PRELIMINARY SITE ASSESSMENT
FOR
PARCEL 103, EARL FAULKNER – FORMERLY ALADDIN TOWING, CURRENTLY PARAGON AUTO GROUP
116 WEST 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

SEPTEMBER 20, 2012
REVISED NOVEMBER 30, 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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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 103, Earl Faulkner property, formerly Aladdin Towing, currently Paragon Auto Group. The parcel/property is located at 116 West 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:

> *This site currently operates as a car lot. The site is located on the northeast quadrant of South Washington Street and West 10th Street. The physical layout of the property including convenient roadway access and concrete aprons suggests that the site may have operated as a gas station historically. There was no observed visual evidence of USTs. According to NCDENR's UST Section Registry there are no known facility IDs or groundwater incidents associated with this property.*

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 103). 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 103, Earl Faulkner property (formerly Aladdin Towing, currently Paragon Auto Group), 116 West 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. Slope stake cuts were identified on the cross-section provided by NCDOT within the subject site along alignment -L- near Station 81. 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 number 1007 (see Sheet 2).

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.

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 A. 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's field activities at the site began on August 1, 2012 and concluded on August 2, 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 103 followed by "DPT" and consecutive numbers starting with "01" (example: 103DPT-01). Borings were located at proposed catch basin number 1007 and along associated proposed piping. Borings were also advanced along the proposed ROW/easement. 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 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 B. As illustrated on Sheet 2, seven (7) 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: 103DPT-01(6-6.5 ft)]. The sample identifications are included on the Boring Logs in Appendix B and the laboratory analytical Chain of Custody in Appendix C.

Six (6) of the seven (7) PowerProbe borings were terminated at approximately eight (8) feet BLS. The 103DPT-01 boring was terminated at 16 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 C.

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) and the groundwater sample was also analyzed for volatile and semi-volatile organics per EPA Methods 8260B and 8270D BN.

A total of seven (7) soil samples and one (1) groundwater sample were submitted to SGS Analytical Perspectives (NC Certification #481). Chain of Custody documentation is included in Appendix C.

2.3 CONTAMINATED SOIL VOLUME

Four (4) soil volume calculations are provided as requested, the total contaminated soil volume across the site, the contaminated soil volume to be excavated for drainage feature installation, the contaminated soil volume to be excavated for water line and gas line installation, and the contaminated soil volume in the cut section. The calculated contaminated soil volumes are generally based on one (1) discrete sample depth per boring. The total volume calculation assumes the contamination extends vertically from the surface to the water table. The volume calculation for drainage feature installation assumes a vertical walled excavation two (2) feet wider than the drainage pipe width to one (1) foot below the final drainage feature installation invert elevation. The volume calculation for water line and gas line installation assumes an excavation 10 feet wide by five (5) feet deep as indicated by NCDOT. The cut soil volume is calculated using the average end-area method based on the estimated contaminated soil area within the cut area identified in the cross-section. Where the excavation areas for utility and/or drainage features may be in a cut section area, no consideration is taken to allow for overlapping soil volume calculations.

Sample results greater than the lowest Risk-Based Maximum Soil Contaminant Concentration (MSCC) or the lowest Inactive Hazardous Sites Branch (IHSB) Soil Remediation Goal (SRG) are considered contaminated. Contaminated soil volume is estimated from the midpoint distance between a "clean" sample location and contaminated sample location or to the property line or ROW/easement. As requested by NCDOT, the volume estimate will only include soils within parcel property limits, NCDOT ROW, and/or easement. Where soil samples are collected at, near, or below the water table and contaminant concentrations are revealed, contamination may not exist above the seasonal high water table capillary fringe and near the surface. The installation/construction contractor may be able to reduce the soil volume requiring disposal by screening soils during excavation.

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 former dry

cleaning business building is located southeast of the subject site and a DSCA site is located approximately 400 feet east.

Historical aerial photographs were also reviewed and there was no evidence of a gas/service station at the site.

Geophysical Investigation

The complete geophysical investigation report by Schnabel is included in Appendix A and indicates that metallic USTs are unlikely to be encountered within 8 feet of the ground surface in the areas surveyed on the subject property.

Site Reconnaissance

CATLIN personnel identified the proposed drainage feature locations and photographs of the site are provided in Appendix D. Additional photographs are included in the Schnabel report provided in Appendix A. As shown in the photographs, the Paragon Auto Group currently operates a used car sales lot at the site. An office building/trailer is located outside the proposed ROW and easement.

Soil and Groundwater

Sandy clay / clayey sand soils with varying amounts of silt and clean sands were encountered across the project site. Generally, clay content increased with depth. No petroleum/hydrocarbon odor was noted in soils collected from any of the borings. Complete boring logs including OVA/PID results are provided in Appendix B.

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, Tetrachloroethene ("Perc") concentrations were reported at 20.5 micrograms per kilogram (ug/kg) in the 103DPT-01 (6-6.5ft) soil sample collected from proposed catch basin 1007 location. The "Perc" concentrations at proposed catch basin 1007 location are above the UST Section Soil-To-Groundwater (STGW) MSCC of 7.4 ug/kg and the IHSB Protection of Groundwater Preliminary SRG of 5 ug/kg but below IHSB Preliminary Residential Health-Based SRG of 17,000 ug/kg. "Perc" concentrations were detected above the STGW MSCC and lowest IHSB PRG in the samples collected along proposed drainage line from borings 103DPT-02 and -03. Additionally, "Perc" concentrations were above the STGW MSCC and lowest IHSB SRG in samples collected from borings 103DPT-05, -06, and -07. No other EPA Method 8260B or EPA Method 8270D BN parameters were revealed above the lowest MSCCs or SRGs in any of the soil samples. The boring 103DPT-04 is located near the southwest property corner, [approximately 25 feet west of 103DPT-03 and approximately

75 west of the proposed catch basin 1007 location (103DPT-01)] and had no detectable "Perc" concentrations.

Summarized groundwater sample analytical results are provided on Table 2 and Sheet 2. Tetrachloroethene was revealed in the 103DPT-01 groundwater sample (at proposed catch basin number 1007) at a concentration of 303 micrograms per liter (ug/L) which is above the 2L GWQS of 0.7 ug/L. No other EPA Method 8260B parameters or any EPA Method 8270D BN parameters were detected above the 2L GWQS. Depth to groundwater was measured at approximately 8.5 feet BLS. The complete laboratory analytical report is provided in Appendix C.

Contaminated Soil Volume

In the event a cut is required for roadway construction or utility installation, any soil samples revealing detectable Total Petroleum Hydrocarbon (TPH) concentrations or Risk-Based analysis parameters above the lowest MSCC will be considered impacted for handling and disposal purposes. The estimated extent of Tetrachloroethene contaminated soil greater than the STGW MSCC is illustrated on Sheet 2 within the red dashed line and skull symbols. The extent of potentially impacted soil beyond the proposed ROW and/or easement and Parcel 103 property line(s) is not considered for volume estimating purposes. While discreet soil samples were collected from soils that may be below the seasonal high water table, soil volume estimate is based on the assumption that impacted soils exist from just below the surface to the assumed water table at roughly eight (8) feet BLS.

The area illustrated with a red dashed line and skull symbols on Sheet 2 is roughly 4,830 square feet. If all soils within this area were excavated to eight (8) feet deep, the volume would be approximately 1,430 cubic yards. However, it should be noted that this area includes a portion along South Washington Street and north of 103DPT-07 where no samples were collected.

The estimated contaminated soil volume to be removed for installation of the proposed catch basin number 1007 and associated piping is based on an assumed excavation width of 4.5 feet for installation of a 30 inch wide pipe. Also, it is assumed, (based on information provided by NCDOT) that the current surface elevation at the proposed catch basin 1007 location is 44.9 feet and the bottom of the excavation necessary for proposed drainage feature construction will be approximately 38.40 feet. Therefore, an excavation for drainage feature installation from the estimated extent of the contaminated soil east of proposed catch basin 1007 to the eastern property line north will be approximately 70 linear feet long, by 4.5 feet wide, and 6.5 feet deep, which equals roughly 76 cubic yards.

The estimated contaminated soil volume to be removed for gas line and water line installation includes approximately 78 linear feet within the estimated extent of contamination. Therefore, an excavation from the estimated western extent of contamination to the eastern property line, 10 feet wide by five (5) feet deep equals roughly 144 cubic yards.

The proposed cut section near Alignment -L- Station 81 that is within the estimated extent of contaminated soil is approximately 10 cubic yards.

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.

Soils and groundwater impacted with "Perc" were revealed in samples collected from along the proposed drainage features and within the proposed ROW and easement. The potential source for the "Perc" appears to be associated with former dry cleaning operations in the building across (south) 10th Street. A rough volume estimate of the contaminated soil within the property is 1,430 cubic yards. The approximate contaminated soil volume to be removed within the property for drainage feature installation including catch basin 1007 is 76 cubic yards. The approximate contaminated soil volume to be removed for gas line and water line installation is 144 cubic yards. The cut section within the estimated extent of contaminated soil is roughly 10 cubic yards. These volume estimates include soil near the surface that may not be contaminated. The cut section volume estimate does not included soils beyond the property limits and beneath the current road. Additionally, where groundwater contamination is known or suspected and excavation is necessary into the water table, those excavated soils may be contaminated. Subsequent sampling may be necessary for possible waste disposal determination.

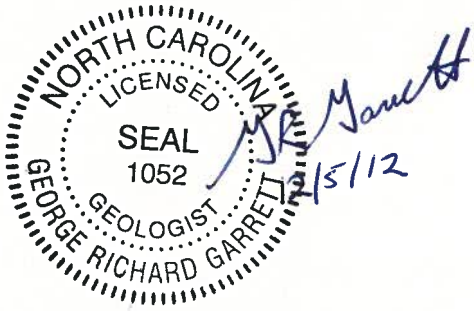
Based on geophysical survey results, site reconnaissance, and NCDENR file review information, there are no USTs suspected at the site.

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 103, Earl Faulkner– Formerly Aladdin Towing, Currently Paragon Auto Group
116 W. 10th Street

Sample ID	Method →		EPA Method 8260B						EPA Method 8270D Base Neutral
	Contaminant of Concern →		Acetone	Chloroform	Methylene chloride	Tetrachloroethene ("Perc")	Toluene	All other EPA Method 8260B Parameters	All EPA Method 8270D Base Neutral Parameters
	Date Collected	Location							
103DPT-01 (6-6.5ft)	8/1/12	@ CB 1007	<4.29	<0.682	2.95 J	**20.5**	1.28 J	BMDL	BMDL
103DPT-02 (5-5.5ft)	8/1/12	≈25' West of DPT-01 and CB 1007 along proposed drainage	<4.60	<0.731	1.47 J	**208**	<0.789	BMDL	BMDL
103DPT-03 (5.5-6ft)	8/1/12	≈25' West of DPT-02 along proposed drainage	<4.24	<0.674	1.97 J	**14.6**	0.761 J	BMDL	BMDL
103DPT-04 (5-5.5ft)	8/1/12	≈25' West of DPT-03 along proposed drainage	<4.03	0.653 J	2.74 J	<0.755	1.27 J	BMDL	BMDL
103DPT-05 (7-8ft)	8/2/12	≈40' North of DPT-02 along proposed easement	12.8 J	<0.751	4.29 J	**208**	1.90 J	BMDL	BMDL
103DPT-06 (7-8ft)	8/2/12	≈40' North of DPT-03 along proposed easement	<49.9	<8.03	<8.78	**347**	<7.69	BMDL	BMDL
103DPT-07 (7-8ft)	8/2/12	≈58' North of DPT-03 and DPT-04 along proposed easement	17.3 J	<0.701	2.11 J	**127**	0.837 J	BMDL	BMDL
Preliminary Residential Health Based SRG (ug/kg)			12,000,000	290	56,000	17,000	820,000	Varies	Varies
Preliminary Industrial Health Based SRG (ug/kg)			100,000,000	1,500	620,000	82,000	820,000	Varies	Varies
Protection of Groundwater Preliminary SRG(ug/kg)			24,000	340	23	5	5,500	Varies	Varies
Residential MSCC (ug/kg)			14,000,000	20,000	85,000	1,100	1,200,000	Varies	Varies
Industrial/Commercial MSCC (ug/kg)			360,000,000	180,000	763,000	10,000	32,000,000	Varies	Varies
STGW MSCC (ug/kg)			24,000	370	20	7.4	4,300	Varies	Varies
NC "Contained-Out" Level for Unrestricted Use (ug/kg)			2,800	220	20	7.4	7,300	Varies	Varies

All results in micrograms per kilogram (ug/kg).
Sample depth below land surface provided in parenthesis as part of the sample identification.
CB = Proposed Catch Basin
BMDL = Below Method Detection Limit, refer to anlaytical report for a complete list of paramters and detection limits
< = Less than method detection limit
J = Estimated Concentration
STGW = Soil To Groundwater
Bold results indicate concentrations above the lowest Maximum Soil Contaminant Concentration (MSCC) or Soil Remediation Goal (SRG).
NC "Contained-Out" Levels for Unrestricted Use are provided for general information and are not applicable for comparison to in-situ soil sample results.

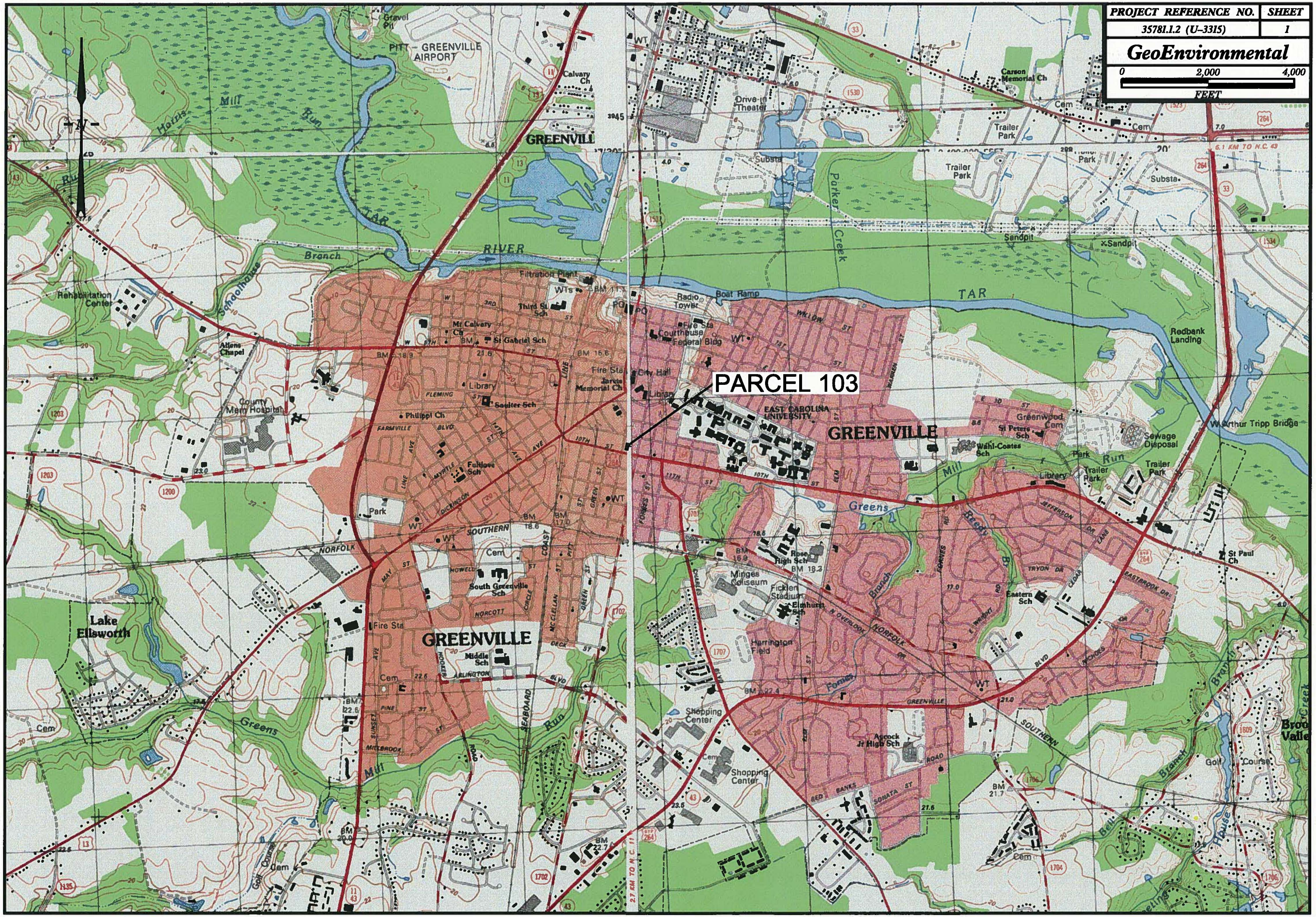
TABLE 2
SUMMARY OF GROUNDWATER LABORATORY RESULTS - EPA METHODS 8260B AND 8270D BASE NEUTRAL

Parcel 103, Earl Faulkner– Formerly Aladdin Towing, Currently Paragon Auto Group
116 W. 10th Street

Sample ID	Method →		EPA Method 8260B					EPA Method 8270D Base Neutral
	Contaminant of Concern →		cis-1,2-Dichloroethene	Tetrachloroethene ("Perc")	Toluene	Trichloroethene (TCE)	All other EPA Method 8260B Parameters	All EPA Method 8270D Base Neutral Parameters
	Date Collected	Location						
103DPT-01	8/1/12	@ CB 1007	2.14	**303**	0.290 J	1.22	BMDL	BMDL
		2L GWQS (ug/L)	70	0.7	600	3	Varies	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
Bold results indicate concentrations above the NCAC T15A:02L Groundwater Quality Standards (2L GWQS).
CB = Proposed Catch Basin
J = Estimated Concentration
< = Less than method detection limit

SHEETS


PROJECT REFERENCE NO.
35781.1.2 (U-3315)
SHEET
1
GeoEnvironmental
0
2,000
4,000
FEET
PARCEL 103
GREENVILLE
GREENVILLE
GREENVILLE
EAST CAROLINA UNIVERSITY
TAR RIVER
TAR
PITT - GREENVILLE AIRPORT
Lake Ellsworth
Redbank Landing
Sewage Disposal
Trailer Park
Drive-in Theater
Carson Memorial Ch
Rehabilitation Center
Allens Chapel
County Mem Hospital
Philippi Ch
Library
Fire Sta
City Hall
Courthouse
Federal Bldg
Radio Tower
Boat Ramp
Filtration Plant
Third St Sch
Mt Calvary Ch
St Gabriel Sch
Sadler Sch
Fullove Sch
Park
South Greenville Sch
Middle Sch
Minges Coliseum
Ficklen Stadium
Elmhurst Sch
Rose High Sch
Harrington Field
Shopping Center
Aycock Jr High Sch
Eastern Sch
Wahl-Coates Sch
St Peters Sch
Greenwood Cem
W. Arthur Tripp Bridge
St Paul Ch
Greens Mill Run
Parker Creek
Schoolhouse Branch
Harris Mill Run
Gravel Pit
Calvary Ch
Sandpit
Golf Course
6.1 KM TO N.C. 43
2.7 KM TO N.C. 11

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
- RR Signal Milepost (CSX TRANSPORTATION, 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 (C)
- Proposed Slope Stakes Fill (F)
- Proposed Curb Ramp
- Curb Cut Future Ramp
- 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 HW)

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

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.*)

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

SANITARY SEWER:
- Sanitary Sewer Manhole
- Sanitary Sewer Cleanout
- U/G Sanitary Sewer Line (SS)
- 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 (UNK)
- 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.)

SUMMARY OF SOIL LABORATORY RESULTS - EPA METHODS 8260B AND 8270D BASE NEUTRAL
Parcel 103, Earl Faulkner– Formerly Aladdin Towing, Currently Paragon Auto Group
116 W. 10th Street

Sample ID	Method →		EPA Method 8260B						EPA Method 8270D Base Neutral
	Contaminant of Concern →		Acetone	Chloroform	Methylene chloride	Tetrachloroethene ("Perc")	Toluene	All other EPA Method 8260B Parameters	All EPA Method 8270D Base Neutral Parameters
	Date Collected	Location							
103DPT-01 (6-6.5ft)	8/1/12	@ CB 1007	<4.29	<0.682	2.95 J	**20.5**	1.28 J	BMDL	BMDL
103DPT-02 (5-5.5ft)	8/1/12	≈25' West of DPT-01 and CB 1007 along proposed drainage	<4.60	<0.731	1.47 J	**208**	<0.789	BMDL	BMDL
103DPT-03 (5.5-6ft)	8/1/12	≈25' West of DPT-02 along proposed drainage	<4.24	<0.674	1.97 J	**14.6**	0.761 J	BMDL	BMDL
103DPT-04 (5-5.5ft)	8/1/12	≈25' West of DPT-03 along proposed drainage	<4.03	0.653 J	2.74 J	<0.755	1.27 J	BMDL	BMDL
103DPT-05 (7-8ft)	8/2/12	≈40' North of DPT-02 along proposed easement	12.8 J	<0.751	4.29 J	**208**	1.90 J	BMDL	BMDL
103DPT-06 (7-8ft)	8/2/12	≈40' North of DPT-03 along proposed easement	<49.9	<8.03	<8.78	**347**	<7.69	BMDL	BMDL
103DPT-07 (7-8ft)	8/2/12	≈58' North of DPT-03 and DPT-04 along proposed easement	17.3 J	<0.701	2.11 J	**127**	0.837 J	BMDL	BMDL
Preliminary Residential Health Based SRG (ug/kg)			12,000,000	290	56,000	17,000	820,000	Varies	Varies
Preliminary Industrial Health Based SRG (ug/kg)			100,000,000	1,500	620,000	82,000	820,000	Varies	Varies
Protection of Groundwater Preliminary SRG(ug/kg)			24,000	340	23	5	5,500	Varies	Varies
Residential MSCC (ug/kg)			14,000,000	20,000	85,000	1,100	1,200,000	Varies	Varies
Industrial/Commercial MSCC (ug/kg)			360,000,000	180,000	763,000	10,000	32,000,000	Varies	Varies
STGW MSCC (ug/kg)			24,000	370	20	7.4	4,300	Varies	Varies
NC "Contained-Out" Level for Unrestricted Use (ug/kg)			2,800	220	20	7.4	7,300	Varies	Varies

All results in micrograms per kilogram (ug/kg).
Sample depth below land surface provided in parenthesis as part of the sample identification.
CB = Proposed Catch Basin
BMDL = Below Method Detection Limit, refer to anlaytical report for a complete list of paramters and detection limits

SUMMARY OF GROUNDWATER LABORATORY RESULTS - EPA METHODS 8260B AND 8270D BASE NEUTRA
Parcel 103, Earl Faulkner– Formerly Aladdin Towing, Currently Paragon Auto Group
116 W. 10th Street

Sample ID	Method →		EPA Method 8260B					EPA Method 8270D Base Neutral
	Contaminant of Concern →		cis-1,2-Dichloroethene	Tetrachloroethene ("Perc")	Toluene	Trichloroethene (TCE)	All other EPA Method 8260B Parameters	All EPA Method 8270D Base Neutral Parameters
	Date Collected	Location						
103DPT-01	8/1/12	@ CB 1007	2.14	**303**	0.290 J	1.22	BMDL	BMDL
2L GWQS (ug/L)			70	0.7	600	3	Varies	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
Bold results indicate concentrations above the NCAC T15A:02L Groundwater Quality Standards (2L GWQS).
CB = Proposed Catch Basin
J = Estimated Concentration
< = 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

NOTES:
- BORING ID'S PREFACED WITH "103" UNLESS OTHERWISE NOTED
- DARK GRAYSCALE BORINGS ASSOCIATED WITH NEARBY PROJECTS
- AERIAL PHOTOGRAPHS OBTAINED FROM NCDOT
- PROPOSED DETAILS OBTAINED FROM NCDOT

WALTER L WILLIAMS & WF MARIE WILLIAMS
S. WASHINGTON ST.
FAULKNER, EARL 116 W. 10TH ST.
MCCARTHY ROBERT F
BRADLEY SYDNOR PROPERTIES, LLC D.B. 832, PG. 848
W. 10TH ST.

APPENDICES

APPENDIX A
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 103, Earl Faulkner Property, 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 two 8.5x11 color figures.

INTRODUCTION

The work described in this report was performed on July 13 and 25, 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 northeast quadrant of S Washington Street and W 10th 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

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11A Oak Branch Drive / Greensboro, NC / 27407

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 103 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 anomalies of unknown cause, in addition to those apparently caused by buried utilities or known site features (Figures 3 and 4). The GPR data indicate that the EM anomalies of unknown cause are probably caused by buried metal pipes. The GPR data collected at the site do not indicate the presence of metallic USTs within the areas surveyed.

CONCLUSIONS

Our evaluation of the geophysical data collected on the subject property on Project U-3315 in Greenville, NC indicates that metallic USTs are unlikely to be encountered within 8 feet of the ground surface in the areas surveyed on the subject property.

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 (4)
CC: NCDOT, Gordon Box
FILE: G:\2011-SDE-JOBS\11821014_00_NCDOT_2011_GEOTECHNICAL_UNIT_SERVICES\11821014_17_U-3315_PITT_COUNTY\REPORT\PARCEL 103\SCHNABEL GEOPHYSICAL REPORT ON PARCEL 103 (U-3315).DOCX

Parcel 103 (Earl Faulkner Property), looking northeast

Parcel 103 (Earl Faulkner Property), looking north

Schnabel ENGINEERING	STATE PROJECT U-3315 NC DEPT. OF TRANSPORTATION PITT COUNTY, NORTH CAROLINA PROJECT NO. 11821014.17	PARCEL 103 SITE PHOTOS FIGURE 1

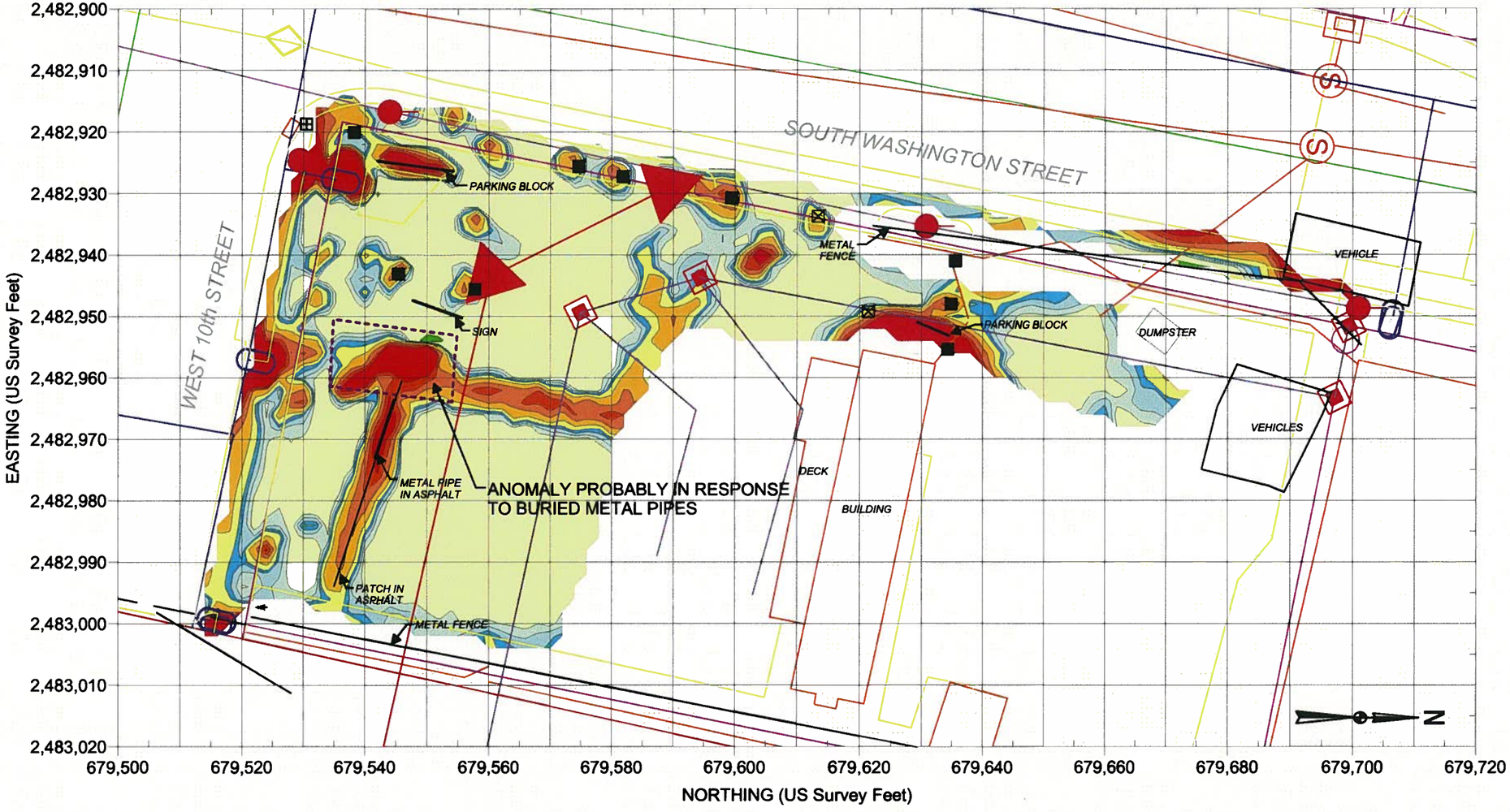
Geonics EM61-MK2 Metal Detector with Trimble DGPS Unit

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 103



EXPLANATION

- MISCELLANEOUS METALLIC OBJECT
- UTILITY MANHOLE, METER, BOX, ETC.
- STORMSEWER INLET
- EDGE OF NCDOT PROPOSED R/W
- PROPERTY LINE
- GPR SURVEY AREA

REF.: NCDOT FILE: u3315_rdy_psh10.dgn
(FOR SOME SITE FEATURES)

Scale in US Survey Feet

0 20 40 60

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 25, 2012, using a Geophysical Survey Systems SIR 3000 equipped with a 400 MHz antenna.

