Sod. Bisulf.

ANALYSIS REQUIRED: 8260, 8270 BN

PAGE 1 OF 1

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	# CONTAINERS	SAMPLE TYPE (C= COMP, G= GRAB)	8260	8270 BN							REMARKS
	107 DPT-04 (4.5-5')	8-3-12	830	SOIL	5	G	✓	✓							
	107 DPT-05 (5-6')	↓	910	↓	↓	↓	↓	↓							
	107 DPT-06 (4.5-5')	↓	930	↓	↓	↓	↓	↓							
	107 DPT-07 (7-8')	↓	940	↓	↓	↓	↓	↓							
	107 DPT-08 (6-7')	↓	1000	↓	↓	↓	↓	↓							
	107 DPT-09 (4.5-5')	↓	1010	↓	↓	↓	↓	↓							

COLLECTED/RELINQUISHED BY: (1)	DATE	TIME	RECEIVED BY:
[signature]	8-3-12	1500	[signature]
Relinquished By: (2)	Date	Time	Received By:
Relinquished By: (3)	Date	Time	Received By:
Received For Laboratory By:	Date	Time	CoC Seal: INTACT BROKEN (ABSENT) — Sample Receipt Temp: C 5.2

REPORT LEVEL: ☐ Level I ☒ Level II ☐ Level IV

REQUESTED TURNAROUND TIME: ☐ Rush: ____ ☒ Standard ☐ Trust Fund Other: ____

SPECIAL DELIVERABLES: State of Origin: ____ ☐ DoD ☒ EDD: Summary

SPECIAL INSTRUCTIONS:

Shipping Carrier:
Shipping Ticket No:
Notes:

SGS-00055 (06/12)

White - Retained by Lab
Yellow - Retained by Client

SGS North America Inc.

Sample Receipt Checklist (SRC)

Client: **NCDOT-Catlin** Work Order No.: **31202488**

1. ___ Shipped
   X Hand Delivered

2. X COC Present on Receipt
   ___ No COC
   ___ Additional Transmittal Forms

3. ___ Custody Tape on Container
   X No Custody Tape

4. X Samples Intact
   ___ Samples Broken / Leaking

5. X Chilled on Receipt Actual Temp.(s) in °C: 5.2
   ___ Ambient on Receipt
   ___ Walk-in on Ice; Coming down to temp.
   ___ Received Outside of Temperature Specifications

6. X Sufficient Sample Submitted
   ___ Insufficient Sample Submitted

7. ___ Chlorine absent
   ___ HNO3 < 2
   ___ HCL < 2
   ___ Additional Preservatives verified (see notes)

8. X Received Within Holding Time
   ___ Not Received Within Holding Time

9. ___ No Discrepancies Noted
   X Discrepancies Noted
   ___ NCDENR notified of Discrepancies*

10. ___ No Headspace present in VOC vials
    ___ Headspace present in VOC vials >6mm

Notes:

Comments: Samples labeled 107DPT-07 (6-7ft) with collection time for 107DPT-08 probably is 107DPT-08 (6-7ft) because already have set of containers for 107DPT-07 (7-8ft) with correct collection time also depth matches 107DPT-08.

Inspected and Logged in by: JJ

Date: Mon-8/6/12 00:00

*NCDENR must be notified when collection, holding time or preservation requirements are not met. MI_11.6

Laboratory Report of Analysis

To: Ben Ashba
RICHARD CATLIN & ASSOCIATES
P.O. Box 10279
Wilmington, NC 28404

Report Number: **31202360**

Client Project: **NCDOT Parcel 107**

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. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. 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 A. 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.

Barbara A. Hager
2012.08.06 13:14:28 -05'00'

Barbara A. Hager
Project Manager
barbara.hager@sgs.com

Date

Print Date: 08/06/2012

N.C. Certification # 481

ANALYTICAL PERSPECTIVES IS NOW PART OF SGS, THE WORLD'S LEADING INSPECTION, VERIFICATION, TESTING AND CERTIFICATION COMPANY.

Laboratory Qualifiers

Report Definitions

DL	Method, Instrument, or Estimated Detection Limit per Analytical Method
CL	Control Limits for the recovery result of a parameter
LOQ	Reporting Limit
DF	Dilution Factor
RPD	Relative Percent Difference
LCS(D)	Laboratory Control Spike (Duplicate)
MS(D)	Matrix Spike (Duplicate)
MB	Method Blank

Qualifier Definitions

*	Recovery or RPD outside of control limits
B	Analyte was detected in the Lab Method Blank at a level above the LOQ
U	Undetected (Reported as ND or < DL)
V	Recovery is below quality control limit. The data has been validated based on a favorable signal-to-noise and detection limit
A	Amount detected is less than the Lower Method Calibration Limit
J	Estimated Concentration.
O	The recovery of this analyte in the OPR is above the Method QC Limits and the reported concentration in the sample may be biased high
E	Amount detected is greater than the Upper Calibration Limit
S	The amount of analyte present has saturated the detector. This situation results in an underestimation of the affected analyte(s)
Q	Indicates the presence of a quantitative interference. This situation may result in an underestimation of the affected analyte(s)
I	Indicates the presence of a qualitative interference that could cause a false positive or an overestimation of the affected analyte(s)
DPE	Indicates the presence of a peak in the polychlorinated diphenylether channel that could cause a false positive or an overestimation of the affected analyte(s)
TIC	Tentatively Identified Compound
EMPC	Estimated Maximum possible Concentration due to ion ratio failure
ND	Not Detected
K	Result is estimated due to ion ratio failure in High Resolution PCB Analysis
P	RPD > 40% between results of dual columns
D	Spike or surrogate was diluted out in order to achieve a parameter result within instrument calibration range

Samples requiring manual integrations for various congeners and/or standards are marked and dated by the analyst. A code definition is provided below:

M1	Mis-identified peak
M2	Software did not integrate peak
M3	Incorrect baseline construction (i.e. not all of peak included; two peaks integrated as one)
M4	Pattern integration required (i.e. DRO, GRO, PCB, Toxaphene and Technical Chlordane)
M5	Other - Explained in case narrative

Note Results pages that include a value for "Solids (%)" have been adjusted for moisture content.

Print Date: 08/06/2012 N.C. Certification # 481

Sample Summary

Client Sample ID	Lab Sample ID	Collected	Received	Matrix
107DPT-01 (4.5-5ft)	31202360001	07/25/2012 14:00	07/26/2012 16:42	Soil-Solid as dry weight
107DPT-02 (5-5.7ft)	31202360002	07/25/2012 14:10	07/26/2012 16:42	Soil-Solid as dry weight
107DPT-03 (5.5-6ft)	31202360003	07/25/2012 15:00	07/26/2012 16:42	Soil-Solid as dry weight
107DPT-02	31202360004	07/26/2012 13:45	07/26/2012 16:42	Water

Print Date: 08/06/2012

N.C. Certification # 481

Detectable Results Summary

Client Sample ID: **107DPT-01 (4.5-5ft)**				
Lab Sample ID: 31202360001-A	Parameter	Result	Units	
SW-846 8260B	Methylene chloride	1.00	ug/Kg	J
Client Sample ID: **107DPT-02 (5-5.7ft)**				
Lab Sample ID: 31202360002-A	Parameter	Result	Units	
SW-846 8260B	Methylene chloride	1.44	ug/Kg	J
Client Sample ID: **107DPT-03 (5.5-6ft)**				
Lab Sample ID: 31202360003-A	Parameter	Result	Units	
SW-846 8260B	Acetone	16.7	ug/Kg	J
	Methylene chloride	1.30	ug/Kg	J
Client Sample ID: **107DPT-02**				
Lab Sample ID: 31202360004-A	Parameter	Result	Units	
SW-846 8260B	Acetone	5.29	ug/L	J
	Toluene	0.310	ug/L	J
	Xylene (total)	0.370	ug/L	J
	m,p-Xylene	0.260	ug/L	J
	o-Xylene	0.110	ug/L	J
SW-846 8270D	Bis(2-Ethylhexyl)phthalate	2.75	ug/L	J

Quality Control Samples

Client Sample ID: **MB-S for HBN 26131 [VXX/3717]**				
Lab Sample ID: 82391	Parameter	Result	Units	
SW-846 8260B	Methylene chloride	0.930	ug/Kg	J

Print Date: 08/06/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 107DPT-01 (4.5-5ft)

Client Sample ID: **107DPT-01 (4.5-5ft)**
Client Project ID: **NCDOT Parcel 107**
Lab Sample ID: 31202360001-A
Lab Project ID: 31202360

Collection Date: 07/25/2012 14:00
Received Date: 07/26/2012 16:42
Matrix: Soil-Solid as dry weight
Solids (%): 78.30

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	U	0.973	4.59	ug/Kg	1	07/27/2012 13:18
1,1,1-Trichloroethane	ND	U	0.714	4.59	ug/Kg	1	07/27/2012 13:18
1,1,2,2-Tetrachloroethane	ND	U	1.04	4.59	ug/Kg	1	07/27/2012 13:18
1,1,2-Trichloroethane	ND	U	0.955	4.59	ug/Kg	1	07/27/2012 13:18
1,1-Dichloroethane	ND	U	0.792	4.59	ug/Kg	1	07/27/2012 13:18
1,1-Dichloroethene	ND	U	0.829	4.59	ug/Kg	1	07/27/2012 13:18
1,1-Dichloropropene	ND	U	0.846	4.59	ug/Kg	1	07/27/2012 13:18
1,2,3-Trichlorobenzene	ND	U	1.28	4.59	ug/Kg	1	07/27/2012 13:18
1,2,3-Trichloropropane	ND	U	1.02	4.59	ug/Kg	1	07/27/2012 13:18
1,2,4-Trichlorobenzene	ND	U	1.09	4.59	ug/Kg	1	07/27/2012 13:18
1,2,4-Trimethylbenzene	ND	U	0.982	4.59	ug/Kg	1	07/27/2012 13:18
1,2-Dibromo-3-chloropropane	ND	U	5.33	27.5	ug/Kg	1	07/27/2012 13:18
1,2-Dibromoethane	ND	U	0.696	4.59	ug/Kg	1	07/27/2012 13:18
1,2-Dichlorobenzene	ND	U	1.18	4.59	ug/Kg	1	07/27/2012 13:18
1,2-Dichloroethane	ND	U	0.813	4.59	ug/Kg	1	07/27/2012 13:18
1,2-Dichloropropane	ND	U	0.739	4.59	ug/Kg	1	07/27/2012 13:18
1,3,5-Trimethylbenzene	ND	U	0.903	4.59	ug/Kg	1	07/27/2012 13:18
1,3-Dichlorobenzene	ND	U	1.06	4.59	ug/Kg	1	07/27/2012 13:18
1,3-Dichloropropane	ND	U	0.740	4.59	ug/Kg	1	07/27/2012 13:18
1,4-Dichlorobenzene	ND	U	1.01	4.59	ug/Kg	1	07/27/2012 13:18
2,2-Dichloropropane	ND	U	0.766	4.59	ug/Kg	1	07/27/2012 13:18
2-Butanone	ND	U	1.43	22.9	ug/Kg	1	07/27/2012 13:18
2-Chlorotoluene	ND	U	1.03	4.59	ug/Kg	1	07/27/2012 13:18
2-Hexanone	ND	U	1.79	11.5	ug/Kg	1	07/27/2012 13:18
4-Chlorotoluene	ND	U	1.02	4.59	ug/Kg	1	07/27/2012 13:18
4-Isopropyltoluene	ND	U	0.955	4.59	ug/Kg	1	07/27/2012 13:18
4-Methyl-2-pentanone	ND	U	2.95	11.5	ug/Kg	1	07/27/2012 13:18
Acetone	ND	U	1.14	45.9	ug/Kg	1	07/27/2012 13:18
Benzene	ND	U	0.820	4.59	ug/Kg	1	07/27/2012 13:18
Bromobenzene	ND	U	0.905	4.59	ug/Kg	1	07/27/2012 13:18
Bromochloromethane	ND	U	0.801	4.59	ug/Kg	1	07/27/2012 13:18
Bromodichloromethane	ND	U	0.746	4.59	ug/Kg	1	07/27/2012 13:18
Bromoform	ND	U	0.614	4.59	ug/Kg	1	07/27/2012 13:18
Bromomethane	ND	U	1.62	4.59	ug/Kg	1	07/27/2012 13:18
n-Butylbenzene	ND	U	0.991	4.59	ug/Kg	1	07/27/2012 13:18
Carbon disulfide	ND	U	0.793	4.59	ug/Kg	1	07/27/2012 13:18
Carbon tetrachloride	ND	U	0.799	4.59	ug/Kg	1	07/27/2012 13:18
Chlorobenzene	ND	U	0.710	4.59	ug/Kg	1	07/27/2012 13:18
Chloroethane	ND	U	0.422	4.59	ug/Kg	1	07/27/2012 13:18
Chloroform	ND	U	0.745	4.59	ug/Kg	1	07/27/2012 13:18
Chloromethane	ND	U	0.665	4.59	ug/Kg	1	07/27/2012 13:18
Dibromochloromethane	ND	U	0.777	4.59	ug/Kg	1	07/27/2012 13:18
Dibromomethane	ND	U	0.745	4.59	ug/Kg	1	07/27/2012 13:18
Dichlorodifluoromethane	ND	U	0.667	4.59	ug/Kg	1	07/27/2012 13:18

Print Date: 08/06/2012

N.C. Certification # 481

Results of 107DPT-01 (4.5-5ft)

Client Sample ID: **107DPT-01 (4.5-5ft)**
Client Project ID: **NCDOT Parcel 107**
Lab Sample ID: 31202360001-A
Lab Project ID: 31202360

Collection Date: 07/25/2012 14:00
Received Date: 07/26/2012 16:42
Matrix: Soil-Solid as dry weight
Solids (%): 78.30

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	U	0.790	4.59	ug/Kg	1	07/27/2012 13:18
trans-1,3-Dichloropropene	ND	U	0.822	4.59	ug/Kg	1	07/27/2012 13:18
Diisopropyl Ether	ND	U	0.824	4.59	ug/Kg	1	07/27/2012 13:18
Ethyl Benzene	ND	U	0.759	4.59	ug/Kg	1	07/27/2012 13:18
Hexachlorobutadiene	ND	U	1.26	4.59	ug/Kg	1	07/27/2012 13:18
Isopropylbenzene (Cumene)	ND	U	0.884	4.59	ug/Kg	1	07/27/2012 13:18
Methyl iodide	ND	U	0.777	4.59	ug/Kg	1	07/27/2012 13:18
Methylene chloride	**1.00**	J	0.641	18.4	ug/Kg	1	07/27/2012 13:18
Naphthalene	ND	U	1.11	4.59	ug/Kg	1	07/27/2012 13:18
Styrene	ND	U	0.905	4.59	ug/Kg	1	07/27/2012 13:18
Tetrachloroethene	ND	U	0.690	4.59	ug/Kg	1	07/27/2012 13:18
Toluene	ND	U	0.743	4.59	ug/Kg	1	07/27/2012 13:18
Trichloroethene	ND	U	0.768	4.59	ug/Kg	1	07/27/2012 13:18
Trichlorofluoromethane	ND	U	0.692	4.59	ug/Kg	1	07/27/2012 13:18
Vinyl chloride	ND	U	0.676	4.59	ug/Kg	1	07/27/2012 13:18
Xylene (total)	ND	U	1.62	9.18	ug/Kg	1	07/27/2012 13:18
cis-1,2-Dichloroethene	ND	U	0.711	4.59	ug/Kg	1	07/27/2012 13:18
m,p-Xylene	ND	U	1.62	9.18	ug/Kg	1	07/27/2012 13:18
n-Propylbenzene	ND	U	0.895	4.59	ug/Kg	1	07/27/2012 13:18
o-Xylene	ND	U	0.927	4.59	ug/Kg	1	07/27/2012 13:18
sec-Butylbenzene	ND	U	0.955	4.59	ug/Kg	1	07/27/2012 13:18
tert-Butyl methyl ether (MTBE)	ND	U	0.782	4.59	ug/Kg	1	07/27/2012 13:18
tert-Butylbenzene	ND	U	0.832	4.59	ug/Kg	1	07/27/2012 13:18
trans-1,2-Dichloroethene	ND	U	0.790	4.59	ug/Kg	1	07/27/2012 13:18
trans-1,4-Dichloro-2-butene	ND	U	4.97	22.9	ug/Kg	1	07/27/2012 13:18
Surrogates							
1,2-Dichloroethane-d4	106			55.0-173	%	1	07/27/2012 13:18
4-Bromofluorobenzene	101			23.0-141	%	1	07/27/2012 13:18
Toluene d8	98.0			57.0-134	%	1	07/27/2012 13:18

Batch Information

Analytical Batch: **VMS2418**
Analytical Method: **SW-846 8260B**
Instrument: **MSD2**
Analyst: **DVO**
Analytical Date/Time: **07/27/2012 13:18**

Prep Batch: **VXX3717**
Prep Method: **SW-846 5035 SL**
Prep Date/Time: **07/27/2012 10:23**
Prep Initial Wt./Vol.: **6.96 g**
Prep Extract Vol: **5 mL**

Print Date: 08/06/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 107DPT-01 (4.5-5ft)

Client Sample ID: **107DPT-01 (4.5-5ft)**
Client Project ID: **NCDOT Parcel 107**
Lab Sample ID: 31202360001-E
Lab Project ID: 31202360

Collection Date: 07/25/2012 14:00
Received Date: 07/26/2012 16:42
Matrix: Soil-Solid as dry weight
Solids (%): 78.30

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,2,4-Trichlorobenzene	ND	U	37.2	421	ug/Kg	1	07/30/2012 17:04
1,2-Dichlorobenzene	ND	U	21.0	421	ug/Kg	1	07/30/2012 17:04
1,3-Dichlorobenzene	ND	U	28.4	421	ug/Kg	1	07/30/2012 17:04
1,4-Dichlorobenzene	ND	U	29.8	421	ug/Kg	1	07/30/2012 17:04
2,4,5-Trichlorophenol	ND	U	28.1	421	ug/Kg	1	07/30/2012 17:04
2,4,6-Trichlorophenol	ND	U	28.5	421	ug/Kg	1	07/30/2012 17:04
2,4-Dichlorophenol	ND	U	24.4	421	ug/Kg	1	07/30/2012 17:04
2,4-Dinitrophenol	ND	U	39.0	841	ug/Kg	1	07/30/2012 17:04
2,4-Dinitrotoluene	ND	U	21.3	421	ug/Kg	1	07/30/2012 17:04
2,6-Dinitrotoluene	ND	U	30.2	421	ug/Kg	1	07/30/2012 17:04
2-Chloronaphthalene	ND	U	24.8	421	ug/Kg	1	07/30/2012 17:04
2-Chlorophenol	ND	U	22.3	421	ug/Kg	1	07/30/2012 17:04
2-Methylnaphthalene	ND	U	34.1	421	ug/Kg	1	07/30/2012 17:04
2-Methylphenol	ND	U	23.3	421	ug/Kg	1	07/30/2012 17:04
2-Nitroaniline	ND	U	27.7	421	ug/Kg	1	07/30/2012 17:04
2-Nitrophenol	ND	U	20.2	421	ug/Kg	1	07/30/2012 17:04
3 and/or 4-Methylphenol	ND	U	27.3	421	ug/Kg	1	07/30/2012 17:04
3,3'-Dichlorobenzidine	ND	U	20.2	421	ug/Kg	1	07/30/2012 17:04
3-Nitroaniline	ND	U	19.0	421	ug/Kg	1	07/30/2012 17:04
4,6-Dinitro-2-methylphenol	ND	U	19.8	421	ug/Kg	1	07/30/2012 17:04
4-Chloro-3-methylphenol	ND	U	21.0	421	ug/Kg	1	07/30/2012 17:04
4-Chloroaniline	ND	U	33.7	421	ug/Kg	1	07/30/2012 17:04
4-Chlorophenyl phenyl ether	ND	U	45.0	421	ug/Kg	1	07/30/2012 17:04
Acenaphthene	ND	U	19.1	421	ug/Kg	1	07/30/2012 17:04
Acenaphthylene	ND	U	17.8	421	ug/Kg	1	07/30/2012 17:04
Anthracene	ND	U	18.7	421	ug/Kg	1	07/30/2012 17:04
Benzo(a)anthracene	ND	U	23.2	421	ug/Kg	1	07/30/2012 17:04
Benzo(a)pyrene	ND	U	23.8	421	ug/Kg	1	07/30/2012 17:04
Benzo(b)fluoranthene	ND	U	24.2	421	ug/Kg	1	07/30/2012 17:04
Benzo(g,h,i)perylene	ND	U	67.0	421	ug/Kg	1	07/30/2012 17:04
Benzo(k)fluoranthene	ND	U	50.5	421	ug/Kg	1	07/30/2012 17:04
Benzoic acid	ND	U	9.34	421	ug/Kg	1	07/30/2012 17:04
Bis(2-Chloroethoxy)methane	ND	U	19.0	421	ug/Kg	1	07/30/2012 17:04
Bis(2-Chloroethyl)ether	ND	U	39.3	421	ug/Kg	1	07/30/2012 17:04
Bis(2-Chloroisopropyl)ether	ND	U	36.8	421	ug/Kg	1	07/30/2012 17:04
Bis(2-Ethylhexyl)phthalate	ND	U	20.2	421	ug/Kg	1	07/30/2012 17:04
4-Bromophenyl phenyl ether	ND	U	27.7	421	ug/Kg	1	07/30/2012 17:04
Butyl benzyl phthalate	ND	U	36.6	421	ug/Kg	1	07/30/2012 17:04
Chrysene	ND	U	49.0	421	ug/Kg	1	07/30/2012 17:04
Di-n-butyl phthalate	ND	U	19.9	421	ug/Kg	1	07/30/2012 17:04
Di-n-octyl phthalate	ND	U	23.3	421	ug/Kg	1	07/30/2012 17:04
Dibenz(a,h)anthracene	ND	U	19.0	421	ug/Kg	1	07/30/2012 17:04
Dibenzofuran	ND	U	33.0	421	ug/Kg	1	07/30/2012 17:04
Diethyl phthalate	ND	U	22.8	421	ug/Kg	1	07/30/2012 17:04

Print Date: 08/06/2012

N.C. Certification # 481

Results of 107DPT-01 (4.5-5ft)

Client Sample ID: **107DPT-01 (4.5-5ft)**
Client Project ID: **NCDOT Parcel 107**
Lab Sample ID: 31202360001-E
Lab Project ID: 31202360

Collection Date: 07/25/2012 14:00
Received Date: 07/26/2012 16:42
Matrix: Soil-Solid as dry weight
Solids (%): 78.30

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
Dimethyl phthalate	ND	U	32.3	421	ug/Kg	1	07/30/2012 17:04
2,4-Dimethylphenol	ND	U	30.8	421	ug/Kg	1	07/30/2012 17:04
Diphenylamine	ND	U	19.0	421	ug/Kg	1	07/30/2012 17:04
Fluoranthene	ND	U	39.6	421	ug/Kg	1	07/30/2012 17:04
Fluorene	ND	U	22.3	421	ug/Kg	1	07/30/2012 17:04
Hexachlorobenzene	ND	U	39.8	421	ug/Kg	1	07/30/2012 17:04
Hexachlorobutadiene	ND	U	25.2	421	ug/Kg	1	07/30/2012 17:04
Hexachlorocyclopentadiene	ND	U	127	421	ug/Kg	1	07/30/2012 17:04
Hexachloroethane	ND	U	24.2	421	ug/Kg	1	07/30/2012 17:04
Indeno(1,2,3-cd)pyrene	ND	U	32.8	421	ug/Kg	1	07/30/2012 17:04
Isophorone	ND	U	19.1	421	ug/Kg	1	07/30/2012 17:04
Naphthalene	ND	U	36.3	421	ug/Kg	1	07/30/2012 17:04
4-Nitroaniline	ND	U	24.2	421	ug/Kg	1	07/30/2012 17:04
Nitrobenzene	ND	U	24.2	421	ug/Kg	1	07/30/2012 17:04
4-Nitrophenol	ND	U	41.5	421	ug/Kg	1	07/30/2012 17:04
Pentachlorophenol	ND	U	33.7	421	ug/Kg	1	07/30/2012 17:04
Phenanthrene	ND	U	27.7	421	ug/Kg	1	07/30/2012 17:04
Phenol	ND	U	39.3	421	ug/Kg	1	07/30/2012 17:04
Pyrene	ND	U	17.8	421	ug/Kg	1	07/30/2012 17:04
n-Nitrosodi-n-propylamine	ND	U	121	421	ug/Kg	1	07/30/2012 17:04
Surrogates							
2,4,6-Tribromophenol	74.0			41.0-129	%	1	07/30/2012 17:04
2-Fluorobiphenyl	62.0			48.0-123	%	1	07/30/2012 17:04
2-Fluorophenol	76.0			42.0-123	%	1	07/30/2012 17:04
Nitrobenzene-d5	76.0			46.0-117	%	1	07/30/2012 17:04
Phenol-d6	87.0			48.0-125	%	1	07/30/2012 17:04
Terphenyl-d14	84.0			44.0-140	%	1	07/30/2012 17:04

Batch Information

Analytical Batch: **XMS1614**
Analytical Method: **SW-846 8270D**
Instrument: **MSD10**
Analyst: **CMP**
Analytical Date/Time: **07/30/2012 17:04**

Prep Batch: **XXX2863**
Prep Method: **SW-846 3541**
Prep Date/Time: **07/27/2012 10:01**
Prep Initial Wt./Vol.: **30.37 g**
Prep Extract Vol: **10 mL**

Print Date: 08/06/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 107DPT-02 (5-5.7ft)

Client Sample ID: **107DPT-02 (5-5.7ft)**
Client Project ID: **NCDOT Parcel 107**
Lab Sample ID: 31202360002-A
Lab Project ID: 31202360

Collection Date: 07/25/2012 14:10
Received Date: 07/26/2012 16:42
Matrix: Soil-Solid as dry weight
Solids (%): 75.20

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	U	1.06	5.00	ug/Kg	1	07/27/2012 13:41
1,1,1-Trichloroethane	ND	U	0.779	5.00	ug/Kg	1	07/27/2012 13:41
1,1,2,2-Tetrachloroethane	ND	U	1.13	5.00	ug/Kg	1	07/27/2012 13:41
1,1,2-Trichloroethane	ND	U	1.04	5.00	ug/Kg	1	07/27/2012 13:41
1,1-Dichloroethane	ND	U	0.864	5.00	ug/Kg	1	07/27/2012 13:41
1,1-Dichloroethene	ND	U	0.904	5.00	ug/Kg	1	07/27/2012 13:41
1,1-Dichloropropene	ND	U	0.923	5.00	ug/Kg	1	07/27/2012 13:41
1,2,3-Trichlorobenzene	ND	U	1.39	5.00	ug/Kg	1	07/27/2012 13:41
1,2,3-Trichloropropane	ND	U	1.11	5.00	ug/Kg	1	07/27/2012 13:41
1,2,4-Trichlorobenzene	ND	U	1.19	5.00	ug/Kg	1	07/27/2012 13:41
1,2,4-Trimethylbenzene	ND	U	1.07	5.00	ug/Kg	1	07/27/2012 13:41
1,2-Dibromo-3-chloropropane	ND	U	5.82	30.0	ug/Kg	1	07/27/2012 13:41
1,2-Dibromoethane	ND	U	0.759	5.00	ug/Kg	1	07/27/2012 13:41
1,2-Dichlorobenzene	ND	U	1.29	5.00	ug/Kg	1	07/27/2012 13:41
1,2-Dichloroethane	ND	U	0.887	5.00	ug/Kg	1	07/27/2012 13:41
1,2-Dichloropropane	ND	U	0.806	5.00	ug/Kg	1	07/27/2012 13:41
1,3,5-Trimethylbenzene	ND	U	0.985	5.00	ug/Kg	1	07/27/2012 13:41
1,3-Dichlorobenzene	ND	U	1.16	5.00	ug/Kg	1	07/27/2012 13:41
1,3-Dichloropropane	ND	U	0.807	5.00	ug/Kg	1	07/27/2012 13:41
1,4-Dichlorobenzene	ND	U	1.10	5.00	ug/Kg	1	07/27/2012 13:41
2,2-Dichloropropane	ND	U	0.835	5.00	ug/Kg	1	07/27/2012 13:41
2-Butanone	ND	U	1.56	25.0	ug/Kg	1	07/27/2012 13:41
2-Chlorotoluene	ND	U	1.12	5.00	ug/Kg	1	07/27/2012 13:41
2-Hexanone	ND	U	1.95	12.5	ug/Kg	1	07/27/2012 13:41
4-Chlorotoluene	ND	U	1.11	5.00	ug/Kg	1	07/27/2012 13:41
4-Isopropyltoluene	ND	U	1.04	5.00	ug/Kg	1	07/27/2012 13:41
4-Methyl-2-pentanone	ND	U	3.21	12.5	ug/Kg	1	07/27/2012 13:41
Acetone	ND	U	1.24	50.0	ug/Kg	1	07/27/2012 13:41
Benzene	ND	U	0.894	5.00	ug/Kg	1	07/27/2012 13:41
Bromobenzene	ND	U	0.987	5.00	ug/Kg	1	07/27/2012 13:41
Bromochloromethane	ND	U	0.874	5.00	ug/Kg	1	07/27/2012 13:41
Bromodichloromethane	ND	U	0.814	5.00	ug/Kg	1	07/27/2012 13:41
Bromoform	ND	U	0.670	5.00	ug/Kg	1	07/27/2012 13:41
Bromomethane	ND	U	1.76	5.00	ug/Kg	1	07/27/2012 13:41
n-Butylbenzene	ND	U	1.08	5.00	ug/Kg	1	07/27/2012 13:41
Carbon disulfide	ND	U	0.865	5.00	ug/Kg	1	07/27/2012 13:41
Carbon tetrachloride	ND	U	0.871	5.00	ug/Kg	1	07/27/2012 13:41
Chlorobenzene	ND	U	0.775	5.00	ug/Kg	1	07/27/2012 13:41
Chloroethane	ND	U	0.460	5.00	ug/Kg	1	07/27/2012 13:41
Chloroform	ND	U	0.813	5.00	ug/Kg	1	07/27/2012 13:41
Chloromethane	ND	U	0.726	5.00	ug/Kg	1	07/27/2012 13:41
Dibromochloromethane	ND	U	0.848	5.00	ug/Kg	1	07/27/2012 13:41
Dibromomethane	ND	U	0.813	5.00	ug/Kg	1	07/27/2012 13:41
Dichlorodifluoromethane	ND	U	0.728	5.00	ug/Kg	1	07/27/2012 13:41

Print Date: 08/06/2012

N.C. Certification # 481

Results of 107DPT-02 (5-5.7ft)

Client Sample ID: **107DPT-02 (5-5.7ft)**
Client Project ID: **NCDOT Parcel 107**
Lab Sample ID: 31202360002-A
Lab Project ID: 31202360

Collection Date: 07/25/2012 14:10
Received Date: 07/26/2012 16:42
Matrix: Soil-Solid as dry weight
Solids (%): 75.20

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	U	0.862	5.00	ug/Kg	1	07/27/2012 13:41
trans-1,3-Dichloropropene	ND	U	0.897	5.00	ug/Kg	1	07/27/2012 13:41
Diisopropyl Ether	ND	U	0.899	5.00	ug/Kg	1	07/27/2012 13:41
Ethyl Benzene	ND	U	0.828	5.00	ug/Kg	1	07/27/2012 13:41
Hexachlorobutadiene	ND	U	1.37	5.00	ug/Kg	1	07/27/2012 13:41
Isopropylbenzene (Cumene)	ND	U	0.964	5.00	ug/Kg	1	07/27/2012 13:41
Methyl iodide	ND	U	0.847	5.00	ug/Kg	1	07/27/2012 13:41
Methylene chloride	1.44	J	0.699	20.0	ug/Kg	1	07/27/2012 13:41
Naphthalene	ND	U	1.21	5.00	ug/Kg	1	07/27/2012 13:41
Styrene	ND	U	0.987	5.00	ug/Kg	1	07/27/2012 13:41
Tetrachloroethene	ND	U	0.753	5.00	ug/Kg	1	07/27/2012 13:41
Toluene	ND	U	0.811	5.00	ug/Kg	1	07/27/2012 13:41
Trichloroethene	ND	U	0.838	5.00	ug/Kg	1	07/27/2012 13:41
Trichlorofluoromethane	ND	U	0.755	5.00	ug/Kg	1	07/27/2012 13:41
Vinyl chloride	ND	U	0.737	5.00	ug/Kg	1	07/27/2012 13:41
Xylene (total)	ND	U	1.77	10.0	ug/Kg	1	07/27/2012 13:41
cis-1,2-Dichloroethene	ND	U	0.776	5.00	ug/Kg	1	07/27/2012 13:41
m,p-Xylene	ND	U	1.77	10.0	ug/Kg	1	07/27/2012 13:41
n-Propylbenzene	ND	U	0.976	5.00	ug/Kg	1	07/27/2012 13:41
o-Xylene	ND	U	1.01	5.00	ug/Kg	1	07/27/2012 13:41
sec-Butylbenzene	ND	U	1.04	5.00	ug/Kg	1	07/27/2012 13:41
tert-Butyl methyl ether (MTBE)	ND	U	0.853	5.00	ug/Kg	1	07/27/2012 13:41
tert-Butylbenzene	ND	U	0.907	5.00	ug/Kg	1	07/27/2012 13:41
trans-1,2-Dichloroethene	ND	U	0.862	5.00	ug/Kg	1	07/27/2012 13:41
trans-1,4-Dichloro-2-butene	ND	U	5.41	25.0	ug/Kg	1	07/27/2012 13:41
Surrogates							
1,2-Dichloroethane-d4	108			55.0-173	%	1	07/27/2012 13:41
4-Bromofluorobenzene	105			23.0-141	%	1	07/27/2012 13:41
Toluene d8	98.0			57.0-134	%	1	07/27/2012 13:41

Batch Information

Analytical Batch: **VMS2418**
Analytical Method: **SW-846 8260B**
Instrument: **MSD2**
Analyst: **DVO**
Analytical Date/Time: **07/27/2012 13:41**

Prep Batch: **VXX3717**
Prep Method: **SW-846 5035 SL**
Prep Date/Time: **07/27/2012 10:27**
Prep Initial Wt./Vol.: **6.64 g**
Prep Extract Vol: **5 mL**

Print Date: 08/06/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 107DPT-02 (5-5.7ft)

Client Sample ID: **107DPT-02 (5-5.7ft)**
Client Project ID: **NCDOT Parcel 107**
Lab Sample ID: 31202360002-E
Lab Project ID: 31202360

Collection Date: 07/25/2012 14:10
Received Date: 07/26/2012 16:42
Matrix: Soil-Solid as dry weight
Solids (%): 75.20

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,2,4-Trichlorobenzene	ND	U	37.9	429	ug/Kg	1	07/30/2012 18:13
1,2-Dichlorobenzene	ND	U	21.4	429	ug/Kg	1	07/30/2012 18:13
1,3-Dichlorobenzene	ND	U	29.0	429	ug/Kg	1	07/30/2012 18:13
1,4-Dichlorobenzene	ND	U	30.3	429	ug/Kg	1	07/30/2012 18:13
2,4,5-Trichlorophenol	ND	U	28.7	429	ug/Kg	1	07/30/2012 18:13
2,4,6-Trichlorophenol	ND	U	29.1	429	ug/Kg	1	07/30/2012 18:13
2,4-Dichlorophenol	ND	U	24.8	429	ug/Kg	1	07/30/2012 18:13
2,4-Dinitrophenol	ND	U	39.8	858	ug/Kg	1	07/30/2012 18:13
2,4-Dinitrotoluene	ND	U	21.7	429	ug/Kg	1	07/30/2012 18:13
2,6-Dinitrotoluene	ND	U	30.7	429	ug/Kg	1	07/30/2012 18:13
2-Chloronaphthalene	ND	U	25.2	429	ug/Kg	1	07/30/2012 18:13
2-Chlorophenol	ND	U	22.8	429	ug/Kg	1	07/30/2012 18:13
2-Methylnaphthalene	ND	U	34.7	429	ug/Kg	1	07/30/2012 18:13
2-Methylphenol	ND	U	23.7	429	ug/Kg	1	07/30/2012 18:13
2-Nitroaniline	ND	U	28.3	429	ug/Kg	1	07/30/2012 18:13
2-Nitrophenol	ND	U	20.6	429	ug/Kg	1	07/30/2012 18:13
3 and/or 4-Methylphenol	ND	U	27.9	429	ug/Kg	1	07/30/2012 18:13
3,3'-Dichlorobenzidine	ND	U	20.6	429	ug/Kg	1	07/30/2012 18:13
3-Nitroaniline	ND	U	19.3	429	ug/Kg	1	07/30/2012 18:13
4,6-Dinitro-2-methylphenol	ND	U	20.2	429	ug/Kg	1	07/30/2012 18:13
4-Chloro-3-methylphenol	ND	U	21.4	429	ug/Kg	1	07/30/2012 18:13
4-Chloroanilne	ND	U	34.3	429	ug/Kg	1	07/30/2012 18:13
4-Chlorophenyl phenyl ether	ND	U	45.8	429	ug/Kg	1	07/30/2012 18:13
Acenaphthene	ND	U	19.5	429	ug/Kg	1	07/30/2012 18:13
Acenaphthylene	ND	U	18.1	429	ug/Kg	1	07/30/2012 18:13
Anthracene	ND	U	19.1	429	ug/Kg	1	07/30/2012 18:13
Benzo(a)anthracene	ND	U	23.6	429	ug/Kg	1	07/30/2012 18:13
Benzo(a)pyrene	ND	U	24.3	429	ug/Kg	1	07/30/2012 18:13
Benzo(b)fluoranthene	ND	U	24.7	429	ug/Kg	1	07/30/2012 18:13
Benzo(g,h,i)perylene	ND	U	68.3	429	ug/Kg	1	07/30/2012 18:13
Benzo(k)fluoranthene	ND	U	51.5	429	ug/Kg	1	07/30/2012 18:13
Benzoic acid	ND	U	9.52	429	ug/Kg	1	07/30/2012 18:13
Bis(2-Chloroethoxy)methane	ND	U	19.3	429	ug/Kg	1	07/30/2012 18:13
Bis(2-Chloroethyl)ether	ND	U	40.1	429	ug/Kg	1	07/30/2012 18:13
Bis(2-Chloroisopropyl)ether	ND	U	37.5	429	ug/Kg	1	07/30/2012 18:13
Bis(2-Ethylhexyl)phthalate	ND	U	20.6	429	ug/Kg	1	07/30/2012 18:13
4-Bromophenyl phenyl ether	ND	U	28.3	429	ug/Kg	1	07/30/2012 18:13
Butyl benzyl phthalate	ND	U	37.3	429	ug/Kg	1	07/30/2012 18:13
Chrysene	ND	U	49.9	429	ug/Kg	1	07/30/2012 18:13
Di-n-butyl phthalate	ND	U	20.3	429	ug/Kg	1	07/30/2012 18:13
Di-n-octyl phthalate	ND	U	23.7	429	ug/Kg	1	07/30/2012 18:13
Dibenz(a,h)anthracene	ND	U	19.3	429	ug/Kg	1	07/30/2012 18:13
Dibenzofuran	ND	U	33.6	429	ug/Kg	1	07/30/2012 18:13
Diethyl phthalate	ND	U	23.2	429	ug/Kg	1	07/30/2012 18:13

Print Date: 08/06/2012

N.C. Certification # 481

Results of 107DPT-02 (5-5.7ft)

Client Sample ID: **107DPT-02 (5-5.7ft)**
Client Project ID: **NCDOT Parcel 107**
Lab Sample ID: 31202360002-E
Lab Project ID: 31202360

Collection Date: 07/25/2012 14:10
Received Date: 07/26/2012 16:42
Matrix: Soil-Solid as dry weight
Solids (%): 75.20

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
Dimethyl phthalate	ND	U	32.9	429	ug/Kg	1	07/30/2012 18:13
2,4-Dimethylphenol	ND	U	31.4	429	ug/Kg	1	07/30/2012 18:13
Diphenylamine	ND	U	19.3	429	ug/Kg	1	07/30/2012 18:13
Fluoranthene	ND	U	40.3	429	ug/Kg	1	07/30/2012 18:13
Fluorene	ND	U	22.8	429	ug/Kg	1	07/30/2012 18:13
Hexachlorobenzene	ND	U	40.6	429	ug/Kg	1	07/30/2012 18:13
Hexachlorobutadiene	ND	U	25.7	429	ug/Kg	1	07/30/2012 18:13
Hexachlorocyclopentadiene	ND	U	130	429	ug/Kg	1	07/30/2012 18:13
Hexachloroethane	ND	U	24.7	429	ug/Kg	1	07/30/2012 18:13
Indeno(1,2,3-cd)pyrene	ND	U	33.5	429	ug/Kg	1	07/30/2012 18:13
Isophorone	ND	U	19.5	429	ug/Kg	1	07/30/2012 18:13
Naphthalene	ND	U	37.0	429	ug/Kg	1	07/30/2012 18:13
4-Nitroaniline	ND	U	24.7	429	ug/Kg	1	07/30/2012 18:13
Nitrobenzene	ND	U	24.7	429	ug/Kg	1	07/30/2012 18:13
4-Nitrophenol	ND	U	42.3	429	ug/Kg	1	07/30/2012 18:13
Pentachlorophenol	ND	U	34.3	429	ug/Kg	1	07/30/2012 18:13
Phenanthrene	ND	U	28.3	429	ug/Kg	1	07/30/2012 18:13
Phenol	ND	U	40.1	429	ug/Kg	1	07/30/2012 18:13
Pyrene	ND	U	18.1	429	ug/Kg	1	07/30/2012 18:13
n-Nitrosodi-n-propylamine	ND	U	123	429	ug/Kg	1	07/30/2012 18:13
Surrogates							
2,4,6-Tribromophenol	95.0			41.0-129	%	1	07/30/2012 18:13
2-Fluorobiphenyl	82.0			48.0-123	%	1	07/30/2012 18:13
2-Fluorophenol	81.0			42.0-123	%	1	07/30/2012 18:13
Nitrobenzene-d5	88.0			46.0-117	%	1	07/30/2012 18:13
Phenol-d6	94.0			48.0-125	%	1	07/30/2012 18:13
Terphenyl-d14	101			44.0-140	%	1	07/30/2012 18:13

Batch Information

Analytical Batch: **XMS1614**
Analytical Method: **SW-846 8270D**
Instrument: **MSD10**
Analyst: **CMP**
Analytical Date/Time: **07/30/2012 18:13**

Prep Batch: **XXX2863**
Prep Method: **SW-846 3541**
Prep Date/Time: **07/27/2012 10:01**
Prep Initial Wt./Vol.: **31 g**
Prep Extract Vol: **10 mL**