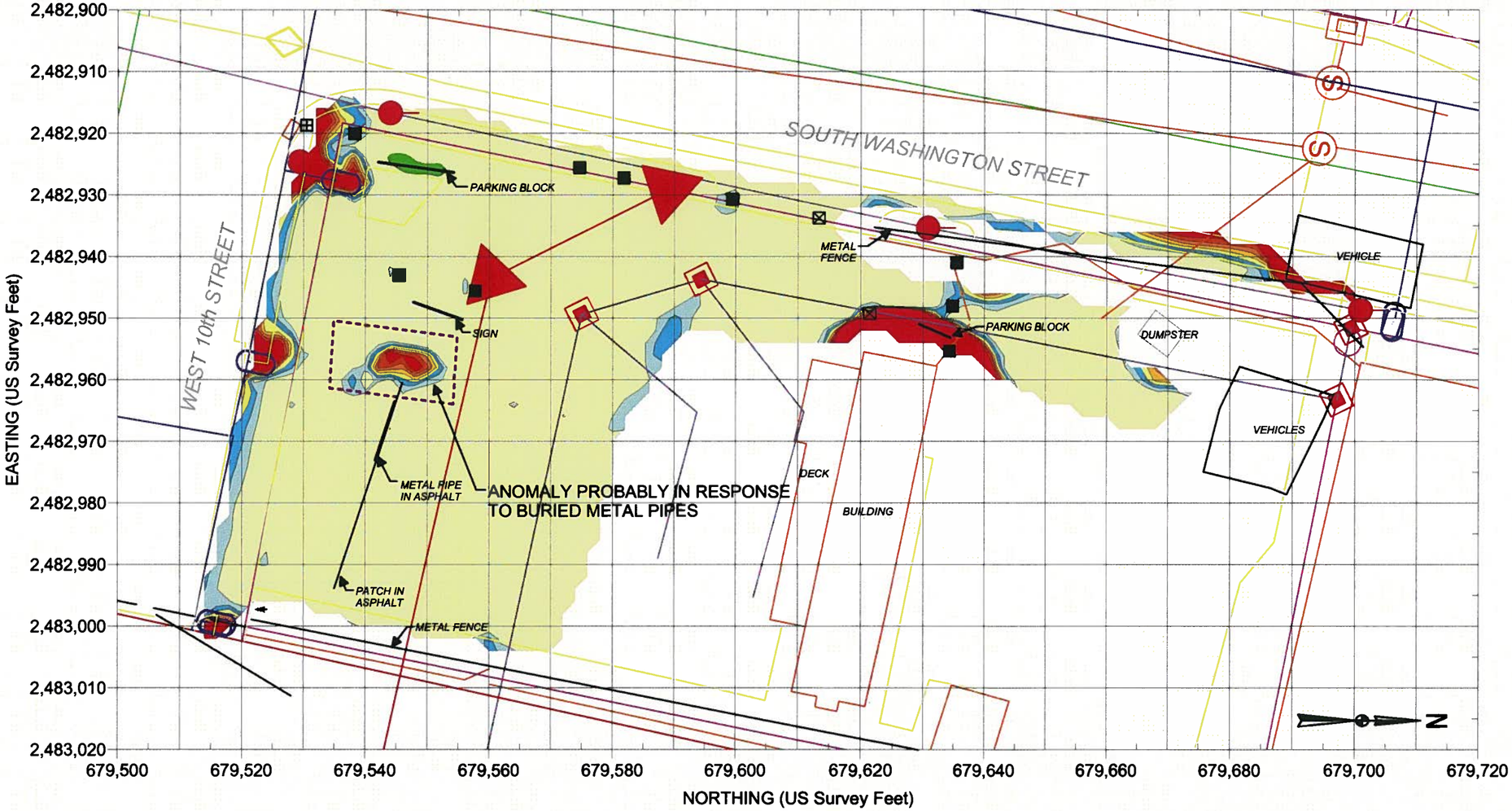
Schnabel ENGINEERING

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

EM61
EARLY TIME GATE
RESPONSE

FIGURE 3

PARCEL 103



EXPLANATION

- MISCELLANEOUS METALLIC OBJECT
- UTILITY MANHOLE, METER, BOX, ETC.
- STORMSEWER INLET
- EDGE OF NCDOT PROPOSED R/W
- PROPERTY LINE
- GPR SURVEY AREA

REF.: NCDOT FILE: u3315_rdy_psh10.dgn
(FOR SOME SITE FEATURES)

Scale in US Survey Feet

0 20 40 60

EM61 Differential Response (mV)

-20000 -100 0 40 80 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 25, 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

APPENDIX B
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 103 - Earl Faulkner - Aladdin Towing		LOGGED BY:	Ben Ashba	BORING ID:	103DPT-01	
			DRILLER:	William J. Miller			
NORTHING:	679,525.00	EASTING: 2,482,992.00	CREW:	Corey Futral			
SYSTEM: NCSP NAD 83 (USft)		BORING LOCATION: @ CB 1007			LAND ELEV.:	NM	
DRILL MACHINE:	Power Probe	METHOD:	CPT / DPT	0 HOUR DTW:	8.5	BORING DEPTH:	16.0
START DATE:	8/1/12	FINISH DATE:	8/1/12	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.	
		W	0		SM			Dk gray grading to med. tan, Silty SAND.	
2.0			0				3.0		
					CL		4.0	Med. tan grading to brown/orange Sandy CLAY.	
4.0			0						
6.0			0	DPT-01 (6-6.5')	CH			Med. gray w/orange mottling, CLAY.	
6.5			0				8.0		
8.0				▽				Blind point to 16ft. (No Recovery)	
16.0							16.0	Boring Terminated at Depth 16.0 ft	

▽ = 0hr. DTW ▼ = 24hr. DTW

CATLIN ENVIRO LOG 212077_GREENVILLE-PSAS_U3315.GPJ CATLIN.GDT 9/11/12

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 103 - Earl Faulkner - Aladdin Towing		LOGGED BY: Ben Ashba	BORING ID: 103DPT-02
		DRILLER: William J. Miller	
NORTHING: 679,530.00	EASTING: 2,482,969.00	CREW: Corey Futral	
SYSTEM: NCSP NAD 83 (USft)	BORING LOCATION: 25' W of CB 1007		LAND ELEV.: NM
DRILL MACHINE: Power Probe	METHOD: CPT / DPT	0 HOUR DTW: N/A	BORING DEPTH: 8.0
START DATE: 8/1/12	FINISH DATE: 8/1/12	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					GW		ASPHALT.	0.5	
		W	▲1		SM		Dk to med. brown/tan, med. SAND grading to tan Silty SAND.		
2.0									
			▲2					3.0	
4.0					CL		Med. brown w/orange, Sandy CLAY.		
			▲2					5.0	
5.0			▲2	DPT-02 (5-5.5')					
5.5			▲2						
6.0					CH		Med. brown w/orange, CLAY. Tr. f. sand at base of sample.		
			▲3						
8.0							Boring Terminated at Depth 8.0 ft		

▽ = 0hr. DTW ▼ = 24hr. DTW

CATLIN ENVIRO LOG 212077 GREENVILLE-PSAS U3315.GPJ CATLIN.GDT 9/11/12

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 103 - Earl Faulkner - Aladdin Towing		LOGGED BY: Ben Ashba	BORING ID: 103DPT-03
		DRILLER: William J. Miller	
NORTHING: 679,536.00	EASTING: 2,482,945.00	CREW: Corey Futral	
SYSTEM: NCSP NAD 83 (USft)	BORING LOCATION: 25' W of 103DPT-02		LAND ELEV.: NM
DRILL MACHINE: Power Probe	METHOD: CPT / DPT	0 HOUR DTW: N/A	BORING DEPTH: 8.0
START DATE: 8/1/12	FINISH DATE: 8/1/12	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.	
			▲2		SM		1.5	Dk gray grading to tan, Silty SAND.	
2.0					CL		3.0	Med. brown w/orange mottling, Sandy CLAY.	
			▲2						
4.0									
			▲2		CH		7.0	Med. brown w/orange mottling, CLAY.	
5.5				DPT-03 (5-5.5')					
6.0			▲2						
			▲2		CL		8.0	Sandy CLAY.	
8.0								Boring Terminated at Depth 8.0 ft	

▽ = 0hr. DTW ▼ = 24hr. DTW

CATLIN ENVIRO LOG 212077_GREENVILLE-PSAS_U3315.GPJ CATLIN.GDT 9/11/12

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 103 - Earl Faulkner - Aladdin Towing		LOGGED BY: Ben Ashba		BORING ID: 103DPT-04	
		DRILLER: William J. Miller			
NORTHING: 679,542.00	EASTING: 2,482,920.00	CREW: Corey Futral			
SYSTEM: NCSP NAD 83 (USft)	BORING LOCATION: 25' W of 103DPT-03			LAND ELEV.: NM	
DRILL MACHINE: Power Probe	METHOD: CPT / DPT		0 HOUR DTW: N/A	BORING DEPTH: 8.0	
START DATE: 8/1/12	FINISH DATE: 8/1/12		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							0.2	ASPHALT	
					GW		0.5	Brick frags.	
			▲1		SM		1.0	Tan, Silty SAND.	
2.0					CL		4.0	Brown w/orange, Sandy CLAY.	
4.0			▲2						
5.0			▲2	DPT-04 (5-5.5')					
5.5			▲2		CH		7.0	CLAY w/tr. sand.	
6.0									
					CL		8.0	Sandy CLAY.	
8.0								Boring Terminated at Depth 8.0 ft	

▽ = 0hr. DTW ▼ = 24hr. DTW

CATLIN ENVIRO LOG 212077_GREENVILLE-PSAS_U3315.GPJ_CATLIN.GDT 9/11/12

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 103 - Earl Faulkner - Aladdin Towing		LOGGED BY: Ben Ashba	BORING ID: 103DPT-05
		DRILLER: William J. Miller	
NORTHING: 679,568.00	EASTING: 2,482,981.00	CREW: Corey Futral	
SYSTEM: NCSP NAD 83 (USft)	BORING LOCATION: E. side of property on Easement line.		LAND ELEV.: NM
DRILL MACHINE: Power Probe	METHOD: CPT / DPT	0 HOUR DTW: N/A	BORING DEPTH: 8.0
START DATE: 8/2/12	FINISH DATE: 8/2/12	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.	
			▲0		SM		2.0	Dk gray to black, Silty f. SAND. Wet to saturated ~1.5-2' BLS.	
2.0			▲0		CL		4.5	Brown w/tr. orange mottling, Sandy CLAY.	
4.0			▲0		CH		7.5	Lt gray w/orange and tr. red, CLAY.	
6.0			▲0						
7.0			▲0	DPT-05 (7-8')	CL		8.0	S.A.A. grading back to Sandy CLAY.	
8.0								Boring Terminated at Depth 8.0 ft	

▽ = 0hr. DTW ▼ = 24hr. DTW

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 103 - Earl Faulkner - Aladdin Towing		LOGGED BY: Ben Ashba	BORING ID: 103DPT-06
		DRILLER: William J. Miller	
NORTHING: 679,574.00	EASTING: 2,482,958.00	CREW: Corey Futral	
SYSTEM: NCSP NAD 83 (USft)	BORING LOCATION: 25' W of 103DPT-05		LAND ELEV.: NM
DRILL MACHINE: Power Probe	METHOD: CPT / DPT	0 HOUR DTW: N/A	BORING DEPTH: 8.0
START DATE: 8/2/12	FINISH DATE: 8/2/12	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.	
		W	0		SM		2.0	Dk gray to lt tan, Silty SAND.	
2.0									
			0						
4.0									
			0		CL			Lt gray w/orange and red staining and mottling, Sandy CLAY.	
6.0									
			0						
7.0									
			0	DPT-06 (7-8')			8.0		
8.0								Boring Terminated at Depth 8.0 ft	

▽ = 0hr. DTW ▼ = 24hr. DTW

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 103 - Earl Faulkner - Aladdin Towing		LOGGED BY: Ben Ashba	BORING ID: 103DPT-07
		DRILLER: William J. Miller	
NORTHING: 679,594.00	EASTING: 2,482,944.00	CREW: Corey Futral	
SYSTEM: NCSP NAD 83 (USft)	BORING LOCATION: W. side of property along easement.		LAND ELEV.: NM
DRILL MACHINE: Power Probe	METHOD: CPT / DPT	0 HOUR DTW: N/A	BORING DEPTH: 8.0
START DATE: 8/2/12	FINISH DATE: 8/2/12	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.	
			▲0		SM		2.0	Dk gray and lt tan Silty SAND.	
2.0			▲0						
4.0			▲0		CL			Lt gray and brown w/red and orange staining and mottling, Sandy CLAY.	
6.0			▲0						
7.0			▲0	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 9/11/12

APPENDIX C

LABORATORY REPORT AND CHAIN OF CUSTODY RECORD

SGS ANALYTICAL PERSPECTIVES

Laboratory Report of Analysis

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

Report Number: **31202487**

Client Project: **NCDOT Parcel 103**

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 14:12:53 -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.

Sample Summary

Client Sample ID	Lab Sample ID	Collected	Received	Matrix
103DPT-01 (6-6.5ft)	31202487001	08/01/2012 15:20	08/03/2012 15:00	Soil-Solid as dry weight
103DPT-02 (5-5.5ft)	31202487002	08/01/2012 15:30	08/03/2012 15:00	Soil-Solid as dry weight
103DPT-03 (5.5-6ft)	31202487003	08/01/2012 15:50	08/03/2012 15:00	Soil-Solid as dry weight
103DPT-04 (5-5.5ft)	31202487004	08/01/2012 16:10	08/03/2012 15:00	Soil-Solid as dry weight
103DPT-05 (7-8ft)	31202487005	08/02/2012 07:40	08/03/2012 15:00	Soil-Solid as dry weight
103DPT-06 (7-8ft)	31202487006	08/02/2012 08:00	08/03/2012 15:00	Soil-Solid as dry weight
103DPT-07 (7-8ft)	31202487007	08/02/2012 08:10	08/03/2012 15:00	Soil-Solid as dry weight
103DPT-01	31202487008	08/01/2012 15:30	08/03/2012 15:00	Water
Trip Blank (Not on CoC)	31202487009	08/01/2012 00:00	08/03/2012 15:00	Water

Case Narrative

103DPT-01
Volatiles - The Method Blank associated with batch VMS2461 has a reported 'J' concentration for Methylene Chloride.

103DPT-01 (6-6.5ft)
8260 - An MS and DUP were not analyzed with batch VMS2451 due to an autosampler error.

103DPT-02 (5-5.5ft)
8260 - The method blank associated with batch VMS2459 has a reported 'J' concentration for Methylene Chloride.

103DPT-03 (5.5-6ft)
8260 - An MS and DUP were not analyzed with batch VMS2451 due to an autosampler error.

103DPT-04 (5-5.5ft)
8260 - An MS and DUP were not analyzed with batch VMS2451 due to an autosampler error.

103DPT-05 (7-8ft)
8260 - The method blank associated with batch VMS2459 has a reported 'J' concentration for Methylene Chloride.

103DPT-07 (7-8ft)
8260 - The method blank associated with batch VMS2459 has a reported 'J' concentration for Methylene Chloride.

105DPT-12 (6-7ft)(83867DUP)
8260 - The method blank associated with batch VMS2459 has a reported 'J' concentration for Methylene Chloride.

105DPT-13 (6-7ft)(83868MS)
8260 - The method blank associated with batch VMS2459 has a reported 'J' concentration for Methylene Chloride.

LCS for HBN 26888 [VXX/3789]
Volatiles - The Method Blank associated with batch VMS2461 has a reported 'J' concentration for Methylene Chloride.

LCSD for HBN 26888 [VXX/3789]
Volatiles - The Method Blank associated with batch VMS2461 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 26881 [VXX/3787
8260 - The method blank associated with batch VMS2459 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 26881 [VXX/3787]
8260 - The method blank associated with batch VMS2459 has a reported 'J' concentration for Methylene Chloride.

MB for HBN 26888 [VXX/3789]
Volatiles - The Method Blank associated with batch VMS2461 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.

Case Narrative

MB-S for HBN 26873 [VXX/3785]

8260 - This medium soil method blank, associated with batch VMS2457, has a reported 'J' concentration for Methylene Chloride.

MB-S for HBN 26881 [VXX/3787]

8260 - The method blank associated with batch VMS2459 has a reported 'J' concentration for Methylene Chloride.

SRW1(84377MS)

Volatiles - The Method Blank associated with batch VMS2461 has a reported 'J' concentration for Methylene Chloride.

SRW1(84377MSD)

Volatiles - The Method Blank associated with batch VMS2461 has a reported 'J' concentration for Methylene Chloride.

Trip Blank (Not on CoC)

8260 - This Trip Blank has a reported 'J' concentration for Methylene Chloride.

Detectable Results Summary

Client Sample ID: **103DPT-01 (6-6.5ft)**
Lab Sample ID: 31202487001-A
SW-846 8260B

Parameter	Result	Units	
Methylene chloride	2.95	ug/Kg	J
Tetrachloroethene	20.5	ug/Kg	
Toluene	1.28	ug/Kg	J

Client Sample ID: **103DPT-02 (5-5.5ft)**
Lab Sample ID: 31202487002-A
SW-846 8260B

Parameter	Result	Units	
Methylene chloride	1.47	ug/Kg	J
Tetrachloroethene	208	ug/Kg	

Client Sample ID: **103DPT-03 (5.5-6ft)**
Lab Sample ID: 31202487003-A
SW-846 8260B

Parameter	Result	Units	
Methylene chloride	1.97	ug/Kg	J
Tetrachloroethene	14.6	ug/Kg	
Toluene	0.761	ug/Kg	J

Client Sample ID: **103DPT-04 (5-5.5ft)**
Lab Sample ID: 31202487004-A
SW-846 8260B

Parameter	Result	Units	
Chloroform	0.653	ug/Kg	J
Methylene chloride	2.74	ug/Kg	J
Toluene	1.27	ug/Kg	J

Client Sample ID: **103DPT-05 (7-8ft)**
Lab Sample ID: 31202487005-A
SW-846 8260B

Parameter	Result	Units	
Acetone	12.8	ug/Kg	J
Methylene chloride	4.29	ug/Kg	J
Tetrachloroethene	208	ug/Kg	
Toluene	1.90	ug/Kg	J

Client Sample ID: **103DPT-06 (7-8ft)**
Lab Sample ID: 31202487006-D
SW-846 8260B

Parameter	Result	Units	
Tetrachloroethene	347	ug/Kg	

Client Sample ID: **103DPT-07 (7-8ft)**
Lab Sample ID: 31202487007-A
SW-846 8260B

Parameter	Result	Units	
Acetone	17.3	ug/Kg	J
Methylene chloride	2.11	ug/Kg	J
Tetrachloroethene	127	ug/Kg	
Toluene	0.837	ug/Kg	J

Client Sample ID: **103DPT-01**
Lab Sample ID: 31202487008-A
SW-846 8260B

Parameter	Result	Units	
Tetrachloroethene	303	ug/L	
Toluene	0.290	ug/L	J
Trichloroethene	1.22	ug/L	
cis-1,2-Dichloroethene	2.14	ug/L	

Client Sample ID: **Trip Blank (Not on CoC)**
Lab Sample ID: 31202487009-A
SW-846 8260B

Parameter	Result	Units	
Methylene chloride	0.390	ug/L	J

Quality Control Samples

Detectable Results Summary

Client Sample ID: **MB-S for HBN 26873 [VXX/3785]**
Lab Sample ID: 84391

	Parameter	Result	Units	
SW-846 8260B	Methylene chloride	11.0	ug/Kg	J

Client Sample ID: **MB-S for HBN 26881 [VXX/3787]**
Lab Sample ID: 84437

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

Client Sample ID: **MB for HBN 26888 [VXX/3789]**
Lab Sample ID: 84443

	Parameter	Result	Units	
SW-846 8260B	Methylene chloride	0.230	ug/L	J

SGS ANALYTICAL PERSPECTIVES

Results of 103DPT-01 (6-6.5ft)

Client Sample ID: **103DPT-01 (6-6.5ft)**
Client Project ID: **NCDOT Parcel 103**
Lab Sample ID: 31202487001-A
Lab Project ID: 31202487

Collection Date: 08/01/2012 15:20
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	0.759	5.35	ug/Kg	1	08/7/2012 15:41
1,1,1-Trichloroethane	ND	U	0.807	5.35	ug/Kg	1	08/7/2012 15:41
1,1,2,2-Tetrachloroethane	ND	U	1.25	5.35	ug/Kg	1	08/7/2012 15:41
1,1,2-Trichloroethane	ND	U	1.11	5.35	ug/Kg	1	08/7/2012 15:41
1,1-Dichloroethane	ND	U	0.576	5.35	ug/Kg	1	08/7/2012 15:41
1,1-Dichloroethene	ND	U	1.24	5.35	ug/Kg	1	08/7/2012 15:41
1,1-Dichloropropene	ND	U	0.723	5.35	ug/Kg	1	08/7/2012 15:41
1,2,3-Trichlorobenzene	ND	U	0.890	5.35	ug/Kg	1	08/7/2012 15:41
1,2,3-Trichloropropane	ND	U	1.10	5.35	ug/Kg	1	08/7/2012 15:41
1,2,4-Trichlorobenzene	ND	U	0.780	5.35	ug/Kg	1	08/7/2012 15:41
1,2,4-Trimethylbenzene	ND	U	0.682	5.35	ug/Kg	1	08/7/2012 15:41
1,2-Dibromo-3-chloropropane	ND	U	7.93	32.1	ug/Kg	1	08/7/2012 15:41
1,2-Dibromoethane	ND	U	1.40	5.35	ug/Kg	1	08/7/2012 15:41
1,2-Dichlorobenzene	ND	U	0.761	5.35	ug/Kg	1	08/7/2012 15:41
1,2-Dichloroethane	ND	U	0.977	5.35	ug/Kg	1	08/7/2012 15:41
1,2-Dichloropropane	ND	U	1.23	5.35	ug/Kg	1	08/7/2012 15:41
1,3,5-Trimethylbenzene	ND	U	0.651	5.35	ug/Kg	1	08/7/2012 15:41
1,3-Dichlorobenzene	ND	U	0.769	5.35	ug/Kg	1	08/7/2012 15:41
1,3-Dichloropropane	ND	U	0.941	5.35	ug/Kg	1	08/7/2012 15:41
1,4-Dichlorobenzene	ND	U	0.722	5.35	ug/Kg	1	08/7/2012 15:41
2,2-Dichloropropane	ND	U	0.790	5.35	ug/Kg	1	08/7/2012 15:41
2-Butanone	ND	U	3.62	26.7	ug/Kg	1	08/7/2012 15:41
2-Chlorotoluene	ND	U	1.00	5.35	ug/Kg	1	08/7/2012 15:41
2-Hexanone	ND	U	3.45	13.4	ug/Kg	1	08/7/2012 15:41
4-Chlorotoluene	ND	U	0.809	5.35	ug/Kg	1	08/7/2012 15:41
4-Isopropyltoluene	ND	U	0.690	5.35	ug/Kg	1	08/7/2012 15:41
4-Methyl-2-pentanone	ND	U	4.00	13.4	ug/Kg	1	08/7/2012 15:41
Acetone	ND	U	4.29	53.5	ug/Kg	1	08/7/2012 15:41
Benzene	ND	U	0.761	5.35	ug/Kg	1	08/7/2012 15:41
Bromobenzene	ND	U	0.746	5.35	ug/Kg	1	08/7/2012 15:41
Bromochloromethane	ND	U	1.01	5.35	ug/Kg	1	08/7/2012 15:41
Bromodichloromethane	ND	U	0.753	5.35	ug/Kg	1	08/7/2012 15:41
Bromoform	ND	U	0.775	5.35	ug/Kg	1	08/7/2012 15:41
Bromomethane	ND	U	1.55	5.35	ug/Kg	1	08/7/2012 15:41
n-Butylbenzene	ND	U	0.703	5.35	ug/Kg	1	08/7/2012 15:41
Carbon disulfide	ND	U	0.560	5.35	ug/Kg	1	08/7/2012 15:41
Carbon tetrachloride	ND	U	0.609	5.35	ug/Kg	1	08/7/2012 15:41
Chlorobenzene	ND	U	0.747	5.35	ug/Kg	1	08/7/2012 15:41
Chloroethane	ND	U	1.07	5.35	ug/Kg	1	08/7/2012 15:41
Chloroform	ND	U	0.682	5.35	ug/Kg	1	08/7/2012 15:41
Chloromethane	ND	U	1.53	5.35	ug/Kg	1	08/7/2012 15:41
Dibromochloromethane	ND	U	1.19	5.35	ug/Kg	1	08/7/2012 15:41
Dibromomethane	ND	U	0.944	5.35	ug/Kg	1	08/7/2012 15:41
Dichlorodifluoromethane	ND	U	1.12	5.35	ug/Kg	1	08/7/2012 15:41

Print Date: 08/16/2012

N.C. Certification # 481

Results of 103DPT-01 (6-6.5ft)

Client Sample ID: **103DPT-01 (6-6.5ft)**
Client Project ID: **NCDOT Parcel 103**
Lab Sample ID: 31202487001-A
Lab Project ID: 31202487