Print Date: 08/06/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 107DPT-03 (5.5-6ft)

Client Sample ID: **107DPT-03 (5.5-6ft)**
Client Project ID: **NCDOT Parcel 107**
Lab Sample ID: 31202360003-A
Lab Project ID: 31202360

Collection Date: 07/25/2012 15:00
Received Date: 07/26/2012 16:42
Matrix: Soil-Solid as dry weight
Solids (%): 75.20

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	U	1.05	4.97	ug/Kg	1	07/27/2012 14:34
1,1,1-Trichloroethane	ND	U	0.774	4.97	ug/Kg	1	07/27/2012 14:34
1,1,2,2-Tetrachloroethane	ND	U	1.12	4.97	ug/Kg	1	07/27/2012 14:34
1,1,2-Trichloroethane	ND	U	1.03	4.97	ug/Kg	1	07/27/2012 14:34
1,1-Dichloroethane	ND	U	0.858	4.97	ug/Kg	1	07/27/2012 14:34
1,1-Dichloroethene	ND	U	0.898	4.97	ug/Kg	1	07/27/2012 14:34
1,1-Dichloropropene	ND	U	0.917	4.97	ug/Kg	1	07/27/2012 14:34
1,2,3-Trichlorobenzene	ND	U	1.38	4.97	ug/Kg	1	07/27/2012 14:34
1,2,3-Trichloropropane	ND	U	1.10	4.97	ug/Kg	1	07/27/2012 14:34
1,2,4-Trichlorobenzene	ND	U	1.18	4.97	ug/Kg	1	07/27/2012 14:34
1,2,4-Trimethylbenzene	ND	U	1.06	4.97	ug/Kg	1	07/27/2012 14:34
1,2-Dibromo-3-chloropropane	ND	U	5.78	29.8	ug/Kg	1	07/27/2012 14:34
1,2-Dibromoethane	ND	U	0.754	4.97	ug/Kg	1	07/27/2012 14:34
1,2-Dichlorobenzene	ND	U	1.28	4.97	ug/Kg	1	07/27/2012 14:34
1,2-Dichloroethane	ND	U	0.881	4.97	ug/Kg	1	07/27/2012 14:34
1,2-Dichloropropane	ND	U	0.801	4.97	ug/Kg	1	07/27/2012 14:34
1,3,5-Trimethylbenzene	ND	U	0.979	4.97	ug/Kg	1	07/27/2012 14:34
1,3-Dichlorobenzene	ND	U	1.15	4.97	ug/Kg	1	07/27/2012 14:34
1,3-Dichloropropane	ND	U	0.802	4.97	ug/Kg	1	07/27/2012 14:34
1,4-Dichlorobenzene	ND	U	1.09	4.97	ug/Kg	1	07/27/2012 14:34
2,2-Dichloropropane	ND	U	0.830	4.97	ug/Kg	1	07/27/2012 14:34
2-Butanone	ND	U	1.55	24.9	ug/Kg	1	07/27/2012 14:34
2-Chlorotoluene	ND	U	1.11	4.97	ug/Kg	1	07/27/2012 14:34
2-Hexanone	ND	U	1.94	12.4	ug/Kg	1	07/27/2012 14:34
4-Chlorotoluene	ND	U	1.10	4.97	ug/Kg	1	07/27/2012 14:34
4-Isopropyltoluene	ND	U	1.03	4.97	ug/Kg	1	07/27/2012 14:34
4-Methyl-2-pentanone	ND	U	3.19	12.4	ug/Kg	1	07/27/2012 14:34
Acetone	16.7	J	1.23	49.7	ug/Kg	1	07/27/2012 14:34
Benzene	ND	U	0.888	4.97	ug/Kg	1	07/27/2012 14:34
Bromobenzene	ND	U	0.981	4.97	ug/Kg	1	07/27/2012 14:34
Bromochloromethane	ND	U	0.868	4.97	ug/Kg	1	07/27/2012 14:34
Bromodichloromethane	ND	U	0.809	4.97	ug/Kg	1	07/27/2012 14:34
Bromoform	ND	U	0.665	4.97	ug/Kg	1	07/27/2012 14:34
Bromomethane	ND	U	1.75	4.97	ug/Kg	1	07/27/2012 14:34
n-Butylbenzene	ND	U	1.07	4.97	ug/Kg	1	07/27/2012 14:34
Carbon disulfide	ND	U	0.859	4.97	ug/Kg	1	07/27/2012 14:34
Carbon tetrachloride	ND	U	0.865	4.97	ug/Kg	1	07/27/2012 14:34
Chlorobenzene	ND	U	0.770	4.97	ug/Kg	1	07/27/2012 14:34
Chloroethane	ND	U	0.458	4.97	ug/Kg	1	07/27/2012 14:34
Chloroform	ND	U	0.808	4.97	ug/Kg	1	07/27/2012 14:34
Chloromethane	ND	U	0.721	4.97	ug/Kg	1	07/27/2012 14:34
Dibromochloromethane	ND	U	0.843	4.97	ug/Kg	1	07/27/2012 14:34
Dibromomethane	ND	U	0.808	4.97	ug/Kg	1	07/27/2012 14:34
Dichlorodifluoromethane	ND	U	0.723	4.97	ug/Kg	1	07/27/2012 14:34

Print Date: 08/06/2012

N.C. Certification # 481

Results of 107DPT-03 (5.5-6ft)

Client Sample ID: **107DPT-03 (5.5-6ft)**
Client Project ID: **NCDOT Parcel 107**
Lab Sample ID: 31202360003-A
Lab Project ID: 31202360

Collection Date: 07/25/2012 15:00
Received Date: 07/26/2012 16:42
Matrix: Soil-Solid as dry weight
Solids (%): 75.20

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	U	0.856	4.97	ug/Kg	1	07/27/2012 14:34
trans-1,3-Dichloropropene	ND	U	0.891	4.97	ug/Kg	1	07/27/2012 14:34
Diisopropyl Ether	ND	U	0.893	4.97	ug/Kg	1	07/27/2012 14:34
Ethyl Benzene	ND	U	0.823	4.97	ug/Kg	1	07/27/2012 14:34
Hexachlorobutadiene	ND	U	1.36	4.97	ug/Kg	1	07/27/2012 14:34
Isopropylbenzene (Cumene)	ND	U	0.958	4.97	ug/Kg	1	07/27/2012 14:34
Methyl iodide	ND	U	0.842	4.97	ug/Kg	1	07/27/2012 14:34
Methylene chloride	**1.30**	J	0.694	19.9	ug/Kg	1	07/27/2012 14:34
Naphthalene	ND	U	1.20	4.97	ug/Kg	1	07/27/2012 14:34
Styrene	ND	U	0.981	4.97	ug/Kg	1	07/27/2012 14:34
Tetrachloroethene	ND	U	0.748	4.97	ug/Kg	1	07/27/2012 14:34
Toluene	ND	U	0.806	4.97	ug/Kg	1	07/27/2012 14:34
Trichloroethene	ND	U	0.833	4.97	ug/Kg	1	07/27/2012 14:34
Trichlorofluoromethane	ND	U	0.750	4.97	ug/Kg	1	07/27/2012 14:34
Vinyl chloride	ND	U	0.732	4.97	ug/Kg	1	07/27/2012 14:34
Xylene (total)	ND	U	1.76	9.95	ug/Kg	1	07/27/2012 14:34
cis-1,2-Dichloroethene	ND	U	0.771	4.97	ug/Kg	1	07/27/2012 14:34
m,p-Xylene	ND	U	1.76	9.95	ug/Kg	1	07/27/2012 14:34
n-Propylbenzene	ND	U	0.970	4.97	ug/Kg	1	07/27/2012 14:34
o-Xylene	ND	U	1.00	4.97	ug/Kg	1	07/27/2012 14:34
sec-Butylbenzene	ND	U	1.03	4.97	ug/Kg	1	07/27/2012 14:34
tert-Butyl methyl ether (MTBE)	ND	U	0.848	4.97	ug/Kg	1	07/27/2012 14:34
tert-Butylbenzene	ND	U	0.901	4.97	ug/Kg	1	07/27/2012 14:34
trans-1,2-Dichloroethene	ND	U	0.856	4.97	ug/Kg	1	07/27/2012 14:34
trans-1,4-Dichloro-2-butene	ND	U	5.38	24.9	ug/Kg	1	07/27/2012 14:34
Surrogates							
1,2-Dichloroethane-d4	113			55.0-173	%	1	07/27/2012 14:34
4-Bromofluorobenzene	102			23.0-141	%	1	07/27/2012 14:34
Toluene d8	100			57.0-134	%	1	07/27/2012 14:34

Batch Information

Analytical Batch: **VMS2418**
Analytical Method: **SW-846 8260B**
Instrument: **MSD2**
Analyst: **DVO**
Analytical Date/Time: **07/27/2012 14:34**

Prep Batch: **VXX3717**
Prep Method: **SW-846 5035 SL**
Prep Date/Time: **07/27/2012 10:29**
Prep Initial Wt./Vol.: **6.68 g**
Prep Extract Vol: **5 mL**

Print Date: 08/06/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 107DPT-03 (5.5-6ft)

Client Sample ID: **107DPT-03 (5.5-6ft)**
Client Project ID: **NCDOT Parcel 107**
Lab Sample ID: 31202360003-E
Lab Project ID: 31202360

Collection Date: 07/25/2012 15:00
Received Date: 07/26/2012 16:42
Matrix: Soil-Solid as dry weight
Solids (%): 75.20

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,2,4-Trichlorobenzene	ND	U	38.2	433	ug/Kg	1	07/30/2012 18:36
1,2-Dichlorobenzene	ND	U	21.6	433	ug/Kg	1	07/30/2012 18:36
1,3-Dichlorobenzene	ND	U	29.2	433	ug/Kg	1	07/30/2012 18:36
1,4-Dichlorobenzene	ND	U	30.6	433	ug/Kg	1	07/30/2012 18:36
2,4,5-Trichlorophenol	ND	U	28.9	433	ug/Kg	1	07/30/2012 18:36
2,4,6-Trichlorophenol	ND	U	29.4	433	ug/Kg	1	07/30/2012 18:36
2,4-Dichlorophenol	ND	U	25.1	433	ug/Kg	1	07/30/2012 18:36
2,4-Dinitrophenol	ND	U	40.2	865	ug/Kg	1	07/30/2012 18:36
2,4-Dinitrotoluene	ND	U	21.9	433	ug/Kg	1	07/30/2012 18:36
2,6-Dinitrotoluene	ND	U	31.0	433	ug/Kg	1	07/30/2012 18:36
2-Chloronaphthalene	ND	U	25.5	433	ug/Kg	1	07/30/2012 18:36
2-Chlorophenol	ND	U	23.0	433	ug/Kg	1	07/30/2012 18:36
2-Methylnaphthalene	ND	U	35.0	433	ug/Kg	1	07/30/2012 18:36
2-Methylphenol	ND	U	24.0	433	ug/Kg	1	07/30/2012 18:36
2-Nitroaniline	ND	U	28.5	433	ug/Kg	1	07/30/2012 18:36
2-Nitrophenol	ND	U	20.8	433	ug/Kg	1	07/30/2012 18:36
3 and/or 4-Methylphenol	ND	U	28.1	433	ug/Kg	1	07/30/2012 18:36
3,3'-Dichlorobenzidine	ND	U	20.8	433	ug/Kg	1	07/30/2012 18:36
3-Nitroaniline	ND	U	19.5	433	ug/Kg	1	07/30/2012 18:36
4,6-Dinitro-2-methylphenol	ND	U	20.4	433	ug/Kg	1	07/30/2012 18:36
4-Chloro-3-methylphenol	ND	U	21.6	433	ug/Kg	1	07/30/2012 18:36
4-Chloroaniline	ND	U	34.6	433	ug/Kg	1	07/30/2012 18:36
4-Chlorophenyl phenyl ether	ND	U	46.3	433	ug/Kg	1	07/30/2012 18:36
Acenaphthene	ND	U	19.7	433	ug/Kg	1	07/30/2012 18:36
Acenaphthylene	ND	U	18.3	433	ug/Kg	1	07/30/2012 18:36
Anthracene	ND	U	19.2	433	ug/Kg	1	07/30/2012 18:36
Benzo(a)anthracene	ND	U	23.8	433	ug/Kg	1	07/30/2012 18:36
Benzo(a)pyrene	ND	U	24.5	433	ug/Kg	1	07/30/2012 18:36
Benzo(b)fluoranthene	ND	U	24.9	433	ug/Kg	1	07/30/2012 18:36
Benzo(g,h,i)perylene	ND	U	69.0	433	ug/Kg	1	07/30/2012 18:36
Benzo(k)fluoranthene	ND	U	51.9	433	ug/Kg	1	07/30/2012 18:36
Benzoic acid	ND	U	9.61	433	ug/Kg	1	07/30/2012 18:36
Bis(2-Chloroethoxy)methane	ND	U	19.5	433	ug/Kg	1	07/30/2012 18:36
Bis(2-Chloroethyl)ether	ND	U	40.4	433	ug/Kg	1	07/30/2012 18:36
Bis(2-Chloroisopropyl)ether	ND	U	37.8	433	ug/Kg	1	07/30/2012 18:36
Bis(2-Ethylhexyl)phthalate	ND	U	20.8	433	ug/Kg	1	07/30/2012 18:36
4-Bromophenyl phenyl ether	ND	U	28.5	433	ug/Kg	1	07/30/2012 18:36
Butyl benzyl phthalate	ND	U	37.7	433	ug/Kg	1	07/30/2012 18:36
Chrysene	ND	U	50.4	433	ug/Kg	1	07/30/2012 18:36
Di-n-butyl phthalate	ND	U	20.5	433	ug/Kg	1	07/30/2012 18:36
Di-n-octyl phthalate	ND	U	24.0	433	ug/Kg	1	07/30/2012 18:36
Dibenz(a,h)anthracene	ND	U	19.5	433	ug/Kg	1	07/30/2012 18:36
Dibenzofuran	ND	U	33.9	433	ug/Kg	1	07/30/2012 18:36
Diethyl phthalate	ND	U	23.4	433	ug/Kg	1	07/30/2012 18:36

Print Date: 08/06/2012

N.C. Certification # 481

Results of 107DPT-03 (5.5-6ft)

Client Sample ID: **107DPT-03 (5.5-6ft)**
Client Project ID: **NCDOT Parcel 107**
Lab Sample ID: 31202360003-E
Lab Project ID: 31202360

Collection Date: 07/25/2012 15:00
Received Date: 07/26/2012 16:42
Matrix: Soil-Solid as dry weight
Solids (%): 75.20

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
Dimethyl phthalate	ND	U	33.2	433	ug/Kg	1	07/30/2012 18:36
2,4-Dimethylphenol	ND	U	31.7	433	ug/Kg	1	07/30/2012 18:36
Diphenylamine	ND	U	19.5	433	ug/Kg	1	07/30/2012 18:36
Fluoranthene	ND	U	40.7	433	ug/Kg	1	07/30/2012 18:36
Fluorene	ND	U	23.0	433	ug/Kg	1	07/30/2012 18:36
Hexachlorobenzene	ND	U	41.0	433	ug/Kg	1	07/30/2012 18:36
Hexachlorobutadiene	ND	U	25.9	433	ug/Kg	1	07/30/2012 18:36
Hexachlorocyclopentadiene	ND	U	131	433	ug/Kg	1	07/30/2012 18:36
Hexachloroethane	ND	U	24.9	433	ug/Kg	1	07/30/2012 18:36
Indeno(1,2,3-cd)pyrene	ND	U	33.8	433	ug/Kg	1	07/30/2012 18:36
Isophorone	ND	U	19.7	433	ug/Kg	1	07/30/2012 18:36
Naphthalene	ND	U	37.4	433	ug/Kg	1	07/30/2012 18:36
4-Nitroaniline	ND	U	24.9	433	ug/Kg	1	07/30/2012 18:36
Nitrobenzene	ND	U	24.9	433	ug/Kg	1	07/30/2012 18:36
4-Nitrophenol	ND	U	42.7	433	ug/Kg	1	07/30/2012 18:36
Pentachlorophenol	ND	U	34.6	433	ug/Kg	1	07/30/2012 18:36
Phenanthrene	ND	U	28.5	433	ug/Kg	1	07/30/2012 18:36
Phenol	ND	U	40.4	433	ug/Kg	1	07/30/2012 18:36
Pyrene	ND	U	18.3	433	ug/Kg	1	07/30/2012 18:36
n-Nitrosodi-n-propylamine	ND	U	124	433	ug/Kg	1	07/30/2012 18:36
Surrogates							
2,4,6-Tribromophenol	82.0			41.0-129	%	1	07/30/2012 18:36
2-Fluorobiphenyl	76.0			48.0-123	%	1	07/30/2012 18:36
2-Fluorophenol	79.0			42.0-123	%	1	07/30/2012 18:36
Nitrobenzene-d5	83.0			46.0-117	%	1	07/30/2012 18:36
Phenol-d6	89.0			48.0-125	%	1	07/30/2012 18:36
Terphenyl-d14	96.0			44.0-140	%	1	07/30/2012 18:36

Batch Information

Analytical Batch: **XMS1614**
Analytical Method: **SW-846 8270D**
Instrument: **MSD10**
Analyst: **CMP**
Analytical Date/Time: **07/30/2012 18:36**

Prep Batch: **XXX2863**
Prep Method: **SW-846 3541**
Prep Date/Time: **07/27/2012 10:01**
Prep Initial Wt./Vol.: **30.71 g**
Prep Extract Vol: **10 mL**

Print Date: 08/06/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 107DPT-02

Client Sample ID: **107DPT-02**
Client Project ID: **NCDOT Parcel 107**
Lab Sample ID: 31202360004-A
Lab Project ID: 31202360

Collection Date: 07/26/2012 13:45
Received Date: 07/26/2012 16:42
Matrix: Water

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	U	0.104	1.00	ug/L	1	07/27/2012 17:30
1,1,1-Trichloroethane	ND	U	0.123	1.00	ug/L	1	07/27/2012 17:30
1,1,2,2-Tetrachloroethane	ND	U	0.156	1.00	ug/L	1	07/27/2012 17:30
1,1,2-Trichloroethane	ND	U	0.126	1.00	ug/L	1	07/27/2012 17:30
1,1-Dichloroethane	ND	U	0.165	1.00	ug/L	1	07/27/2012 17:30
1,1-Dichloroethene	ND	U	0.212	1.00	ug/L	1	07/27/2012 17:30
1,1-Dichloropropene	ND	U	0.0863	1.00	ug/L	1	07/27/2012 17:30
1,2,3-Trichlorobenzene	ND	U	0.110	1.00	ug/L	1	07/27/2012 17:30
1,2,3-Trichloropropane	ND	U	0.212	1.00	ug/L	1	07/27/2012 17:30
1,2,4-Trichlorobenzene	ND	U	0.0913	1.00	ug/L	1	07/27/2012 17:30
1,2,4-Trimethylbenzene	ND	U	0.0961	1.00	ug/L	1	07/27/2012 17:30
1,2-Dibromo-3-chloropropane	ND	U	0.748	5.00	ug/L	1	07/27/2012 17:30
1,2-Dibromoethane	ND	U	0.120	1.00	ug/L	1	07/27/2012 17:30
1,2-Dichlorobenzene	ND	U	0.137	1.00	ug/L	1	07/27/2012 17:30
1,2-Dichloroethane	ND	U	0.167	1.00	ug/L	1	07/27/2012 17:30
1,2-Dichloropropane	ND	U	0.163	1.00	ug/L	1	07/27/2012 17:30
1,3,5-Trimethylbenzene	ND	U	0.113	1.00	ug/L	1	07/27/2012 17:30
1,3-Dichlorobenzene	ND	U	0.103	1.00	ug/L	1	07/27/2012 17:30
1,3-Dichloropropane	ND	U	0.130	1.00	ug/L	1	07/27/2012 17:30
1,4-Dichlorobenzene	ND	U	0.130	1.00	ug/L	1	07/27/2012 17:30
2,2-Dichloropropane	ND	U	0.393	1.00	ug/L	1	07/27/2012 17:30
2-Butanone	ND	U	0.723	25.0	ug/L	1	07/27/2012 17:30
2-Chlorotoluene	ND	U	0.113	1.00	ug/L	1	07/27/2012 17:30
2-Hexanone	ND	U	0.728	5.00	ug/L	1	07/27/2012 17:30
4-Chlorotoluene	ND	U	0.125	1.00	ug/L	1	07/27/2012 17:30
4-Isopropyltoluene	ND	U	0.0769	1.00	ug/L	1	07/27/2012 17:30
4-Methyl-2-pentanone	ND	U	0.558	5.00	ug/L	1	07/27/2012 17:30
Acetone	**5.29**	J	0.864	25.0	ug/L	1	07/27/2012 17:30
Benzene	ND	U	0.113	1.00	ug/L	1	07/27/2012 17:30
Bromobenzene	ND	U	0.110	1.00	ug/L	1	07/27/2012 17:30
Bromochloromethane	ND	U	0.211	1.00	ug/L	1	07/27/2012 17:30
Bromodichloromethane	ND	U	0.110	1.00	ug/L	1	07/27/2012 17:30
Bromoform	ND	U	0.0974	1.00	ug/L	1	07/27/2012 17:30
Bromomethane	ND	U	0.237	1.00	ug/L	1	07/27/2012 17:30
n-Butylbenzene	ND	U	0.0769	1.00	ug/L	1	07/27/2012 17:30
Carbon disulfide	ND	U	0.106	1.00	ug/L	1	07/27/2012 17:30
Carbon tetrachloride	ND	U	0.101	1.00	ug/L	1	07/27/2012 17:30
Chlorobenzene	ND	U	0.116	1.00	ug/L	1	07/27/2012 17:30
Chloroethane	ND	U	0.311	1.00	ug/L	1	07/27/2012 17:30
Chloroform	ND	U	0.139	1.00	ug/L	1	07/27/2012 17:30
Chloromethane	ND	U	0.448	1.00	ug/L	1	07/27/2012 17:30
Dibromochloromethane	ND	U	0.134	1.00	ug/L	1	07/27/2012 17:30
Dibromomethane	ND	U	0.168	1.00	ug/L	1	07/27/2012 17:30
Dichlorodifluoromethane	ND	U	0.171	5.00	ug/L	1	07/27/2012 17:30