Collection Date: 08/01/2012 15:20
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	1.10	5.35	ug/Kg	1	08/7/2012 15:41
trans-1,3-Dichloropropene	ND	U	1.01	5.35	ug/Kg	1	08/7/2012 15:41
Diisopropyl Ether	ND	U	0.878	5.35	ug/Kg	1	08/7/2012 15:41
Ethyl Benzene	ND	U	0.754	5.35	ug/Kg	1	08/7/2012 15:41
Hexachlorobutadiene	ND	U	0.735	5.35	ug/Kg	1	08/7/2012 15:41
Isopropylbenzene (Cumene)	ND	U	0.666	5.35	ug/Kg	1	08/7/2012 15:41
Methyl iodide	ND	U	0.820	5.35	ug/Kg	1	08/7/2012 15:41
Methylene chloride	**2.95**	J	1.12	21.4	ug/Kg	1	08/7/2012 15:41
Naphthalene	ND	U	0.973	5.35	ug/Kg	1	08/7/2012 15:41
Styrene	ND	U	0.616	5.35	ug/Kg	1	08/7/2012 15:41
Tetrachloroethene	**20.5**		0.804	5.35	ug/Kg	1	08/7/2012 15:41
Toluene	**1.28**	J	0.736	5.35	ug/Kg	1	08/7/2012 15:41
Trichloroethene	ND	U	0.901	5.35	ug/Kg	1	08/7/2012 15:41
Trichlorofluoromethane	ND	U	1.08	5.35	ug/Kg	1	08/7/2012 15:41
Vinyl chloride	ND	U	1.02	5.35	ug/Kg	1	08/7/2012 15:41
Xylene (total)	ND	U	1.89	10.7	ug/Kg	1	08/7/2012 15:41
cis-1,2-Dichloroethene	ND	U	0.654	5.35	ug/Kg	1	08/7/2012 15:41
m,p-Xylene	ND	U	1.81	10.7	ug/Kg	1	08/7/2012 15:41
n-Propylbenzene	ND	U	0.783	5.35	ug/Kg	1	08/7/2012 15:41
o-Xylene	ND	U	0.820	5.35	ug/Kg	1	08/7/2012 15:41
sec-Butylbenzene	ND	U	0.642	5.35	ug/Kg	1	08/7/2012 15:41
tert-Butyl methyl ether (MTBE)	ND	U	0.851	5.35	ug/Kg	1	08/7/2012 15:41
tert-Butylbenzene	ND	U	0.720	5.35	ug/Kg	1	08/7/2012 15:41
trans-1,2-Dichloroethene	ND	U	0.781	5.35	ug/Kg	1	08/7/2012 15:41
trans-1,4-Dichloro-2-butene	ND	U	4.49	26.7	ug/Kg	1	08/7/2012 15:41
Surrogates							
1,2-Dichloroethane-d4	109			55.0-173	%	1	08/7/2012 15:41
4-Bromofluorobenzene	94.0			23.0-141	%	1	08/7/2012 15:41
Toluene d8	103			57.0-134	%	1	08/7/2012 15:41

Batch Information

Analytical Batch: **VMS2451**
Analytical Method: **SW-846 8260B**
Instrument: **MSD9**
Analyst: **DVO**
Analytical Date/Time: **08/07/2012 15:41**

Prep Batch: **VXX3769**
Prep Method: **SW-846 5035 SL**
Prep Date/Time: **08/06/2012 16:11**
Prep Initial Wt./Vol.: **6.26 g**
Prep Extract Vol: **5 mL**

Print Date: 08/16/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 103DPT-01 (6-6.5ft)

Client Sample ID: **103DPT-01 (6-6.5ft)**
Client Project ID: **NCDOT Parcel 103**
Lab Sample ID: 31202487001-E
Lab Project ID: 31202487

Collection Date: 08/01/2012 15:20
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	37.3	424	ug/Kg	1	08/7/2012 18:35
1,2-Dichlorobenzene	ND	U	21.1	424	ug/Kg	1	08/7/2012 18:35
1,3-Dichlorobenzene	ND	U	28.6	424	ug/Kg	1	08/7/2012 18:35
1,4-Dichlorobenzene	ND	U	29.9	424	ug/Kg	1	08/7/2012 18:35
2,4,5-Trichlorophenol	ND	U	28.3	424	ug/Kg	1	08/7/2012 18:35
2,4,6-Trichlorophenol	ND	U	28.7	424	ug/Kg	1	08/7/2012 18:35
2,4-Dichlorophenol	ND	U	24.5	424	ug/Kg	1	08/7/2012 18:35
2,4-Dinitrophenol	ND	U	39.2	846	ug/Kg	1	08/7/2012 18:35
2,4-Dinitrotoluene	ND	U	21.4	424	ug/Kg	1	08/7/2012 18:35
2,6-Dinitrotoluene	ND	U	30.3	424	ug/Kg	1	08/7/2012 18:35
2-Chloronaphthalene	ND	U	24.9	424	ug/Kg	1	08/7/2012 18:35
2-Chlorophenol	ND	U	22.5	424	ug/Kg	1	08/7/2012 18:35
2-Methylnaphthalene	ND	U	34.2	424	ug/Kg	1	08/7/2012 18:35
2-Methylphenol	ND	U	23.4	424	ug/Kg	1	08/7/2012 18:35
2-Nitroaniline	ND	U	27.9	424	ug/Kg	1	08/7/2012 18:35
2-Nitrophenol	ND	U	20.3	424	ug/Kg	1	08/7/2012 18:35
3 and/or 4-Methylphenol	ND	U	27.5	424	ug/Kg	1	08/7/2012 18:35
3,3'-Dichlorobenzidine	ND	U	20.3	424	ug/Kg	1	08/7/2012 18:35
3-Nitroaniline	ND	U	19.1	424	ug/Kg	1	08/7/2012 18:35
4,6-Dinitro-2-methylphenol	ND	U	19.9	424	ug/Kg	1	08/7/2012 18:35
4-Chloro-3-methylphenol	ND	U	21.1	424	ug/Kg	1	08/7/2012 18:35
4-Chloroaniline	ND	U	33.8	424	ug/Kg	1	08/7/2012 18:35
4-Chlorophenyl phenyl ether	ND	U	45.2	424	ug/Kg	1	08/7/2012 18:35
Acenaphthene	ND	U	19.2	424	ug/Kg	1	08/7/2012 18:35
Acenaphthylene	ND	U	17.9	424	ug/Kg	1	08/7/2012 18:35
Anthracene	ND	U	18.8	424	ug/Kg	1	08/7/2012 18:35
Benzo(a)anthracene	ND	U	23.3	424	ug/Kg	1	08/7/2012 18:35
Benzo(a)pyrene	ND	U	24.0	424	ug/Kg	1	08/7/2012 18:35
Benzo(b)fluoranthene	ND	U	24.4	424	ug/Kg	1	08/7/2012 18:35
Benzo(g,h,i)perylene	ND	U	67.4	424	ug/Kg	1	08/7/2012 18:35
Benzo(k)fluoranthene	ND	U	50.7	424	ug/Kg	1	08/7/2012 18:35
Benzoic acid	ND	U	9.39	424	ug/Kg	1	08/7/2012 18:35
Bis(2-Chloroethoxy)methane	ND	U	19.1	424	ug/Kg	1	08/7/2012 18:35
Bis(2-Chloroethyl)ether	ND	U	39.5	424	ug/Kg	1	08/7/2012 18:35
Bis(2-Chloroisopropyl)ether	ND	U	36.9	424	ug/Kg	1	08/7/2012 18:35
Bis(2-Ethylhexyl)phthalate	ND	U	20.3	424	ug/Kg	1	08/7/2012 18:35
4-Bromophenyl phenyl ether	ND	U	27.9	424	ug/Kg	1	08/7/2012 18:35
Butyl benzyl phthalate	ND	U	36.8	424	ug/Kg	1	08/7/2012 18:35
Chrysene	ND	U	49.3	424	ug/Kg	1	08/7/2012 18:35
Di-n-butyl phthalate	ND	U	20.0	424	ug/Kg	1	08/7/2012 18:35
Di-n-octyl phthalate	ND	U	23.4	424	ug/Kg	1	08/7/2012 18:35
Dibenz(a,h)anthracene	ND	U	19.1	424	ug/Kg	1	08/7/2012 18:35
Dibenzofuran	ND	U	33.2	424	ug/Kg	1	08/7/2012 18:35
Diethyl phthalate	ND	U	22.9	424	ug/Kg	1	08/7/2012 18:35

Print Date: 08/16/2012

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Results of 103DPT-01 (6-6.5ft)

Client Sample ID: **103DPT-01 (6-6.5ft)**
Client Project ID: **NCDOT Parcel 103**
Lab Sample ID: 31202487001-E
Lab Project ID: 31202487

Collection Date: 08/01/2012 15:20
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	32.5	424	ug/Kg	1	08/7/2012 18:35
2,4-Dimethylphenol	ND	U	31.0	424	ug/Kg	1	08/7/2012 18:35
Diphenylamine	ND	U	19.1	424	ug/Kg	1	08/7/2012 18:35
Fluoranthene	ND	U	39.8	424	ug/Kg	1	08/7/2012 18:35
Fluorene	ND	U	22.5	424	ug/Kg	1	08/7/2012 18:35
Hexachlorobenzene	ND	U	40.1	424	ug/Kg	1	08/7/2012 18:35
Hexachlorobutadiene	ND	U	25.3	424	ug/Kg	1	08/7/2012 18:35
Hexachlorocyclopentadiene	ND	U	128	424	ug/Kg	1	08/7/2012 18:35
Hexachloroethane	ND	U	24.4	424	ug/Kg	1	08/7/2012 18:35
Indeno(1,2,3-cd)pyrene	ND	U	33.0	424	ug/Kg	1	08/7/2012 18:35
Isophorone	ND	U	19.2	424	ug/Kg	1	08/7/2012 18:35
Naphthalene	ND	U	36.5	424	ug/Kg	1	08/7/2012 18:35
4-Nitroaniline	ND	U	24.4	424	ug/Kg	1	08/7/2012 18:35
Nitrobenzene	ND	U	24.4	424	ug/Kg	1	08/7/2012 18:35
4-Nitrophenol	ND	U	41.7	424	ug/Kg	1	08/7/2012 18:35
Pentachlorophenol	ND	U	33.8	424	ug/Kg	1	08/7/2012 18:35
Phenanthrene	ND	U	27.9	424	ug/Kg	1	08/7/2012 18:35
Phenol	ND	U	39.5	424	ug/Kg	1	08/7/2012 18:35
Pyrene	ND	U	17.9	424	ug/Kg	1	08/7/2012 18:35
n-Nitrosodi-n-propylamine	ND	U	121	424	ug/Kg	1	08/7/2012 18:35
Surrogates							
2,4,6-Tribromophenol	81.0			41.0-129	%	1	08/7/2012 18:35
2-Fluorobiphenyl	83.0			48.0-123	%	1	08/7/2012 18:35
2-Fluorophenol	79.0			42.0-123	%	1	08/7/2012 18:35
Nitrobenzene-d5	87.0			46.0-117	%	1	08/7/2012 18:35
Phenol-d6	91.0			48.0-125	%	1	08/7/2012 18:35
Terphenyl-d14	95.0			44.0-140	%	1	08/7/2012 18:35

Batch Information

Analytical Batch: **XMS1627**
Analytical Method: **SW-846 8270D**
Instrument: **MSD10**
Analyst: **CMP**
Analytical Date/Time: **08/07/2012 18:35**

Prep Batch: **XXX2893**
Prep Method: **SW-846 3541**
Prep Date/Time: **08/06/2012 16:36**
Prep Initial Wt./Vol.: **31.68 g**
Prep Extract Vol: **10 mL**

Print Date: 08/16/2012

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Results of 103DPT-02 (5-5.5ft)

Client Sample ID: **103DPT-02 (5-5.5ft)**
Client Project ID: **NCDOT Parcel 103**
Lab Sample ID: 31202487002-A
Lab Project ID: 31202487

Collection Date: 08/01/2012 15:30
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 73.20

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	U	0.813	5.74	ug/Kg	1	08/9/2012 20:20
1,1,1-Trichloroethane	ND	U	0.865	5.74	ug/Kg	1	08/9/2012 20:20
1,1,2,2-Tetrachloroethane	ND	U	1.34	5.74	ug/Kg	1	08/9/2012 20:20
1,1,2-Trichloroethane	ND	U	1.19	5.74	ug/Kg	1	08/9/2012 20:20
1,1-Dichloroethane	ND	U	0.617	5.74	ug/Kg	1	08/9/2012 20:20
1,1-Dichloroethene	ND	U	1.33	5.74	ug/Kg	1	08/9/2012 20:20
1,1-Dichloropropene	ND	U	0.776	5.74	ug/Kg	1	08/9/2012 20:20
1,2,3-Trichlorobenzene	ND	U	0.955	5.74	ug/Kg	1	08/9/2012 20:20
1,2,3-Trichloropropane	ND	U	1.18	5.74	ug/Kg	1	08/9/2012 20:20
1,2,4-Trichlorobenzene	ND	U	0.836	5.74	ug/Kg	1	08/9/2012 20:20
1,2,4-Trimethylbenzene	ND	U	0.731	5.74	ug/Kg	1	08/9/2012 20:20
1,2-Dibromo-3-chloropropane	ND	U	8.50	34.4	ug/Kg	1	08/9/2012 20:20
1,2-Dibromoethane	ND	U	1.50	5.74	ug/Kg	1	08/9/2012 20:20
1,2-Dichlorobenzene	ND	U	0.816	5.74	ug/Kg	1	08/9/2012 20:20
1,2-Dichloroethane	ND	U	1.05	5.74	ug/Kg	1	08/9/2012 20:20
1,2-Dichloropropane	ND	U	1.32	5.74	ug/Kg	1	08/9/2012 20:20
1,3,5-Trimethylbenzene	ND	U	0.698	5.74	ug/Kg	1	08/9/2012 20:20
1,3-Dichlorobenzene	ND	U	0.825	5.74	ug/Kg	1	08/9/2012 20:20
1,3-Dichloropropane	ND	U	1.01	5.74	ug/Kg	1	08/9/2012 20:20
1,4-Dichlorobenzene	ND	U	0.774	5.74	ug/Kg	1	08/9/2012 20:20
2,2-Dichloropropane	ND	U	0.847	5.74	ug/Kg	1	08/9/2012 20:20
2-Butanone	ND	U	3.88	28.7	ug/Kg	1	08/9/2012 20:20
2-Chlorotoluene	ND	U	1.08	5.74	ug/Kg	1	08/9/2012 20:20
2-Hexanone	ND	U	3.69	14.3	ug/Kg	1	08/9/2012 20:20
4-Chlorotoluene	ND	U	0.867	5.74	ug/Kg	1	08/9/2012 20:20
4-Isopropyltoluene	ND	U	0.740	5.74	ug/Kg	1	08/9/2012 20:20
4-Methyl-2-pentanone	ND	U	4.29	14.3	ug/Kg	1	08/9/2012 20:20
Acetone	ND	U	4.60	57.4	ug/Kg	1	08/9/2012 20:20
Benzene	ND	U	0.816	5.74	ug/Kg	1	08/9/2012 20:20
Bromobenzene	ND	U	0.800	5.74	ug/Kg	1	08/9/2012 20:20
Bromochloromethane	ND	U	1.08	5.74	ug/Kg	1	08/9/2012 20:20
Bromodichloromethane	ND	U	0.808	5.74	ug/Kg	1	08/9/2012 20:20
Bromoform	ND	U	0.831	5.74	ug/Kg	1	08/9/2012 20:20
Bromomethane	ND	U	1.66	5.74	ug/Kg	1	08/9/2012 20:20
n-Butylbenzene	ND	U	0.754	5.74	ug/Kg	1	08/9/2012 20:20
Carbon disulfide	ND	U	0.600	5.74	ug/Kg	1	08/9/2012 20:20
Carbon tetrachloride	ND	U	0.653	5.74	ug/Kg	1	08/9/2012 20:20
Chlorobenzene	ND	U	0.801	5.74	ug/Kg	1	08/9/2012 20:20
Chloroethane	ND	U	1.15	5.74	ug/Kg	1	08/9/2012 20:20
Chloroform	ND	U	0.731	5.74	ug/Kg	1	08/9/2012 20:20
Chloromethane	ND	U	1.64	5.74	ug/Kg	1	08/9/2012 20:20
Dibromochloromethane	ND	U	1.27	5.74	ug/Kg	1	08/9/2012 20:20
Dibromomethane	ND	U	1.01	5.74	ug/Kg	1	08/9/2012 20:20
Dichlorodifluoromethane	ND	U	1.20	5.74	ug/Kg	1	08/9/2012 20:20

Print Date: 08/16/2012

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Results of 103DPT-02 (5-5.5ft)

Client Sample ID: **103DPT-02 (5-5.5ft)**
Client Project ID: **NCDOT Parcel 103**
Lab Sample ID: 31202487002-A
Lab Project ID: 31202487

Collection Date: 08/01/2012 15:30
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 73.20

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	U	1.18	5.74	ug/Kg	1	08/9/2012 20:20
trans-1,3-Dichloropropene	ND	U	1.08	5.74	ug/Kg	1	08/9/2012 20:20
Diisopropyl Ether	ND	U	0.942	5.74	ug/Kg	1	08/9/2012 20:20
Ethyl Benzene	ND	U	0.809	5.74	ug/Kg	1	08/9/2012 20:20
Hexachlorobutadiene	ND	U	0.788	5.74	ug/Kg	1	08/9/2012 20:20
Isopropylbenzene (Cumene)	ND	U	0.714	5.74	ug/Kg	1	08/9/2012 20:20
Methyl Iodide	ND	U	0.879	5.74	ug/Kg	1	08/9/2012 20:20
Methylene chloride	1.47	J	1.20	22.9	ug/Kg	1	08/9/2012 20:20
Naphthalene	ND	U	1.04	5.74	ug/Kg	1	08/9/2012 20:20
Styrene	ND	U	0.661	5.74	ug/Kg	1	08/9/2012 20:20
Tetrachloroethene	208		0.862	5.74	ug/Kg	1	08/9/2012 20:20
Toluene	ND	U	0.789	5.74	ug/Kg	1	08/9/2012 20:20
Trichloroethene	ND	U	0.966	5.74	ug/Kg	1	08/9/2012 20:20
Trichlorofluoromethane	ND	U	1.16	5.74	ug/Kg	1	08/9/2012 20:20
Vinyl chloride	ND	U	1.09	5.74	ug/Kg	1	08/9/2012 20:20
Xylene (total)	ND	U	2.03	11.5	ug/Kg	1	08/9/2012 20:20
cis-1,2-Dichloroethene	ND	U	0.701	5.74	ug/Kg	1	08/9/2012 20:20
m,p-Xylene	ND	U	1.94	11.5	ug/Kg	1	08/9/2012 20:20
n-Propylbenzene	ND	U	0.840	5.74	ug/Kg	1	08/9/2012 20:20
o-Xylene	ND	U	0.879	5.74	ug/Kg	1	08/9/2012 20:20
sec-Butylbenzene	ND	U	0.688	5.74	ug/Kg	1	08/9/2012 20:20
tert-Butyl methyl ether (MTBE)	ND	U	0.912	5.74	ug/Kg	1	08/9/2012 20:20
tert-Butylbenzene	ND	U	0.772	5.74	ug/Kg	1	08/9/2012 20:20
trans-1,2-Dichloroethene	ND	U	0.838	5.74	ug/Kg	1	08/9/2012 20:20
trans-1,4-Dichloro-2-butene	ND	U	4.82	28.7	ug/Kg	1	08/9/2012 20:20
Surrogates							
1,2-Dichloroethane-d4	109			55.0-173	%	1	08/9/2012 20:20
4-Bromofluorobenzene	95.0			23.0-141	%	1	08/9/2012 20:20
Toluene d8	101			57.0-134	%	1	08/9/2012 20:20

Batch Information

Analytical Batch: **VMS2459**
Analytical Method: **SW-846 8260B**
Instrument: **MSD9**
Analyst: **DVO**
Analytical Date/Time: **08/09/2012 20:20**

Prep Batch: **VXX3787**
Prep Method: **SW-846 5035 SL**
Prep Date/Time: **08/06/2012 16:11**
Prep Initial Wt./Vol.: **5.95 g**
Prep Extract Vol: **5 mL**

Print Date: 08/16/2012

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SGS ANALYTICAL PERSPECTIVES

Results of 103DPT-02 (5-5.5ft)

Client Sample ID: **103DPT-02 (5-5.5ft)**
Client Project ID: **NCDOT Parcel 103**
Lab Sample ID: 31202487002-E
Lab Project ID: 31202487

Collection Date: 08/01/2012 15:30
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 73.20

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,2,4-Trichlorobenzene	ND	U	37.7	427	ug/Kg	1	08/7/2012 18:58
1,2-Dichlorobenzene	ND	U	21.3	427	ug/Kg	1	08/7/2012 18:58
1,3-Dichlorobenzene	ND	U	28.8	427	ug/Kg	1	08/7/2012 18:58
1,4-Dichlorobenzene	ND	U	30.2	427	ug/Kg	1	08/7/2012 18:58
2,4,5-Trichlorophenol	ND	U	28.5	427	ug/Kg	1	08/7/2012 18:58
2,4,6-Trichlorophenol	ND	U	28.9	427	ug/Kg	1	08/7/2012 18:58
2,4-Dichlorophenol	ND	U	24.7	427	ug/Kg	1	08/7/2012 18:58
2,4-Dinitrophenol	ND	U	39.6	853	ug/Kg	1	08/7/2012 18:58
2,4-Dinitrotoluene	ND	U	21.6	427	ug/Kg	1	08/7/2012 18:58
2,6-Dinitrotoluene	ND	U	30.6	427	ug/Kg	1	08/7/2012 18:58
2-Chloronaphthalene	ND	U	25.1	427	ug/Kg	1	08/7/2012 18:58
2-Chlorophenol	ND	U	22.7	427	ug/Kg	1	08/7/2012 18:58
2-Methylnaphthalene	ND	U	34.5	427	ug/Kg	1	08/7/2012 18:58
2-Methylphenol	ND	U	23.6	427	ug/Kg	1	08/7/2012 18:58
2-Nitroaniline	ND	U	28.1	427	ug/Kg	1	08/7/2012 18:58
2-Nitrophenol	ND	U	20.5	427	ug/Kg	1	08/7/2012 18:58
3 and/or 4-Methylphenol	ND	U	27.7	427	ug/Kg	1	08/7/2012 18:58
3,3'-Dichlorobenzidine	ND	U	20.5	427	ug/Kg	1	08/7/2012 18:58
3-Nitroaniline	ND	U	19.2	427	ug/Kg	1	08/7/2012 18:58
4,6-Dinitro-2-methylphenol	ND	U	20.1	427	ug/Kg	1	08/7/2012 18:58
4-Chloro-3-methylphenol	ND	U	21.3	427	ug/Kg	1	08/7/2012 18:58
4-Chloroaniline	ND	U	34.1	427	ug/Kg	1	08/7/2012 18:58
4-Chlorophenyl phenyl ether	ND	U	45.6	427	ug/Kg	1	08/7/2012 18:58
Acenaphthene	ND	U	19.4	427	ug/Kg	1	08/7/2012 18:58
Acenaphthylene	ND	U	18.0	427	ug/Kg	1	08/7/2012 18:58
Anthracene	ND	U	19.0	427	ug/Kg	1	08/7/2012 18:58
Benzo(a)anthracene	ND	U	23.5	427	ug/Kg	1	08/7/2012 18:58
Benzo(a)pyrene	ND	U	24.2	427	ug/Kg	1	08/7/2012 18:58
Benzo(b)fluoranthene	ND	U	24.6	427	ug/Kg	1	08/7/2012 18:58
Benzo(g,h,i)perylene	ND	U	68.0	427	ug/Kg	1	08/7/2012 18:58
Benzo(k)fluoranthene	ND	U	51.2	427	ug/Kg	1	08/7/2012 18:58
Benzoic acid	ND	U	9.47	427	ug/Kg	1	08/7/2012 18:58
Bis(2-Chloroethoxy)methane	ND	U	19.2	427	ug/Kg	1	08/7/2012 18:58
Bis(2-Chloroethyl)ether	ND	U	39.9	427	ug/Kg	1	08/7/2012 18:58
Bis(2-Chloroisopropyl)ether	ND	U	37.3	427	ug/Kg	1	08/7/2012 18:58
Bis(2-Ethylhexyl)phthalate	ND	U	20.5	427	ug/Kg	1	08/7/2012 18:58
4-Bromophenyl phenyl ether	ND	U	28.1	427	ug/Kg	1	08/7/2012 18:58
Butyl benzyl phthalate	ND	U	37.1	427	ug/Kg	1	08/7/2012 18:58
Chrysene	ND	U	49.7	427	ug/Kg	1	08/7/2012 18:58
Di-n-butyl phthalate	ND	U	20.2	427	ug/Kg	1	08/7/2012 18:58
Di-n-octyl phthalate	ND	U	23.6	427	ug/Kg	1	08/7/2012 18:58
Dibenz(a,h)anthracene	ND	U	19.2	427	ug/Kg	1	08/7/2012 18:58
Dibenzofuran	ND	U	33.4	427	ug/Kg	1	08/7/2012 18:58
Diethyl phthalate	ND	U	23.1	427	ug/Kg	1	08/7/2012 18:58

Print Date: 08/16/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 103DPT-02 (5-5.5ft)

Client Sample ID: **103DPT-02 (5-5.5ft)**
Client Project ID: **NCDOT Parcel 103**
Lab Sample ID: 31202487002-E
Lab Project ID: 31202487

Collection Date: 08/01/2012 15:30
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 73.20

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
Dimethyl phthalate	ND	U	32.8	427	ug/Kg	1	08/7/2012 18:58
2,4-Dimethylphenol	ND	U	31.3	427	ug/Kg	1	08/7/2012 18:58
Diphenylamine	ND	U	19.2	427	ug/Kg	1	08/7/2012 18:58
Fluoranthene	ND	U	40.1	427	ug/Kg	1	08/7/2012 18:58
Fluorene	ND	U	22.7	427	ug/Kg	1	08/7/2012 18:58
Hexachlorobenzene	ND	U	40.4	427	ug/Kg	1	08/7/2012 18:58
Hexachlorobutadiene	ND	U	25.5	427	ug/Kg	1	08/7/2012 18:58
Hexachlorocyclopentadiene	ND	U	129	427	ug/Kg	1	08/7/2012 18:58
Hexachloroethane	ND	U	24.6	427	ug/Kg	1	08/7/2012 18:58
Indeno(1,2,3-cd)pyrene	ND	U	33.3	427	ug/Kg	1	08/7/2012 18:58
Isophorone	ND	U	19.4	427	ug/Kg	1	08/7/2012 18:58
Naphthalene	ND	U	36.9	427	ug/Kg	1	08/7/2012 18:58
4-Nitroaniline	ND	U	24.6	427	ug/Kg	1	08/7/2012 18:58
Nitrobenzene	ND	U	24.6	427	ug/Kg	1	08/7/2012 18:58
4-Nitrophenol	ND	U	42.0	427	ug/Kg	1	08/7/2012 18:58
Pentachlorophenol	ND	U	34.1	427	ug/Kg	1	08/7/2012 18:58
Phenanthrene	ND	U	28.1	427	ug/Kg	1	08/7/2012 18:58
Phenol	ND	U	39.9	427	ug/Kg	1	08/7/2012 18:58
Pyrene	ND	U	18.0	427	ug/Kg	1	08/7/2012 18:58
n-Nitrosodi-n-propylamine	ND	U	122	427	ug/Kg	1	08/7/2012 18:58
Surrogates							
2,4,6-Tribromophenol	84.0			41.0-129	%	1	08/7/2012 18:58
2-Fluorobiphenyl	89.0			48.0-123	%	1	08/7/2012 18:58
2-Fluorophenol	77.0			42.0-123	%	1	08/7/2012 18:58
Nitrobenzene-d5	89.0			46.0-117	%	1	08/7/2012 18:58
Phenol-d6	91.0			48.0-125	%	1	08/7/2012 18:58
Terphenyl-d14	96.0			44.0-140	%	1	08/7/2012 18:58