Print Date: 08/06/2012

N.C. Certification # 481

Results of 107DPT-02

Client Sample ID: **107DPT-02**
Client Project ID: **NCDOT Parcel 107**
Lab Sample ID: 31202360004-A
Lab Project ID: 31202360

Collection Date: 07/26/2012 13:45
Received Date: 07/26/2012 16:42
Matrix: Water

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	U	0.0767	1.00	ug/L	1	07/27/2012 17:30
trans-1,3-Dichloropropene	ND	U	0.0862	1.00	ug/L	1	07/27/2012 17:30
Diisopropyl Ether	ND	U	0.294	1.00	ug/L	1	07/27/2012 17:30
Ethyl Benzene	ND	U	0.0877	1.00	ug/L	1	07/27/2012 17:30
Hexachlorobutadiene	ND	U	0.0792	1.00	ug/L	1	07/27/2012 17:30
Isopropylbenzene (Cumene)	ND	U	0.0869	1.00	ug/L	1	07/27/2012 17:30
Methyl iodide	ND	U	0.115	1.00	ug/L	1	07/27/2012 17:30
Methylene chloride	ND	U	0.152	5.00	ug/L	1	07/27/2012 17:30
Naphthalene	ND	U	0.0855	1.00	ug/L	1	07/27/2012 17:30
Styrene	ND	U	0.102	1.00	ug/L	1	07/27/2012 17:30
Tetrachloroethene	ND	U	0.155	1.00	ug/L	1	07/27/2012 17:30
Toluene	**0.310**	J	0.133	1.00	ug/L	1	07/27/2012 17:30
Trichloroethene	ND	U	0.125	1.00	ug/L	1	07/27/2012 17:30
Trichlorofluoromethane	ND	U	0.137	1.00	ug/L	1	07/27/2012 17:30
Vinyl chloride	ND	U	0.124	1.00	ug/L	1	07/27/2012 17:30
Xylene (total)	**0.370**	J	0.182	2.00	ug/L	1	07/27/2012 17:30
cis-1,2-Dichloroethene	ND	U	0.136	1.00	ug/L	1	07/27/2012 17:30
m,p-Xylene	**0.260**	J	0.182	2.00	ug/L	1	07/27/2012 17:30
n-Propylbenzene	ND	U	0.113	1.00	ug/L	1	07/27/2012 17:30
o-Xylene	**0.110**	J	0.0874	1.00	ug/L	1	07/27/2012 17:30
sec-Butylbenzene	ND	U	0.112	1.00	ug/L	1	07/27/2012 17:30
tert-Butyl methyl ether (MTBE)	ND	U	0.144	1.00	ug/L	1	07/27/2012 17:30
tert-Butylbenzene	ND	U	0.0855	1.00	ug/L	1	07/27/2012 17:30
trans-1,2-Dichloroethene	ND	U	0.223	1.00	ug/L	1	07/27/2012 17:30
trans-1,4-Dichloro-2-butene	ND	U	0.414	5.00	ug/L	1	07/27/2012 17:30
Surrogates							
1,2-Dichloroethane-d4	102			64.0-140	%	1	07/27/2012 17:30
4-Bromofluorobenzene	97.0			85.0-115	%	1	07/27/2012 17:30
Toluene d8	101			82.0-117	%	1	07/27/2012 17:30

Batch Information

Analytical Batch: **VMS2417**
Analytical Method: **SW-846 8260B**
Instrument: **MSD8**
Analyst: **DVO**
Analytical Date/Time: **07/27/2012 17:30**

Prep Batch: **VXX3716**
Prep Method: **SW-846 5030B**
Prep Date/Time: **07/27/2012 08:00**
Prep Initial Wt./Vol.: **40 mL**
Prep Extract Vol: **40 mL**

Print Date: 08/06/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 107DPT-02

Client Sample ID: **107DPT-02**
Client Project ID: **NCDOT Parcel 107**
Lab Sample ID: 31202360004-D
Lab Project ID: 31202360

Collection Date: 07/26/2012 13:45
Received Date: 07/26/2012 16:42
Matrix: Water

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,2,4-Trichlorobenzene	ND	U	1.70	4.92	ug/L	1	08/2/2012 19:01
1,2-Dichlorobenzene	ND	U	1.68	4.92	ug/L	1	08/2/2012 19:01
1,3-Dichlorobenzene	ND	U	1.62	4.92	ug/L	1	08/2/2012 19:01
1,4-Dichlorobenzene	ND	U	1.60	4.92	ug/L	1	08/2/2012 19:01
2,4,5-Trichlorophenol	ND	U	2.05	4.92	ug/L	1	08/2/2012 19:01
2,4,6-Trichlorophenol	ND	U	2.00	4.92	ug/L	1	08/2/2012 19:01
2,4-Dichlorophenol	ND	U	2.03	4.92	ug/L	1	08/2/2012 19:01
2,4-Dinitrophenol	ND	U	0.657	24.6	ug/L	1	08/2/2012 19:01
2,4-Dinitrotoluene	ND	U	1.81	4.92	ug/L	1	08/2/2012 19:01
2,6-Dinitrotoluene	ND	U	1.85	4.92	ug/L	1	08/2/2012 19:01
2-Chloronaphthalene	ND	U	1.97	4.92	ug/L	1	08/2/2012 19:01
2-Chlorophenol	ND	U	2.76	4.92	ug/L	1	08/2/2012 19:01
2-Methylnaphthalene	ND	U	1.91	4.92	ug/L	1	08/2/2012 19:01
2-Methylphenol	ND	U	2.04	4.92	ug/L	1	08/2/2012 19:01
2-Nitroaniline	ND	U	1.66	4.92	ug/L	1	08/2/2012 19:01
2-Nitrophenol	ND	U	1.94	4.92	ug/L	1	08/2/2012 19:01
3 and/or 4-Methylphenol	ND	U	2.20	4.92	ug/L	1	08/2/2012 19:01
3,3'-Dichlorobenzidine	ND	U	1.72	9.83	ug/L	1	08/2/2012 19:01
3-Nitroaniline	ND	U	1.62	24.6	ug/L	1	08/2/2012 19:01
4,6-Dinitro-2-methylphenol	ND	U	0.486	24.6	ug/L	1	08/2/2012 19:01
4-Chloro-3-methylphenol	ND	U	1.95	4.92	ug/L	1	08/2/2012 19:01
4-Chloroaniline	ND	U	1.85	24.6	ug/L	1	08/2/2012 19:01
4-Chlorophenyl phenyl ether	ND	U	2.42	4.92	ug/L	1	08/2/2012 19:01
Acenaphthene	ND	U	2.03	4.92	ug/L	1	08/2/2012 19:01
Acenaphthylene	ND	U	1.97	4.92	ug/L	1	08/2/2012 19:01
Anthracene	ND	U	1.90	4.92	ug/L	1	08/2/2012 19:01
Benzo(a)anthracene	ND	U	1.93	4.92	ug/L	1	08/2/2012 19:01
Benzo(a)pyrene	ND	U	1.83	4.92	ug/L	1	08/2/2012 19:01
Benzo(b)fluoranthene	ND	U	1.93	4.92	ug/L	1	08/2/2012 19:01
Benzo(g,h,i)perylene	ND	U	2.11	4.92	ug/L	1	08/2/2012 19:01
Benzo(k)fluoranthene	ND	U	2.27	4.92	ug/L	1	08/2/2012 19:01
Benzoic acid	ND	U	2.24	4.92	ug/L	1	08/2/2012 19:01
Bis(2-Chloroethoxy)methane	ND	U	2.08	4.92	ug/L	1	08/2/2012 19:01
Bis(2-Chloroethyl)ether	ND	U	2.17	4.92	ug/L	1	08/2/2012 19:01
Bis(2-Chloroisopropyl)ether	ND	U	2.01	4.92	ug/L	1	08/2/2012 19:01
Bis(2-Ethylhexyl)phthalate	**2.75**	J	1.92	4.92	ug/L	1	08/2/2012 19:01
4-Bromophenyl phenyl ether	ND	U	2.01	4.92	ug/L	1	08/2/2012 19:01
Butyl benzyl phthalate	ND	U	1.86	4.92	ug/L	1	08/2/2012 19:01
Chrysene	ND	U	2.16	4.92	ug/L	1	08/2/2012 19:01
Di-n-butyl phthalate	ND	U	1.88	4.92	ug/L	1	08/2/2012 19:01
Di-n-octyl phthalate	ND	U	1.44	4.92	ug/L	1	08/2/2012 19:01
Dibenz(a,h)anthracene	ND	U	1.99	4.92	ug/L	1	08/2/2012 19:01
Dibenzofuran	ND	U	2.18	4.92	ug/L	1	08/2/2012 19:01
Diethyl phthalate	ND	U	2.06	4.92	ug/L	1	08/2/2012 19:01

Print Date: 08/06/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 107DPT-02

Client Sample ID: **107DPT-02**
Client Project ID: **NCDOT Parcel 107**
Lab Sample ID: 31202360004-D
Lab Project ID: 31202360

Collection Date: 07/26/2012 13:45
Received Date: 07/26/2012 16:42
Matrix: Water

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
Dimethyl phthalate	ND	U	2.10	4.92	ug/L	1	08/2/2012 19:01
2,4-Dimethylphenol	ND	U	2.17	4.92	ug/L	1	08/2/2012 19:01
Diphenylamine	ND	U	1.99	4.92	ug/L	1	08/2/2012 19:01
Fluoranthene	ND	U	1.99	4.92	ug/L	1	08/2/2012 19:01
Fluorene	ND	U	2.40	4.92	ug/L	1	08/2/2012 19:01
Hexachlorobenzene	ND	U	1.90	4.92	ug/L	1	08/2/2012 19:01
Hexachlorobutadiene	ND	U	1.49	4.92	ug/L	1	08/2/2012 19:01
Hexachlorocyclopentadiene	ND	U	0.775	9.83	ug/L	1	08/2/2012 19:01
Hexachloroethane	ND	U	1.38	4.92	ug/L	1	08/2/2012 19:01
Indeno(1,2,3-cd)pyrene	ND	U	1.99	4.92	ug/L	1	08/2/2012 19:01
Isophorone	ND	U	2.06	4.92	ug/L	1	08/2/2012 19:01
Naphthalene	ND	U	1.91	4.92	ug/L	1	08/2/2012 19:01
4-Nitroaniline	ND	U	1.65	24.6	ug/L	1	08/2/2012 19:01
Nitrobenzene	ND	U	2.15	4.92	ug/L	1	08/2/2012 19:01
4-Nitrophenol	ND	U	1.25	24.6	ug/L	1	08/2/2012 19:01
Pentachlorophenol	ND	U	1.52	24.6	ug/L	1	08/2/2012 19:01
Phenanthrene	ND	U	1.96	4.92	ug/L	1	08/2/2012 19:01
Phenol	ND	U	2.32	4.92	ug/L	1	08/2/2012 19:01
Pyrene	ND	U	1.98	4.92	ug/L	1	08/2/2012 19:01
n-Nitrosodi-n-propylamine	ND	U	2.19	4.92	ug/L	1	08/2/2012 19:01
Surrogates							
2,4,6-Tribromophenol	89.0			29.3-152	%	1	08/2/2012 19:01
2-Fluorobiphenyl	80.0			50.0-107	%	1	08/2/2012 19:01
2-Fluorophenol	68.0			33.1-118	%	1	08/2/2012 19:01
Nitrobenzene-d5	84.0			46.0-118	%	1	08/2/2012 19:01
Phenol-d6	87.0			49.0-120	%	1	08/2/2012 19:01
Terphenyl-d14	43.0			22.1-142	%	1	08/2/2012 19:01

Batch Information

Analytical Batch: **XMS1620**
Analytical Method: **SW-846 8270D**
Instrument: **MSD10**
Analyst: **CMP**
Analytical Date/Time: **08/02/2012 19:01**

Prep Batch: **XXX2865**
Prep Method: **SW-846 3520C**
Prep Date/Time: **07/30/2012 09:06**
Prep Initial Wt./Vol.: **1017 mL**
Prep Extract Vol: **5 mL**

Print Date: 08/06/2012

N.C. Certification # 481

Batch Summary

Analytical Method: SW-846 8260B

Prep Method: SW-846 5030B
Prep Batch: VXX3716
Prep Date: 07/27/2012 10:08

Client Sample ID	Lab Sample ID	Analysis Date	Analytical Batch	Instrument	Analyst
LCS for HBN 26128 [VXX/3716]	82378	07/27/2012 11:12	VMS2417	MSD8	DVO
LCSD for HBN 26128 [VXX/3716]	82379	07/27/2012 11:37	VMS2417	MSD8	DVO
MB for HBN 26128 [VXX/3716]	82380	07/27/2012 12:27	VMS2417	MSD8	DVO
USTHPFF-MW17(81787MS)	82487	07/27/2012 14:59	VMS2417	MSD8	DVO
USTHPFF-MW17(81787MSD)	82488	07/27/2012 15:24	VMS2417	MSD8	DVO
107DPT-02	31202360004	07/27/2012 17:30	VMS2417	MSD8	DVO

Method Blank

Blank ID: MB for HBN 26128 [VXX/3716]
Blank Lab ID: 82380
QC for Samples:
31202360004

Matrix: Water

Results by **SW-846 8260B**

Parameter	Result	Qual	DL	LOQ/CL	Units	DF
Dichlorodifluoromethane	ND	U	0.171	5.00	ug/L	1
Chloromethane	ND	U	0.448	1.00	ug/L	1
Vinyl chloride	ND	U	0.124	1.00	ug/L	1
Bromomethane	ND	U	0.237	1.00	ug/L	1
Chloroethane	ND	U	0.311	1.00	ug/L	1
Trichlorofluoromethane	ND	U	0.137	1.00	ug/L	1
1,1-Dichloroethene	ND	U	0.212	1.00	ug/L	1
Acetone	ND	U	0.864	25.0	ug/L	1
Methylene chloride	ND	U	0.152	5.00	ug/L	1
trans-1,2-Dichloroethene	ND	U	0.223	1.00	ug/L	1
tert-Butyl methyl ether (MTBE)	ND	U	0.144	1.00	ug/L	1
1,1-Dichloroethane	ND	U	0.165	1.00	ug/L	1
Diisopropyl Ether	ND	U	0.294	1.00	ug/L	1
2,2-Dichloropropane	ND	U	0.393	1.00	ug/L	1
cis-1,2-Dichloroethene	ND	U	0.136	1.00	ug/L	1
2-Butanone	ND	U	0.723	25.0	ug/L	1
Bromochloromethane	ND	U	0.211	1.00	ug/L	1
Chloroform	ND	U	0.139	1.00	ug/L	1
1,1,1-Trichloroethane	ND	U	0.123	1.00	ug/L	1
Carbon tetrachloride	ND	U	0.101	1.00	ug/L	1
1,1-Dichloropropene	ND	U	0.0863	1.00	ug/L	1
Benzene	ND	U	0.113	1.00	ug/L	1
1,2-Dichloroethane	ND	U	0.167	1.00	ug/L	1
Trichloroethene	ND	U	0.125	1.00	ug/L	1
1,2-Dichloropropane	ND	U	0.163	1.00	ug/L	1
Dibromomethane	ND	U	0.168	1.00	ug/L	1
Bromodichloromethane	ND	U	0.110	1.00	ug/L	1
cis-1,3-Dichloropropene	ND	U	0.0767	1.00	ug/L	1
4-Methyl-2-pentanone	ND	U	0.558	5.00	ug/L	1
Toluene	ND	U	0.133	1.00	ug/L	1
Methyl iodide	ND	U	0.115	1.00	ug/L	1
trans-1,3-Dichloropropene	ND	U	0.0862	1.00	ug/L	1
Carbon disulfide	ND	U	0.106	1.00	ug/L	1
1,1,2-Trichloroethane	ND	U	0.126	1.00	ug/L	1
Tetrachloroethene	ND	U	0.155	1.00	ug/L	1
1,3-Dichloropropane	ND	U	0.130	1.00	ug/L	1
2-Hexanone	ND	U	0.728	5.00	ug/L	1
Dibromochloromethane	ND	U	0.134	1.00	ug/L	1
1,2-Dibromoethane	ND	U	0.120	1.00	ug/L	1
Chlorobenzene	ND	U	0.116	1.00	ug/L	1
1,1,1,2-Tetrachloroethane	ND	U	0.104	1.00	ug/L	1
Bromoform	ND	U	0.0974	1.00	ug/L	1

Print Date: 08/06/2012

N.C. Certification # 481

Method Blank

Blank ID: MB for HBN 26128 [VXX/3716]
Blank Lab ID: 82380
QC for Samples:
31202360004

Matrix: Water

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF
Bromobenzene	ND	U	0.110	1.00	ug/L	1
1,1,2,2-Tetrachloroethane	ND	U	0.156	1.00	ug/L	1
1,2,3-Trichloropropane	ND	U	0.212	1.00	ug/L	1
Ethyl Benzene	ND	U	0.0877	1.00	ug/L	1
m,p-Xylene	ND	U	0.182	2.00	ug/L	1
Styrene	ND	U	0.102	1.00	ug/L	1
o-Xylene	ND	U	0.0874	1.00	ug/L	1
Xylene (total)	ND	U	0.182	2.00	ug/L	1
Isopropylbenzene (Cumene)	ND	U	0.0869	1.00	ug/L	1
n-Propylbenzene	ND	U	0.113	1.00	ug/L	1
2-Chlorotoluene	ND	U	0.113	1.00	ug/L	1
4-Chlorotoluene	ND	U	0.125	1.00	ug/L	1
1,3,5-Trimethylbenzene	ND	U	0.113	1.00	ug/L	1
tert-Butylbenzene	ND	U	0.0855	1.00	ug/L	1
1,2,4-Trimethylbenzene	ND	U	0.0961	1.00	ug/L	1
sec-Butylbenzene	ND	U	0.112	1.00	ug/L	1
1,3-Dichlorobenzene	ND	U	0.103	1.00	ug/L	1
4-Isopropyltoluene	ND	U	0.0769	1.00	ug/L	1
1,4-Dichlorobenzene	ND	U	0.130	1.00	ug/L	1
1,2-Dichlorobenzene	ND	U	0.137	1.00	ug/L	1
n-Butylbenzene	ND	U	0.0769	1.00	ug/L	1
1,2-Dibromo-3-chloropropane	ND	U	0.748	5.00	ug/L	1
1,2,4-Trichlorobenzene	ND	U	0.0913	1.00	ug/L	1
Hexachlorobutadiene	ND	U	0.0792	1.00	ug/L	1
Naphthalene	ND	U	0.0855	1.00	ug/L	1
trans-1,4-Dichloro-2-butene	ND	U	0.414	5.00	ug/L	1
1,2,3-Trichlorobenzene	ND	U	0.110	1.00	ug/L	1
Surrogates						
1,2-Dichloroethane-d4	101			64.0-140	%	1
Toluene d8	100			82.0-117	%	1
4-Bromofluorobenzene	93.0			85.0-115	%	1

Batch Information

Analytical Batch: VMS2417
Analytical Method: SW-846 8260B
Instrument: MSD8
Analyst: DVO
Analytical Date/Time: 7/27/2012 12:27:00PM

Prep Batch: VXX3716
Prep Method: SW-846 5030B
Prep Date/Time: 7/27/2012 10:08:03AM
Prep Initial Wt./Vol.: 40 mL
Prep Extract Vol: 40 mL

Print Date: 08/06/2012

N.C. Certification # 481

Blank Spike Summary

Blank Spike ID: LCS for HBN 26128 [VXX/3716]
Blank Spike Lab ID: 82378
Date Analyzed: 07/27/2012 11:12

Spike Duplicate ID: LCSD for HBN 26128 [VXX/3716]
Spike Duplicate Lab ID: 82379
Date Analyzed: 07/27/2012 11:37
Matrix: Water