Batch Information

Analytical Batch: **XMS1627**
Analytical Method: **SW-846 8270D**
Instrument: **MSD10**
Analyst: **CMP**
Analytical Date/Time: **08/07/2012 18:58**

Prep Batch: **XXX2893**
Prep Method: **SW-846 3541**
Prep Date/Time: **08/06/2012 16:36**
Prep Initial Wt./Vol.: **32.01 g**
Prep Extract Vol: **10 mL**

Print Date: 08/16/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 103DPT-03 (5.5-6ft)

Client Sample ID: **103DPT-03 (5.5-6ft)**
Client Project ID: **NCDOT Parcel 103**
Lab Sample ID: 31202487003-A
Lab Project ID: 31202487

Collection Date: 08/01/2012 15:50
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 74.20

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	U	0.750	5.29	ug/Kg	1	08/7/2012 16:07
1,1,1-Trichloroethane	ND	U	0.797	5.29	ug/Kg	1	08/7/2012 16:07
1,1,2,2-Tetrachloroethane	ND	U	1.24	5.29	ug/Kg	1	08/7/2012 16:07
1,1,2-Trichloroethane	ND	U	1.10	5.29	ug/Kg	1	08/7/2012 16:07
1,1-Dichloroethane	ND	U	0.569	5.29	ug/Kg	1	08/7/2012 16:07
1,1-Dichloroethene	ND	U	1.23	5.29	ug/Kg	1	08/7/2012 16:07
1,1-Dichloropropene	ND	U	0.715	5.29	ug/Kg	1	08/7/2012 16:07
1,2,3-Trichlorobenzene	ND	U	0.880	5.29	ug/Kg	1	08/7/2012 16:07
1,2,3-Trichloropropane	ND	U	1.09	5.29	ug/Kg	1	08/7/2012 16:07
1,2,4-Trichlorobenzene	ND	U	0.771	5.29	ug/Kg	1	08/7/2012 16:07
1,2,4-Trimethylbenzene	ND	U	0.674	5.29	ug/Kg	1	08/7/2012 16:07
1,2-Dibromo-3-chloropropane	ND	U	7.84	31.7	ug/Kg	1	08/7/2012 16:07
1,2-Dibromoethane	ND	U	1.39	5.29	ug/Kg	1	08/7/2012 16:07
1,2-Dichlorobenzene	ND	U	0.752	5.29	ug/Kg	1	08/7/2012 16:07
1,2-Dichloroethane	ND	U	0.966	5.29	ug/Kg	1	08/7/2012 16:07
1,2-Dichloropropane	ND	U	1.22	5.29	ug/Kg	1	08/7/2012 16:07
1,3,5-Trimethylbenzene	ND	U	0.643	5.29	ug/Kg	1	08/7/2012 16:07
1,3-Dichlorobenzene	ND	U	0.760	5.29	ug/Kg	1	08/7/2012 16:07
1,3-Dichloropropane	ND	U	0.930	5.29	ug/Kg	1	08/7/2012 16:07
1,4-Dichlorobenzene	ND	U	0.714	5.29	ug/Kg	1	08/7/2012 16:07
2,2-Dichloropropane	ND	U	0.780	5.29	ug/Kg	1	08/7/2012 16:07
2-Butanone	ND	U	3.57	26.4	ug/Kg	1	08/7/2012 16:07
2-Chlorotoluene	ND	U	0.991	5.29	ug/Kg	1	08/7/2012 16:07
2-Hexanone	ND	U	3.41	13.2	ug/Kg	1	08/7/2012 16:07
4-Chlorotoluene	ND	U	0.799	5.29	ug/Kg	1	08/7/2012 16:07
4-Isopropyltoluene	ND	U	0.682	5.29	ug/Kg	1	08/7/2012 16:07
4-Methyl-2-pentanone	ND	U	3.96	13.2	ug/Kg	1	08/7/2012 16:07
Acetone	ND	U	4.24	52.9	ug/Kg	1	08/7/2012 16:07
Benzene	ND	U	0.752	5.29	ug/Kg	1	08/7/2012 16:07
Bromobenzene	ND	U	0.737	5.29	ug/Kg	1	08/7/2012 16:07
Bromochloromethane	ND	U	0.994	5.29	ug/Kg	1	08/7/2012 16:07
Bromodichloromethane	ND	U	0.745	5.29	ug/Kg	1	08/7/2012 16:07
Bromoform	ND	U	0.766	5.29	ug/Kg	1	08/7/2012 16:07
Bromomethane	ND	U	1.53	5.29	ug/Kg	1	08/7/2012 16:07
n-Butylbenzene	ND	U	0.695	5.29	ug/Kg	1	08/7/2012 16:07
Carbon disulfide	ND	U	0.553	5.29	ug/Kg	1	08/7/2012 16:07
Carbon tetrachloride	ND	U	0.602	5.29	ug/Kg	1	08/7/2012 16:07
Chlorobenzene	ND	U	0.738	5.29	ug/Kg	1	08/7/2012 16:07
Chloroethane	ND	U	1.06	5.29	ug/Kg	1	08/7/2012 16:07
Chloroform	ND	U	0.674	5.29	ug/Kg	1	08/7/2012 16:07
Chloromethane	ND	U	1.51	5.29	ug/Kg	1	08/7/2012 16:07
Dibromochloromethane	ND	U	1.17	5.29	ug/Kg	1	08/7/2012 16:07
Dibromomethane	ND	U	0.933	5.29	ug/Kg	1	08/7/2012 16:07
Dichlorodifluoromethane	ND	U	1.11	5.29	ug/Kg	1	08/7/2012 16:07

Print Date: 08/16/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 103DPT-03 (5.5-6ft)

Client Sample ID: **103DPT-03 (5.5-6ft)**
Client Project ID: **NCDOT Parcel 103**
Lab Sample ID: 31202487003-A
Lab Project ID: 31202487

Collection Date: 08/01/2012 15:50
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 74.20

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	U	1.09	5.29	ug/Kg	1	08/7/2012 16:07
trans-1,3-Dichloropropene	ND	U	0.998	5.29	ug/Kg	1	08/7/2012 16:07
Diisopropyl Ether	ND	U	0.868	5.29	ug/Kg	1	08/7/2012 16:07
Ethyl Benzene	ND	U	0.746	5.29	ug/Kg	1	08/7/2012 16:07
Hexachlorobutadiene	ND	U	0.727	5.29	ug/Kg	1	08/7/2012 16:07
Isopropylbenzene (Cumene)	ND	U	0.658	5.29	ug/Kg	1	08/7/2012 16:07
Methyl Iodide	ND	U	0.810	5.29	ug/Kg	1	08/7/2012 16:07
Methylene chloride	**1.97**	J	1.11	21.2	ug/Kg	1	08/7/2012 16:07
Naphthalene	ND	U	0.961	5.29	ug/Kg	1	08/7/2012 16:07
Styrene	ND	U	0.609	5.29	ug/Kg	1	08/7/2012 16:07
Tetrachloroethene	**14.6**		0.794	5.29	ug/Kg	1	08/7/2012 16:07
Toluene	**0.761**	J	0.728	5.29	ug/Kg	1	08/7/2012 16:07
Trichloroethene	ND	U	0.890	5.29	ug/Kg	1	08/7/2012 16:07
Trichlorofluoromethane	ND	U	1.07	5.29	ug/Kg	1	08/7/2012 16:07
Vinyl chloride	ND	U	1.00	5.29	ug/Kg	1	08/7/2012 16:07
Xylene (total)	ND	U	1.87	10.6	ug/Kg	1	08/7/2012 16:07
cis-1,2-Dichloroethene	ND	U	0.646	5.29	ug/Kg	1	08/7/2012 16:07
m,p-Xylene	ND	U	1.79	10.6	ug/Kg	1	08/7/2012 16:07
n-Propylbenzene	ND	U	0.774	5.29	ug/Kg	1	08/7/2012 16:07
o-Xylene	ND	U	0.810	5.29	ug/Kg	1	08/7/2012 16:07
sec-Butylbenzene	ND	U	0.635	5.29	ug/Kg	1	08/7/2012 16:07
tert-Butyl methyl ether (MTBE)	ND	U	0.841	5.29	ug/Kg	1	08/7/2012 16:07
tert-Butylbenzene	ND	U	0.712	5.29	ug/Kg	1	08/7/2012 16:07
trans-1,2-Dichloroethene	ND	U	0.772	5.29	ug/Kg	1	08/7/2012 16:07
trans-1,4-Dichloro-2-butene	ND	U	4.44	26.4	ug/Kg	1	08/7/2012 16:07
Surrogates							
1,2-Dichloroethane-d4	112			55.0-173	%	1	08/7/2012 16:07
4-Bromofluorobenzene	96.0			23.0-141	%	1	08/7/2012 16:07
Toluene d8	102			57.0-134	%	1	08/7/2012 16:07

Batch Information

Analytical Batch: **VMS2451**
Analytical Method: **SW-846 8260B**
Instrument: **MSD9**
Analyst: **DVO**
Analytical Date/Time: **08/07/2012 16:07**

Prep Batch: **VXX3769**
Prep Method: **SW-846 5035 SL**
Prep Date/Time: **08/06/2012 16:12**
Prep Initial Wt./Vol.: **6.37 g**
Prep Extract Vol: **5 mL**

Print Date: 08/16/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 103DPT-03 (5.5-6ft)

Client Sample ID: **103DPT-03 (5.5-6ft)**
Client Project ID: **NCDOT Parcel 103**
Lab Sample ID: 31202487003-E
Lab Project ID: 31202487

Collection Date: 08/01/2012 15:50
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 74.20

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,2,4-Trichlorobenzene	ND	U	36.4	412	ug/Kg	1	08/7/2012 19:21
1,2-Dichlorobenzene	ND	U	20.6	412	ug/Kg	1	08/7/2012 19:21
1,3-Dichlorobenzene	ND	U	27.8	412	ug/Kg	1	08/7/2012 19:21
1,4-Dichlorobenzene	ND	U	29.1	412	ug/Kg	1	08/7/2012 19:21
2,4,5-Trichlorophenol	ND	U	27.5	412	ug/Kg	1	08/7/2012 19:21
2,4,6-Trichlorophenol	ND	U	27.9	412	ug/Kg	1	08/7/2012 19:21
2,4-Dichlorophenol	ND	U	23.8	412	ug/Kg	1	08/7/2012 19:21
2,4-Dinitrophenol	ND	U	38.2	824	ug/Kg	1	08/7/2012 19:21
2,4-Dinitrotoluene	ND	U	20.8	412	ug/Kg	1	08/7/2012 19:21
2,6-Dinitrotoluene	ND	U	29.5	412	ug/Kg	1	08/7/2012 19:21
2-Chloronaphthalene	ND	U	24.2	412	ug/Kg	1	08/7/2012 19:21
2-Chlorophenol	ND	U	21.9	412	ug/Kg	1	08/7/2012 19:21
2-Methylnaphthalene	ND	U	33.3	412	ug/Kg	1	08/7/2012 19:21
2-Methylphenol	ND	U	22.8	412	ug/Kg	1	08/7/2012 19:21
2-Nitroaniline	ND	U	27.1	412	ug/Kg	1	08/7/2012 19:21
2-Nitrophenol	ND	U	19.8	412	ug/Kg	1	08/7/2012 19:21
3 and/or 4-Methylphenol	ND	U	26.7	412	ug/Kg	1	08/7/2012 19:21
3,3'-Dichlorobenzidine	ND	U	19.8	412	ug/Kg	1	08/7/2012 19:21
3-Nitroaniline	ND	U	18.6	412	ug/Kg	1	08/7/2012 19:21
4,6-Dinitro-2-methylphenol	ND	U	19.4	412	ug/Kg	1	08/7/2012 19:21
4-Chloro-3-methylphenol	ND	U	20.6	412	ug/Kg	1	08/7/2012 19:21
4-Chloroaniline	ND	U	32.9	412	ug/Kg	1	08/7/2012 19:21
4-Chlorophenyl phenyl ether	ND	U	44.0	412	ug/Kg	1	08/7/2012 19:21
Acenaphthene	ND	U	18.7	412	ug/Kg	1	08/7/2012 19:21
Acenaphthylene	ND	U	17.4	412	ug/Kg	1	08/7/2012 19:21
Anthracene	ND	U	18.3	412	ug/Kg	1	08/7/2012 19:21
Benzo(a)anthracene	ND	U	22.7	412	ug/Kg	1	08/7/2012 19:21
Benzo(a)pyrene	ND	U	23.3	412	ug/Kg	1	08/7/2012 19:21
Benzo(b)fluoranthene	ND	U	23.7	412	ug/Kg	1	08/7/2012 19:21
Benzo(g,h,i)perylene	ND	U	65.6	412	ug/Kg	1	08/7/2012 19:21
Benzo(k)fluoranthene	ND	U	49.4	412	ug/Kg	1	08/7/2012 19:21
Benzoic acid	ND	U	9.14	412	ug/Kg	1	08/7/2012 19:21
Bis(2-Chloroethoxy)methane	ND	U	18.6	412	ug/Kg	1	08/7/2012 19:21
Bis(2-Chloroethyl)ether	ND	U	38.5	412	ug/Kg	1	08/7/2012 19:21
Bis(2-Chloroisopropyl)ether	ND	U	36.0	412	ug/Kg	1	08/7/2012 19:21
Bis(2-Ethylhexyl)phthalate	ND	U	19.8	412	ug/Kg	1	08/7/2012 19:21
4-Bromophenyl phenyl ether	ND	U	27.1	412	ug/Kg	1	08/7/2012 19:21
Butyl benzyl phthalate	ND	U	35.8	412	ug/Kg	1	08/7/2012 19:21
Chrysene	ND	U	48.0	412	ug/Kg	1	08/7/2012 19:21
Di-n-butyl phthalate	ND	U	19.5	412	ug/Kg	1	08/7/2012 19:21
Di-n-octyl phthalate	ND	U	22.8	412	ug/Kg	1	08/7/2012 19:21
Dibenz(a,h)anthracene	ND	U	18.6	412	ug/Kg	1	08/7/2012 19:21
Dibenzofuran	ND	U	32.3	412	ug/Kg	1	08/7/2012 19:21
Diethyl phthalate	ND	U	22.3	412	ug/Kg	1	08/7/2012 19:21

Print Date: 08/16/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 103DPT-03 (5.5-6ft)

Client Sample ID: **103DPT-03 (5.5-6ft)**
Client Project ID: **NCDOT Parcel 103**
Lab Sample ID: 31202487003-E
Lab Project ID: 31202487

Collection Date: 08/01/2012 15:50
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 74.20

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
Dimethyl phthalate	ND	U	31.6	412	ug/Kg	1	08/7/2012 19:21
2,4-Dimethylphenol	ND	U	30.2	412	ug/Kg	1	08/7/2012 19:21
Diphenylamine	ND	U	18.6	412	ug/Kg	1	08/7/2012 19:21
Fluoranthene	ND	U	38.7	412	ug/Kg	1	08/7/2012 19:21
Fluorene	ND	U	21.9	412	ug/Kg	1	08/7/2012 19:21
Hexachlorobenzene	ND	U	39.0	412	ug/Kg	1	08/7/2012 19:21
Hexachlorobutadiene	ND	U	24.6	412	ug/Kg	1	08/7/2012 19:21
Hexachlorocyclopentadiene	ND	U	125	412	ug/Kg	1	08/7/2012 19:21
Hexachloroethane	ND	U	23.7	412	ug/Kg	1	08/7/2012 19:21
Indeno(1,2,3-cd)pyrene	ND	U	32.2	412	ug/Kg	1	08/7/2012 19:21
Isophorone	ND	U	18.7	412	ug/Kg	1	08/7/2012 19:21
Naphthalene	ND	U	35.6	412	ug/Kg	1	08/7/2012 19:21
4-Nitroaniline	ND	U	23.7	412	ug/Kg	1	08/7/2012 19:21
Nitrobenzene	ND	U	23.7	412	ug/Kg	1	08/7/2012 19:21
4-Nitrophenol	ND	U	40.6	412	ug/Kg	1	08/7/2012 19:21
Pentachlorophenol	ND	U	32.9	412	ug/Kg	1	08/7/2012 19:21
Phenanthrene	ND	U	27.1	412	ug/Kg	1	08/7/2012 19:21
Phenol	ND	U	38.5	412	ug/Kg	1	08/7/2012 19:21
Pyrene	ND	U	17.4	412	ug/Kg	1	08/7/2012 19:21
n-Nitrosodi-n-propylamine	ND	U	118	412	ug/Kg	1	08/7/2012 19:21
Surrogates							
2,4,6-Tribromophenol	73.0			41.0-129	%	1	08/7/2012 19:21
2-Fluorobiphenyl	71.0			48.0-123	%	1	08/7/2012 19:21
2-Fluorophenol	78.0			42.0-123	%	1	08/7/2012 19:21
Nitrobenzene-d5	82.0			46.0-117	%	1	08/7/2012 19:21
Phenol-d6	90.0			48.0-125	%	1	08/7/2012 19:21
Terphenyl-d14	88.0			44.0-140	%	1	08/7/2012 19:21

Batch Information

Analytical Batch: **XMS1627**
Analytical Method: **SW-846 8270D**
Instrument: **MSD10**
Analyst: **CMP**
Analytical Date/Time: **08/07/2012 19:21**

Prep Batch: **XXX2893**
Prep Method: **SW-846 3541**
Prep Date/Time: **08/06/2012 16:36**
Prep Initial Wt./Vol.: **32.72 g**
Prep Extract Vol: **10 mL**

Print Date: 08/16/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 103DPT-04 (5-5.5ft)

Client Sample ID: **103DPT-04 (5-5.5ft)**
Client Project ID: **NCDOT Parcel 103**
Lab Sample ID: 31202487004-A
Lab Project ID: 31202487

Collection Date: 08/01/2012 16:10
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	0.713	5.03	ug/Kg	1	08/7/2012 16:34
1,1,1-Trichloroethane	ND	U	0.758	5.03	ug/Kg	1	08/7/2012 16:34
1,1,2,2-Tetrachloroethane	ND	U	1.18	5.03	ug/Kg	1	08/7/2012 16:34
1,1,2-Trichloroethane	ND	U	1.05	5.03	ug/Kg	1	08/7/2012 16:34
1,1-Dichloroethane	ND	U	0.541	5.03	ug/Kg	1	08/7/2012 16:34
1,1-Dichloroethene	ND	U	1.17	5.03	ug/Kg	1	08/7/2012 16:34
1,1-Dichloropropene	ND	U	0.680	5.03	ug/Kg	1	08/7/2012 16:34
1,2,3-Trichlorobenzene	ND	U	0.836	5.03	ug/Kg	1	08/7/2012 16:34
1,2,3-Trichloropropane	ND	U	1.04	5.03	ug/Kg	1	08/7/2012 16:34
1,2,4-Trichlorobenzene	ND	U	0.733	5.03	ug/Kg	1	08/7/2012 16:34
1,2,4-Trimethylbenzene	ND	U	0.640	5.03	ug/Kg	1	08/7/2012 16:34
1,2-Dibromo-3-chloropropane	ND	U	7.45	30.2	ug/Kg	1	08/7/2012 16:34
1,2-Dibromoethane	ND	U	1.32	5.03	ug/Kg	1	08/7/2012 16:34
1,2-Dichlorobenzene	ND	U	0.715	5.03	ug/Kg	1	08/7/2012 16:34
1,2-Dichloroethane	ND	U	0.918	5.03	ug/Kg	1	08/7/2012 16:34
1,2-Dichloropropane	ND	U	1.16	5.03	ug/Kg	1	08/7/2012 16:34
1,3,5-Trimethylbenzene	ND	U	0.611	5.03	ug/Kg	1	08/7/2012 16:34
1,3-Dichlorobenzene	ND	U	0.723	5.03	ug/Kg	1	08/7/2012 16:34
1,3-Dichloropropane	ND	U	0.884	5.03	ug/Kg	1	08/7/2012 16:34
1,4-Dichlorobenzene	ND	U	0.679	5.03	ug/Kg	1	08/7/2012 16:34
2,2-Dichloropropane	ND	U	0.742	5.03	ug/Kg	1	08/7/2012 16:34
2-Butanone	ND	U	3.40	25.1	ug/Kg	1	08/7/2012 16:34
2-Chlorotoluene	ND	U	0.942	5.03	ug/Kg	1	08/7/2012 16:34
2-Hexanone	ND	U	3.24	12.6	ug/Kg	1	08/7/2012 16:34
4-Chlorotoluene	ND	U	0.760	5.03	ug/Kg	1	08/7/2012 16:34
4-Isopropyltoluene	ND	U	0.648	5.03	ug/Kg	1	08/7/2012 16:34
4-Methyl-2-pentanone	ND	U	3.76	12.6	ug/Kg	1	08/7/2012 16:34
Acetone	ND	U	4.03	50.3	ug/Kg	1	08/7/2012 16:34
Benzene	ND	U	0.715	5.03	ug/Kg	1	08/7/2012 16:34
Bromobenzene	ND	U	0.701	5.03	ug/Kg	1	08/7/2012 16:34
Bromochloromethane	ND	U	0.945	5.03	ug/Kg	1	08/7/2012 16:34
Bromodichloromethane	ND	U	0.708	5.03	ug/Kg	1	08/7/2012 16:34
Bromoform	ND	U	0.728	5.03	ug/Kg	1	08/7/2012 16:34
Bromomethane	ND	U	1.46	5.03	ug/Kg	1	08/7/2012 16:34
n-Butylbenzene	ND	U	0.660	5.03	ug/Kg	1	08/7/2012 16:34
Carbon disulfide	ND	U	0.526	5.03	ug/Kg	1	08/7/2012 16:34
Carbon tetrachloride	ND	U	0.572	5.03	ug/Kg	1	08/7/2012 16:34
Chlorobenzene	ND	U	0.702	5.03	ug/Kg	1	08/7/2012 16:34
Chloroethane	ND	U	1.01	5.03	ug/Kg	1	08/7/2012 16:34
Chloroform	**0.653**	J	0.640	5.03	ug/Kg	1	08/7/2012 16:34
Chloromethane	ND	U	1.44	5.03	ug/Kg	1	08/7/2012 16:34
Dibromochloromethane	ND	U	1.12	5.03	ug/Kg	1	08/7/2012 16:34
Dibromomethane	ND	U	0.887	5.03	ug/Kg	1	08/7/2012 16:34
Dichlorodifluoromethane	ND	U	1.06	5.03	ug/Kg	1	08/7/2012 16:34

Print Date: 08/16/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 103DPT-04 (5-5.5ft)

Client Sample ID: **103DPT-04 (5-5.5ft)**
Client Project ID: **NCDOT Parcel 103**
Lab Sample ID: 31202487004-A
Lab Project ID: 31202487

Collection Date: 08/01/2012 16:10
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	1.04	5.03	ug/Kg	1	08/7/2012 16:34
trans-1,3-Dichloropropene	ND	U	0.949	5.03	ug/Kg	1	08/7/2012 16:34
Diisopropyl Ether	ND	U	0.825	5.03	ug/Kg	1	08/7/2012 16:34
Ethyl Benzene	ND	U	0.709	5.03	ug/Kg	1	08/7/2012 16:34
Hexachlorobutadiene	ND	U	0.691	5.03	ug/Kg	1	08/7/2012 16:34
Isopropylbenzene (Cumene)	ND	U	0.625	5.03	ug/Kg	1	08/7/2012 16:34
Methyl iodide	ND	U	0.770	5.03	ug/Kg	1	08/7/2012 16:34
Methylene chloride	2.74	J	1.06	20.1	ug/Kg	1	08/7/2012 16:34
Naphthalene	ND	U	0.914	5.03	ug/Kg	1	08/7/2012 16:34
Styrene	ND	U	0.579	5.03	ug/Kg	1	08/7/2012 16:34
Tetrachloroethene	ND	U	0.755	5.03	ug/Kg	1	08/7/2012 16:34
Toluene	1.27	J	0.692	5.03	ug/Kg	1	08/7/2012 16:34
Trichloroethene	ND	U	0.846	5.03	ug/Kg	1	08/7/2012 16:34
Trichlorofluoromethane	ND	U	1.02	5.03	ug/Kg	1	08/7/2012 16:34
Vinyl chloride	ND	U	0.955	5.03	ug/Kg	1	08/7/2012 16:34
Xylene (total)	ND	U	1.78	10.1	ug/Kg	1	08/7/2012 16:34
cis-1,2-Dichloroethene	ND	U	0.614	5.03	ug/Kg	1	08/7/2012 16:34
m,p-Xylene	ND	U	1.70	10.1	ug/Kg	1	08/7/2012 16:34
n-Propylbenzene	ND	U	0.736	5.03	ug/Kg	1	08/7/2012 16:34
o-Xylene	ND	U	0.770	5.03	ug/Kg	1	08/7/2012 16:34
sec-Butylbenzene	ND	U	0.603	5.03	ug/Kg	1	08/7/2012 16:34
tert-Butyl methyl ether (MTBE)	ND	U	0.799	5.03	ug/Kg	1	08/7/2012 16:34
tert-Butylbenzene	ND	U	0.677	5.03	ug/Kg	1	08/7/2012 16:34
trans-1,2-Dichloroethene	ND	U	0.734	5.03	ug/Kg	1	08/7/2012 16:34
trans-1,4-Dichloro-2-butene	ND	U	4.22	25.1	ug/Kg	1	08/7/2012 16:34
Surrogates							
1,2-Dichloroethane-d4	110			55.0-173	%	1	08/7/2012 16:34
4-Bromofluorobenzene	95.0			23.0-141	%	1	08/7/2012 16:34
Toluene d8	102			57.0-134	%	1	08/7/2012 16:34

Batch Information

Analytical Batch: **VMS2451**
Analytical Method: **SW-846 8260B**
Instrument: **MSD9**
Analyst: **DVO**
Analytical Date/Time: **08/07/2012 16:34**

Prep Batch: **VXX3769**
Prep Method: **SW-846 5035 SL**
Prep Date/Time: **08/06/2012 16:12**
Prep Initial Wt./Vol.: **6.67 g**
Prep Extract Vol: **5 mL**

Print Date: 08/16/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 103DPT-04 (5-5.5ft)

Client Sample ID: **103DPT-04 (5-5.5ft)**
Client Project ID: **NCDOT Parcel 103**
Lab Sample ID: 31202487004-E
Lab Project ID: 31202487