QC for Samples: 31202360004

Results by SW-846 8260B

	Blank Spike (ug/L)			Spike Duplicate (ug/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Dichlorodifluoromethane	5.00	5.54	111	5.00	4.85	97	33.0-170	13	30.00
Chloromethane	5.00	4.72	94	5.00	4.65	93	57.0-132	1.5	30.00
Vinyl chloride	5.00	5.20	104	5.00	4.65	93	59.0-138	11	30.00
Bromomethane	5.00	6.28	126	5.00	5.07	101	51.0-134	21	30.00
Chloroethane	5.00	5.47	109	5.00	4.76	95	64.0-145	14	30.00
Trichlorofluoromethane	5.00	5.11	102	5.00	4.57	91	64.0-133	11	30.00
1,1-Dichloroethene	5.00	6.78	136*	5.00	5.91	118	71.0-128	14	30.00
Acetone	25.0	31.2	125	25.0	30.7	123	52.0-140	1.6	30.00
Methylene chloride	5.00	5.25	105	5.00	5.04	101	70.0-113	4.1	30.00
trans-1,2-Dichloroethene	5.00	5.66	113	5.00	5.60	112	57.0-138	1.1	30.00
tert-Butyl methyl ether (MTBE)	5.00	5.60	112	5.00	5.13	103	47.0-142	8.8	30.00
1,1-Dichloroethane	5.00	5.87	117	5.00	5.28	106	68.0-133	11	30.00
Diisopropyl Ether	5.00	5.29	106	5.00	4.84	97	66.0-132	8.9	30.00
2,2-Dichloropropane	5.00	5.36	107	5.00	5.11	102	74.0-125	4.8	30.00
cis-1,2-Dichloroethene	5.00	5.76	115	5.00	5.79	116	73.0-128	0.52	30.00
2-Butanone	25.0	28.4	114	25.0	28.2	113	58.0-134	0.71	30.00
Bromochloromethane	5.00	6.08	122	5.00	5.83	117	73.0-128	4.2	30.00
Chloroform	5.00	5.89	118	5.00	5.44	109	74.0-124	7.9	30.00
1,1,1-Trichloroethane	5.00	5.66	113	5.00	5.11	102	76.0-119	10	30.00
Carbon tetrachloride	5.00	5.48	110	5.00	5.26	105	75.0-120	4.1	30.00
1,1-Dichloropropene	5.00	5.38	108	5.00	5.02	100	76.0-124	6.9	30.00
Benzene	5.00	5.46	109	5.00	5.10	102	76.0-124	6.8	30.00
1,2-Dichloroethane	5.00	5.93	119	5.00	5.06	101	76.0-119	16	30.00
Trichloroethene	5.00	5.29	106	5.00	5.25	105	74.0-121	0.76	30.00
1,2-Dichloropropane	5.00	5.46	109	5.00	4.66	93	74.0-124	16	30.00
Dibromomethane	5.00	5.73	115	5.00	4.98	100	71.0-128	14	30.00
Bromodichloromethane	5.00	5.44	109	5.00	4.99	100	72.0-120	8.6	30.00
cis-1,3-Dichloropropene	5.00	5.73	115	5.00	5.42	108	73.0-122	5.6	30.00
4-Methyl-2-pentanone	25.0	27.2	109	25.0	24.8	99	65.0-124	9.2	30.00
Toluene	5.00	5.59	112	5.00	5.25	105	75.0-123	6.3	30.00
Methyl iodide	5.00	5.15	103	5.00	4.80	96	55.0-123	7.0	30.00
trans-1,3-Dichloropropene	5.00	5.29	106	5.00	4.97	99	70.0-125	6.2	30.00
Carbon disulfide	5.00	5.68	114	5.00	5.24	105	65.0-132	8.1	30.00
1,1,2-Trichloroethane	5.00	5.18	104	5.00	5.12	102	76.0-121	1.2	30.00

Print Date: 08/06/2012

N.C. Certification # 481

Blank Spike Summary

Blank Spike ID: LCS for HBN 26128 [VXX/3716]
Blank Spike Lab ID: 82378
Date Analyzed: 07/27/2012 11:12

Spike Duplicate ID: LCSD for HBN 26128 [VXX/3716]
Spike Duplicate Lab ID: 82379
Date Analyzed: 07/27/2012 11:37
Matrix: Water

QC for Samples: 31202360004

Results by SW-846 8260B

	Blank Spike (ug/L)			Spike Duplicate (ug/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Tetrachloroethene	5.00	5.06	101	5.00	5.24	105	59.0-112	3.5	30.00
1,3-Dichloropropane	5.00	5.10	102	5.00	4.84	97	74.0-120	5.2	30.00
2-Hexanone	25.0	25.8	103	25.0	23.8	95	56.0-133	8.1	30.00
Dibromochloromethane	5.00	4.95	99	5.00	4.86	97	67.0-122	1.8	30.00
1,2-Dibromoethane	5.00	5.68	114	5.00	5.08	102	74.0-119	11	30.00
Chlorobenzene	5.00	5.24	105	5.00	5.01	100	74.0-120	4.5	30.00
1,1,1,2-Tetrachloroethane	5.00	4.76	95	5.00	4.81	96	73.0-119	1.0	30.00
Bromoform	5.00	4.83	97	5.00	5.16	103	62.0-127	6.6	30.00
Bromobenzene	5.00	5.03	101	5.00	4.74	95	75.0-120	5.9	30.00
1,1,2,2-Tetrachloroethane	5.00	5.24	105	5.00	5.22	104	68.0-129	0.38	30.00
1,2,3-Trichloropropane	5.00	5.21	104	5.00	5.08	102	67.0-126	2.5	30.00
Ethyl Benzene	5.00	5.44	109	5.00	4.97	99	76.0-123	9.0	30.00
m,p-Xylene	10.0	10.9	109	10.0	9.60	96	76.0-124	13	30.00
Styrene	5.00	5.29	106	5.00	4.79	96	76.0-121	9.9	30.00
o-Xylene	5.00	5.48	110	5.00	5.03	101	75.0-124	8.6	30.00
Isopropylbenzene (Cumene)	5.00	5.51	110	5.00	5.02	100	77.0-120	9.3	30.00
n-Propylbenzene	5.00	5.65	113	5.00	5.10	102	77.0-123	10	30.00
2-Chlorotoluene	5.00	5.59	112	5.00	5.10	102	74.0-127	9.2	30.00
4-Chlorotoluene	5.00	5.94	119	5.00	5.14	103	77.0-123	14	30.00
1,3,5-Trimethylbenzene	5.00	5.45	109	5.00	4.81	96	76.0-122	12	30.00
tert-Butylbenzene	5.00	5.46	109	5.00	4.91	98	67.0-122	11	30.00
1,2,4-Trimethylbenzene	5.00	5.38	108	5.00	4.82	96	76.0-124	11	30.00
sec-Butylbenzene	5.00	5.36	107	5.00	4.92	98	78.0-121	8.6	30.00
1,3-Dichlorobenzene	5.00	5.70	114	5.00	5.01	100	75.0-120	13	30.00
4-Isopropyltoluene	5.00	5.34	107	5.00	4.80	96	77.0-120	11	30.00
1,4-Dichlorobenzene	5.00	5.39	108	5.00	5.15	103	70.0-125	4.6	30.00
1,2-Dichlorobenzene	5.00	4.95	99	5.00	5.00	100	76.0-118	1.0	30.00
n-Butylbenzene	5.00	5.17	103	5.00	5.01	100	78.0-118	3.1	30.00
1,2-Dibromo-3-chloropropane	30.0	33.1	110	30.0	28.4	95	62.0-130	15	30.00
1,2,4-Trichlorobenzene	5.00	4.39	88	5.00	4.16	83	72.0-119	5.4	30.00
Hexachlorobutadiene	5.00	5.19	104	5.00	4.07	81	69.0-121	24	30.00
Naphthalene	5.00	4.63	93	5.00	4.40	88	67.0-122	5.1	30.00
trans-1,4-Dichloro-2-butene	25.0	29.1	116	25.0	24.2	97	61.0-132	18	30.00
1,2,3-Trichlorobenzene	5.00	4.77	95	5.00	4.42	88	68.0-123	7.6	30.00

Print Date: 08/06/2012

N.C. Certification # 481

Blank Spike Summary

Blank Spike ID: LCS for HBN 26128 [VXX/3716]
Blank Spike Lab ID: 82378
Date Analyzed: 07/27/2012 11:12

Spike Duplicate ID: LCSD for HBN 26128 [VXX/3716]
Spike Duplicate Lab ID: 82379
Date Analyzed: 07/27/2012 11:37
Matrix: Water

QC for Samples: 31202360004

Results by SW-846 8260B

Parameter	Blank Spike (%) Spike	Result	Rec (%)	Spike Duplicate (%) Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Surrogates									
1,2-Dichloroethane-d4			111			106	64.0-140		
Toluene d8			105			102	82.0-117		
4-Bromofluorobenzene			98			97	85.0-115		

Batch Information

Analytical Batch: **VMS2417**
Analytical Method: **SW-846 8260B**
Instrument: **MSD8**
Analyst: **DVO**

Prep Batch: **VXX3716**
Prep Method: **SW-846 5030B**
Prep Date/Time: **07/27/2012 10:08**
Spike Init Wt./Vol.: **40 mL** Extract Vol: **40 mL**
Dupe Init Wt./Vol.: **40 mL** Extract Vol: **40 mL**

Batch Summary

Analytical Method: SW-846 8260B

Prep Method: SW-846 5035 SL
Prep Batch: VXX3717
Prep Date: 07/27/2012 10:10

Client Sample ID	Lab Sample ID	Analysis Date	Analytical Batch	Instrument	Analyst
LCS-S for HBN 26131 [VXX/3717]	82389	07/27/2012 11:20	VMS2418	MSD2	DVO
LCSD-S for HBN 26131 [VXX/3717	82390	07/27/2012 11:44	VMS2418	MSD2	DVO
MB-S for HBN 26131 [VXX/3717]	82391	07/27/2012 12:31	VMS2418	MSD2	DVO
107DPT-01 (4.5-5ft)	31202360001	07/27/2012 13:18	VMS2418	MSD2	DVO
107DPT-02 (5-5.7ft)	31202360002	07/27/2012 13:41	VMS2418	MSD2	DVO
107DPT-03 (5.5-6ft)	31202360003	07/27/2012 14:34	VMS2418	MSD2	DVO
107DPT-01 (4.5-5ft)(82319DUP)	82697	07/27/2012 17:13	VMS2418	MSD2	DVO
107DPT-02 (5-5.7ft)(82320MS)	82698	07/27/2012 17:37	VMS2418	MSD2	DVO

Method Blank

Blank ID: MB-S for HBN 26131 [VXX/3717]
Blank Lab ID: 82391
QC for Samples:
31202360001, 31202360002, 31202360003

Matrix: Soil-Solid as dry weight

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF
Dichlorodifluoromethane	ND	U	0.727	5.00	ug/Kg	1
Chloromethane	ND	U	0.725	5.00	ug/Kg	1
Vinyl chloride	ND	U	0.736	5.00	ug/Kg	1
Bromomethane	ND	U	1.76	5.00	ug/Kg	1
Chloroethane	ND	U	0.460	5.00	ug/Kg	1
Trichlorofluoromethane	ND	U	0.754	5.00	ug/Kg	1
1,1-Dichloroethene	ND	U	0.903	5.00	ug/Kg	1
Acetone	ND	U	1.24	50.0	ug/Kg	1
Methylene chloride	**0.930**	J	0.698	20.0	ug/Kg	1
trans-1,2-Dichloroethene	ND	U	0.861	5.00	ug/Kg	1
tert-Butyl methyl ether (MTBE)	ND	U	0.852	5.00	ug/Kg	1
1,1-Dichloroethane	ND	U	0.863	5.00	ug/Kg	1
Diisopropyl Ether	ND	U	0.898	5.00	ug/Kg	1
2,2-Dichloropropane	ND	U	0.834	5.00	ug/Kg	1
cis-1,2-Dichloroethene	ND	U	0.775	5.00	ug/Kg	1
2-Butanone	ND	U	1.56	25.0	ug/Kg	1
Bromochloromethane	ND	U	0.873	5.00	ug/Kg	1
Chloroform	ND	U	0.812	5.00	ug/Kg	1
1,1,1-Trichloroethane	ND	U	0.778	5.00	ug/Kg	1
Carbon tetrachloride	ND	U	0.870	5.00	ug/Kg	1
1,1-Dichloropropene	ND	U	0.922	5.00	ug/Kg	1
Benzene	ND	U	0.893	5.00	ug/Kg	1
1,2-Dichloroethane	ND	U	0.886	5.00	ug/Kg	1
Trichloroethene	ND	U	0.837	5.00	ug/Kg	1
1,2-Dichloropropane	ND	U	0.805	5.00	ug/Kg	1
Dibromomethane	ND	U	0.812	5.00	ug/Kg	1
Bromodichloromethane	ND	U	0.813	5.00	ug/Kg	1
cis-1,3-Dichloropropene	ND	U	0.861	5.00	ug/Kg	1
4-Methyl-2-pentanone	ND	U	3.21	12.5	ug/Kg	1
Toluene	ND	U	0.810	5.00	ug/Kg	1
Methyl iodide	ND	U	0.846	5.00	ug/Kg	1
trans-1,3-Dichloropropene	ND	U	0.896	5.00	ug/Kg	1
Carbon disulfide	ND	U	0.864	5.00	ug/Kg	1
1,1,2-Trichloroethane	ND	U	1.04	5.00	ug/Kg	1
Tetrachloroethene	ND	U	0.752	5.00	ug/Kg	1
1,3-Dichloropropane	ND	U	0.806	5.00	ug/Kg	1
2-Hexanone	ND	U	1.95	12.5	ug/Kg	1
Dibromochloromethane	ND	U	0.847	5.00	ug/Kg	1
1,2-Dibromoethane	ND	U	0.758	5.00	ug/Kg	1
Chlorobenzene	ND	U	0.774	5.00	ug/Kg	1
1,1,1,2-Tetrachloroethane	ND	U	1.06	5.00	ug/Kg	1
Bromoform	ND	U	0.669	5.00	ug/Kg	1

Print Date: 08/06/2012

N.C. Certification # 481

Method Blank

Blank ID: MB-S for HBN 26131 [VXX/3717]
Blank Lab ID: 82391
QC for Samples:
31202360001, 31202360002, 31202360003

Matrix: Soil-Solid as dry weight

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF
Bromobenzene	ND	U	0.986	5.00	ug/Kg	1
1,1,2,2-Tetrachloroethane	ND	U	1.13	5.00	ug/Kg	1
1,2,3-Trichloropropane	ND	U	1.11	5.00	ug/Kg	1
Ethyl Benzene	ND	U	0.827	5.00	ug/Kg	1
m,p-Xylene	ND	U	1.77	10.0	ug/Kg	1
Styrene	ND	U	0.986	5.00	ug/Kg	1
o-Xylene	ND	U	1.01	5.00	ug/Kg	1
Xylene (total)	ND	U	1.77	10.0	ug/Kg	1
Isopropylbenzene (Cumene)	ND	U	0.963	5.00	ug/Kg	1
n-Propylbenzene	ND	U	0.975	5.00	ug/Kg	1
2-Chlorotoluene	ND	U	1.12	5.00	ug/Kg	1
4-Chlorotoluene	ND	U	1.11	5.00	ug/Kg	1
1,3,5-Trimethylbenzene	ND	U	0.984	5.00	ug/Kg	1
tert-Butylbenzene	ND	U	0.906	5.00	ug/Kg	1
1,2,4-Trimethylbenzene	ND	U	1.07	5.00	ug/Kg	1
sec-Butylbenzene	ND	U	1.04	5.00	ug/Kg	1
1,3-Dichlorobenzene	ND	U	1.16	5.00	ug/Kg	1
4-Isopropyltoluene	ND	U	1.04	5.00	ug/Kg	1
1,4-Dichlorobenzene	ND	U	1.10	5.00	ug/Kg	1
1,2-Dichlorobenzene	ND	U	1.29	5.00	ug/Kg	1
n-Butylbenzene	ND	U	1.08	5.00	ug/Kg	1
1,2-Dibromo-3-chloropropane	ND	U	5.81	30.0	ug/Kg	1
1,2,4-Trichlorobenzene	ND	U	1.19	5.00	ug/Kg	1
Hexachlorobutadiene	ND	U	1.37	5.00	ug/Kg	1
Naphthalene	ND	U	1.21	5.00	ug/Kg	1
trans-1,4-Dichloro-2-butene	ND	U	5.41	25.0	ug/Kg	1
1,2,3-Trichlorobenzene	ND	U	1.39	5.00	ug/Kg	1
Surrogates						
1,2-Dichloroethane-d4	100			55.0-173	%	1
Toluene d8	101			57.0-134	%	1
4-Bromofluorobenzene	102			23.0-141	%	1

Batch Information

Analytical Batch: VMS2418
Analytical Method: SW-846 8260B
Instrument: MSD2
Analyst: DVO
Analytical Date/Time: 7/27/2012 12:31:00PM

Prep Batch: VXX3717
Prep Method: SW-846 5035 SL
Prep Date/Time: 7/27/2012 10:10:34AM
Prep Initial Wt./Vol.: 5 g
Prep Extract Vol: 5 mL

Print Date: 08/06/2012

N.C. Certification # 481

Blank Spike Summary

Blank Spike ID: LCS-S for HBN 26131 [VXX/3717]
Blank Spike Lab ID: 82389
Date Analyzed: 07/27/2012 11:20

Spike Duplicate ID: LCSD-S for HBN 26131 [VXX/3717
Spike Duplicate Lab ID: 82390
Matrix: Soil-Solid as dry weight

QC for Samples: 31202360001, 31202360002, 31202360003

Results by SW-846 8260B

	Blank Spike (ug/Kg)			Spike Duplicate (ug/Kg)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Dichlorodifluoromethane	30.0	25.0	83	30.0	24.0	80	52.0-133	4.1	30.00
Chloromethane	30.0	27.8	93	30.0	25.9	86	64.0-126	7.1	30.00
Vinyl chloride	30.0	28.2	94	30.0	26.2	87	69.0-120	7.4	30.00
Bromomethane	30.0	28.8	96	30.0	27.1	90	41.0-160	6.1	30.00
Chloroethane	30.0	30.4	101	30.0	27.4	91	69.0-126	10	30.00
Trichlorofluoromethane	30.0	28.5	95	30.0	26.3	88	72.0-123	8.0	30.00
1,1-Dichloroethene	30.0	31.8	106	30.0	28.9	96	78.0-113	9.6	30.00
Acetone	75.0	86.5	115	75.0	92.6	123	0.00-243	6.8	30.00
Methylene chloride	30.0	27.9	93	30.0	24.6	82	40.0-156	13	30.00
trans-1,2-Dichloroethene	30.0	29.1	97	30.0	29.1	97	78.0-111	0.0	30.00
tert-Butyl methyl ether (MTBE)	30.0	28.4	95	30.0	28.7	96	68.0-138	1.1	30.00
1,1-Dichloroethane	30.0	28.6	95	30.0	28.5	95	71.0-121	0.35	30.00
Diisopropyl Ether	30.0	28.4	95	30.0	28.7	96	60.0-141	1.1	30.00
2,2-Dichloropropane	30.0	29.2	97	30.0	28.5	95	79.0-127	2.4	30.00
cis-1,2-Dichloroethene	30.0	28.7	96	30.0	29.6	99	80.0-114	3.1	30.00
2-Butanone	75.0	83.0	111	75.0	90.1	120	31.0-189	8.2	30.00
Bromochloromethane	30.0	30.5	102	30.0	32.3	108	81.0-115	5.7	30.00
Chloroform	30.0	27.4	91	30.0	28.4	95	76.0-114	3.6	30.00
1,1,1-Trichloroethane	30.0	27.6	92	30.0	27.4	91	79.0-117	0.73	30.00
Carbon tetrachloride	30.0	28.4	95	30.0	28.1	94	82.0-119	1.1	30.00
1,1-Dichloropropene	30.0	28.7	96	30.0	28.6	95	82.0-114	0.35	30.00
Benzene	30.0	28.4	95	30.0	28.9	96	82.0-113	1.7	30.00
1,2-Dichloroethane	30.0	28.1	94	30.0	29.1	97	72.0-126	3.5	30.00
Trichloroethene	30.0	28.5	95	30.0	29.0	97	82.0-108	1.7	30.00
1,2-Dichloropropane	30.0	28.5	95	30.0	29.2	97	78.0-116	2.4	30.00
Dibromomethane	30.0	30.9	103	30.0	30.8	103	79.0-125	0.32	30.00
Bromodichloromethane	30.0	27.9	93	30.0	27.8	93	79.0-122	0.36	30.00
cis-1,3-Dichloropropene	30.0	30.6	102	30.0	30.4	101	75.0-127	0.66	30.00
4-Methyl-2-pentanone	75.0	84.0	112	75.0	87.9	117	57.0-159	4.5	30.00
Toluene	30.0	29.7	99	30.0	29.9	100	83.0-111	0.67	30.00
Methyl iodide	30.0	29.0	97	30.0	29.7	99	63.0-137	2.4	30.00
trans-1,3-Dichloropropene	30.0	30.2	101	30.0	30.3	101	75.0-134	0.33	30.00
Carbon disulfide	30.0	26.2	87	30.0	26.6	89	72.0-116	1.5	30.00
1,1,2-Trichloroethane	30.0	31.5	105	30.0	31.6	105	73.0-121	0.32	30.00

Print Date: 08/06/2012

N.C. Certification # 481

Blank Spike Summary

Blank Spike ID: LCS-S for HBN 26131 [VXX/3717]
Blank Spike Lab ID: 82389
Date Analyzed: 07/27/2012 11:20

Spike Duplicate ID: LCSD-S for HBN 26131 [VXX/3717
Spike Duplicate Lab ID: 82390
Matrix: Soil-Solid as dry weight