Collection Date: 08/01/2012 16:10
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	35.6	404	ug/Kg	1	08/8/2012 12:10
1,2-Dichlorobenzene	ND	U	20.1	404	ug/Kg	1	08/8/2012 12:10
1,3-Dichlorobenzene	ND	U	27.2	404	ug/Kg	1	08/8/2012 12:10
1,4-Dichlorobenzene	ND	U	28.5	404	ug/Kg	1	08/8/2012 12:10
2,4,5-Trichlorophenol	ND	U	27.0	404	ug/Kg	1	08/8/2012 12:10
2,4,6-Trichlorophenol	ND	U	27.4	404	ug/Kg	1	08/8/2012 12:10
2,4-Dichlorophenol	ND	U	23.4	404	ug/Kg	1	08/8/2012 12:10
2,4-Dinitrophenol	ND	U	37.4	807	ug/Kg	1	08/8/2012 12:10
2,4-Dinitrotoluene	ND	U	20.4	404	ug/Kg	1	08/8/2012 12:10
2,6-Dinitrotoluene	ND	U	28.9	404	ug/Kg	1	08/8/2012 12:10
2-Chloronaphthalene	ND	U	23.7	404	ug/Kg	1	08/8/2012 12:10
2-Chlorophenol	ND	U	21.4	404	ug/Kg	1	08/8/2012 12:10
2-Methylnaphthalene	ND	U	32.7	404	ug/Kg	1	08/8/2012 12:10
2-Methylphenol	ND	U	22.3	404	ug/Kg	1	08/8/2012 12:10
2-Nitroaniline	ND	U	26.6	404	ug/Kg	1	08/8/2012 12:10
2-Nitrophenol	ND	U	19.4	404	ug/Kg	1	08/8/2012 12:10
3 and/or 4-Methylphenol	ND	U	26.2	404	ug/Kg	1	08/8/2012 12:10
3,3'-Dichlorobenzidine	ND	U	19.4	404	ug/Kg	1	08/8/2012 12:10
3-Nitroaniline	ND	U	18.2	404	ug/Kg	1	08/8/2012 12:10
4,6-Dinitro-2-methylphenol	ND	U	19.0	404	ug/Kg	1	08/8/2012 12:10
4-Chloro-3-methylphenol	ND	U	20.1	404	ug/Kg	1	08/8/2012 12:10
4-Chloroaniline	ND	U	32.3	404	ug/Kg	1	08/8/2012 12:10
4-Chlorophenyl phenyl ether	ND	U	43.1	404	ug/Kg	1	08/8/2012 12:10
Acenaphthene	ND	U	18.3	404	ug/Kg	1	08/8/2012 12:10
Acenaphthylene	ND	U	17.0	404	ug/Kg	1	08/8/2012 12:10
Anthracene	ND	U	17.9	404	ug/Kg	1	08/8/2012 12:10
Benzo(a)anthracene	ND	U	22.2	404	ug/Kg	1	08/8/2012 12:10
Benzo(a)pyrene	ND	U	22.8	404	ug/Kg	1	08/8/2012 12:10
Benzo(b)fluoranthene	ND	U	23.2	404	ug/Kg	1	08/8/2012 12:10
Benzo(g,h,i)perylene	ND	U	64.3	404	ug/Kg	1	08/8/2012 12:10
Benzo(k)fluoranthene	ND	U	48.4	404	ug/Kg	1	08/8/2012 12:10
Benzoic acid	ND	U	8.96	404	ug/Kg	1	08/8/2012 12:10
Bis(2-Chloroethoxy)methane	ND	U	18.2	404	ug/Kg	1	08/8/2012 12:10
Bis(2-Chloroethyl)ether	ND	U	37.7	404	ug/Kg	1	08/8/2012 12:10
Bis(2-Chloroisopropyl)ether	ND	U	35.2	404	ug/Kg	1	08/8/2012 12:10
Bis(2-Ethylhexyl)phthalate	ND	U	19.4	404	ug/Kg	1	08/8/2012 12:10
4-Bromophenyl phenyl ether	ND	U	26.6	404	ug/Kg	1	08/8/2012 12:10
Butyl benzyl phthalate	ND	U	35.1	404	ug/Kg	1	08/8/2012 12:10
Chrysene	ND	U	47.0	404	ug/Kg	1	08/8/2012 12:10
Di-n-butyl phthalate	ND	U	19.1	404	ug/Kg	1	08/8/2012 12:10
Di-n-octyl phthalate	ND	U	22.3	404	ug/Kg	1	08/8/2012 12:10
Dibenz(a,h)anthracene	ND	U	18.2	404	ug/Kg	1	08/8/2012 12:10
Dibenzofuran	ND	U	31.6	404	ug/Kg	1	08/8/2012 12:10
Diethyl phthalate	ND	U	21.8	404	ug/Kg	1	08/8/2012 12:10

Print Date: 08/16/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 103DPT-04 (5-5.5ft)

Client Sample ID: **103DPT-04 (5-5.5ft)**
Client Project ID: **NCDOT Parcel 103**
Lab Sample ID: 31202487004-E
Lab Project ID: 31202487

Collection Date: 08/01/2012 16:10
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	31.0	404	ug/Kg	1	08/8/2012 12:10
2,4-Dimethylphenol	ND	U	29.6	404	ug/Kg	1	08/8/2012 12:10
Diphenylamine	ND	U	18.2	404	ug/Kg	1	08/8/2012 12:10
Fluoranthene	ND	U	37.9	404	ug/Kg	1	08/8/2012 12:10
Fluorene	ND	U	21.4	404	ug/Kg	1	08/8/2012 12:10
Hexachlorobenzene	ND	U	38.2	404	ug/Kg	1	08/8/2012 12:10
Hexachlorobutadiene	ND	U	24.1	404	ug/Kg	1	08/8/2012 12:10
Hexachlorocyclopentadiene	ND	U	122	404	ug/Kg	1	08/8/2012 12:10
Hexachloroethane	ND	U	23.2	404	ug/Kg	1	08/8/2012 12:10
Indeno(1,2,3-cd)pyrene	ND	U	31.5	404	ug/Kg	1	08/8/2012 12:10
Isophorone	ND	U	18.3	404	ug/Kg	1	08/8/2012 12:10
Naphthalene	ND	U	34.8	404	ug/Kg	1	08/8/2012 12:10
4-Nitroaniline	ND	U	23.2	404	ug/Kg	1	08/8/2012 12:10
Nitrobenzene	ND	U	23.2	404	ug/Kg	1	08/8/2012 12:10
4-Nitrophenol	ND	U	39.7	404	ug/Kg	1	08/8/2012 12:10
Pentachlorophenol	ND	U	32.3	404	ug/Kg	1	08/8/2012 12:10
Phenanthrene	ND	U	26.6	404	ug/Kg	1	08/8/2012 12:10
Phenol	ND	U	37.7	404	ug/Kg	1	08/8/2012 12:10
Pyrene	ND	U	17.0	404	ug/Kg	1	08/8/2012 12:10
n-Nitrosodi-n-propylamine	ND	U	116	404	ug/Kg	1	08/8/2012 12:10
Surrogates							
2,4,6-Tribromophenol	86.0			41.0-129	%	1	08/8/2012 12:10
2-Fluorobiphenyl	78.0			48.0-123	%	1	08/8/2012 12:10
2-Fluorophenol	85.0			42.0-123	%	1	08/8/2012 12:10
Nitrobenzene-d5	88.0			46.0-117	%	1	08/8/2012 12:10
Phenol-d6	98.0			48.0-125	%	1	08/8/2012 12:10
Terphenyl-d14	89.0			44.0-140	%	1	08/8/2012 12:10

Batch Information

Analytical Batch: **XMS1628**
Analytical Method: **SW-846 8270D**
Instrument: **MSD10**
Analyst: **CMP**
Analytical Date/Time: **08/08/2012 12:10**

Prep Batch: **XXX2895**
Prep Method: **SW-846 3541**
Prep Date/Time: **08/07/2012 15:37**
Prep Initial Wt./Vol.: **33.25 g**
Prep Extract Vol: **10 mL**

Print Date: 08/16/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 103DPT-05 (7-8ft)

Client Sample ID: **103DPT-05 (7-8ft)**
Client Project ID: **NCDOT Parcel 103**
Lab Sample ID: 31202487005-A
Lab Project ID: 31202487

Collection Date: 08/02/2012 07:40
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 68.90

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	U	0.836	5.89	ug/Kg	1	08/9/2012 19:00
1,1,1-Trichloroethane	ND	U	0.889	5.89	ug/Kg	1	08/9/2012 19:00
1,1,2,2-Tetrachloroethane	ND	U	1.38	5.89	ug/Kg	1	08/9/2012 19:00
1,1,2-Trichloroethane	ND	U	1.23	5.89	ug/Kg	1	08/9/2012 19:00
1,1-Dichloroethane	ND	U	0.634	5.89	ug/Kg	1	08/9/2012 19:00
1,1-Dichloroethene	ND	U	1.37	5.89	ug/Kg	1	08/9/2012 19:00
1,1-Dichloropropene	ND	U	0.797	5.89	ug/Kg	1	08/9/2012 19:00
1,2,3-Trichlorobenzene	ND	U	0.981	5.89	ug/Kg	1	08/9/2012 19:00
1,2,3-Trichloropropane	ND	U	1.21	5.89	ug/Kg	1	08/9/2012 19:00
1,2,4-Trichlorobenzene	ND	U	0.859	5.89	ug/Kg	1	08/9/2012 19:00
1,2,4-Trimethylbenzene	ND	U	0.751	5.89	ug/Kg	1	08/9/2012 19:00
1,2-Dibromo-3-chloropropane	ND	U	8.74	35.4	ug/Kg	1	08/9/2012 19:00
1,2-Dibromoethane	ND	U	1.54	5.89	ug/Kg	1	08/9/2012 19:00
1,2-Dichlorobenzene	ND	U	0.838	5.89	ug/Kg	1	08/9/2012 19:00
1,2-Dichloroethane	ND	U	1.08	5.89	ug/Kg	1	08/9/2012 19:00
1,2-Dichloropropane	ND	U	1.36	5.89	ug/Kg	1	08/9/2012 19:00
1,3,5-Trimethylbenzene	ND	U	0.717	5.89	ug/Kg	1	08/9/2012 19:00
1,3-Dichlorobenzene	ND	U	0.848	5.89	ug/Kg	1	08/9/2012 19:00
1,3-Dichloropropane	ND	U	1.04	5.89	ug/Kg	1	08/9/2012 19:00
1,4-Dichlorobenzene	ND	U	0.796	5.89	ug/Kg	1	08/9/2012 19:00
2,2-Dichloropropane	ND	U	0.870	5.89	ug/Kg	1	08/9/2012 19:00
2-Butanone	ND	U	3.98	29.5	ug/Kg	1	08/9/2012 19:00
2-Chlorotoluene	ND	U	1.10	5.89	ug/Kg	1	08/9/2012 19:00
2-Hexanone	ND	U	3.80	14.7	ug/Kg	1	08/9/2012 19:00
4-Chlorotoluene	ND	U	0.891	5.89	ug/Kg	1	08/9/2012 19:00
4-Isopropyltoluene	ND	U	0.760	5.89	ug/Kg	1	08/9/2012 19:00
4-Methyl-2-pentanone	ND	U	4.41	14.7	ug/Kg	1	08/9/2012 19:00
Acetone	**12.8**	J	4.73	58.9	ug/Kg	1	08/9/2012 19:00
Benzene	ND	U	0.838	5.89	ug/Kg	1	08/9/2012 19:00
Bromobenzene	ND	U	0.822	5.89	ug/Kg	1	08/9/2012 19:00
Bromochloromethane	ND	U	1.11	5.89	ug/Kg	1	08/9/2012 19:00
Bromodichloromethane	ND	U	0.830	5.89	ug/Kg	1	08/9/2012 19:00
Bromoform	ND	U	0.854	5.89	ug/Kg	1	08/9/2012 19:00
Bromomethane	ND	U	1.71	5.89	ug/Kg	1	08/9/2012 19:00
n-Butylbenzene	ND	U	0.775	5.89	ug/Kg	1	08/9/2012 19:00
Carbon disulfide	ND	U	0.617	5.89	ug/Kg	1	08/9/2012 19:00
Carbon tetrachloride	ND	U	0.671	5.89	ug/Kg	1	08/9/2012 19:00
Chlorobenzene	ND	U	0.823	5.89	ug/Kg	1	08/9/2012 19:00
Chloroethane	ND	U	1.18	5.89	ug/Kg	1	08/9/2012 19:00
Chloroform	ND	U	0.751	5.89	ug/Kg	1	08/9/2012 19:00
Chloromethane	ND	U	1.69	5.89	ug/Kg	1	08/9/2012 19:00
Dibromochloromethane	ND	U	1.31	5.89	ug/Kg	1	08/9/2012 19:00
Dibromomethane	ND	U	1.04	5.89	ug/Kg	1	08/9/2012 19:00
Dichlorodifluoromethane	ND	U	1.24	5.89	ug/Kg	1	08/9/2012 19:00

Print Date: 08/16/2012

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SGS ANALYTICAL PERSPECTIVES

Results of 103DPT-05 (7-8ft)

Client Sample ID: **103DPT-05 (7-8ft)**
Client Project ID: **NCDOT Parcel 103**
Lab Sample ID: 31202487005-A
Lab Project ID: 31202487

Collection Date: 08/02/2012 07:40
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 68.90

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	U	1.21	5.89	ug/Kg	1	08/9/2012 19:00
trans-1,3-Dichloropropene	ND	U	1.11	5.89	ug/Kg	1	08/9/2012 19:00
Diisopropyl Ether	ND	U	0.968	5.89	ug/Kg	1	08/9/2012 19:00
Ethyl Benzene	ND	U	0.831	5.89	ug/Kg	1	08/9/2012 19:00
Hexachlorobutadiene	ND	U	0.810	5.89	ug/Kg	1	08/9/2012 19:00
Isopropylbenzene (Cumene)	ND	U	0.733	5.89	ug/Kg	1	08/9/2012 19:00
Methyl Iodide	ND	U	0.903	5.89	ug/Kg	1	08/9/2012 19:00
Methylene chloride	**4.29**	J	1.24	23.6	ug/Kg	1	08/9/2012 19:00
Naphthalene	ND	U	1.07	5.89	ug/Kg	1	08/9/2012 19:00
Styrene	ND	U	0.679	5.89	ug/Kg	1	08/9/2012 19:00
Tetrachloroethene	**208**		0.885	5.89	ug/Kg	1	08/9/2012 19:00
Toluene	**1.90**	J	0.811	5.89	ug/Kg	1	08/9/2012 19:00
Trichloroethene	ND	U	0.993	5.89	ug/Kg	1	08/9/2012 19:00
Trichlorofluoromethane	ND	U	1.19	5.89	ug/Kg	1	08/9/2012 19:00
Vinyl chloride	ND	U	1.12	5.89	ug/Kg	1	08/9/2012 19:00
Xylene (total)	ND	U	2.09	11.8	ug/Kg	1	08/9/2012 19:00
cis-1,2-Dichloroethene	ND	U	0.720	5.89	ug/Kg	1	08/9/2012 19:00
m,p-Xylene	ND	U	1.99	11.8	ug/Kg	1	08/9/2012 19:00
n-Propylbenzene	ND	U	0.863	5.89	ug/Kg	1	08/9/2012 19:00
o-Xylene	ND	U	0.903	5.89	ug/Kg	1	08/9/2012 19:00
sec-Butylbenzene	ND	U	0.707	5.89	ug/Kg	1	08/9/2012 19:00
tert-Butyl methyl ether (MTBE)	ND	U	0.937	5.89	ug/Kg	1	08/9/2012 19:00
tert-Butylbenzene	ND	U	0.793	5.89	ug/Kg	1	08/9/2012 19:00
trans-1,2-Dichloroethene	ND	U	0.861	5.89	ug/Kg	1	08/9/2012 19:00
trans-1,4-Dichloro-2-butene	ND	U	4.95	29.5	ug/Kg	1	08/9/2012 19:00
Surrogates							
1,2-Dichloroethane-d4	112			55.0-173	%	1	08/9/2012 19:00
4-Bromofluorobenzene	95.0			23.0-141	%	1	08/9/2012 19:00
Toluene d8	103			57.0-134	%	1	08/9/2012 19:00

Batch Information

Analytical Batch: **VMS2459**
Analytical Method: **SW-846 8260B**
Instrument: **MSD9**
Analyst: **DVO**
Analytical Date/Time: **08/09/2012 19:00**

Prep Batch: **VXX3787**
Prep Method: **SW-846 5035 SL**
Prep Date/Time: **08/06/2012 16:12**
Prep Initial Wt./Vol.: **6.16 g**
Prep Extract Vol: **5 mL**

Print Date: 08/16/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of **103DPT-05 (7-8ft)**

Client Sample ID: **103DPT-05 (7-8ft)**
Client Project ID: **NCDOT Parcel 103**
Lab Sample ID: 31202487005-E
Lab Project ID: 31202487

Collection Date: 08/02/2012 07:40
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 68.90

Results by **SW-846 8270D**

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,2,4-Trichlorobenzene	ND	U	38.5	437	ug/Kg	1	08/8/2012 13:18
1,2-Dichlorobenzene	ND	U	21.8	437	ug/Kg	1	08/8/2012 13:18
1,3-Dichlorobenzene	ND	U	29.4	437	ug/Kg	1	08/8/2012 13:18
1,4-Dichlorobenzene	ND	U	30.8	437	ug/Kg	1	08/8/2012 13:18
2,4,5-Trichlorophenol	ND	U	29.2	437	ug/Kg	1	08/8/2012 13:18
2,4,6-Trichlorophenol	ND	U	29.6	437	ug/Kg	1	08/8/2012 13:18
2,4-Dichlorophenol	ND	U	25.2	437	ug/Kg	1	08/8/2012 13:18
2,4-Dinitrophenol	ND	U	40.5	872	ug/Kg	1	08/8/2012 13:18
2,4-Dinitrotoluene	ND	U	22.0	437	ug/Kg	1	08/8/2012 13:18
2,6-Dinitrotoluene	ND	U	31.2	437	ug/Kg	1	08/8/2012 13:18
2-Chloronaphthalene	ND	U	25.7	437	ug/Kg	1	08/8/2012 13:18
2-Chlorophenol	ND	U	23.2	437	ug/Kg	1	08/8/2012 13:18
2-Methylnaphthalene	ND	U	35.3	437	ug/Kg	1	08/8/2012 13:18
2-Methylphenol	ND	U	24.1	437	ug/Kg	1	08/8/2012 13:18
2-Nitroaniline	ND	U	28.7	437	ug/Kg	1	08/8/2012 13:18
2-Nitrophenol	ND	U	20.9	437	ug/Kg	1	08/8/2012 13:18
3 and/or 4-Methylphenol	ND	U	28.3	437	ug/Kg	1	08/8/2012 13:18
3,3'-Dichlorobenzidine	ND	U	20.9	437	ug/Kg	1	08/8/2012 13:18
3-Nitroaniline	ND	U	19.7	437	ug/Kg	1	08/8/2012 13:18
4,6-Dinitro-2-methylphenol	ND	U	20.5	437	ug/Kg	1	08/8/2012 13:18
4-Chloro-3-methylphenol	ND	U	21.8	437	ug/Kg	1	08/8/2012 13:18
4-Chloroaniline	ND	U	34.9	437	ug/Kg	1	08/8/2012 13:18
4-Chlorophenyl phenyl ether	ND	U	46.6	437	ug/Kg	1	08/8/2012 13:18
Acenaphthene	ND	U	19.8	437	ug/Kg	1	08/8/2012 13:18
Acenaphthylene	ND	U	18.4	437	ug/Kg	1	08/8/2012 13:18
Anthracene	ND	U	19.4	437	ug/Kg	1	08/8/2012 13:18
Benzo(a)anthracene	ND	U	24.0	437	ug/Kg	1	08/8/2012 13:18
Benzo(a)pyrene	ND	U	24.7	437	ug/Kg	1	08/8/2012 13:18
Benzo(b)fluoranthene	ND	U	25.1	437	ug/Kg	1	08/8/2012 13:18
Benzo(g,h,i)perylene	ND	U	69.5	437	ug/Kg	1	08/8/2012 13:18
Benzo(k)fluoranthene	ND	U	52.3	437	ug/Kg	1	08/8/2012 13:18
Benzoic acid	ND	U	9.68	437	ug/Kg	1	08/8/2012 13:18
Bis(2-Chloroethoxy)methane	ND	U	19.7	437	ug/Kg	1	08/8/2012 13:18
Bis(2-Chloroethyl)ether	ND	U	40.7	437	ug/Kg	1	08/8/2012 13:18
Bis(2-Chloroisopropyl)ether	ND	U	38.1	437	ug/Kg	1	08/8/2012 13:18
Bis(2-Ethylhexyl)phthalate	ND	U	20.9	437	ug/Kg	1	08/8/2012 13:18
4-Bromophenyl phenyl ether	ND	U	28.7	437	ug/Kg	1	08/8/2012 13:18
Butyl benzyl phthalate	ND	U	37.9	437	ug/Kg	1	08/8/2012 13:18
Chrysene	ND	U	50.8	437	ug/Kg	1	08/8/2012 13:18
Di-n-butyl phthalate	ND	U	20.6	437	ug/Kg	1	08/8/2012 13:18
Di-n-octyl phthalate	ND	U	24.1	437	ug/Kg	1	08/8/2012 13:18
Dibenz(a,h)anthracene	ND	U	19.7	437	ug/Kg	1	08/8/2012 13:18
Dibenzofuran	ND	U	34.2	437	ug/Kg	1	08/8/2012 13:18
Diethyl phthalate	ND	U	23.6	437	ug/Kg	1	08/8/2012 13:18

Print Date: 08/16/2012

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SGS ANALYTICAL PERSPECTIVES

Results of 103DPT-05 (7-8ft)

Client Sample ID: **103DPT-05 (7-8ft)**
Client Project ID: **NCDOT Parcel 103**
Lab Sample ID: 31202487005-E
Lab Project ID: 31202487

Collection Date: 08/02/2012 07:40
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 68.90

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
Dimethyl phthalate	ND	U	33.5	437	ug/Kg	1	08/8/2012 13:18
2,4-Dimethylphenol	ND	U	31.9	437	ug/Kg	1	08/8/2012 13:18
Diphenylamine	ND	U	19.7	437	ug/Kg	1	08/8/2012 13:18
Fluoranthene	ND	U	41.0	437	ug/Kg	1	08/8/2012 13:18
Fluorene	ND	U	23.2	437	ug/Kg	1	08/8/2012 13:18
Hexachlorobenzene	ND	U	41.3	437	ug/Kg	1	08/8/2012 13:18
Hexachlorobutadiene	ND	U	26.1	437	ug/Kg	1	08/8/2012 13:18
Hexachlorocyclopentadiene	ND	U	132	437	ug/Kg	1	08/8/2012 13:18
Hexachloroethane	ND	U	25.1	437	ug/Kg	1	08/8/2012 13:18
Indeno(1,2,3-cd)pyrene	ND	U	34.0	437	ug/Kg	1	08/8/2012 13:18
Isophorone	ND	U	19.8	437	ug/Kg	1	08/8/2012 13:18
Naphthalene	ND	U	37.7	437	ug/Kg	1	08/8/2012 13:18
4-Nitroaniline	ND	U	25.1	437	ug/Kg	1	08/8/2012 13:18
Nitrobenzene	ND	U	25.1	437	ug/Kg	1	08/8/2012 13:18
4-Nitrophenol	ND	U	43.0	437	ug/Kg	1	08/8/2012 13:18
Pentachlorophenol	ND	U	34.9	437	ug/Kg	1	08/8/2012 13:18
Phenanthrene	ND	U	28.7	437	ug/Kg	1	08/8/2012 13:18
Phenol	ND	U	40.7	437	ug/Kg	1	08/8/2012 13:18
Pyrene	ND	U	18.4	437	ug/Kg	1	08/8/2012 13:18
n-Nitrosodi-n-propylamine	ND	U	125	437	ug/Kg	1	08/8/2012 13:18
Surrogates							
2,4,6-Tribromophenol	91.0			41.0-129	%	1	08/8/2012 13:18
2-Fluorobiphenyl	82.0			48.0-123	%	1	08/8/2012 13:18
2-Fluorophenol	85.0			42.0-123	%	1	08/8/2012 13:18
Nitrobenzene-d5	89.0			46.0-117	%	1	08/8/2012 13:18
Phenol-d6	98.0			48.0-125	%	1	08/8/2012 13:18
Terphenyl-d14	92.0			44.0-140	%	1	08/8/2012 13:18

Batch Information

Analytical Batch: **XMS1628**
Analytical Method: **SW-846 8270D**
Instrument: **MSD10**
Analyst: **CMP**
Analytical Date/Time: **08/08/2012 13:18**

Prep Batch: **XXX2895**
Prep Method: **SW-846 3541**
Prep Date/Time: **08/07/2012 15:37**
Prep Initial Wt./Vol.: **33.32 g**
Prep Extract Vol: **10 mL**

Print Date: 08/16/2012

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SGS ANALYTICAL PERSPECTIVES

Results of 103DPT-06 (7-8ft)

Client Sample ID: **103DPT-06 (7-8ft)**
Client Project ID: **NCDOT Parcel 103**
Lab Sample ID: 31202487006-D
Lab Project ID: 31202487

Collection Date: 08/02/2012 08:00
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 74.10

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	U	6.01	57.8	ug/Kg	50	08/8/2012 15:08
1,1,1-Trichloroethane	ND	U	7.11	57.8	ug/Kg	50	08/8/2012 15:08
1,1,2,2-Tetrachloroethane	ND	U	9.01	57.8	ug/Kg	50	08/8/2012 15:08
1,1,2-Trichloroethane	ND	U	7.28	57.8	ug/Kg	50	08/8/2012 15:08
1,1-Dichloroethane	ND	U	9.53	57.8	ug/Kg	50	08/8/2012 15:08
1,1-Dichloroethene	ND	U	12.3	57.8	ug/Kg	50	08/8/2012 15:08
1,1-Dichloropropene	ND	U	4.99	57.8	ug/Kg	50	08/8/2012 15:08
1,2,3-Trichlorobenzene	ND	U	6.36	57.8	ug/Kg	50	08/8/2012 15:08
1,2,3-Trichloropropane	ND	U	12.3	57.8	ug/Kg	50	08/8/2012 15:08
1,2,4-Trichlorobenzene	ND	U	5.28	57.8	ug/Kg	50	08/8/2012 15:08
1,2,4-Trimethylbenzene	ND	U	5.55	57.8	ug/Kg	50	08/8/2012 15:08
1,2-Dibromo-3-chloropropane	ND	U	43.2	289	ug/Kg	50	08/8/2012 15:08
1,2-Dibromoethane	ND	U	6.93	57.8	ug/Kg	50	08/8/2012 15:08
1,2-Dichlorobenzene	ND	U	7.92	57.8	ug/Kg	50	08/8/2012 15:08
1,2-Dichloroethane	ND	U	9.65	57.8	ug/Kg	50	08/8/2012 15:08
1,2-Dichloropropane	ND	U	9.42	57.8	ug/Kg	50	08/8/2012 15:08
1,3,5-Trimethylbenzene	ND	U	6.53	57.8	ug/Kg	50	08/8/2012 15:08
1,3-Dichlorobenzene	ND	U	5.95	57.8	ug/Kg	50	08/8/2012 15:08
1,3-Dichloropropane	ND	U	7.51	57.8	ug/Kg	50	08/8/2012 15:08
1,4-Dichlorobenzene	ND	U	7.51	57.8	ug/Kg	50	08/8/2012 15:08
2,2-Dichloropropane	ND	U	22.7	57.8	ug/Kg	50	08/8/2012 15:08
2-Butanone	ND	U	41.8	1440	ug/Kg	50	08/8/2012 15:08
2-Chlorotoluene	ND	U	6.53	57.8	ug/Kg	50	08/8/2012 15:08
2-Hexanone	ND	U	42.1	289	ug/Kg	50	08/8/2012 15:08
4-Chlorotoluene	ND	U	7.22	57.8	ug/Kg	50	08/8/2012 15:08
4-Isopropyltoluene	ND	U	4.44	57.8	ug/Kg	50	08/8/2012 15:08
4-Methyl-2-pentanone	ND	U	32.2	289	ug/Kg	50	08/8/2012 15:08
Acetone	ND	U	49.9	1440	ug/Kg	50	08/8/2012 15:08
Benzene	ND	U	6.53	57.8	ug/Kg	50	08/8/2012 15:08
Bromobenzene	ND	U	6.36	57.8	ug/Kg	50	08/8/2012 15:08
Bromochloromethane	ND	U	12.2	57.8	ug/Kg	50	08/8/2012 15:08
Bromodichloromethane	ND	U	6.36	57.8	ug/Kg	50	08/8/2012 15:08
Bromoform	ND	U	5.63	57.8	ug/Kg	50	08/8/2012 15:08
Bromomethane	ND	U	13.7	57.8	ug/Kg	50	08/8/2012 15:08
n-Butylbenzene	ND	U	4.44	57.8	ug/Kg	50	08/8/2012 15:08
Carbon disulfide	ND	U	6.13	57.8	ug/Kg	50	08/8/2012 15:08
Carbon tetrachloride	ND	U	5.84	57.8	ug/Kg	50	08/8/2012 15:08
Chlorobenzene	ND	U	6.70	57.8	ug/Kg	50	08/8/2012 15:08
Chloroethane	ND	U	18.0	57.8	ug/Kg	50	08/8/2012 15:08
Chloroform	ND	U	8.03	57.8	ug/Kg	50	08/8/2012 15:08
Chloromethane	ND	U	25.9	57.8	ug/Kg	50	08/8/2012 15:08
Dibromochloromethane	ND	U	7.74	57.8	ug/Kg	50	08/8/2012 15:08
Dibromomethane	ND	U	9.71	57.8	ug/Kg	50	08/8/2012 15:08
Dichlorodifluoromethane	ND	U	9.88	289	ug/Kg	50	08/8/2012 15:08