QC for Samples: 31202360001, 31202360002, 31202360003

Results by SW-846 8260B

	Blank Spike (ug/Kg)			Spike Duplicate (ug/Kg)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Tetrachloroethene	30.0	28.9	96	30.0	29.5	98	60.0-118	2.1	30.00
1,3-Dichloropropane	30.0	30.7	102	30.0	30.8	103	76.0-121	0.33	30.00
2-Hexanone	75.0	86.4	115	75.0	93.0	124	41.0-171	7.4	30.00
Dibromochloromethane	30.0	29.8	99	30.0	31.2	104	77.0-126	4.6	30.00
1,2-Dibromoethane	30.0	30.2	101	30.0	32.8	109	76.0-125	8.3	30.00
Chlorobenzene	30.0	29.6	99	30.0	30.2	101	78.0-109	2.0	30.00
1,1,1,2-Tetrachloroethane	30.0	28.4	95	30.0	29.6	99	81.0-117	4.1	30.00
Bromoform	30.0	31.6	105	30.0	33.9	113	72.0-134	7.0	30.00
Bromobenzene	30.0	28.8	96	30.0	28.9	96	76.0-113	0.35	30.00
1,1,2,2-Tetrachloroethane	30.0	31.4	105	30.0	33.6	112	76.0-129	6.8	30.00
1,2,3-Trichloropropane	30.0	32.2	107	30.0	34.1	114	70.0-145	5.7	30.00
Ethyl Benzene	30.0	29.0	97	30.0	28.8	96	72.0-115	0.69	30.00
m,p-Xylene	60.0	58.2	97	60.0	57.8	96	73.0-114	0.69	30.00
Styrene	30.0	28.9	96	30.0	28.6	95	74.0-114	1.0	30.00
o-Xylene	30.0	29.3	98	30.0	28.8	96	74.0-113	1.7	30.00
Isopropylbenzene (Cumene)	30.0	29.3	98	30.0	28.8	96	72.0-115	1.7	30.00
n-Propylbenzene	30.0	30.1	100	30.0	29.7	99	71.0-117	1.3	30.00
2-Chlorotoluene	30.0	30.3	101	30.0	29.4	98	76.0-111	3.0	30.00
4-Chlorotoluene	30.0	28.8	96	30.0	28.7	96	75.0-113	0.35	30.00
1,3,5-Trimethylbenzene	30.0	29.4	98	30.0	28.9	96	72.0-115	1.7	30.00
tert-Butylbenzene	30.0	29.0	97	30.0	28.7	96	74.0-112	1.0	30.00
1,2,4-Trimethylbenzene	30.0	29.6	99	30.0	29.1	97	73.0-114	1.7	30.00
sec-Butylbenzene	30.0	28.9	96	30.0	28.4	95	72.0-115	1.7	30.00
1,3-Dichlorobenzene	30.0	29.4	98	30.0	29.8	99	75.0-110	1.4	30.00
4-Isopropyltoluene	30.0	29.2	97	30.0	28.7	96	73.0-114	1.7	30.00
1,4-Dichlorobenzene	30.0	29.4	98	30.0	29.7	99	76.0-110	1.0	30.00
1,2-Dichlorobenzene	30.0	29.6	99	30.0	29.7	99	77.0-109	0.34	30.00
n-Butylbenzene	30.0	29.4	98	30.0	29.4	98	72.0-118	0.0	30.00
1,2-Dibromo-3-chloropropane	180	206	114	180	223	124	54.0-166	7.9	30.00
1,2,4-Trichlorobenzene	30.0	27.9	93	30.0	28.4	95	76.0-115	1.8	30.00
Hexachlorobutadiene	30.0	27.5	92	30.0	26.8	89	70.0-111	2.6	30.00
Naphthalene	30.0	32.2	107	30.0	32.9	110	71.0-129	2.2	30.00
trans-1,4-Dichloro-2-butene	150	159	106	150	164	109	62.0-164	3.1	30.00
1,2,3-Trichlorobenzene	30.0	30.0	100	30.0	29.9	100	78.0-115	0.33	30.00

Print Date: 08/06/2012

N.C. Certification # 481

Blank Spike Summary

Blank Spike ID: LCS-S for HBN 26131 [VXX/3717]
Blank Spike Lab ID: 82389
Date Analyzed: 07/27/2012 11:20

Spike Duplicate ID: LCSD-S for HBN 26131 [VXX/3717
Spike Duplicate Lab ID: 82390
Matrix: Soil-Solid as dry weight

QC for Samples: 31202360001, 31202360002, 31202360003

Results by SW-846 8260B

	Blank Spike (%)			Spike Duplicate (%)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Surrogates									
1,2-Dichloroethane-d4			101			102	55.0-173		
Toluene d8			99			100	57.0-134		
4-Bromofluorobenzene			102			103	23.0-141		

Batch Information

Analytical Batch: VMS2418
Analytical Method: SW-846 8260B
Instrument: MSD2
Analyst: DVO

Prep Batch: VXX3717
Prep Method: SW-846 5035 SL
Prep Date/Time: 07/27/2012 10:10
Spike Init Wt./Vol.: 5 g Extract Vol: 5 mL
Dupe Init Wt./Vol.: 5 g Extract Vol: 5 mL

Matrix Spike Summary

Original Sample ID: 31202360002 (107DPT-02 (5-5.7ft))
MS Sample ID: 82698
MSD Sample ID:

Analysis Date: 07/27/2012 13:41
Analysis Date: 07/27/2012 17:37
Analysis Date:
Matrix: Soil-Solid as dry weight

QC for Samples: 31202360001, 31202360002, 31202360003

Results by SW-846 8260B

		Matrix Spike (ug/Kg)			Spike Duplicate (ug/Kg)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
1,1,1,2-Tetrachloroethane	ND	29.5	24.1	82				69.0-120		
1,1,1-Trichloroethane	ND	29.5	23.2	79				78.0-121		
1,1,2,2-Tetrachloroethane	ND	29.5	33.6	114				76.0-136		
1,1,2-Trichloroethane	ND	29.5	28.3	96				65.0-128		
1,1-Dichloroethane	ND	29.5	23.3	79				72.0-139		
1,1-Dichloroethene	ND	29.5	24.2	82				72.0-135		
1,1-Dichloropropene	ND	29.5	23.4	79				69.0-137		
1,2,3-Trichlorobenzene	ND	29.5	22.6	77				61.0-126		
1,2,3-Trichloropropane	ND	29.5	34.6	117				10.0-218		
1,2,4-Trichlorobenzene	ND	29.5	20.6	70				61.0-125		
1,2,4-Trimethylbenzene	ND	29.5	23.4	79				31.0-172		
1,2-Dibromo-3-chloropropane	ND	177	244	138				43.0-229		
1,2-Dibromoethane	ND	29.5	29.6	100				78.0-148		
1,2-Dichlorobenzene	ND	29.5	24.3	82				58.0-148		
1,2-Dichloroethane	ND	29.5	25.2	85				73.0-146		
1,2-Dichloropropane	ND	29.5	23.4	79				76.0-136		
1,3,5-Trimethylbenzene	ND	29.5	23.1	78				68.0-132		
1,3-Dichlorobenzene	ND	29.5	24.2	82				55.0-145		
1,3-Dichloropropane	ND	29.5	27.1	92				33.0-137		
1,4-Dichlorobenzene	ND	29.5	24.0	81				53.0-146		
2,2-Dichloropropane	ND	29.5	23.6	80				58.0-150		
2-Butanone	ND	73.8	110	149				41.0-256		
2-Chlorotoluene	ND	29.5	24.1	82				60.0-144		
2-Hexanone	ND	73.8	103	140 *				42.0-111		
4-Chlorotoluene	ND	29.5	23.4	79				59.0-141		
4-Isopropyltoluene	ND	29.5	22.0	75				75.0-122		
4-Methyl-2-pentanone	ND	73.8	105	142				6.90-166		
Acetone	ND	73.8	115	156				6.80-355		
Benzene	ND	29.5	24.5	83				75.0-133		
Bromobenzene	ND	29.5	25.0	85				66.0-140		
Bromochloromethane	ND	29.5	26.6	90				85.0-136		
Bromodichloromethane	ND	29.5	24.5	83				77.0-140		
Bromoform	ND	29.5	31.8	108				75.0-151		
Bromomethane	ND	29.5	23.6	80				30.0-127		
n-Butylbenzene	ND	29.5	22.2	75				41.0-147		
Carbon disulfide	ND	29.5	21.9	74				64.0-145		
Carbon tetrachloride	ND	29.5	23.2	79				64.0-142		
Chlorobenzene	ND	29.5	24.2	82				66.0-135		
Chloroethane	ND	29.5	25.5	87				21.0-182		

Print Date: 08/06/2012

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Matrix Spike Summary

Original Sample ID: 31202360002 (107DPT-02 (5-5.7ft))
MS Sample ID: 82698
MSD Sample ID:

Analysis Date: 07/27/2012 13:41
Analysis Date: 07/27/2012 17:37
Analysis Date:
Matrix: Soil-Solid as dry weight

QC for Samples: 31202360001, 31202360002, 31202360003

Results by SW-846 8260B

		Matrix Spike (ug/Kg)			Spike Duplicate (ug/Kg)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Chloroform	ND	29.5	24.7	84				71.0-143		
Chloromethane	ND	29.5	26.0	88				69.0-138		
Dibromochloromethane	ND	29.5	27.7	94				78.0-141		
Dibromomethane	ND	29.5	28.3	96				80.0-150		
Dichlorodifluoromethane	ND	29.5	24.5	83				82.0-130		
cis-1,3-Dichloropropene	ND	29.5	25.6	87				72.0-146		
trans-1,3-Dichloropropene	ND	29.5	27.0	92				45.0-144		
Diisopropyl Ether	ND	29.5	24.3	83				79.0-122		
Ethyl Benzene	ND	29.5	23.2	79				74.0-126		
Hexachlorobutadiene	ND	29.5	20.5	70				52.0-134		
Isopropylbenzene (Cumene)	ND	29.5	23.5	80				74.0-123		
Methyl iodide	ND	29.5	25.8	88				41.0-126		
Methylene chloride	1.44	29.5	22.8	77				49.0-155		
Naphthalene	ND	29.5	28.9	98				55.0-140		
Styrene	ND	29.5	23.9	81				73.0-123		
Tetrachloroethene	ND	29.5	23.3	79				46.0-153		
Toluene	ND	29.5	25.4	86				66.0-128		
Trichloroethene	ND	29.5	23.4	79				35.0-136		
Trichlorofluoromethane	ND	29.5	22.2	75 *				77.0-132		
Vinyl chloride	ND	29.5	27.3	93				68.0-137		
cis-1,2-Dichloroethene	ND	29.5	23.7	80				77.0-134		
m,p-Xylene	ND	59.0	47.1	80				80.0-118		
n-Propylbenzene	ND	29.5	23.4	79				72.0-128		
o-Xylene	ND	29.5	23.8	81				80.0-121		
sec-Butylbenzene	ND	29.5	22.2	75				57.0-138		
tert-Butyl methyl ether (MTBE)	ND	29.5	26.5	90				67.0-135		
tert-Butylbenzene	ND	29.5	22.8	77				61.0-142		
trans-1,2-Dichloroethene	ND	29.5	24.3	82				72.0-135		
trans-1,4-Dichloro-2-butene	ND	148	175	118				49.0-211		
Surrogates										
1,2-Dichloroethane-d4				101				55.0-173		
4-Bromofluorobenzene				101				23.0-141		
Toluene d8				101				57.0-134		

Print Date: 08/06/2012

N.C. Certification # 481

Matrix Spike Summary

Original Sample ID: 31202360002 (107DPT-02 (5-5.7ft))
MS Sample ID: 82698
MSD Sample ID:

Analysis Date: 07/27/2012 13:41
Analysis Date: 07/27/2012 17:37
Analysis Date:
Matrix: Soil-Solid as dry weight

QC for Samples: 31202360001, 31202360002, 31202360003

Results by SW-846 8260B

		Matrix Spike (%)			Spike Duplicate (%)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL

Batch Information

Analytical Batch: VMS2418
Analytical Method: SW-846 8260B
Instrument: MSD2
Analyst: DVO

Prep Batch: VXX3717
Prep Method: SW-846 5035 SL
Prep Date/Time: 07/27/2012 10:27
MS Init Wt./Vol.: 6.76 g Extract Vol.: 5 mL
MSD Init Wt./Vol.: Extract Vol.:

Print Date: 08/06/2012

N.C. Certification # 481

Duplicate Sample Summary

Original Sample ID: 31202360001-A
Duplicate Sample ID: 82697

Analysis Date: 07/27/2012 13:18
Analysis Date: 07/27/2012 17:13
Matrix: Soil-Solid as dry weight

QC for Samples: 31202360001, 31202360002, 31202360003

Results by SW-846 8260B

PARAMETER	Original (ug/Kg)	Qual	Duplicate (ug/Kg)	Qual	RPD (%)	RPD CL
1,1,1,2-Tetrachloroethane	ND	U	ND	U		30.00
1,1,1-Trichloroethane	ND	U	ND	U		30.00
1,1,2,2-Tetrachloroethane	ND	U	ND	U		30.00
1,1,2-Trichloroethane	ND	U	ND	U		30.00
1,1-Dichloroethane	ND	U	ND	U		30.00
1,1-Dichloroethene	ND	U	ND	U		30.00
1,1-Dichloropropene	ND	U	ND	U		30.00
1,2,3-Trichlorobenzene	ND	U	ND	U		30.00
1,2,3-Trichloropropane	ND	U	ND	U		30.00
1,2,4-Trichlorobenzene	ND	U	ND	U		30.00
1,2,4-Trimethylbenzene	ND	U	ND	U		30.00
1,2-Dibromo-3-chloropropane	ND	U	ND	U		30.00
1,2-Dibromoethane	ND	U	ND	U		30.00
1,2-Dichlorobenzene	ND	U	ND	U		30.00
1,2-Dichloroethane	ND	U	ND	U		30.00
1,2-Dichloropropane	ND	U	ND	U		30.00
1,3,5-Trimethylbenzene	ND	U	ND	U		30.00
1,3-Dichlorobenzene	ND	U	ND	U		30.00
1,3-Dichloropropane	ND	U	ND	U		30.00
1,4-Dichlorobenzene	ND	U	ND	U		30.00
2,2-Dichloropropane	ND	U	ND	U		30.00
2-Butanone	ND	U	ND	U		30.00
2-Chlorotoluene	ND	U	ND	U		30.00
2-Hexanone	ND	U	ND	U		30.00
4-Chlorotoluene	ND	U	ND	U		30.00
4-Isopropyltoluene	ND	U	ND	U		30.00
4-Methyl-2-pentanone	ND	U	ND	U		30.00
Acetone	ND	U	ND	U		30.00

Print Date: 08/06/2012

N.C. Certification # 481

Duplicate Sample Summary

Original Sample ID: 31202360001-A
Duplicate Sample ID: 82697

Analysis Date: 07/27/2012 13:18
Analysis Date: 07/27/2012 17:13
Matrix: Soil-Solid as dry weight

QC for Samples: 31202360001, 31202360002, 31202360003

Results by SW-846 8260B

PARAMETER	Original (ug/Kg)	Qual	Duplicate (ug/Kg)	Qual	RPD (%)	RPD CL
Benzene	ND	U	ND	U		30.00
Bromobenzene	ND	U	ND	U		30.00
Bromochloromethane	ND	U	ND	U		30.00
Bromodichloromethane	ND	U	ND	U		30.00
Bromoform	ND	U	ND	U		30.00
Bromomethane	ND	U	ND	U		30.00
Carbon disulfide	ND	U	ND	U		30.00
Carbon tetrachloride	ND	U	ND	U		30.00
Chlorobenzene	ND	U	ND	U		30.00
Chloroethane	ND	U	ND	U		30.00
Chloroform	ND	U	ND	U		30.00
Chloromethane	ND	U	ND	U		30.00
cis-1,2-Dichloroethene	ND	U	ND	U		30.00
cis-1,3-Dichloropropene	ND	U	ND	U		30.00
Dibromochloromethane	ND	U	ND	U		30.00
Dibromomethane	ND	U	ND	U		30.00
Dichlorodifluoromethane	ND	U	ND	U		30.00
Diisopropyl Ether	ND	U	ND	U		30.00
Ethyl Benzene	ND	U	ND	U		30.00
Hexachlorobutadiene	ND	U	ND	U		30.00
Isopropylbenzene (Cumene)	ND	U	ND	U		30.00
m,p-Xylene	ND	U	ND	U		30.00
Methyl iodide	ND	U	ND	U		30.00
Methylene chloride	1.00	J	1.12	J	11	30.00
n-Butylbenzene	ND	U	ND	U		30.00
n-Propylbenzene	ND	U	ND	U		30.00
Naphthalene	ND	U	ND	U		30.00
o-Xylene	ND	U	ND	U		30.00

Print Date: 08/06/2012

N.C. Certification # 481

Duplicate Sample Summary

Original Sample ID: 31202360001-A
Duplicate Sample ID: 82697

Analysis Date: 07/27/2012 13:18
Analysis Date: 07/27/2012 17:13
Matrix: Soil-Solid as dry weight

QC for Samples: 31202360001, 31202360002, 31202360003

Results by SW-846 8260B

PARAMETER	Original (ug/Kg)	Qual	Duplicate (ug/Kg)	Qual	RPD (%)	RPD CL
sec-Butylbenzene	ND	U	ND	U		30.00
Styrene	ND	U	ND	U		30.00
tert-Butyl methyl ether (MTBE)	ND	U	ND	U		30.00
tert-Butylbenzene	ND	U	ND	U		30.00
Tetrachloroethene	ND	U	ND	U		30.00
Toluene	ND	U	ND	U		30.00
trans-1,2-Dichloroethene	ND	U	ND	U		30.00
trans-1,3-Dichloropropene	ND	U	ND	U		30.00
trans-1,4-Dichloro-2-butene	ND	U	ND	U		30.00
Trichloroethene	ND	U	ND	U		30.00
Trichlorofluoromethane	ND	U	ND	U		30.00
Vinyl chloride	ND	U	ND	U		30.00
Xylene (total)	ND	U	ND	U		
Surrogates						
1,2-Dichloroethane-d4	106		107		13	
4-Bromofluorobenzene	101		101		13	
Toluene d8	98.0		97.0		12	

Batch Information

Analytical Batch: VMS2418
Analytical Method: SW-846 8260B
Instrument: MSD2
Analyst: DVO

Prep Batch: VXX3717
Prep Method: SW-846 5035 SL
Prep Date/Time: 07/27/2012 10:23

Print Date: 08/06/2012

N.C. Certification # 481

Batch Summary

Analytical Method: SW-846 8270D

Prep Method: SW-846 3541
Prep Batch: XXX2863
Prep Date: 07/27/2012 10:01

Client Sample ID	Lab Sample ID	Analysis Date	Analytical Batch	Instrument	Analyst
MB for HBN 26126 [XXX/2863]	82374	07/30/2012 15:09	XMS1614	MSD10	CMP
LCS for HBN 26126 [XXX/2863]	82375	07/30/2012 15:55	XMS1614	MSD10	CMP
107DPT-01 (4.5-5ft)	31202360001	07/30/2012 17:04	XMS1614	MSD10	CMP
107DPT-01 (4.5-5ft)(82319MS)	82376	07/30/2012 17:27	XMS1614	MSD10	CMP
107DPT-01 (4.5-5ft)(82319MSD)	82377	07/30/2012 17:50	XMS1614	MSD10	CMP
107DPT-02 (5-5.7ft)	31202360002	07/30/2012 18:13	XMS1614	MSD10	CMP
107DPT-03 (5.5-6ft)	31202360003	07/30/2012 18:36	XMS1614	MSD10	CMP

Method Blank

Blank ID: MB for HBN 26126 [XXX/2863]
Blank Lab ID: 82374
QC for Samples:
31202360001, 31202360002, 31202360003

Matrix: Soil-Solid as dry weight

Results by **SW-846 8270D**

Parameter	Result	Qual	DL	LOQ/CL	Units	DF
Phenol	ND	U	29.2	313	ug/Kg	1
Bis(2-Chloroethyl)ether	ND	U	29.2	313	ug/Kg	1
2-Chlorophenol	ND	U	16.6	313	ug/Kg	1
1,3-Dichlorobenzene	ND	U	21.1	313	ug/Kg	1
1,4-Dichlorobenzene	ND	U	22.1	313	ug/Kg	1
1,2-Dichlorobenzene	ND	U	15.6	313	ug/Kg	1
2-Methylphenol	ND	U	17.3	313	ug/Kg	1
3 and/or 4-Methylphenol	ND	U	20.3	313	ug/Kg	1
Bis(2-Chloroisopropyl)ether	ND	U	27.3	313	ug/Kg	1
n-Nitrosodi-n-propylamine	ND	U	89.6	313	ug/Kg	1
Hexachloroethane	ND	U	18.0	313	ug/Kg	1
Nitrobenzene	ND	U	18.0	313	ug/Kg	1
Isophorone	ND	U	14.2	313	ug/Kg	1
2-Nitrophenol	ND	U	15.0	313	ug/Kg	1
2,4-Dimethylphenol	ND	U	22.9	313	ug/Kg	1
Bis(2-Chloroethoxy)methane	ND	U	14.1	313	ug/Kg	1
2,4-Dichlorophenol	ND	U	18.1	313	ug/Kg	1
1,2,4-Trichlorobenzene	ND	U	27.6	313	ug/Kg	1
Naphthalene	ND	U	27.0	313	ug/Kg	1
4-Chloroaniline	ND	U	25.0	313	ug/Kg	1
Hexachlorobutadiene	ND	U	18.7	313	ug/Kg	1
4-Chloro-3-methylphenol	ND	U	15.6	313	ug/Kg	1
2-Methylnaphthalene	ND	U	25.3	313	ug/Kg	1
Hexachlorocyclopentadiene	ND	U	94.7	313	ug/Kg	1
2,4,5-Trichlorophenol	ND	U	20.9	313	ug/Kg	1
2,4,6-Trichlorophenol	ND	U	21.2	313	ug/Kg	1
2-Chloronaphthalene	ND	U	18.4	313	ug/Kg	1
2-Nitroaniline	ND	U	20.6	313	ug/Kg	1
3-Nitroaniline	ND	U	14.1	313	ug/Kg	1
Dimethyl phthalate	ND	U	24.0	313	ug/Kg	1
2,6-Dinitrotoluene	ND	U	22.4	313	ug/Kg	1
Acenaphthene	ND	U	14.2	313	ug/Kg	1
2,4-Dinitrophenol	ND	U	29.0	625	ug/Kg	1
4-Nitrophenol	ND	U	30.8	313	ug/Kg	1
Dibenzofuran	ND	U	24.5	313	ug/Kg	1
2,4-Dinitrotoluene	ND	U	15.8	313	ug/Kg	1
Fluorene	ND	U	16.6	313	ug/Kg	1
Diethyl phthalate	ND	U	16.9	313	ug/Kg	1
4-Chlorophenyl phenyl ether	ND	U	33.4	313	ug/Kg	1
4-Nitroaniline	ND	U	18.0	313	ug/Kg	1
4,6-Dinitro-2-methylphenol	ND	U	14.7	313	ug/Kg	1
Diphenylamine	ND	U	14.1	313	ug/Kg	1