Print Date: 08/16/2012

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SGS ANALYTICAL PERSPECTIVES

Results of 103DPT-06 (7-8ft)

Client Sample ID: **103DPT-06 (7-8ft)**
Client Project ID: **NCDOT Parcel 103**
Lab Sample ID: 31202487006-D
Lab Project ID: 31202487

Collection Date: 08/02/2012 08:00
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 74.10

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	U	4.43	57.8	ug/Kg	50	08/8/2012 15:08
trans-1,3-Dichloropropene	ND	U	4.98	57.8	ug/Kg	50	08/8/2012 15:08
Diisopropyl Ether	ND	U	17.0	57.8	ug/Kg	50	08/8/2012 15:08
Ethyl Benzene	ND	U	5.07	57.8	ug/Kg	50	08/8/2012 15:08
Hexachlorobutadiene	ND	U	4.58	57.8	ug/Kg	50	08/8/2012 15:08
Isopropylbenzene (Cumene)	ND	U	5.02	57.8	ug/Kg	50	08/8/2012 15:08
Methyl iodide	ND	U	6.65	57.8	ug/Kg	50	08/8/2012 15:08
Methylene chloride	ND	U	8.78	289	ug/Kg	50	08/8/2012 15:08
Naphthalene	ND	U	4.94	57.8	ug/Kg	50	08/8/2012 15:08
Styrene	ND	U	5.89	57.8	ug/Kg	50	08/8/2012 15:08
Tetrachloroethene	347		8.96	57.8	ug/Kg	50	08/8/2012 15:08
Toluene	ND	U	7.69	57.8	ug/Kg	50	08/8/2012 15:08
Trichloroethene	ND	U	7.22	57.8	ug/Kg	50	08/8/2012 15:08
Trichlorofluoromethane	ND	U	7.92	57.8	ug/Kg	50	08/8/2012 15:08
Vinyl chloride	ND	U	7.17	57.8	ug/Kg	50	08/8/2012 15:08
Xylene (total)	ND	U	10.5	116	ug/Kg	50	08/8/2012 15:08
cis-1,2-Dichloroethene	ND	U	7.86	57.8	ug/Kg	50	08/8/2012 15:08
m,p-Xylene	ND	U	10.5	116	ug/Kg	50	08/8/2012 15:08
n-Propylbenzene	ND	U	6.53	57.8	ug/Kg	50	08/8/2012 15:08
o-Xylene	ND	U	5.05	57.8	ug/Kg	50	08/8/2012 15:08
sec-Butylbenzene	ND	U	6.47	57.8	ug/Kg	50	08/8/2012 15:08
tert-Butyl methyl ether (MTBE)	ND	U	8.32	57.8	ug/Kg	50	08/8/2012 15:08
tert-Butylbenzene	ND	U	4.94	57.8	ug/Kg	50	08/8/2012 15:08
trans-1,2-Dichloroethene	ND	U	12.9	57.8	ug/Kg	50	08/8/2012 15:08
trans-1,4-Dichloro-2-butene	ND	U	23.9	289	ug/Kg	50	08/8/2012 15:08
Surrogates							
1,2-Dichloroethane-d4	100			55.0-173	%	50	08/8/2012 15:08
4-Bromofluorobenzene	100			23.0-141	%	50	08/8/2012 15:08
Toluene d8	104			57.0-134	%	50	08/8/2012 15:08

Batch Information

Analytical Batch: **VMS2457**
Analytical Method: **SW-846 8260B**
Instrument: **MSD3**
Analyst: **BWS**
Analytical Date/Time: **08/08/2012 15:08**

Prep Batch: **VXX3785**
Prep Method: **SW-846 5035 SM**
Prep Date/Time: **08/06/2012 16:12**
Prep Initial Wt./Vol.: **5.84 g**
Prep Extract Vol: **5 mL**

Print Date: 08/16/2012

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SGS ANALYTICAL PERSPECTIVES

Results of 103DPT-06 (7-8ft)

Client Sample ID: **103DPT-06 (7-8ft)**
Client Project ID: **NCDOT Parcel 103**
Lab Sample ID: 31202487006-E
Lab Project ID: 31202487

Collection Date: 08/02/2012 08:00
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 74.10

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,2,4-Trichlorobenzene	ND	U	38.0	431	ug/Kg	1	08/8/2012 13:41
1,2-Dichlorobenzene	ND	U	21.5	431	ug/Kg	1	08/8/2012 13:41
1,3-Dichlorobenzene	ND	U	29.1	431	ug/Kg	1	08/8/2012 13:41
1,4-Dichlorobenzene	ND	U	30.4	431	ug/Kg	1	08/8/2012 13:41
2,4,5-Trichlorophenol	ND	U	28.8	431	ug/Kg	1	08/8/2012 13:41
2,4,6-Trichlorophenol	ND	U	29.2	431	ug/Kg	1	08/8/2012 13:41
2,4-Dichlorophenol	ND	U	24.9	431	ug/Kg	1	08/8/2012 13:41
2,4-Dinitrophenol	ND	U	40.0	861	ug/Kg	1	08/8/2012 13:41
2,4-Dinitrotoluene	ND	U	21.8	431	ug/Kg	1	08/8/2012 13:41
2,6-Dinitrotoluene	ND	U	30.9	431	ug/Kg	1	08/8/2012 13:41
2-Chloronaphthalene	ND	U	25.4	431	ug/Kg	1	08/8/2012 13:41
2-Chlorophenol	ND	U	22.9	431	ug/Kg	1	08/8/2012 13:41
2-Methylnaphthalene	ND	U	34.9	431	ug/Kg	1	08/8/2012 13:41
2-Methylphenol	ND	U	23.8	431	ug/Kg	1	08/8/2012 13:41
2-Nitroaniline	ND	U	28.4	431	ug/Kg	1	08/8/2012 13:41
2-Nitrophenol	ND	U	20.7	431	ug/Kg	1	08/8/2012 13:41
3 and/or 4-Methylphenol	ND	U	28.0	431	ug/Kg	1	08/8/2012 13:41
3,3'-Dichlorobenzidine	ND	U	20.7	431	ug/Kg	1	08/8/2012 13:41
3-Nitroaniline	ND	U	19.4	431	ug/Kg	1	08/8/2012 13:41
4,6-Dinitro-2-methylphenol	ND	U	20.3	431	ug/Kg	1	08/8/2012 13:41
4-Chloro-3-methylphenol	ND	U	21.5	431	ug/Kg	1	08/8/2012 13:41
4-Chloroaniline	ND	U	34.4	431	ug/Kg	1	08/8/2012 13:41
4-Chlorophenyl phenyl ether	ND	U	46.0	431	ug/Kg	1	08/8/2012 13:41
Acenaphthene	ND	U	19.6	431	ug/Kg	1	08/8/2012 13:41
Acenaphthylene	ND	U	18.2	431	ug/Kg	1	08/8/2012 13:41
Anthracene	ND	U	19.2	431	ug/Kg	1	08/8/2012 13:41
Benzo(a)anthracene	ND	U	23.7	431	ug/Kg	1	08/8/2012 13:41
Benzo(a)pyrene	ND	U	24.4	431	ug/Kg	1	08/8/2012 13:41
Benzo(b)fluoranthene	ND	U	24.8	431	ug/Kg	1	08/8/2012 13:41
Benzo(g,h,i)perylene	ND	U	68.6	431	ug/Kg	1	08/8/2012 13:41
Benzo(k)fluoranthene	ND	U	51.7	431	ug/Kg	1	08/8/2012 13:41
Benzoic acid	ND	U	9.56	431	ug/Kg	1	08/8/2012 13:41
Bis(2-Chloroethoxy)methane	ND	U	19.4	431	ug/Kg	1	08/8/2012 13:41
Bis(2-Chloroethyl)ether	ND	U	40.2	431	ug/Kg	1	08/8/2012 13:41
Bis(2-Chloroisopropyl)ether	ND	U	37.6	431	ug/Kg	1	08/8/2012 13:41
Bis(2-Ethylhexyl)phthalate	ND	U	20.7	431	ug/Kg	1	08/8/2012 13:41
4-Bromophenyl phenyl ether	ND	U	28.4	431	ug/Kg	1	08/8/2012 13:41
Butyl benzyl phthalate	ND	U	37.5	431	ug/Kg	1	08/8/2012 13:41
Chrysene	ND	U	50.2	431	ug/Kg	1	08/8/2012 13:41
Di-n-butyl phthalate	ND	U	20.4	431	ug/Kg	1	08/8/2012 13:41
Di-n-octyl phthalate	ND	U	23.8	431	ug/Kg	1	08/8/2012 13:41
Dibenz(a,h)anthracene	ND	U	19.4	431	ug/Kg	1	08/8/2012 13:41
Dibenzofuran	ND	U	33.8	431	ug/Kg	1	08/8/2012 13:41
Diethyl phthalate	ND	U	23.3	431	ug/Kg	1	08/8/2012 13:41

Print Date: 08/16/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 103DPT-06 (7-8ft)

Client Sample ID: **103DPT-06 (7-8ft)**
Client Project ID: **NCDOT Parcel 103**
Lab Sample ID: 31202487006-E
Lab Project ID: 31202487

Collection Date: 08/02/2012 08:00
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 74.10

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
Dimethyl phthalate	ND	U	33.1	431	ug/Kg	1	08/8/2012 13:41
2,4-Dimethylphenol	ND	U	31.6	431	ug/Kg	1	08/8/2012 13:41
Diphenylamine	ND	U	19.4	431	ug/Kg	1	08/8/2012 13:41
Fluoranthene	ND	U	40.5	431	ug/Kg	1	08/8/2012 13:41
Fluorene	ND	U	22.9	431	ug/Kg	1	08/8/2012 13:41
Hexachlorobenzene	ND	U	40.8	431	ug/Kg	1	08/8/2012 13:41
Hexachlorobutadiene	ND	U	25.8	431	ug/Kg	1	08/8/2012 13:41
Hexachlorocyclopentadiene	ND	U	130	431	ug/Kg	1	08/8/2012 13:41
Hexachloroethane	ND	U	24.8	431	ug/Kg	1	08/8/2012 13:41
Indeno(1,2,3-cd)pyrene	ND	U	33.6	431	ug/Kg	1	08/8/2012 13:41
Isophorone	ND	U	19.6	431	ug/Kg	1	08/8/2012 13:41
Naphthalene	ND	U	37.2	431	ug/Kg	1	08/8/2012 13:41
4-Nitroaniline	ND	U	24.8	431	ug/Kg	1	08/8/2012 13:41
Nitrobenzene	ND	U	24.8	431	ug/Kg	1	08/8/2012 13:41
4-Nitrophenol	ND	U	42.4	431	ug/Kg	1	08/8/2012 13:41
Pentachlorophenol	ND	U	34.4	431	ug/Kg	1	08/8/2012 13:41
Phenanthrene	ND	U	28.4	431	ug/Kg	1	08/8/2012 13:41
Phenol	ND	U	40.2	431	ug/Kg	1	08/8/2012 13:41
Pyrene	ND	U	18.2	431	ug/Kg	1	08/8/2012 13:41
n-Nitrosodi-n-propylamine	ND	U	123	431	ug/Kg	1	08/8/2012 13:41
Surrogates							
2,4,6-Tribromophenol	94.0			41.0-129	%	1	08/8/2012 13:41
2-Fluorobiphenyl	90.0			48.0-123	%	1	08/8/2012 13:41
2-Fluorophenol	83.0			42.0-123	%	1	08/8/2012 13:41
Nitrobenzene-d5	89.0			46.0-117	%	1	08/8/2012 13:41
Phenol-d6	95.0			48.0-125	%	1	08/8/2012 13:41
Terphenyl-d14	97.0			44.0-140	%	1	08/8/2012 13:41

Batch Information

Analytical Batch: **XMS1628**
Analytical Method: **SW-846 8270D**
Instrument: **MSD10**
Analyst: **CMP**
Analytical Date/Time: **08/08/2012 13:41**

Prep Batch: **XXX2895**
Prep Method: **SW-846 3541**
Prep Date/Time: **08/07/2012 15:37**
Prep Initial Wt./Vol.: **31.35 g**
Prep Extract Vol: **10 mL**

Print Date: 08/16/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 103DPT-07 (7-8ft)

Client Sample ID: **103DPT-07 (7-8ft)**
Client Project ID: **NCDOT Parcel 103**
Lab Sample ID: 31202487007-A
Lab Project ID: 31202487

Collection Date: 08/02/2012 08:10
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 71.30

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	U	0.781	5.51	ug/Kg	1	08/9/2012 19:26
1,1,1-Trichloroethane	ND	U	0.830	5.51	ug/Kg	1	08/9/2012 19:26
1,1,2,2-Tetrachloroethane	ND	U	1.29	5.51	ug/Kg	1	08/9/2012 19:26
1,1,2-Trichloroethane	ND	U	1.15	5.51	ug/Kg	1	08/9/2012 19:26
1,1-Dichloroethane	ND	U	0.592	5.51	ug/Kg	1	08/9/2012 19:26
1,1-Dichloroethene	ND	U	1.28	5.51	ug/Kg	1	08/9/2012 19:26
1,1-Dichloropropene	ND	U	0.744	5.51	ug/Kg	1	08/9/2012 19:26
1,2,3-Trichlorobenzene	ND	U	0.916	5.51	ug/Kg	1	08/9/2012 19:26
1,2,3-Trichloropropane	ND	U	1.13	5.51	ug/Kg	1	08/9/2012 19:26
1,2,4-Trichlorobenzene	ND	U	0.803	5.51	ug/Kg	1	08/9/2012 19:26
1,2,4-Trimethylbenzene	ND	U	0.701	5.51	ug/Kg	1	08/9/2012 19:26
1,2-Dibromo-3-chloropropane	ND	U	8.16	33.0	ug/Kg	1	08/9/2012 19:26
1,2-Dibromoethane	ND	U	1.44	5.51	ug/Kg	1	08/9/2012 19:26
1,2-Dichlorobenzene	ND	U	0.783	5.51	ug/Kg	1	08/9/2012 19:26
1,2-Dichloroethane	ND	U	1.01	5.51	ug/Kg	1	08/9/2012 19:26
1,2-Dichloropropane	ND	U	1.27	5.51	ug/Kg	1	08/9/2012 19:26
1,3,5-Trimethylbenzene	ND	U	0.669	5.51	ug/Kg	1	08/9/2012 19:26
1,3-Dichlorobenzene	ND	U	0.792	5.51	ug/Kg	1	08/9/2012 19:26
1,3-Dichloropropane	ND	U	0.968	5.51	ug/Kg	1	08/9/2012 19:26
1,4-Dichlorobenzene	ND	U	0.743	5.51	ug/Kg	1	08/9/2012 19:26
2,2-Dichloropropane	ND	U	0.813	5.51	ug/Kg	1	08/9/2012 19:26
2-Butanone	ND	U	3.72	27.5	ug/Kg	1	08/9/2012 19:26
2-Chlorotoluene	ND	U	1.03	5.51	ug/Kg	1	08/9/2012 19:26
2-Hexanone	ND	U	3.55	13.8	ug/Kg	1	08/9/2012 19:26
4-Chlorotoluene	ND	U	0.832	5.51	ug/Kg	1	08/9/2012 19:26
4-Isopropyltoluene	ND	U	0.710	5.51	ug/Kg	1	08/9/2012 19:26
4-Methyl-2-pentanone	ND	U	4.12	13.8	ug/Kg	1	08/9/2012 19:26
Acetone	17.3	J	4.42	55.1	ug/Kg	1	08/9/2012 19:26
Benzene	ND	U	0.783	5.51	ug/Kg	1	08/9/2012 19:26
Bromobenzene	ND	U	0.767	5.51	ug/Kg	1	08/9/2012 19:26
Bromochloromethane	ND	U	1.03	5.51	ug/Kg	1	08/9/2012 19:26
Bromodichloromethane	ND	U	0.775	5.51	ug/Kg	1	08/9/2012 19:26
Bromoform	ND	U	0.797	5.51	ug/Kg	1	08/9/2012 19:26
Bromomethane	ND	U	1.60	5.51	ug/Kg	1	08/9/2012 19:26
n-Butylbenzene	ND	U	0.723	5.51	ug/Kg	1	08/9/2012 19:26
Carbon disulfide	ND	U	0.576	5.51	ug/Kg	1	08/9/2012 19:26
Carbon tetrachloride	ND	U	0.626	5.51	ug/Kg	1	08/9/2012 19:26
Chlorobenzene	ND	U	0.769	5.51	ug/Kg	1	08/9/2012 19:26
Chloroethane	ND	U	1.10	5.51	ug/Kg	1	08/9/2012 19:26
Chloroform	ND	U	0.701	5.51	ug/Kg	1	08/9/2012 19:26
Chloromethane	ND	U	1.57	5.51	ug/Kg	1	08/9/2012 19:26
Dibromochloromethane	ND	U	1.22	5.51	ug/Kg	1	08/9/2012 19:26
Dibromomethane	ND	U	0.971	5.51	ug/Kg	1	08/9/2012 19:26
Dichlorodifluoromethane	ND	U	1.16	5.51	ug/Kg	1	08/9/2012 19:26

Print Date: 08/16/2012

N.C. Certification # 481

Results of 103DPT-07 (7-8ft)

Client Sample ID: **103DPT-07 (7-8ft)**
Client Project ID: **NCDOT Parcel 103**
Lab Sample ID: 31202487007-A
Lab Project ID: 31202487

Collection Date: 08/02/2012 08:10
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 71.30

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	U	1.13	5.51	ug/Kg	1	08/9/2012 19:26
trans-1,3-Dichloropropene	ND	U	1.04	5.51	ug/Kg	1	08/9/2012 19:26
Diisopropyl Ether	ND	U	0.904	5.51	ug/Kg	1	08/9/2012 19:26
Ethyl Benzene	ND	U	0.776	5.51	ug/Kg	1	08/9/2012 19:26
Hexachlorobutadiene	ND	U	0.756	5.51	ug/Kg	1	08/9/2012 19:26
Isopropylbenzene (Cumene)	ND	U	0.685	5.51	ug/Kg	1	08/9/2012 19:26
Methyl iodide	ND	U	0.843	5.51	ug/Kg	1	08/9/2012 19:26
Methylene chloride	**2.11**	J	1.16	22.0	ug/Kg	1	08/9/2012 19:26
Naphthalene	ND	U	1.00	5.51	ug/Kg	1	08/9/2012 19:26
Styrene	ND	U	0.634	5.51	ug/Kg	1	08/9/2012 19:26
Tetrachloroethene	**127**		0.827	5.51	ug/Kg	1	08/9/2012 19:26
Toluene	**0.837**	J	0.758	5.51	ug/Kg	1	08/9/2012 19:26
Trichloroethene	ND	U	0.927	5.51	ug/Kg	1	08/9/2012 19:26
Trichlorofluoromethane	ND	U	1.11	5.51	ug/Kg	1	08/9/2012 19:26
Vinyl chloride	ND	U	1.05	5.51	ug/Kg	1	08/9/2012 19:26
Xylene (total)	ND	U	1.95	11.0	ug/Kg	1	08/9/2012 19:26
cis-1,2-Dichloroethene	ND	U	0.673	5.51	ug/Kg	1	08/9/2012 19:26
m,p-Xylene	ND	U	1.86	11.0	ug/Kg	1	08/9/2012 19:26
n-Propylbenzene	ND	U	0.806	5.51	ug/Kg	1	08/9/2012 19:26
o-Xylene	ND	U	0.843	5.51	ug/Kg	1	08/9/2012 19:26
sec-Butylbenzene	ND	U	0.661	5.51	ug/Kg	1	08/9/2012 19:26
tert-Butyl methyl ether (MTBE)	ND	U	0.875	5.51	ug/Kg	1	08/9/2012 19:26
tert-Butylbenzene	ND	U	0.741	5.51	ug/Kg	1	08/9/2012 19:26
trans-1,2-Dichloroethene	ND	U	0.804	5.51	ug/Kg	1	08/9/2012 19:26
trans-1,4-Dichloro-2-butene	ND	U	4.62	27.5	ug/Kg	1	08/9/2012 19:26
Surrogates							
1,2-Dichloroethane-d4	112			55.0-173	%	1	08/9/2012 19:26
4-Bromofluorobenzene	96.0			23.0-141	%	1	08/9/2012 19:26
Toluene d8	103			57.0-134	%	1	08/9/2012 19:26

Batch Information

Analytical Batch: **VMS2459**
Analytical Method: **SW-846 8260B**
Instrument: **MSD9**
Analyst: **DVO**
Analytical Date/Time: **08/09/2012 19:26**

Prep Batch: **VXX3787**
Prep Method: **SW-846 5035 SL**
Prep Date/Time: **08/06/2012 16:12**
Prep Initial Wt./Vol.: **6.37 g**
Prep Extract Vol: **5 mL**

Print Date: 08/16/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 103DPT-07 (7-8ft)

Client Sample ID: **103DPT-07 (7-8ft)**
Client Project ID: **NCDOT Parcel 103**
Lab Sample ID: 31202487007-E
Lab Project ID: 31202487

Collection Date: 08/02/2012 08:10
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 71.30

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,2,4-Trichlorobenzene	ND	U	39.2	444	ug/Kg	1	08/8/2012 14:04
1,2-Dichlorobenzene	ND	U	22.1	444	ug/Kg	1	08/8/2012 14:04
1,3-Dichlorobenzene	ND	U	29.9	444	ug/Kg	1	08/8/2012 14:04
1,4-Dichlorobenzene	ND	U	31.4	444	ug/Kg	1	08/8/2012 14:04
2,4,5-Trichlorophenol	ND	U	29.7	444	ug/Kg	1	08/8/2012 14:04
2,4,6-Trichlorophenol	ND	U	30.1	444	ug/Kg	1	08/8/2012 14:04
2,4-Dichlorophenol	ND	U	25.7	444	ug/Kg	1	08/8/2012 14:04
2,4-Dinitrophenol	ND	U	41.2	887	ug/Kg	1	08/8/2012 14:04
2,4-Dinitrotoluene	ND	U	22.4	444	ug/Kg	1	08/8/2012 14:04
2,6-Dinitrotoluene	ND	U	31.8	444	ug/Kg	1	08/8/2012 14:04
2-Chloronaphthalene	ND	U	26.1	444	ug/Kg	1	08/8/2012 14:04
2-Chlorophenol	ND	U	23.6	444	ug/Kg	1	08/8/2012 14:04
2-Methylnaphthalene	ND	U	35.9	444	ug/Kg	1	08/8/2012 14:04
2-Methylphenol	ND	U	24.6	444	ug/Kg	1	08/8/2012 14:04
2-Nitroaniline	ND	U	29.2	444	ug/Kg	1	08/8/2012 14:04
2-Nitrophenol	ND	U	21.3	444	ug/Kg	1	08/8/2012 14:04
3 and/or 4-Methylphenol	ND	U	28.8	444	ug/Kg	1	08/8/2012 14:04
3,3'-Dichlorobenzidine	ND	U	21.3	444	ug/Kg	1	08/8/2012 14:04
3-Nitroaniline	ND	U	20.0	444	ug/Kg	1	08/8/2012 14:04
4,6-Dinitro-2-methylphenol	ND	U	20.9	444	ug/Kg	1	08/8/2012 14:04
4-Chloro-3-methylphenol	ND	U	22.1	444	ug/Kg	1	08/8/2012 14:04
4-Chloroaniline	ND	U	35.5	444	ug/Kg	1	08/8/2012 14:04
4-Chlorophenyl phenyl ether	ND	U	47.4	444	ug/Kg	1	08/8/2012 14:04
Acenaphthene	ND	U	20.2	444	ug/Kg	1	08/8/2012 14:04
Acenaphthylene	ND	U	18.7	444	ug/Kg	1	08/8/2012 14:04
Anthracene	ND	U	19.7	444	ug/Kg	1	08/8/2012 14:04
Benzo(a)anthracene	ND	U	24.4	444	ug/Kg	1	08/8/2012 14:04
Benzo(a)pyrene	ND	U	25.1	444	ug/Kg	1	08/8/2012 14:04
Benzo(b)fluoranthene	ND	U	25.5	444	ug/Kg	1	08/8/2012 14:04
Benzo(g,h,i)perylene	ND	U	70.7	444	ug/Kg	1	08/8/2012 14:04
Benzo(k)fluoranthene	ND	U	53.2	444	ug/Kg	1	08/8/2012 14:04
Benzoic acid	ND	U	9.85	444	ug/Kg	1	08/8/2012 14:04
Bis(2-Chloroethoxy)methane	ND	U	20.0	444	ug/Kg	1	08/8/2012 14:04
Bis(2-Chloroethyl)ether	ND	U	41.4	444	ug/Kg	1	08/8/2012 14:04
Bis(2-Chloroisopropyl)ether	ND	U	38.7	444	ug/Kg	1	08/8/2012 14:04
Bis(2-Ethylhexyl)phthalate	ND	U	21.3	444	ug/Kg	1	08/8/2012 14:04
4-Bromophenyl phenyl ether	ND	U	29.2	444	ug/Kg	1	08/8/2012 14:04
Butyl benzyl phthalate	ND	U	38.6	444	ug/Kg	1	08/8/2012 14:04
Chrysene	ND	U	51.7	444	ug/Kg	1	08/8/2012 14:04
Di-n-butyl phthalate	ND	U	21.0	444	ug/Kg	1	08/8/2012 14:04
Di-n-octyl phthalate	ND	U	24.6	444	ug/Kg	1	08/8/2012 14:04
Dibenz(a,h)anthracene	ND	U	20.0	444	ug/Kg	1	08/8/2012 14:04
Dibenzofuran	ND	U	34.8	444	ug/Kg	1	08/8/2012 14:04
Diethyl phthalate	ND	U	24.0	444	ug/Kg	1	08/8/2012 14:04

Print Date: 08/16/2012

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SGS ANALYTICAL PERSPECTIVES

Results of 103DPT-07 (7-8ft)

Client Sample ID: **103DPT-07 (7-8ft)**
Client Project ID: **NCDOT Parcel 103**
Lab Sample ID: 31202487007-E
Lab Project ID: 31202487

Collection Date: 08/02/2012 08:10
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 71.30