Print Date: 08/06/2012

N.C. Certification # 481

Method Blank

Blank ID: MB for HBN 26126 [XXX/2863]
Blank Lab ID: 82374
QC for Samples:
31202360001, 31202360002, 31202360003

Matrix: Soil-Solid as dry weight

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF
4-Bromophenyl phenyl ether	ND	U	20.6	313	ug/Kg	1
Hexachlorobenzene	ND	U	29.6	313	ug/Kg	1
Pentachlorophenol	ND	U	25.0	313	ug/Kg	1
Phenanthrene	ND	U	20.6	313	ug/Kg	1
Anthracene	ND	U	13.9	313	ug/Kg	1
Di-n-butyl phthalate	ND	U	14.8	313	ug/Kg	1
Fluoranthene	ND	U	29.4	313	ug/Kg	1
Pyrene	ND	U	13.2	313	ug/Kg	1
Butyl benzyl phthalate	ND	U	27.2	313	ug/Kg	1
Benzo(a)anthracene	ND	U	17.2	313	ug/Kg	1
3,3'-Dichlorobenzidine	ND	U	15.0	313	ug/Kg	1
Chrysene	ND	U	36.4	313	ug/Kg	1
Bis(2-Ethylhexyl)phthalate	ND	U	15.0	313	ug/Kg	1
Di-n-octyl phthalate	ND	U	17.3	313	ug/Kg	1
Benzo(b)fluoranthene	ND	U	18.0	313	ug/Kg	1
Benzo(k)fluoranthene	ND	U	37.5	313	ug/Kg	1
Benzo(a)pyrene	ND	U	17.7	313	ug/Kg	1
Indeno(1,2,3-cd)pyrene	ND	U	24.4	313	ug/Kg	1
Dibenz(a,h)anthracene	ND	U	14.1	313	ug/Kg	1
Benzo(g,h,i)perylene	ND	U	49.8	313	ug/Kg	1
Benzoic acid	ND	U	6.94	313	ug/Kg	1
Acenaphthylene	ND	U	13.2	313	ug/Kg	1
Surrogates						
2-Fluorophenol	62.0			42.0-123	%	1
Phenol-d6	74.0			48.0-125	%	1
Nitrobenzene-d5	73.0			46.0-117	%	1
2-Fluorobiphenyl	83.0			48.0-123	%	1
2,4,6-Tribromophenol	90.0			41.0-129	%	1
Terphenyl-d14	113			44.0-140	%	1

Batch Information

Analytical Batch: XMS1614
Analytical Method: SW-846 8270D
Instrument: MSD10
Analyst: CMP
Analytical Date/Time: 7/30/2012 3:09:00PM

Prep Batch: XXX2863
Prep Method: SW-846 3541
Prep Date/Time: 7/27/2012 10:01:47AM
Prep Initial Wt./Vol.: 32 g
Prep Extract Vol: 10 mL

Print Date: 08/06/2012

N.C. Certification # 481

Blank Spike Summary

Blank Spike ID: LCS for HBN 26126 [XXX/2863]
Blank Spike Lab ID: 82375
Date Analyzed: 07/30/2012 15:55

Matrix: Soil-Solid as dry weight

QC for Samples: 31202360001, 31202360002, 31202360003

Results by SW-846 8270D

Blank Spike (ug/Kg)

Parameter	Spike	Result	Rec (%)	CL
Phenol	3130	2870	92	67.0-112
Bis(2-Chloroethyl)ether	3130	2690	86	63.0-116
2-Chlorophenol	3130	2850	91	67.0-109
1,3-Dichlorobenzene	3130	2770	89	66.0-109
1,4-Dichlorobenzene	3130	2790	89	65.0-112
1,2-Dichlorobenzene	3130	2820	90	67.0-110
2-Methylphenol	3130	2890	93	68.0-110
3 and/or 4-Methylphenol	6250	6020	96	66.0-113
Bis(2-Chloroisopropyl)ether	3130	2610	84	64.0-114
n-Nitrosodi-n-propylamine	3130	2720	87	66.0-111
Hexachloroethane	3130	2680	86	64.0-110
Nitrobenzene	3130	2770	88	69.0-112
Isophorone	3130	2990	96	69.0-108
2-Nitrophenol	3130	3060	98	65.0-117
2,4-Dimethylphenol	3130	2880	92	69.0-112
Bis(2-Chloroethoxy)methane	3130	2970	95	68.0-112
Benzoic acid	3130	1550	50	0.00-203
2,4-Dichlorophenol	3130	3080	99	67.0-118
1,2,4-Trichlorobenzene	3130	3030	97	65.0-114
Naphthalene	3130	3060	98	70.0-111
4-Chloroaniline	3130	2340	75	41.0-93.0
Hexachlorobutadiene	3130	2970	95	63.0-124
4-Chloro-3-methylphenol	3130	2990	96	70.0-114
2-Methylnaphthalene	3130	3080	98	69.0-110
Hexachlorocyclopentadiene	3130	3070	98	0.00-1080
2,4,5-Trichlorophenol	3130	3340	107	66.0-119
2,4,6-Trichlorophenol	3130	3250	104	67.0-119
2-Chloronaphthalene	3130	2810	90	57.0-96.0
2-Nitroaniline	3130	2380	76	61.0-100
3-Nitroaniline	3130	2520	81	48.0-103
Dimethyl phthalate	3130	2990	96	69.0-118
2,6-Dinitrotoluene	3130	3070	98	69.0-122
Acenaphthene	3130	3010	96	68.0-111
2,4-Dinitrophenol	3130	3070	98	12.0-125

Print Date: 08/06/2012

N.C. Certification # 481

Blank Spike Summary

Blank Spike ID: LCS for HBN 26126 [XXX/2863]
Blank Spike Lab ID: 82375
Date Analyzed: 07/30/2012 15:55

Matrix: Soil-Solid as dry weight

QC for Samples: 31202360001, 31202360002, 31202360003

Results by SW-846 8270D

Blank Spike (ug/Kg)

Parameter	Spike	Result	Rec (%)	CL
4-Nitrophenol	3130	2330	75	45.0-120
Dibenzofuran	3130	3080	98	71.0-114
2,4-Dinitrotoluene	3130	3140	101	68.0-123
Fluorene	3130	3020	97	66.0-116
Diethyl phthalate	3130	2990	96	68.0-114
4-Chlorophenyl phenyl ether	3130	3060	98	66.0-120
4-Nitroaniline	3130	2730	87	66.0-114
4,6-Dinitro-2-methylphenol	3130	4020	129*	24.0-123
Diphenylamine	3130	3340	107	60.0-118
4-Bromophenyl phenyl ether	3130	3420	110	63.0-118
Hexachlorobenzene	3130	3090	99	62.0-112
Pentachlorophenol	3130	4030	129*	34.0-125
Phenanthrene	3130	3450	110	60.0-122
Anthracene	3130	3440	110	63.0-113
Di-n-butyl phthalate	3130	3490	112	64.0-121
Fluoranthene	3130	3500	112	64.0-118
Pyrene	3130	3200	102	67.0-116
Butyl benzyl phthalate	3130	2900	93	68.0-118
Benzo(a)anthracene	3130	3150	101	65.0-118
3,3'-Dichlorobenzidine	3130	2720	87	54.0-118
Chrysene	3130	3200	102	66.0-118
Bis(2-Ethylhexyl)phthalate	3130	2900	93	67.0-123
Di-n-octyl phthalate	3130	3020	97	62.0-131
Benzo(b)fluoranthene	3130	2790	89	63.0-119
Benzo(k)fluoranthene	3130	3360	107	69.0-118
Benzo(a)pyrene	3130	3230	103	69.0-113
Indeno(1,2,3-cd)pyrene	3130	3310	106	64.0-123
Dibenz(a,h)anthracene	3130	3250	104	64.0-123
Benzo(g,h,i)perylene	3130	3390	108	57.0-128
Acenaphthylene	3130	3200	102	72.0-115
Surrogates				
2-Fluorophenol			78	42.0-123
Phenol-d6			93	48.0-125
Nitrobenzene-d5			89	46.0-117

Print Date: 08/06/2012

N.C. Certification # 481

Blank Spike Summary

Blank Spike ID: LCS for HBN 26126 [XXX/2863]
Blank Spike Lab ID: 82375
Date Analyzed: 07/30/2012 15:55

Matrix: Soil-Solid as dry weight

QC for Samples: 31202360001, 31202360002, 31202360003

Results by SW-846 8270D

		Blank Spike (%)		
Parameter	Spike	Result	Rec (%)	CL
2-Fluorobiphenyl			98	48.0-123
2,4,6-Tribromophenol			119	41.0-129
Terphenyl-d14			98	44.0-140

Batch Information

Analytical Batch: XMS1614
Analytical Method: SW-846 8270D
Instrument: MSD10
Analyst: CMP

Prep Batch: XXX2863
Prep Method: SW-846 3541
Prep Date/Time: 07/27/2012 10:01
Spike Init Wt./Vol.: 32 g Extract Vol: 10 mL
Dupe Init Wt./Vol.: Extract Vol:

SGS ANALYTICAL PERSPECTIVES

Matrix Spike Summary

Original Sample ID: 31202360001 (107DPT-01 (4.5-5ft))
MS Sample ID: 82376
MSD Sample ID: 82377

Analysis Date: 07/30/2012 17:04
Analysis Date: 07/30/2012 17:27
Analysis Date: 07/30/2012 17:50
Matrix: Soil-Solid as dry weight

QC for Samples: 31202360001, 31202360002, 31202360003

Results by SW-846 8270D

		Matrix Spike (ug/Kg)			Spike Duplicate (ug/Kg)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
1,2,4-Trichlorobenzene	ND	3985	3900	98	4112	3950	96	68.9-119	1.3	30.00
1,2-Dichlorobenzene	ND	3985	3650	91	4112	3760	92	73.3-121	2.8	30.00
1,3-Dichlorobenzene	ND	3985	3610	90	4112	3720	91	69.7-119	3.1	30.00
1,4-Dichlorobenzene	ND	3985	3650	92	4112	3740	91	70.6-117	2.4	30.00
2,4,5-Trichlorophenol	ND	3985	4340	109	4112	4420	107	72.4-118	1.7	30.00
2,4,6-Trichlorophenol	ND	3985	4160	104	4112	4320	105	67.9-116	3.9	30.00
2,4-Dichlorophenol	ND	3985	4000	100	4112	4140	101	74.5-115	3.5	30.00
2,4-Dinitrophenol	ND	3985	4240	106	4112	4870	119	20.4-130	14	30.00
2,4-Dinitrotoluene	ND	3985	3940	99	4112	4120	100	67.6-136	4.8	30.00
2,6-Dinitrotoluene	ND	3985	3850	97	4112	4040	98	69.3-131	4.9	30.00
2-Chloronaphthalene	ND	3985	3580	90	4112	3640	89	70.3-124	1.8	30.00
2-Chlorophenol	ND	3985	3670	92	4112	3860	94	77.1-111	5.1	30.00
2-Methylnaphthalene	ND	3985	3880	97	4112	3930	96	74.1-111	1.3	30.00
2-Methylphenol	ND	3985	3700	93	4112	3850	94	78.7-116	3.7	30.00
2-Nitroaniline	ND	3985	3020	76	4112	3160	77	70.0-129	5.0	30.00
2-Nitrophenol	ND	3985	4030	101	4112	4170	101	63.3-112	3.4	30.00
3 and/or 4-Methylphenol	ND	7969	7600	95	8212	7950	97	71.2-101	4.6	30.00
3,3'-Dichlorobenzidine	ND	3985	3670	92	4112	3670	89	14.2-302	0.0	30.00
3-Nitroaniline	ND	3985	3370	85	4112	3590	87	76.6-356	6.2	30.00
4,6-Dinitro-2-methylphenol	ND	3985	5140	129 *	4112	5520	134 *	39.4-126	7.2	30.00
4-Chloro-3-methylphenol	ND	3985	3790	95	4112	3870	94	80.0-115	2.3	30.00
4-Chloroaniline	ND	3985	3160	79	4112	3220	78	25.1-237	1.6	30.00
4-Chlorophenyl phenyl ether	ND	3985	3790	95	4112	3980	97	72.8-125	4.6	30.00
Acenaphthene	ND	3985	3810	95	4112	3910	95	71.0-125	2.6	30.00
Acenaphthylene	ND	3985	4040	101	4112	4120	100	73.0-140	1.9	30.00
Anthracene	ND	3985	4240	106	4112	4320	105	66.9-119	1.8	30.00
Benzo(a)anthracene	ND	3985	3890	97	4112	3980	97	51.8-127	2.3	30.00
Benzo(a)pyrene	ND	3985	3890	97	4112	4080	99	78.5-137	4.8	30.00
Benzo(b)fluoranthene	ND	3985	3350	84	4112	3710	90	62.3-134	10	30.00
Benzo(g,h,i)perylene	ND	3985	4080	102	4112	4450	108	56.2-149	8.4	30.00
Benzo(k)fluoranthene	ND	3985	4210	105	4112	4000	97	79.7-133	5.0	30.00
Benzoic acid	ND	3985	3120	78	4112	3480	85	1.00-140	11	30.00
Bis(2-Chloroethoxy)methane	ND	3985	3700	93	4112	3760	91	71.4-123	1.4	30.00
Bis(2-Chloroethyl)ether	ND	3985	3450	87	4112	3590	87	64.0-120	4.0	30.00
Bis(2-Chloroisopropyl)ether	ND	3985	3310	83	4112	3360	82	60.5-123	1.5	30.00
Bis(2-Ethylhexyl)phthalate	ND	3985	3600	90	4112	3750	91	68.5-134	4.2	30.00
4-Bromophenyl phenyl ether	ND	3985	4210	106	4112	4400	107	65.2-127	4.5	30.00
Butyl benzyl phthalate	ND	3985	3640	91	4112	3710	90	64.4-133	1.7	30.00
Chrysene	ND	3985	4000	100	4112	4020	98	72.7-124	0.32	30.00

Print Date: 08/06/2012

N.C. Certification # 481

Matrix Spike Summary

Original Sample ID: 31202360001 (107DPT-01 (4.5-5ft))
MS Sample ID: 82376
MSD Sample ID: 82377

Analysis Date: 07/30/2012 17:04
Analysis Date: 07/30/2012 17:27
Analysis Date: 07/30/2012 17:50
Matrix: Soil-Solid as dry weight

QC for Samples: 31202360001, 31202360002, 31202360003

Results by SW-846 8270D

		Matrix Spike (ug/Kg)			Spike Duplicate (ug/Kg)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Di-n-butyl phthalate	ND	3985	4320	108	4112	4390	107	67.9-125	1.8	30.00
Di-n-octyl phthalate	ND	3985	3700	93	4112	3820	93	48.9-162	3.1	30.00
Dibenz(a,h)anthracene	ND	3985	3990	100	4112	4260	104	58.6-146	6.5	30.00
Dibenzofuran	ND	3985	3840	96	4112	3980	97	70.6-115	3.6	30.00
Diethyl phthalate	ND	3985	3620	91	4112	3670	89	70.8-127	1.4	30.00
Dimethyl phthalate	ND	3985	3580	90	4112	3680	90	68.5-122	2.8	30.00
2,4-Dimethylphenol	ND	3985	3720	93	4112	3760	92	85.4-138	1.0	30.00
Diphenylamine	ND	3985	4080	102	4112	4180	102	73.6-208	2.5	30.00
Fluoranthene	ND	3985	4350	109	4112	4360	106	64.6-129	0.0	30.00
Fluorene	ND	3985	3760	94	4112	3900	95	72.4-128	3.3	30.00
Hexachlorobenzene	ND	3985	3800	95	4112	3920	95	62.9-124	3.3	30.00
Hexachlorobutadiene	ND	3985	3790	95	4112	3860	94	69.1-118	2.0	30.00
Hexachlorocyclopentadiene	ND	3985	3880	97	4112	4000	97	1.00-176	2.9	30.00
Hexachloroethane	ND	3985	3470	87	4112	3590	87	68.0-122	3.3	30.00
Indeno(1,2,3-cd)pyrene	ND	3985	4010	101	4112	4290	104	29.1-157	6.8	30.00
Isophorone	ND	3985	3640	91	4112	3600	88	65.2-143	1.1	30.00
Naphthalene	ND	3985	3900	98	4112	3930	96	49.9-137	0.98	30.00
4-Nitroaniline	ND	3985	3510	88	4112	3670	89	50.8-178	4.3	30.00
Nitrobenzene	ND	3985	3560	89	4112	3620	88	71.4-122	1.8	30.00
4-Nitrophenol	ND	3985	3100	78	4112	3250	79	56.8-133	4.4	30.00
Pentachlorophenol	ND	3985	5150	129 *	4112	5540	135 *	29.2-108	7.4	30.00
Phenanthrene	ND	3985	4280	107	4112	4360	106	55.8-128	1.8	30.00
Phenol	ND	3985	3710	93	4112	3870	94	71.2-120	4.0	30.00
Pyrene	ND	3985	3990	100	4112	4070	99	68.5-140	2.2	30.00
n-Nitrosodi-n-propylamine	ND	3985	3320	83	4112	3360	82	74.3-133	1.1	30.00
Surrogates										
2,4,6-Tribromophenol				111			117	41.0-129		
2-Fluorobiphenyl				93			94	48.0-123		
2-Fluorophenol				78			80	42.0-123		
Nitrobenzene-d5				85			86	46.0-117		
Phenol-d6				90			93	48.0-125		
Terphenyl-d14				90			91	44.0-140		

Print Date: 08/06/2012

N.C. Certification # 481

Matrix Spike Summary

Original Sample ID: 31202360001 (107DPT-01 (4.5-5ft))
MS Sample ID: 82376
MSD Sample ID: 82377

Analysis Date: 07/30/2012 17:04
Analysis Date: 07/30/2012 17:27
Analysis Date: 07/30/2012 17:50
Matrix: Soil-Solid as dry weight

QC for Samples: 31202360001, 31202360002, 31202360003

Results by SW-846 8270D

		Matrix Spike (%)			Spike Duplicate (%)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL

Batch Information

Analytical Batch: XMS1614
Analytical Method: SW-846 8270D
Instrument: MSD10
Analyst: CMP

Prep Batch: XXX2863
Prep Method: SW-846 3541
Prep Date/Time: 07/27/2012 10:01
MS Init Wt./Vol.: 32.04 g Extract Vol.: 10 mL
MSD Init Wt./Vol.: 31.1 g Extract Vol.: 10 mL

Print Date: 08/06/2012

N.C. Certification # 481

Batch Summary

Analytical Method: SW-846 8270D

Prep Method: SW-846 3520C
Prep Batch: XXX2865
Prep Date: 07/30/2012 09:06

Client Sample ID	Lab Sample ID	Analysis Date	Analytical Batch	Instrument	Analyst
MB for HBN 26268 [XXX/2865]	82587	08/02/2012 12:33	XMS1620	MSD10	CMP
LCS for HBN 26268 [XXX/2865]	82588	08/02/2012 12:56	XMS1620	MSD10	CMP
LCSD for HBN 26268 [XXX/2865]	82589	08/02/2012 13:19	XMS1620	MSD10	CMP
107DPT-02	31202360004	08/02/2012 19:01	XMS1620	MSD10	CMP

Method Blank

Blank ID: MB for HBN 26268 [XXX/2865]
Blank Lab ID: 82587
QC for Samples:
31202360004

Matrix: Water

Results by **SW-846 8270D**

Parameter	Result	Qual	DL	LOQ/CL	Units	DF
Phenol	ND	U	2.36	5.00	ug/L	1
Bis(2-Chloroethyl)ether	ND	U	2.21	5.00	ug/L	1
2-Chlorophenol	ND	U	2.81	5.00	ug/L	1
1,3-Dichlorobenzene	ND	U	1.65	5.00	ug/L	1
1,4-Dichlorobenzene	ND	U	1.63	5.00	ug/L	1
1,2-Dichlorobenzene	ND	U	1.71	5.00	ug/L	1
2-Methylphenol	ND	U	2.07	5.00	ug/L	1
3 and/or 4-Methylphenol	ND	U	2.24	5.00	ug/L	1
Bis(2-Chloroisopropyl)ether	ND	U	2.04	5.00	ug/L	1
n-Nitrosodi-n-propylamine	ND	U	2.23	5.00	ug/L	1
Hexachloroethane	ND	U	1.40	5.00	ug/L	1
Nitrobenzene	ND	U	2.19	5.00	ug/L	1
Isophorone	ND	U	2.09	5.00	ug/L	1
2-Nitrophenol	ND	U	1.97	5.00	ug/L	1
2,4-Dimethylphenol	ND	U	2.21	5.00	ug/L	1
Bis(2-Chloroethoxy)methane	ND	U	2.12	5.00	ug/L	1
2,4-Dichlorophenol	ND	U	2.06	5.00	ug/L	1
1,2,4-Trichlorobenzene	ND	U	1.73	5.00	ug/L	1
Naphthalene	ND	U	1.94	5.00	ug/L	1
4-Chloroaniline	ND	U	1.88	25.0	ug/L	1
Hexachlorobutadiene	ND	U	1.52	5.00	ug/L	1
4-Chloro-3-methylphenol	ND	U	1.98	5.00	ug/L	1
2-Methylnaphthalene	ND	U	1.94	5.00	ug/L	1
Hexachlorocyclopentadiene	ND	U	0.788	10.0	ug/L	1
2,4,5-Trichlorophenol	ND	U	2.08	5.00	ug/L	1
2,4,6-Trichlorophenol	ND	U	2.03	5.00	ug/L	1
2-Chloronaphthalene	ND	U	2.00	5.00	ug/L	1
2-Nitroaniline	ND	U	1.69	5.00	ug/L	1
3-Nitroaniline	ND	U	1.65	25.0	ug/L	1
Dimethyl phthalate	ND	U	2.14	5.00	ug/L	1
2,6-Dinitrotoluene	ND	U	1.88	5.00	ug/L	1
Acenaphthene	ND	U	2.06	5.00	ug/L	1
2,4-Dinitrophenol	ND	U	0.668	25.0	ug/L	1
4-Nitrophenol	ND	U	1.27	25.0	ug/L	1
Dibenzofuran	ND	U	2.22	5.00	ug/L	1
2,4-Dinitrotoluene	ND	U	1.84	5.00	ug/L	1
Fluorene	ND	U	2.44	5.00	ug/L	1
Diethyl phthalate	ND	U	2.10	5.00	ug/L	1
4-Chlorophenyl phenyl ether	ND	U	2.46	5.00	ug/L	1
4-Nitroaniline	ND	U	1.68	25.0	ug/L	1
4,6-Dinitro-2-methylphenol	ND	U	0.494	25.0	ug/L	1
Diphenylamine	ND	U	2.02	5.00	ug/L	1

Print Date: 08/06/2012

N.C. Certification # 481

Method Blank

Blank ID: MB for HBN 26268 [XXX/2865]
Blank Lab ID: 82587
QC for Samples:
31202360004

Matrix: Water

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF
4-Bromophenyl phenyl ether	ND	U	2.04	5.00	ug/L	1
Hexachlorobenzene	ND	U	1.93	5.00	ug/L	1
Pentachlorophenol	ND	U	1.55	25.0	ug/L	1
Phenanthrene	ND	U	1.99	5.00	ug/L	1
Anthracene	ND	U	1.93	5.00	ug/L	1
Di-n-butyl phthalate	ND	U	1.91	5.00	ug/L	1
Fluoranthene	ND	U	2.02	5.00	ug/L	1
Pyrene	ND	U	2.01	5.00	ug/L	1
Butyl benzyl phthalate	ND	U	1.89	5.00	ug/L	1
Benzo(a)anthracene	ND	U	1.96	5.00	ug/L	1
3,3'-Dichlorobenzidine	ND	U	1.75	10.0	ug/L	1
Chrysene	ND	U	2.20	5.00	ug/L	1
Bis(2-Ethylhexyl)phthalate	ND	U	1.95	5.00	ug/L	1
Di-n-octyl phthalate	ND	U	1.46	5.00	ug/L	1
Benzo(b)fluoranthene	ND	U	1.96	5.00	ug/L	1
Benzo(k)fluoranthene	ND	U	2.31	5.00	ug/L	1
Benzo(a)pyrene	ND	U	1.86	5.00	ug/L	1
Indeno(1,2,3-cd)pyrene	ND	U	2.02	5.00	ug/L	1
Dibenz(a,h)anthracene	ND	U	2.02	5.00	ug/L	1
Benzo(g,h,i)perylene	ND	U	2.15	5.00	ug/L	1
Benzoic acid	ND	U	2.28	5.00	ug/L	1
Acenaphthylene	ND	U	2.00	5.00	ug/L	1
Surrogates						
2-Fluorophenol	78.0			33.1-118	%	1
Phenol-d6	97.0			49.0-120	%	1
Nitrobenzene-d5	97.0			46.0-118	%	1
2-Fluorobiphenyl	95.0			50.0-107	%	1
2,4,6-Tribromophenol	93.0			29.3-152	%	1
Terphenyl-d14	103			22.1-142	%	1

Batch Information

Analytical Batch: XMS1620
Analytical Method: SW-846 8270D
Instrument: MSD10
Analyst: CMP
Analytical Date/Time: 8/2/2012 12:33:00PM

Prep Batch: XXX2865
Prep Method: SW-846 3520C
Prep Date/Time: 7/30/2012 9:06:42AM
Prep Initial Wt./Vol.: 1000 mL
Prep Extract Vol: 5 mL

Print Date: 08/06/2012

N.C. Certification # 481

Blank Spike Summary

Blank Spike ID: LCS for HBN 26268 [XXX/2865]
Blank Spike Lab ID: 82588
Date Analyzed: 08/02/2012 12:56

Spike Duplicate ID: LCSD for HBN 26268 [XXX/2865]
Spike Duplicate Lab ID: 82589
Date Analyzed: 08/02/2012 13:19
Matrix: Water

QC for Samples: 31202360004

Results by SW-846 8270D

	Blank Spike (ug/L)			Spike Duplicate (ug/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Phenol	50.0	48.9	98	50.0	54.7	109	57.0-113	11	30.00
Bis(2-Chloroethyl)ether	50.0	44.6	89	50.0	49.5	99	61.0-117	10	30.00
2-Chlorophenol	50.0	46.3	93	50.0	51.4	103	57.0-110	10	30.00
1,3-Dichlorobenzene	50.0	36.1	72	50.0	40.5	81	22.0-101	11	30.00
1,4-Dichlorobenzene	50.0	36.9	74	50.0	41.3	83	25.0-102	11	30.00
1,2-Dichlorobenzene	50.0	38.5	77	50.0	43.1	86	29.0-102	11	30.00
2-Methylphenol	50.0	42.0	84	50.0	47.8	96	55.0-110	13	30.00
3 and/or 4-Methylphenol	100	96.6	97	100	108	108	53.0-118	11	30.00
Bis(2-Chloroisopropyl)ether	50.0	44.7	89	50.0	48.9	98	56.0-112	9.0	30.00
n-Nitrosodi-n-propylamine	50.0	39.6	79	50.0	45.2	90	53.0-115	13	30.00
Hexachloroethane	50.0	36.2	72	50.0	40.7	81	11.0-104	12	30.00
Nitrobenzene	50.0	47.3	95	50.0	50.8	102	63.0-115	7.1	30.00
Isophorone	50.0	49.5	99	50.0	52.8	106	64.0-121	6.5	30.00
2-Nitrophenol	50.0	48.2	96	50.0	52.9	106	58.0-115	9.3	30.00
2,4-Dimethylphenol	50.0	20.6	41	50.0	21.4	43	40.0-104	3.8	30.00
Bis(2-Chloroethoxy)methane	50.0	49.8	100	50.0	53.6	107	62.0-107	7.4	30.00
Benzoic acid	50.0	40.6	81	50.0	54.0	108	8.00-186	28	30.00
2,4-Dichlorophenol	50.0	49.2	98	50.0	53.7	107	58.0-118	8.7	30.00
1,2,4-Trichlorobenzene	50.0	45.4	91	50.0	48.9	98	45.0-108	7.4	30.00
Naphthalene	50.0	48.0	96	50.0	51.4	103	52.0-110	6.8	30.00
4-Chloroaniline	50.0	39.8	80	50.0	42.2	84	44.0-115	5.9	30.00
Hexachlorobutadiene	50.0	44.2	88	50.0	47.5	95	25.0-115	7.2	30.00
4-Chloro-3-methylphenol	50.0	51.1	102	50.0	55.3	111	56.0-119	7.9	30.00
2-Methylnaphthalene	50.0	48.8	98	50.0	52.4	105	55.0-112	7.1	30.00
Hexachlorocyclopentadiene	50.0	53.6	107	50.0	56.6	113	0.00-1430	5.4	30.00
2,4,5-Trichlorophenol	50.0	55.4	111	50.0	59.0	118	59.0-119	6.3	30.00
2,4,6-Trichlorophenol	50.0	51.0	102	50.0	54.6	109	58.0-116	6.8	30.00
2-Chloronaphthalene	50.0	44.4	89	50.0	47.7	95	57.0-105	7.2	30.00
2-Nitroaniline	50.0	43.9	88	50.0	46.1	92	53.0-108	4.9	30.00
3-Nitroaniline	50.0	46.3	93	50.0	47.8	96	54.0-116	3.2	30.00
Dimethyl phthalate	50.0	50.6	101	50.0	52.7	105	66.0-119	4.1	30.00
2,6-Dinitrotoluene	50.0	50.7	101	50.0	54.4	109	65.0-121	7.0	30.00
Acenaphthene	50.0	48.1	96	50.0	51.2	102	60.0-114	6.2	30.00
2,4-Dinitrophenol	50.0	43.7	87	50.0	51.0	102	1.00-157	15	30.00

Blank Spike Summary

Blank Spike ID: LCS for HBN 26268 [XXX/2865]
Blank Spike Lab ID: 82588
Date Analyzed: 08/02/2012 12:56

Spike Duplicate ID: LCSD for HBN 26268 [XXX/2865]
Spike Duplicate Lab ID: 82589
Date Analyzed: 08/02/2012 13:19
Matrix: Water

QC for Samples: 31202360004

Results by SW-846 8270D

	Blank Spike (ug/L)			Spike Duplicate (ug/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
4-Nitrophenol	50.0	50.0	100	50.0	53.8	108	38.0-123	7.3	30.00
Dibenzofuran	50.0	50.1	100	50.0	53.2	106	64.0-120	6.0	30.00
2,4-Dinitrotoluene	50.0	51.6	103	50.0	54.7	109	65.0-125	5.8	30.00
Fluorene	50.0	51.7	103	50.0	54.4	109	52.0-120	5.1	30.00
Diethyl phthalate	50.0	51.3	103	50.0	54.2	108	59.0-122	5.5	30.00
4-Chlorophenyl phenyl ether	50.0	51.8	104	50.0	54.0	108	61.0-113	4.2	30.00
4-Nitroaniline	50.0	47.1	94	50.0	48.9	98	53.0-123	3.8	30.00
4,6-Dinitro-2-methylphenol	50.0	46.2	92	50.0	53.8	108	30.0-128	15	30.00
Diphenylamine	50.0	47.6	95	50.0	52.8	106	51.0-114	10	30.00
4-Bromophenyl phenyl ether	50.0	50.9	102	50.0	54.8	110*	61.0-109	7.4	30.00
Hexachlorobenzene	50.0	49.2	98	50.0	52.7	105	53.0-110	6.9	30.00
Pentachlorophenol	50.0	49.9	100	50.0	54.9	110	32.0-132	9.5	30.00
Phenanthrene	50.0	52.5	105	50.0	56.0	112	53.0-115	6.5	30.00
Anthracene	50.0	45.3	91	50.0	49.2	98	50.0-113	8.3	30.00
Di-n-butyl phthalate	50.0	55.6	111	50.0	60.2	120	59.0-123	7.9	30.00
Fluoranthene	50.0	54.0	108	50.0	57.3	115	54.0-119	5.9	30.00
Pyrene	50.0	50.6	101	50.0	53.5	107	60.0-120	5.6	30.00
Butyl benzyl phthalate	50.0	49.1	98	50.0	53.0	106	61.0-128	7.6	30.00
Benzo(a)anthracene	50.0	48.9	98	50.0	52.0	104	57.0-119	6.1	30.00
3,3'-Dichlorobenzidine	50.0	43.8	88	50.0	45.6	91	37.0-136	4.0	30.00
Chrysene	50.0	50.5	101	50.0	53.4	107	59.0-117	5.6	30.00
Bis(2-Ethylhexyl)phthalate	50.0	50.3	101	50.0	53.5	107	63.0-122	6.2	30.00
Di-n-octyl phthalate	50.0	54.2	108	50.0	58.1	116	62.0-129	6.9	30.00
Benzo(b)fluoranthene	50.0	47.6	95	50.0	50.7	101	59.0-120	6.3	30.00
Benzo(k)fluoranthene	50.0	51.9	104	50.0	54.8	110	62.0-124	5.4	30.00
Benzo(a)pyrene	50.0	45.4	91	50.0	49.3	99	54.0-123	8.2	30.00
Indeno(1,2,3-cd)pyrene	50.0	55.1	110	50.0	58.5	117	59.0-127	6.0	30.00
Dibenz(a,h)anthracene	50.0	55.4	111	50.0	58.6	117	59.0-129	5.6	30.00
Benzo(g,h,i)perylene	50.0	56.9	114	50.0	60.0	120	60.0-126	5.3	30.00
Acenaphthylene	50.0	50.2	100	50.0	52.1	104	58.0-117	3.7	30.00
Surrogates									
2-Fluorophenol			76			81	33.1-118		
Phenol-d6			97			102	49.0-120		
Nitrobenzene-d5			98			98	46.0-118		

Print Date: 08/06/2012

N.C. Certification # 481

Blank Spike Summary

Blank Spike ID: LCS for HBN 26268 [XXX/2865]
Blank Spike Lab ID: 82588
Date Analyzed: 08/02/2012 12:56

Spike Duplicate ID: LCSD for HBN 26268 [XXX/2865]
Spike Duplicate Lab ID: 82589
Date Analyzed: 08/02/2012 13:19
Matrix: Water

QC for Samples: 31202360004

Results by SW-846 8270D

	Blank Spike (%)			Spike Duplicate (%)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
2-Fluorobiphenyl			102			100	50.0-107		
2,4,6-Tribromophenol			111			109	29.3-152		
Terphenyl-d14			99			97	22.1-142		

Batch Information

Analytical Batch: XMS1620
Analytical Method: SW-846 8270D
Instrument: MSD10
Analyst: CMP

Prep Batch: XXX2865
Prep Method: SW-846 3520C
Prep Date/Time: 07/30/2012 09:06
Spike Init Wt./Vol.: 1000 mL Extract Vol: 5 mL
Dupe Init Wt./Vol.: 1000 mL Extract Vol: 5 mL

CHAIN OF CUSTODY

SGS ANALYTICAL PERSPECTIVES
5500 Business Drive
Wilmington, NC 28405
+1 910 350 1903
WWW.SGS.COM

CLIENT: CATLIN / NCDOT
CONTACT: Ben Ashba @ CATLIN PHONE NO: 910 452-5861
PROJECT: NCDOT Parcel 107 SITE / PWSID / WBS #: 35781.1.2
REPORTS TO: Ben @ CATLIN U-3315 Diff County
EMAIL: ben.ashba@catlinusa.com
INVOICE TO: NCDOT QUOTE #
P.O. NUMBER NCDOT

SGS Reference #: 312023 60

PAGE 1 OF 1

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	# CONTAINERS	SAMPLE TYPE (C=COMP G=GRAB)	PRESERVATIVES USED: Sod. Bisulf. Meoh		HCl							ANALYSES REQUIRED: 8260 & 8270	8260 & 8270						REMARKS
	107 DPT-01 (4.5-5')	7.25.12	1400	SOIL	5	G										✓							@CB 1115
	107 DPT-02 (5-5.7')	7.25.12	1410	SOIL	5	G										✓							@CB 1111
BA	~~107 DPT-03 (5-5.5')~~		1330																				
	107 DPT-03 (5.5-6')	7.25.12	1500	SOIL	5	G										✓							@CB 1110
	107 DPT-02	7.26.12	1345	H_2O	4	G											✓						air in 1 VOA

COLLECTED/RELINQUISHED BY: (1)	DATE	TIME	RECEIVED BY:
Ben Ashba	7.26.12	1642	
Relinquished By: (2)	Date	Time	Received By:
Relinquished By: (3)	Date	Time	Received By:
Received For Laboratory By:	Date	Time	CoC Seal: INTACT BROKEN ABSENT Sample Receipt Temp: C 0.8°C

REPORT LEVEL: ☐ Level I ☒ Level II ☐ Level IV

REQUESTED TURNAROUND TIME: ☐ Rush:_____ ☒ Standard

SPECIAL DELIVERABLES: State of Origin: NC ☐ Trust Fund
☐ DoD ☒ EDD: Summary Other:_____

SPECIAL INSTRUCTIONS:

Shipping Carrier:
Shipping Ticket No:

Notes:

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SGS-00055 (06/12)

White - Retained by Lab
Yellow - Retained by Client

SGS North America Inc.

Sample Receipt Checklist (SRC)

Client: **NCDOT-Catlin** Work Order No.: **31202360**

1. ___ Shipped
   _X_ Hand Delivered

2. _X_ COC Present on Receipt
   ___ No COC
   ___ Additional Transmittal Forms

3. ___ Custody Tape on Container
   _X_ No Custody Tape

4. _X_ Samples Intact
   ___ Samples Broken / Leaking

5. _X_ Chilled on Receipt Actual Temp.(s) in °C: 0.8
   ___ Ambient on Receipt
   ___ Walk-in on Ice; Coming down to temp.
   ___ Received Outside of Temperature Specifications

6. _X_ Sufficient Sample Submitted
   ___ Insufficient Sample Submitted

7. ___ Chlorine absent
   ___ HNO3 < 2
   ___ HCL < 2
   ___ Additional Preservatives verified (see notes)

8. _X_ Received Within Holding Time
   ___ Not Received Within Holding Time

9. _X_ No Discrepancies Noted
   ___ Discrepancies Noted
   ___ NCDENR notified of Discrepancies*

10. _X_ No Headspace present in VOC vials
    ___ Headspace present in VOC vials >6mm

Notes:

Comments:

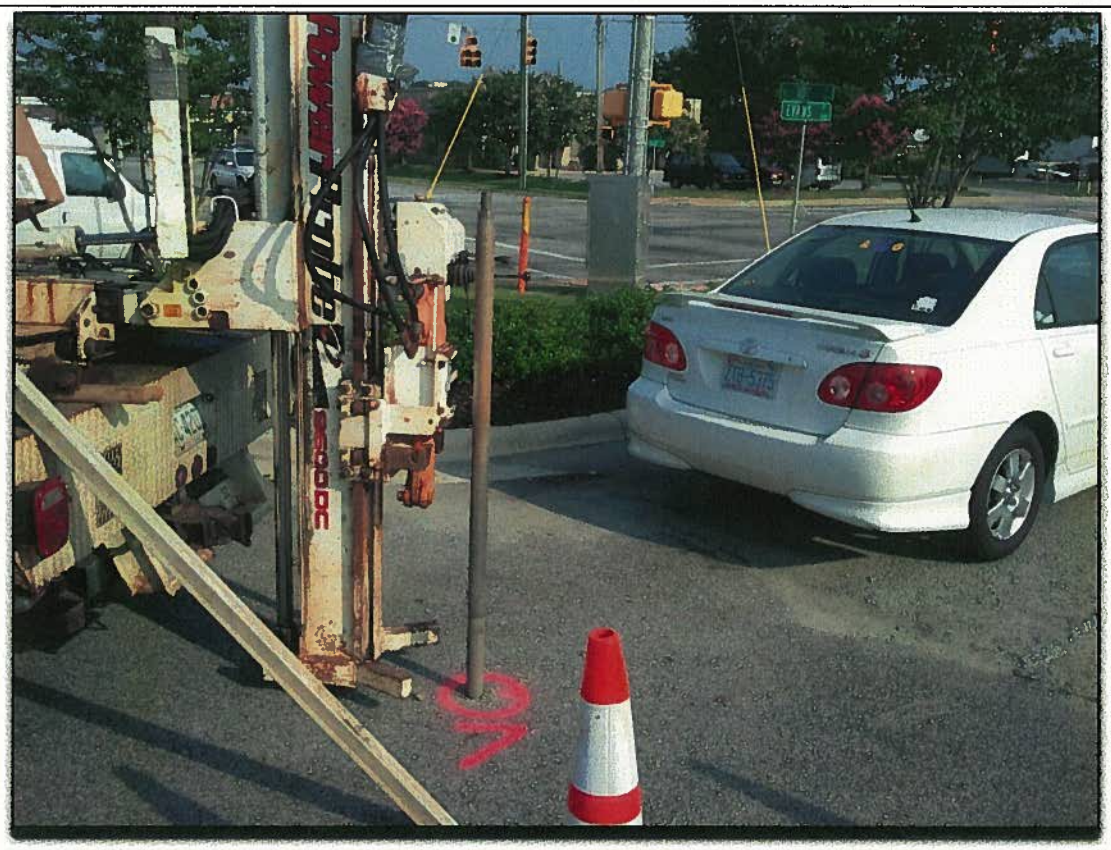
Inspected and Logged in by: JJ

Date: Thu-7/26/12 00:00

*NCDENR must be notified when collection, holding time or preservation requirements are not met. MI_11.6

APPENDIX E
PHOTOGRAPHS

PARCEL 107, BRODY PROPERTIES
930 EVANS STREET



PARCEL 107, BRODY PROPERTIES
930 EVANS STREET