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
Dimethyl phthalate	ND	U	34.1	444	ug/Kg	1	08/8/2012 14:04
2,4-Dimethylphenol	ND	U	32.5	444	ug/Kg	1	08/8/2012 14:04
Diphenylamine	ND	U	20.0	444	ug/Kg	1	08/8/2012 14:04
Fluoranthene	ND	U	41.7	444	ug/Kg	1	08/8/2012 14:04
Fluorene	ND	U	23.6	444	ug/Kg	1	08/8/2012 14:04
Hexachlorobenzene	ND	U	42.0	444	ug/Kg	1	08/8/2012 14:04
Hexachlorobutadiene	ND	U	26.5	444	ug/Kg	1	08/8/2012 14:04
Hexachlorocyclopentadiene	ND	U	134	444	ug/Kg	1	08/8/2012 14:04
Hexachloroethane	ND	U	25.5	444	ug/Kg	1	08/8/2012 14:04
Indeno(1,2,3-cd)pyrene	ND	U	34.6	444	ug/Kg	1	08/8/2012 14:04
Isophorone	ND	U	20.2	444	ug/Kg	1	08/8/2012 14:04
Naphthalene	ND	U	38.3	444	ug/Kg	1	08/8/2012 14:04
4-Nitroaniline	ND	U	25.5	444	ug/Kg	1	08/8/2012 14:04
Nitrobenzene	ND	U	25.5	444	ug/Kg	1	08/8/2012 14:04
4-Nitrophenol	ND	U	43.7	444	ug/Kg	1	08/8/2012 14:04
Pentachlorophenol	ND	U	35.5	444	ug/Kg	1	08/8/2012 14:04
Phenanthrene	ND	U	29.2	444	ug/Kg	1	08/8/2012 14:04
Phenol	ND	U	41.4	444	ug/Kg	1	08/8/2012 14:04
Pyrene	ND	U	18.7	444	ug/Kg	1	08/8/2012 14:04
n-Nitrosodi-n-propylamine	ND	U	127	444	ug/Kg	1	08/8/2012 14:04
Surrogates							
2,4,6-Tribromophenol	79.0			41.0-129	%	1	08/8/2012 14:04
2-Fluorobiphenyl	72.0			48.0-123	%	1	08/8/2012 14:04
2-Fluorophenol	83.0			42.0-123	%	1	08/8/2012 14:04
Nitrobenzene-d5	84.0			46.0-117	%	1	08/8/2012 14:04
Phenol-d6	95.0			48.0-125	%	1	08/8/2012 14:04
Terphenyl-d14	83.0			44.0-140	%	1	08/8/2012 14:04

Batch Information

Analytical Batch: **XMS1628**
Analytical Method: **SW-846 8270D**
Instrument: **MSD10**
Analyst: **CMP**
Analytical Date/Time: **08/08/2012 14:04**

Prep Batch: **XXX2895**
Prep Method: **SW-846 3541**
Prep Date/Time: **08/07/2012 15:37**
Prep Initial Wt./Vol.: **31.63 g**
Prep Extract Vol: **10 mL**

Print Date: 08/16/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 103DPT-01

Client Sample ID: **103DPT-01**
Client Project ID: **NCDOT Parcel 103**
Lab Sample ID: 31202487008-B
Lab Project ID: 31202487

Collection Date: 08/01/2012 15:30
Received Date: 08/03/2012 15:00
Matrix: Water

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	U	0.175	1.00	ug/L	1	08/9/2012 19:24
1,1,1-Trichloroethane	ND	U	0.221	1.00	ug/L	1	08/9/2012 19:24
1,1,2,2-Tetrachloroethane	ND	U	0.223	1.00	ug/L	1	08/9/2012 19:24
1,1,2-Trichloroethane	ND	U	0.216	1.00	ug/L	1	08/9/2012 19:24
1,1-Dichloroethane	ND	U	0.162	1.00	ug/L	1	08/9/2012 19:24
1,1-Dichloroethene	ND	U	0.202	1.00	ug/L	1	08/9/2012 19:24
1,1-Dichloropropene	ND	U	0.176	1.00	ug/L	1	08/9/2012 19:24
1,2,3-Trichlorobenzene	ND	U	0.246	1.00	ug/L	1	08/9/2012 19:24
1,2,3-Trichloropropane	ND	U	0.210	1.00	ug/L	1	08/9/2012 19:24
1,2,4-Trichlorobenzene	ND	U	0.220	1.00	ug/L	1	08/9/2012 19:24
1,2,4-Trimethylbenzene	ND	U	0.179	1.00	ug/L	1	08/9/2012 19:24
1,2-Dibromo-3-chloropropane	ND	U	1.88	5.00	ug/L	1	08/9/2012 19:24
1,2-Dibromoethane	ND	U	0.179	1.00	ug/L	1	08/9/2012 19:24
1,2-Dichlorobenzene	ND	U	0.214	1.00	ug/L	1	08/9/2012 19:24
1,2-Dichloroethane	ND	U	0.139	1.00	ug/L	1	08/9/2012 19:24
1,2-Dichloropropane	ND	U	0.158	1.00	ug/L	1	08/9/2012 19:24
1,3,5-Trimethylbenzene	ND	U	0.159	1.00	ug/L	1	08/9/2012 19:24
1,3-Dichlorobenzene	ND	U	0.180	1.00	ug/L	1	08/9/2012 19:24
1,3-Dichloropropane	ND	U	0.198	1.00	ug/L	1	08/9/2012 19:24
1,4-Dichlorobenzene	ND	U	0.243	1.00	ug/L	1	08/9/2012 19:24
2,2-Dichloropropane	ND	U	0.194	1.00	ug/L	1	08/9/2012 19:24
2-Butanone	ND	U	1.39	25.0	ug/L	1	08/9/2012 19:24
2-Chlorotoluene	ND	U	0.160	1.00	ug/L	1	08/9/2012 19:24
2-Hexanone	ND	U	1.39	5.00	ug/L	1	08/9/2012 19:24
4-Chlorotoluene	ND	U	0.259	1.00	ug/L	1	08/9/2012 19:24
4-Isopropyltoluene	ND	U	0.170	1.00	ug/L	1	08/9/2012 19:24
4-Methyl-2-pentanone	ND	U	1.15	5.00	ug/L	1	08/9/2012 19:24
Acetone	ND	U	2.56	25.0	ug/L	1	08/9/2012 19:24
Benzene	ND	U	0.156	1.00	ug/L	1	08/9/2012 19:24
Bromobenzene	ND	U	0.205	1.00	ug/L	1	08/9/2012 19:24
Bromochloromethane	ND	U	0.134	1.00	ug/L	1	08/9/2012 19:24
Bromodichloromethane	ND	U	0.222	1.00	ug/L	1	08/9/2012 19:24
Bromoform	ND	U	0.208	1.00	ug/L	1	08/9/2012 19:24
Bromomethane	ND	U	0.507	1.00	ug/L	1	08/9/2012 19:24
n-Butylbenzene	ND	U	0.168	1.00	ug/L	1	08/9/2012 19:24
Carbon disulfide	ND	U	0.197	1.00	ug/L	1	08/9/2012 19:24
Carbon tetrachloride	ND	U	0.169	1.00	ug/L	1	08/9/2012 19:24
Chlorobenzene	ND	U	0.158	1.00	ug/L	1	08/9/2012 19:24
Chloroethane	ND	U	0.902	1.00	ug/L	1	08/9/2012 19:24
Chloroform	ND	U	0.205	1.00	ug/L	1	08/9/2012 19:24
Chloromethane	ND	U	0.295	1.00	ug/L	1	08/9/2012 19:24
Dibromochloromethane	ND	U	0.173	1.00	ug/L	1	08/9/2012 19:24
Dibromomethane	ND	U	0.171	1.00	ug/L	1	08/9/2012 19:24
Dichlorodifluoromethane	ND	U	0.283	5.00	ug/L	1	08/9/2012 19:24

Print Date: 08/16/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 103DPT-01

Client Sample ID: **103DPT-01**
Client Project ID: **NCDOT Parcel 103**
Lab Sample ID: 31202487008-B
Lab Project ID: 31202487

Collection Date: 08/01/2012 15:30
Received Date: 08/03/2012 15:00
Matrix: Water

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	U	0.185	1.00	ug/L	1	08/9/2012 19:24
trans-1,3-Dichloropropene	ND	U	0.167	1.00	ug/L	1	08/9/2012 19:24
Diisopropyl Ether	ND	U	0.134	1.00	ug/L	1	08/9/2012 19:24
Ethyl Benzene	ND	U	0.186	1.00	ug/L	1	08/9/2012 19:24
Hexachlorobutadiene	ND	U	0.365	1.00	ug/L	1	08/9/2012 19:24
Isopropylbenzene (Cumene)	ND	U	0.196	1.00	ug/L	1	08/9/2012 19:24
Methyl iodide	ND	U	0.247	1.00	ug/L	1	08/9/2012 19:24
Methylene chloride	ND	U	0.199	5.00	ug/L	1	08/9/2012 19:24
Naphthalene	ND	U	0.260	1.00	ug/L	1	08/9/2012 19:24
Styrene	ND	U	0.207	1.00	ug/L	1	08/9/2012 19:24
Tetrachloroethene	**303**		2.25	10.0	ug/L	10	08/8/2012 13:28
Toluene	**0.290**	J	0.180	1.00	ug/L	1	08/9/2012 19:24
Trichloroethene	**1.22**		0.199	1.00	ug/L	1	08/9/2012 19:24
Trichlorofluoromethane	ND	U	0.308	1.00	ug/L	1	08/9/2012 19:24
Vinyl chloride	ND	U	0.386	1.00	ug/L	1	08/9/2012 19:24
Xylene (total)	ND	U	0.602	2.00	ug/L	1	08/9/2012 19:24
cis-1,2-Dichloroethene	**2.14**		0.179	1.00	ug/L	1	08/9/2012 19:24
m,p-Xylene	ND	U	0.407	2.00	ug/L	1	08/9/2012 19:24
n-Propylbenzene	ND	U	0.185	1.00	ug/L	1	08/9/2012 19:24
o-Xylene	ND	U	0.195	1.00	ug/L	1	08/9/2012 19:24
sec-Butylbenzene	ND	U	0.151	1.00	ug/L	1	08/9/2012 19:24
tert-Butyl methyl ether (MTBE)	ND	U	0.195	1.00	ug/L	1	08/9/2012 19:24
tert-Butylbenzene	ND	U	0.239	1.00	ug/L	1	08/9/2012 19:24
trans-1,2-Dichloroethene	ND	U	0.247	1.00	ug/L	1	08/9/2012 19:24
trans-1,4-Dichloro-2-butene	ND	U	1.25	5.00	ug/L	1	08/9/2012 19:24
Surrogates							
1,2-Dichloroethane-d4	99.0			64.0-140	%	1	08/9/2012 19:24
4-Bromofluorobenzene	100			85.0-115	%	1	08/9/2012 19:24
Toluene d8	102			82.0-117	%	1	08/9/2012 19:24

Batch Information

Analytical Batch: **VMS2457**
Analytical Method: **SW-846 8260B**
Instrument: **MSD3**
Analyst: **BWS**
Analytical Date/Time: **08/08/2012 13:28**

Prep Batch: **VXX3780**
Prep Method: **SW-846 5030B**
Prep Date/Time: **08/08/2012 08:40**
Prep Initial Wt./Vol.: **40 mL**
Prep Extract Vol: **40 mL**

Analytical Batch: **VMS2461**
Analytical Method: **SW-846 8260B**
Instrument: **MSD3**
Analyst: **BWS**
Analytical Date/Time: **08/09/2012 19:24**

Prep Batch: **VXX3789**
Prep Method: **SW-846 5030B**
Prep Date/Time: **08/09/2012 08:11**
Prep Initial Wt./Vol.: **40 mL**
Prep Extract Vol: **40 mL**

Print Date: 08/16/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 103DPT-01

Client Sample ID: **103DPT-01**
Client Project ID: **NCDOT Parcel 103**
Lab Sample ID: 31202487008-D
Lab Project ID: 31202487

Collection Date: 08/01/2012 15:30
Received Date: 08/03/2012 15:00
Matrix: Water

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,2,4-Trichlorobenzene	ND	U	1.76	5.09	ug/L	1	08/9/2012 20:54
1,2-Dichlorobenzene	ND	U	1.74	5.09	ug/L	1	08/9/2012 20:54
1,3-Dichlorobenzene	ND	U	1.68	5.09	ug/L	1	08/9/2012 20:54
1,4-Dichlorobenzene	ND	U	1.66	5.09	ug/L	1	08/9/2012 20:54
2,4,5-Trichlorophenol	ND	U	2.12	5.09	ug/L	1	08/9/2012 20:54
2,4,6-Trichlorophenol	ND	U	2.07	5.09	ug/L	1	08/9/2012 20:54
2,4-Dichlorophenol	ND	U	2.10	5.09	ug/L	1	08/9/2012 20:54
2,4-Dinitrophenol	ND	U	0.680	25.4	ug/L	1	08/9/2012 20:54
2,4-Dinitrotoluene	ND	U	1.87	5.09	ug/L	1	08/9/2012 20:54
2,6-Dinitrotoluene	ND	U	1.91	5.09	ug/L	1	08/9/2012 20:54
2-Chloronaphthalene	ND	U	2.03	5.09	ug/L	1	08/9/2012 20:54
2-Chlorophenol	ND	U	2.86	5.09	ug/L	1	08/9/2012 20:54
2-Methylnaphthalene	ND	U	1.97	5.09	ug/L	1	08/9/2012 20:54
2-Methylphenol	ND	U	2.11	5.09	ug/L	1	08/9/2012 20:54
2-Nitroaniline	ND	U	1.72	5.09	ug/L	1	08/9/2012 20:54
2-Nitrophenol	ND	U	2.00	5.09	ug/L	1	08/9/2012 20:54
3 and/or 4-Methylphenol	ND	U	2.28	5.09	ug/L	1	08/9/2012 20:54
3,3'-Dichlorobenzidine	ND	U	1.78	10.2	ug/L	1	08/9/2012 20:54
3-Nitroaniline	ND	U	1.68	25.4	ug/L	1	08/9/2012 20:54
4,6-Dinitro-2-methylphenol	ND	U	0.503	25.4	ug/L	1	08/9/2012 20:54
4-Chloro-3-methylphenol	ND	U	2.01	5.09	ug/L	1	08/9/2012 20:54
4-Chloroaniline	ND	U	1.91	25.4	ug/L	1	08/9/2012 20:54
4-Chlorophenyl phenyl ether	ND	U	2.50	5.09	ug/L	1	08/9/2012 20:54
Acenaphthene	ND	U	2.10	5.09	ug/L	1	08/9/2012 20:54
Acenaphthylene	ND	U	2.03	5.09	ug/L	1	08/9/2012 20:54
Anthracene	ND	U	1.96	5.09	ug/L	1	08/9/2012 20:54
Benzo(a)anthracene	ND	U	1.99	5.09	ug/L	1	08/9/2012 20:54
Benzo(a)pyrene	ND	U	1.89	5.09	ug/L	1	08/9/2012 20:54
Benzo(b)fluoranthene	ND	U	1.99	5.09	ug/L	1	08/9/2012 20:54
Benzo(g,h,i)perylene	ND	U	2.19	5.09	ug/L	1	08/9/2012 20:54
Benzo(k)fluoranthene	ND	U	2.35	5.09	ug/L	1	08/9/2012 20:54
Benzoic acid	ND	U	2.32	5.09	ug/L	1	08/9/2012 20:54
Bis(2-Chloroethoxy)methane	ND	U	2.16	5.09	ug/L	1	08/9/2012 20:54
Bis(2-Chloroethyl)ether	ND	U	2.25	5.09	ug/L	1	08/9/2012 20:54
Bis(2-Chloroisopropyl)ether	ND	U	2.08	5.09	ug/L	1	08/9/2012 20:54
Bis(2-Ethylhexyl)phthalate	ND	U	1.98	5.09	ug/L	1	08/9/2012 20:54
4-Bromophenyl phenyl ether	ND	U	2.08	5.09	ug/L	1	08/9/2012 20:54
Butyl benzyl phthalate	ND	U	1.92	5.09	ug/L	1	08/9/2012 20:54
Chrysene	ND	U	2.24	5.09	ug/L	1	08/9/2012 20:54
Di-n-butyl phthalate	ND	U	1.94	5.09	ug/L	1	08/9/2012 20:54
Di-n-octyl phthalate	ND	U	1.49	5.09	ug/L	1	08/9/2012 20:54
Dibenz(a,h)anthracene	ND	U	2.05	5.09	ug/L	1	08/9/2012 20:54
Dibenzofuran	ND	U	2.26	5.09	ug/L	1	08/9/2012 20:54
Diethyl phthalate	ND	U	2.14	5.09	ug/L	1	08/9/2012 20:54

Print Date: 08/16/2012

N.C. Certification # 481

Results of 103DPT-01

Client Sample ID: **103DPT-01**
Client Project ID: **NCDOT Parcel 103**
Lab Sample ID: 31202487008-D
Lab Project ID: 31202487

Collection Date: 08/01/2012 15:30
Received Date: 08/03/2012 15:00
Matrix: Water

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
Dimethyl phthalate	ND	U	2.18	5.09	ug/L	1	08/9/2012 20:54
2,4-Dimethylphenol	ND	U	2.25	5.09	ug/L	1	08/9/2012 20:54
Diphenylamine	ND	U	2.05	5.09	ug/L	1	08/9/2012 20:54
Fluoranthene	ND	U	2.05	5.09	ug/L	1	08/9/2012 20:54
Fluorene	ND	U	2.48	5.09	ug/L	1	08/9/2012 20:54
Hexachlorobenzene	ND	U	1.96	5.09	ug/L	1	08/9/2012 20:54
Hexachlorobutadiene	ND	U	1.55	5.09	ug/L	1	08/9/2012 20:54
Hexachlorocyclopentadiene	ND	U	0.802	10.2	ug/L	1	08/9/2012 20:54
Hexachloroethane	ND	U	1.42	5.09	ug/L	1	08/9/2012 20:54
Indeno(1,2,3-cd)pyrene	ND	U	2.05	5.09	ug/L	1	08/9/2012 20:54
Isophorone	ND	U	2.13	5.09	ug/L	1	08/9/2012 20:54
Naphthalene	ND	U	1.97	5.09	ug/L	1	08/9/2012 20:54
4-Nitroaniline	ND	U	1.71	25.4	ug/L	1	08/9/2012 20:54
Nitrobenzene	ND	U	2.23	5.09	ug/L	1	08/9/2012 20:54
4-Nitrophenol	ND	U	1.29	25.4	ug/L	1	08/9/2012 20:54
Pentachlorophenol	ND	U	1.58	25.4	ug/L	1	08/9/2012 20:54
Phenanthrene	ND	U	2.02	5.09	ug/L	1	08/9/2012 20:54
Phenol	ND	U	2.40	5.09	ug/L	1	08/9/2012 20:54
Pyrene	ND	U	2.04	5.09	ug/L	1	08/9/2012 20:54
n-Nitrosodi-n-propylamine	ND	U	2.27	5.09	ug/L	1	08/9/2012 20:54
Surrogates							
2,4,6-Tribromophenol	94.0			29.3-152	%	1	08/9/2012 20:54
2-Fluorobiphenyl	72.0			50.0-107	%	1	08/9/2012 20:54
2-Fluorophenol	63.0			33.1-118	%	1	08/9/2012 20:54
Nitrobenzene-d5	83.0			46.0-118	%	1	08/9/2012 20:54
Phenol-d6	85.0			49.0-120	%	1	08/9/2012 20:54
Terphenyl-d14	101			22.1-142	%	1	08/9/2012 20:54

Batch Information

Analytical Batch: **XMS1630**
Analytical Method: **SW-846 8270D**
Instrument: **MSD10**
Analyst: **CMP**
Analytical Date/Time: **08/09/2012 20:54**

Prep Batch: **XXX2897**
Prep Method: **SW-846 3520C**
Prep Date/Time: **08/07/2012 16:58**
Prep Initial Wt./Vol.: **983 mL**
Prep Extract Vol: **5 mL**

Print Date: 08/16/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of Trip Blank (Not on CoC)

Client Sample ID: **Trip Blank (Not on CoC)**
Client Project ID: **NCDOT Parcel 103**
Lab Sample ID: 31202487009-A
Lab Project ID: 31202487

Collection Date: 08/01/2012 00:00
Received Date: 08/03/2012 15:00
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	08/7/2012 11:35
1,1,1-Trichloroethane	ND	U	0.123	1.00	ug/L	1	08/7/2012 11:35
1,1,2,2-Tetrachloroethane	ND	U	0.156	1.00	ug/L	1	08/7/2012 11:35
1,1,2-Trichloroethane	ND	U	0.126	1.00	ug/L	1	08/7/2012 11:35
1,1-Dichloroethane	ND	U	0.165	1.00	ug/L	1	08/7/2012 11:35
1,1-Dichloroethene	ND	U	0.212	1.00	ug/L	1	08/7/2012 11:35
1,1-Dichloropropene	ND	U	0.0863	1.00	ug/L	1	08/7/2012 11:35
1,2,3-Trichlorobenzene	ND	U	0.110	1.00	ug/L	1	08/7/2012 11:35
1,2,3-Trichloropropane	ND	U	0.212	1.00	ug/L	1	08/7/2012 11:35
1,2,4-Trichlorobenzene	ND	U	0.0913	1.00	ug/L	1	08/7/2012 11:35
1,2,4-Trimethylbenzene	ND	U	0.0961	1.00	ug/L	1	08/7/2012 11:35
1,2-Dibromo-3-chloropropane	ND	U	0.748	5.00	ug/L	1	08/7/2012 11:35
1,2-Dibromoethane	ND	U	0.120	1.00	ug/L	1	08/7/2012 11:35
1,2-Dichlorobenzene	ND	U	0.137	1.00	ug/L	1	08/7/2012 11:35
1,2-Dichloroethane	ND	U	0.167	1.00	ug/L	1	08/7/2012 11:35
1,2-Dichloropropane	ND	U	0.163	1.00	ug/L	1	08/7/2012 11:35
1,3,5-Trimethylbenzene	ND	U	0.113	1.00	ug/L	1	08/7/2012 11:35
1,3-Dichlorobenzene	ND	U	0.103	1.00	ug/L	1	08/7/2012 11:35
1,3-Dichloropropane	ND	U	0.130	1.00	ug/L	1	08/7/2012 11:35
1,4-Dichlorobenzene	ND	U	0.130	1.00	ug/L	1	08/7/2012 11:35
2,2-Dichloropropane	ND	U	0.393	1.00	ug/L	1	08/7/2012 11:35
2-Butanone	ND	U	0.723	25.0	ug/L	1	08/7/2012 11:35
2-Chlorotoluene	ND	U	0.113	1.00	ug/L	1	08/7/2012 11:35
2-Hexanone	ND	U	0.728	5.00	ug/L	1	08/7/2012 11:35
4-Chlorotoluene	ND	U	0.125	1.00	ug/L	1	08/7/2012 11:35
4-Isopropyltoluene	ND	U	0.0769	1.00	ug/L	1	08/7/2012 11:35
4-Methyl-2-pentanone	ND	U	0.558	5.00	ug/L	1	08/7/2012 11:35
Acetone	ND	U	0.864	25.0	ug/L	1	08/7/2012 11:35
Benzene	ND	U	0.113	1.00	ug/L	1	08/7/2012 11:35
Bromobenzene	ND	U	0.110	1.00	ug/L	1	08/7/2012 11:35
Bromochloromethane	ND	U	0.211	1.00	ug/L	1	08/7/2012 11:35
Bromodichloromethane	ND	U	0.110	1.00	ug/L	1	08/7/2012 11:35
Bromoform	ND	U	0.0974	1.00	ug/L	1	08/7/2012 11:35
Bromomethane	ND	U	0.237	1.00	ug/L	1	08/7/2012 11:35
n-Butylbenzene	ND	U	0.0769	1.00	ug/L	1	08/7/2012 11:35
Carbon disulfide	ND	U	0.106	1.00	ug/L	1	08/7/2012 11:35
Carbon tetrachloride	ND	U	0.101	1.00	ug/L	1	08/7/2012 11:35
Chlorobenzene	ND	U	0.116	1.00	ug/L	1	08/7/2012 11:35
Chloroethane	ND	U	0.311	1.00	ug/L	1	08/7/2012 11:35
Chloroform	ND	U	0.139	1.00	ug/L	1	08/7/2012 11:35
Chloromethane	ND	U	0.448	1.00	ug/L	1	08/7/2012 11:35
Dibromochloromethane	ND	U	0.134	1.00	ug/L	1	08/7/2012 11:35
Dibromomethane	ND	U	0.168	1.00	ug/L	1	08/7/2012 11:35
Dichlorodifluoromethane	ND	U	0.171	5.00	ug/L	1	08/7/2012 11:35

Print Date: 08/16/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of Trip Blank (Not on CoC)

Client Sample ID: **Trip Blank (Not on CoC)**
Client Project ID: **NCDOT Parcel 103**
Lab Sample ID: 31202487009-A
Lab Project ID: 31202487

Collection Date: 08/01/2012 00:00
Received Date: 08/03/2012 15:00
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	08/7/2012 11:35
trans-1,3-Dichloropropene	ND	U	0.0862	1.00	ug/L	1	08/7/2012 11:35
Diisopropyl Ether	ND	U	0.294	1.00	ug/L	1	08/7/2012 11:35
Ethyl Benzene	ND	U	0.0877	1.00	ug/L	1	08/7/2012 11:35
Hexachlorobutadiene	ND	U	0.0792	1.00	ug/L	1	08/7/2012 11:35
Isopropylbenzene (Cumene)	ND	U	0.0869	1.00	ug/L	1	08/7/2012 11:35
Methyl iodide	ND	U	0.115	1.00	ug/L	1	08/7/2012 11:35
Methylene chloride	**0.390**	J	0.152	5.00	ug/L	1	08/7/2012 11:35
Naphthalene	ND	U	0.0855	1.00	ug/L	1	08/7/2012 11:35
Styrene	ND	U	0.102	1.00	ug/L	1	08/7/2012 11:35
Tetrachloroethene	ND	U	0.155	1.00	ug/L	1	08/7/2012 11:35
Toluene	ND	U	0.133	1.00	ug/L	1	08/7/2012 11:35
Trichloroethene	ND	U	0.125	1.00	ug/L	1	08/7/2012 11:35
Trichlorofluoromethane	ND	U	0.137	1.00	ug/L	1	08/7/2012 11:35
Vinyl chloride	ND	U	0.124	1.00	ug/L	1	08/7/2012 11:35
Xylene (total)	ND	U	0.182	2.00	ug/L	1	08/7/2012 11:35
cis-1,2-Dichloroethene	ND	U	0.136	1.00	ug/L	1	08/7/2012 11:35
m,p-Xylene	ND	U	0.182	2.00	ug/L	1	08/7/2012 11:35
n-Propylbenzene	ND	U	0.113	1.00	ug/L	1	08/7/2012 11:35
o-Xylene	ND	U	0.0874	1.00	ug/L	1	08/7/2012 11:35
sec-Butylbenzene	ND	U	0.112	1.00	ug/L	1	08/7/2012 11:35
tert-Butyl methyl ether (MTBE)	ND	U	0.144	1.00	ug/L	1	08/7/2012 11:35
tert-Butylbenzene	ND	U	0.0855	1.00	ug/L	1	08/7/2012 11:35
trans-1,2-Dichloroethene	ND	U	0.223	1.00	ug/L	1	08/7/2012 11:35
trans-1,4-Dichloro-2-butene	ND	U	0.414	5.00	ug/L	1	08/7/2012 11:35
Surrogates							
1,2-Dichloroethane-d4	100			64.0-140	%	1	08/7/2012 11:35
4-Bromofluorobenzene	101			85.0-115	%	1	08/7/2012 11:35
Toluene d8	102			82.0-117	%	1	08/7/2012 11:35

Batch Information

Analytical Batch: **VMS2452**
Analytical Method: **SW-846 8260B**
Instrument: **MSD4**
Analyst: **DVO**
Analytical Date/Time: **08/07/2012 11:35**

Prep Batch: **VXX3770**
Prep Method: **SW-846 5030B**
Prep Date/Time: **08/07/2012 08:00**
Prep Initial Wt./Vol.: **40 mL**
Prep Extract Vol: **40 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
103DPT-01 (6-6.5ft)	31202487001	08/07/2012 15:41	VMS2451	MSD9	DVO
103DPT-03 (5.5-6ft)	31202487003	08/07/2012 16:07	VMS2451	MSD9	DVO
103DPT-04 (5-5.5ft)	31202487004	08/07/2012 16:34	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:
31202487001, 31202487003, 31202487004

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:
31202487001, 31202487003, 31202487004

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: 31202487001, 31202487003, 31202487004

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: 31202487001, 31202487003, 31202487004

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: 31202487001, 31202487003, 31202487004

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 5030B
Prep Batch: VXX3770
Prep Date: 08/07/2012 08:35

Client Sample ID	Lab Sample ID	Analysis Date	Analytical Batch	Instrument	Analyst
LCS for HBN 26799 [VXX/3770]	84030	08/07/2012 09:35	VMS2452	MSD4	DVO
LCSD for HBN 26799 [VXX/3770]	84031	08/07/2012 09:59	VMS2452	MSD4	DVO
MB for HBN 26799 [VXX/3770]	84032	08/07/2012 10:47	VMS2452	MSD4	DVO
Trip Blank (Not on CoC)	31202487009	08/07/2012 11:35	VMS2452	MSD4	DVO
4976 MS	31202471016	08/07/2012 19:11	VMS2452	MSD4	DVO
4976 MSD	31202471017	08/07/2012 19:35	VMS2452	MSD4	DVO

Print Date: 08/16/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Method Blank

Blank ID: MB for HBN 26799 [VXX/3770]
Blank Lab ID: 84032
QC for Samples:
31202487009

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: 08/16/2012

N.C. Certification # 481

Method Blank

Blank ID: MB for HBN 26799 [VXX/3770]
Blank Lab ID: 84032
QC for Samples:
31202487009

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	100			64.0-140	%	1
Toluene d8	102			82.0-117	%	1
4-Bromofluorobenzene	102			85.0-115	%	1

Batch Information

Analytical Batch: VMS2452
Analytical Method: SW-846 8260B
Instrument: MSD4
Analyst: DVO
Analytical Date/Time: 8/7/2012 10:47:00AM

Prep Batch: VXX3770
Prep Method: SW-846 5030B
Prep Date/Time: 8/7/2012 8:35:31AM
Prep Initial Wt./Vol.: 40 mL
Prep Extract Vol: 40 mL

Print Date: 08/16/2012

N.C. Certification # 481

Blank Spike Summary

Blank Spike ID: LCS for HBN 26799 [VXX/3770]
Blank Spike Lab ID: 84030
Date Analyzed: 08/07/2012 09:35

Spike Duplicate ID: LCSD for HBN 26799 [VXX/3770]
Spike Duplicate Lab ID: 84031
Date Analyzed: 08/07/2012 09:59
Matrix: Water

QC for Samples: 31202487009

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	3.10	62	5.00	3.27	65	33.0-170	5.3	30.00
Chloromethane	5.00	3.76	75	5.00	3.76	75	57.0-132	0.0	30.00
Vinyl chloride	5.00	3.63	73	5.00	3.71	74	59.0-138	2.2	30.00
Bromomethane	5.00	4.98	100	5.00	4.50	90	51.0-134	10	30.00
Chloroethane	5.00	4.00	80	5.00	4.57	91	64.0-145	13	30.00
Trichlorofluoromethane	5.00	4.02	80	5.00	4.29	86	64.0-133	6.5	30.00
1,1-Dichloroethene	5.00	4.80	96	5.00	4.66	93	71.0-128	3.0	30.00
Acetone	25.0	25.4	102	25.0	22.2	89	52.0-140	13	30.00
Methylene chloride	5.00	4.67	93	5.00	4.43	89	70.0-113	5.3	30.00
trans-1,2-Dichloroethene	5.00	4.85	97	5.00	4.79	96	57.0-138	1.2	30.00
tert-Butyl methyl ether (MTBE)	5.00	4.94	99	5.00	4.55	91	47.0-142	8.2	30.00
1,1-Dichloroethane	5.00	4.59	92	5.00	4.47	89	68.0-133	2.6	30.00
Diisopropyl Ether	5.00	4.86	97	5.00	4.68	94	66.0-132	3.8	30.00
2,2-Dichloropropane	5.00	4.33	87	5.00	3.86	77	74.0-125	11	30.00
cis-1,2-Dichloroethene	5.00	4.84	97	5.00	4.71	94	73.0-128	2.7	30.00
2-Butanone	25.0	24.6	98	25.0	22.2	89	58.0-134	10	30.00
Bromochloromethane	5.00	4.98	100	5.00	4.62	92	73.0-128	7.5	30.00
Chloroform	5.00	4.70	94	5.00	4.60	92	74.0-124	2.2	30.00
1,1,1-Trichloroethane	5.00	4.57	91	5.00	4.40	88	76.0-119	3.8	30.00
Carbon tetrachloride	5.00	4.52	90	5.00	4.31	86	75.0-120	4.8	30.00
1,1-Dichloropropene	5.00	4.73	95	5.00	4.57	91	76.0-124	3.4	30.00
Benzene	5.00	4.78	96	5.00	4.66	93	76.0-124	2.5	30.00
1,2-Dichloroethane	5.00	4.78	96	5.00	4.47	89	76.0-119	6.7	30.00
Trichloroethene	5.00	4.59	92	5.00	4.52	90	74.0-121	1.5	30.00
1,2-Dichloropropane	5.00	4.63	93	5.00	4.51	90	74.0-124	2.6	30.00
Dibromomethane	5.00	4.54	91	5.00	4.32	86	71.0-128	5.0	30.00
Bromodichloromethane	5.00	4.61	92	5.00	4.52	90	72.0-120	2.0	30.00
cis-1,3-Dichloropropene	5.00	4.62	92	5.00	4.49	90	73.0-122	2.9	30.00
4-Methyl-2-pentanone	25.0	24.7	99	25.0	22.2	89	65.0-124	11	30.00
Toluene	5.00	4.86	97	5.00	4.75	95	75.0-123	2.3	30.00
Methyl Iodide	5.00	4.15	83	5.00	3.87	77	55.0-123	7.0	30.00
trans-1,3-Dichloropropene	5.00	4.32	86	5.00	4.05	81	70.0-125	6.5	30.00
Carbon disulfide	5.00	4.64	93	5.00	4.35	87	65.0-132	6.5	30.00
1,1,2-Trichloroethane	5.00	4.69	94	5.00	4.37	87	76.0-121	7.1	30.00

SGS ANALYTICAL PERSPECTIVES

Blank Spike Summary

Blank Spike ID: LCS for HBN 26799 [VXX/3770]
Blank Spike Lab ID: 84030
Date Analyzed: 08/07/2012 09:35

Spike Duplicate ID: LCSD for HBN 26799 [VXX/3770]
Spike Duplicate Lab ID: 84031
Date Analyzed: 08/07/2012 09:59
Matrix: Water

QC for Samples: 31202487009

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	4.60	92	5.00	4.41	88	59.0-112	4.2	30.00
1,3-Dichloropropane	5.00	4.78	96	5.00	4.50	90	74.0-120	6.0	30.00
2-Hexanone	25.0	24.0	96	25.0	21.3	85	56.0-133	12	30.00
Dibromochloromethane	5.00	4.58	92	5.00	4.34	87	67.0-122	5.4	30.00
1,2-Dibromoethane	5.00	4.52	90	5.00	4.23	85	74.0-119	6.6	30.00
Chlorobenzene	5.00	4.65	93	5.00	4.55	91	74.0-120	2.2	30.00
1,1,1,2-Tetrachloroethane	5.00	4.35	87	5.00	4.15	83	73.0-119	4.7	30.00
Bromoform	5.00	4.84	97	5.00	4.49	90	62.0-127	7.5	30.00
Bromobenzene	5.00	4.66	93	5.00	4.54	91	75.0-120	2.6	30.00
1,1,2,2-Tetrachloroethane	5.00	4.71	94	5.00	4.35	87	68.0-129	7.9	30.00
1,2,3-Trichloropropane	5.00	4.79	96	5.00	4.41	88	67.0-126	8.3	30.00
Ethyl Benzene	5.00	4.44	89	5.00	4.40	88	76.0-123	0.90	30.00
m,p-Xylene	10.0	9.17	92	10.0	9.03	90	76.0-124	1.5	30.00
Styrene	5.00	4.49	90	5.00	4.35	87	76.0-121	3.2	30.00
o-Xylene	5.00	4.58	92	5.00	4.45	89	75.0-124	2.9	30.00
Isopropylbenzene (Cumene)	5.00	4.69	94	5.00	4.50	90	77.0-120	4.1	30.00
n-Propylbenzene	5.00	4.69	94	5.00	4.51	90	77.0-123	3.9	30.00
2-Chlorotoluene	5.00	4.68	94	5.00	4.46	89	74.0-127	4.8	30.00
4-Chlorotoluene	5.00	4.42	88	5.00	4.19	84	77.0-123	5.3	30.00
1,3,5-Trimethylbenzene	5.00	4.65	93	5.00	4.44	89	76.0-122	4.6	30.00
tert-Butylbenzene	5.00	4.68	94	5.00	4.45	89	67.0-122	5.0	30.00
1,2,4-Trimethylbenzene	5.00	4.65	93	5.00	4.44	89	76.0-124	4.6	30.00
sec-Butylbenzene	5.00	4.58	92	5.00	4.41	88	78.0-121	3.8	30.00
1,3-Dichlorobenzene	5.00	4.60	92	5.00	4.37	87	75.0-120	5.1	30.00
4-Isopropyltoluene	5.00	4.56	91	5.00	4.41	88	77.0-120	3.3	30.00
1,4-Dichlorobenzene	5.00	4.58	92	5.00	4.36	87	70.0-125	4.9	30.00
1,2-Dichlorobenzene	5.00	4.61	92	5.00	4.41	88	76.0-118	4.4	30.00
n-Butylbenzene	5.00	4.66	93	5.00	4.40	88	78.0-118	5.7	30.00
1,2-Dibromo-3-chloropropane	30.0	25.4	85	30.0	23.0	77	62.0-130	9.9	30.00
1,2,4-Trichlorobenzene	5.00	4.53	91	5.00	4.22	84	72.0-119	7.1	30.00
Hexachlorobutadiene	5.00	4.36	87	5.00	3.98	80	69.0-121	9.1	30.00
Naphthalene	5.00	4.57	91	5.00	4.01	80	67.0-122	13	30.00
trans-1,4-Dichloro-2-butene	25.0	21.4	86	25.0	19.8	79	61.0-132	7.8	30.00
1,2,3-Trichlorobenzene	5.00	4.33	87	5.00	3.89	78	68.0-123	11	30.00

Blank Spike Summary

Blank Spike ID: LCS for HBN 26799 [VXX/3770]
Blank Spike Lab ID: 84030
Date Analyzed: 08/07/2012 09:35

Spike Duplicate ID: LCSD for HBN 26799 [VXX/3770]
Spike Duplicate Lab ID: 84031
Date Analyzed: 08/07/2012 09:59
Matrix: Water

QC for Samples: 31202487009

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			100			98	64.0-140		
Toluene d8			102			102	82.0-117		
4-Bromofluorobenzene			102			101	85.0-115		

Batch Information

Analytical Batch: VMS2452
Analytical Method: SW-846 8260B
Instrument: MSD4
Analyst: DVO

Prep Batch: VXX3770
Prep Method: SW-846 5030B
Prep Date/Time: 08/07/2012 08:35
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 5030B
Prep Batch: VXX3780
Prep Date: 08/08/2012 08:53

Client Sample ID	Lab Sample ID	Analysis Date	Analytical Batch	Instrument	Analyst
LCS for HBN 26846 [VXX/3780]	84247	08/08/2012 10:33	VMS2457	MSD3	BWS
LCSD for HBN 26846 [VXX/3780]	84248	08/08/2012 10:58	VMS2457	MSD3	BWS
MB for HBN 26846 [VXX/3780]	84249	08/08/2012 11:48	VMS2457	MSD3	BWS
103DPT-01	31202487008	08/08/2012 13:28	VMS2457	MSD3	BWS

Print Date: 08/16/2012

N.C. Certification # 481

Method Blank

Blank ID: MB for HBN 26846 [VXX/3780]
Blank Lab ID: 84249
QC for Samples:
31202487008

Matrix: Water

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF
Tetrachloroethene	ND	U	0.225	1.00	ug/L	1

Batch Information

Analytical Batch: VMS2457
Analytical Method: SW-846 8260B
Instrument: MSD3
Analyst: BWS
Analytical Date/Time: 8/8/2012 11:48:00AM

Prep Batch: VXX3780
Prep Method: SW-846 5030B
Prep Date/Time: 8/8/2012 8:53:33AM
Prep Initial Wt./Vol.: 40 mL
Prep Extract Vol: 40 mL

Blank Spike Summary

Blank Spike ID: LCS for HBN 26846 [VXX/3780]
Blank Spike Lab ID: 84247
Date Analyzed: 08/08/2012 10:33

Spike Duplicate ID: LCSD for HBN 26846 [VXX/3780]
Spike Duplicate Lab ID: 84248
Date Analyzed: 08/08/2012 10:58
Matrix: Water

QC for Samples: 31202487008

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	4.01	80	5.00	4.81	96	59.0-112	18	30.00

Batch Information

Analytical Batch: VMS2457
Analytical Method: SW-846 8260B
Instrument: MSD3
Analyst: BWS

Prep Batch: VXX3780
Prep Method: SW-846 5030B
Prep Date/Time: 08/08/2012 08:53
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 SM
Prep Batch: VXX3785
Prep Date: 08/08/2012 08:08

Client Sample ID	Lab Sample ID	Analysis Date	Analytical Batch	Instrument	Analyst
LCS-S for HBN 26873 [VXX/3785]	84392	08/08/2012 10:33	VMS2457	MSD3	BWS
LCSD-S for HBN 26873 [VXX/3785	84393	08/08/2012 10:58	VMS2457	MSD3	BWS
MB-S for HBN 26873 [VXX/3785]	84391	08/08/2012 12:13	VMS2457	MSD3	BWS
103DPT-06 (7-8ft)	31202487006	08/08/2012 15:08	VMS2457	MSD3	BWS
confirm-5(83948MS)	84519	08/08/2012 20:33	VMS2457	MSD3	BWS
confirm-5(83948MSD)	84520	08/08/2012 20:58	VMS2457	MSD3	BWS

Method Blank

Blank ID: MB-S for HBN 26873 [VXX/3785]
Blank Lab ID: 84391
QC for Samples:
31202487006

Matrix: Soil-Solid as dry weight

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF
Dichlorodifluoromethane	ND	U	8.55	250	ug/Kg	50
Chloromethane	ND	U	22.4	50.0	ug/Kg	50
Vinyl chloride	ND	U	6.20	50.0	ug/Kg	50
Bromomethane	ND	U	11.9	50.0	ug/Kg	50
Chloroethane	ND	U	15.6	50.0	ug/Kg	50
Trichlorofluoromethane	ND	U	6.85	50.0	ug/Kg	50
1,1-Dichloroethene	ND	U	10.6	50.0	ug/Kg	50
Acetone	ND	U	43.2	1250	ug/Kg	50
Methylene chloride	11.0	J	7.60	250	ug/Kg	50
trans-1,2-Dichloroethene	ND	U	11.2	50.0	ug/Kg	50
tert-Butyl methyl ether (MTBE)	ND	U	7.20	50.0	ug/Kg	50
1,1-Dichloroethane	ND	U	8.25	50.0	ug/Kg	50
Diisopropyl Ether	ND	U	14.7	50.0	ug/Kg	50
2,2-Dichloropropane	ND	U	19.7	50.0	ug/Kg	50
cis-1,2-Dichloroethene	ND	U	6.80	50.0	ug/Kg	50
2-Butanone	ND	U	36.2	1250	ug/Kg	50
Bromochloromethane	ND	U	10.6	50.0	ug/Kg	50
Chloroform	ND	U	6.95	50.0	ug/Kg	50
1,1,1-Trichloroethane	ND	U	6.15	50.0	ug/Kg	50
Carbon tetrachloride	ND	U	5.05	50.0	ug/Kg	50
1,1-Dichloropropene	ND	U	4.32	50.0	ug/Kg	50
Benzene	ND	U	5.65	50.0	ug/Kg	50
1,2-Dichloroethane	ND	U	8.35	50.0	ug/Kg	50
Trichloroethene	ND	U	6.25	50.0	ug/Kg	50
1,2-Dichloropropane	ND	U	8.15	50.0	ug/Kg	50
Dibromomethane	ND	U	8.40	50.0	ug/Kg	50
Bromodichloromethane	ND	U	5.50	50.0	ug/Kg	50
cis-1,3-Dichloropropene	ND	U	3.84	50.0	ug/Kg	50
4-Methyl-2-pentanone	ND	U	27.9	250	ug/Kg	50
Toluene	ND	U	6.65	50.0	ug/Kg	50
Methyl Iodide	ND	U	5.75	50.0	ug/Kg	50
trans-1,3-Dichloropropene	ND	U	4.31	50.0	ug/Kg	50
Carbon disulfide	ND	U	5.30	50.0	ug/Kg	50
1,1,2-Trichloroethane	ND	U	6.30	50.0	ug/Kg	50
Tetrachloroethene	ND	U	7.75	50.0	ug/Kg	50
1,3-Dichloropropane	ND	U	6.50	50.0	ug/Kg	50
2-Hexanone	ND	U	36.4	250	ug/Kg	50
Dibromochloromethane	ND	U	6.70	50.0	ug/Kg	50
1,2-Dibromoethane	ND	U	6.00	50.0	ug/Kg	50
Chlorobenzene	ND	U	5.80	50.0	ug/Kg	50
1,1,1,2-Tetrachloroethane	ND	U	5.20	50.0	ug/Kg	50
Bromoform	ND	U	4.87	50.0	ug/Kg	50

Print Date: 08/16/2012

N.C. Certification # 481

Method Blank

Blank ID: MB-S for HBN 26873 [VXX/3785]
Blank Lab ID: 84391
QC for Samples:
31202487006

Matrix: Soil-Solid as dry weight

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF
Bromobenzene	ND	U	5.50	50.0	ug/Kg	50
1,1,2,2-Tetrachloroethane	ND	U	7.80	50.0	ug/Kg	50
1,2,3-Trichloropropane	ND	U	10.6	50.0	ug/Kg	50
Ethyl Benzene	ND	U	4.39	50.0	ug/Kg	50
m,p-Xylene	ND	U	9.10	100	ug/Kg	50
Styrene	ND	U	5.10	50.0	ug/Kg	50
o-Xylene	ND	U	4.37	50.0	ug/Kg	50
Xylene (total)	ND	U	9.10	100	ug/Kg	50
Isopropylbenzene (Cumene)	ND	U	4.35	50.0	ug/Kg	50
n-Propylbenzene	ND	U	5.65	50.0	ug/Kg	50
2-Chlorotoluene	ND	U	5.65	50.0	ug/Kg	50
4-Chlorotoluene	ND	U	6.25	50.0	ug/Kg	50
1,3,5-Trimethylbenzene	ND	U	5.65	50.0	ug/Kg	50
tert-Butylbenzene	ND	U	4.28	50.0	ug/Kg	50
1,2,4-Trimethylbenzene	ND	U	4.81	50.0	ug/Kg	50
sec-Butylbenzene	ND	U	5.60	50.0	ug/Kg	50
1,3-Dichlorobenzene	ND	U	5.15	50.0	ug/Kg	50
4-Isopropyltoluene	ND	U	3.85	50.0	ug/Kg	50
1,4-Dichlorobenzene	ND	U	6.50	50.0	ug/Kg	50
1,2-Dichlorobenzene	ND	U	6.85	50.0	ug/Kg	50
n-Butylbenzene	ND	U	3.85	50.0	ug/Kg	50
1,2-Dibromo-3-chloropropane	ND	U	37.4	250	ug/Kg	50
1,2,4-Trichlorobenzene	ND	U	4.57	50.0	ug/Kg	50
Hexachlorobutadiene	ND	U	3.96	50.0	ug/Kg	50
Naphthalene	ND	U	4.28	50.0	ug/Kg	50
trans-1,4-Dichloro-2-butene	ND	U	20.7	250	ug/Kg	50
1,2,3-Trichlorobenzene	ND	U	5.50	50.0	ug/Kg	50
Surrogates						
1,2-Dichloroethane-d4	98.0			55.0-173	%	50
Toluene d8	103			57.0-134	%	50
4-Bromofluorobenzene	100			23.0-141	%	50

Batch Information

Analytical Batch: VMS2457
Analytical Method: SW-846 8260B
Instrument: MSD3
Analyst: BWS
Analytical Date/Time: 8/8/2012 12:13:00PM

Prep Batch: VXX3785
Prep Method: SW-846 5035 SM
Prep Date/Time: 8/8/2012 8:08:55AM
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 26873 [VXX/3785]
Blank Spike Lab ID: 84392
Date Analyzed: 08/08/2012 10:33

Spike Duplicate ID: LCSD-S for HBN 26873 [VXX/3785
Spike Duplicate Lab ID: 84393
Matrix: Soil-Solid as dry weight

QC for Samples: 31202487006

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	250	248	99	5.00	243	4860*	70.0-130	2.0	30.00
Chloromethane	250	262	105	5.00	233	4650*	70.0-130	12	30.00
Vinyl chloride	250	244	98	5.00	248	4950*	70.0-130	1.6	30.00
Bromomethane	250	223	89	5.00	283	5650*	70.0-130	24	30.00
Chloroethane	250	229	92	5.00	229	4580*	70.0-130	0.0	30.00
Trichlorofluoromethane	250	228	91	5.00	228	4560*	70.0-130	0.0	30.00
1,1-Dichloroethene	250	202	81	5.00	238	4750*	70.0-130	16	30.00
Acetone	1250	1020	82	25.0	1160	4620*	70.0-130	13	30.00
Methylene chloride	250	208	83	5.00	237	4730*	70.0-130	13	30.00
trans-1,2-Dichloroethene	250	219	88	5.00	250	4990*	70.0-130	13	30.00
tert-Butyl methyl ether (MTBE)	250	201	80	5.00	239	4780*	70.0-130	17	30.00
1,1-Dichloroethane	250	210	84	5.00	241	4820*	70.0-130	14	30.00
Diisopropyl Ether	250	216	86	5.00	254	5080*	70.0-130	16	30.00
2,2-Dichloropropane	250	211	84	5.00	238	4760*	70.0-130	12	30.00
cis-1,2-Dichloroethene	250	225	90	5.00	253	5060*	70.0-130	12	30.00
2-Butanone	1250	976	78	25.0	1150	4592*	70.0-130	16	30.00
Bromochloromethane	250	201	80	5.00	275	5490*	70.0-130	31*	30.00
Chloroform	250	212	85	5.00	244	4870*	70.0-130	14	30.00
1,1,1-Trichloroethane	250	213	85	5.00	237	4730*	70.0-130	11	30.00
Carbon tetrachloride	250	208	83	5.00	225	4500*	70.0-130	7.9	30.00
1,1-Dichloropropene	250	218	87	5.00	238	4750*	70.0-130	8.8	30.00
Benzene	250	215	86	5.00	244	4880*	70.0-130	13	30.00
1,2-Dichloroethane	250	219	87	5.00	243	4850*	70.0-130	10	30.00
Trichloroethene	250	220	88	5.00	244	4880*	70.0-130	10	30.00
1,2-Dichloropropane	250	224	90	5.00	244	4880*	70.0-130	8.5	30.00
Dibromomethane	250	202	81	5.00	247	4940*	70.0-130	20	30.00
Bromodichloromethane	250	203	81	5.00	247	4930*	70.0-130	20	30.00
cis-1,3-Dichloropropene	250	207	83	5.00	243	4860*	70.0-130	16	30.00
4-Methyl-2-pentanone	1250	999	80	25.0	1170	4690*	70.0-130	16	30.00
Toluene	250	223	89	5.00	268	5350*	70.0-130	18	30.00
Methyl iodide	250	226	90	5.00	233	4660*	70.0-130	3.1	30.00
trans-1,3-Dichloropropene	250	221	88	5.00	251	5010*	70.0-130	13	30.00
Carbon disulfide	250	204	82	5.00	220	4400*	70.0-130	7.5	30.00
1,1,2-Trichloroethane	250	208	83	5.00	250	4990*	70.0-130	18	30.00

SGS ANALYTICAL PERSPECTIVES

Blank Spike Summary

Blank Spike ID: LCS-S for HBN 26873 [VXX/3785]
Blank Spike Lab ID: 84392
Date Analyzed: 08/08/2012 10:33

Spike Duplicate ID: LCSD-S for HBN 26873 [VXX/3785
Spike Duplicate Lab ID: 84393
Matrix: Soil-Solid as dry weight

QC for Samples: 31202487006

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	250	201	80	5.00	241	4810*	70.0-130	18	30.00
1,3-Dichloropropane	250	205	82	5.00	236	4720*	70.0-130	14	30.00
2-Hexanone	1250	939	75	25.0	1130	4508*	70.0-130	18	30.00
Dibromochloromethane	250	195	78	5.00	233	4650*	70.0-130	18	30.00
1,2-Dibromoethane	250	203	81	5.00	242	4830*	70.0-130	18	30.00
Chlorobenzene	250	206	82	5.00	243	4860*	70.0-130	16	30.00
1,1,1,2-Tetrachloroethane	250	203	81	5.00	243	4850*	70.0-130	18	30.00
Bromoform	250	221	88	5.00	244	4870*	70.0-130	9.9	30.00
Bromobenzene	250	209	84	5.00	250	4990*	70.0-130	18	30.00
1,1,2,2-Tetrachloroethane	250	200	80	5.00	238	4760*	70.0-130	17	30.00
1,2,3-Trichloropropane	250	211	84	5.00	235	4690*	70.0-130	11	30.00
Ethyl Benzene	250	202	81	5.00	229	4570*	70.0-130	13	30.00
m,p-Xylene	500	411	82	10.0	476	4760*	70.0-130	15	30.00
Styrene	250	207	83	5.00	233	4660*	70.0-130	12	30.00
o-Xylene	250	205	82	5.00	237	4730*	70.0-130	14	30.00
Isopropylbenzene (Cumene)	250	208	83	5.00	232	4640*	70.0-130	11	30.00
n-Propylbenzene	250	208	83	5.00	232	4640*	70.0-130	11	30.00
2-Chlorotoluene	250	205	82	5.00	238	4760*	70.0-130	15	30.00
4-Chlorotoluene	250	197	79	5.00	232	4630*	70.0-130	16	30.00
1,3,5-Trimethylbenzene	250	200	80	5.00	224	4470*	70.0-130	11	30.00
tert-Butylbenzene	250	206	82	5.00	233	4650*	70.0-130	12	30.00
1,2,4-Trimethylbenzene	250	202	81	5.00	237	4730*	70.0-130	16	30.00
sec-Butylbenzene	250	205	82	5.00	231	4620*	70.0-130	12	30.00
1,3-Dichlorobenzene	250	214	85	5.00	239	4770*	70.0-130	11	30.00
4-Isopropyltoluene	250	200	80	5.00	233	4650*	70.0-130	15	30.00
1,4-Dichlorobenzene	250	204	81	5.00	232	4630*	70.0-130	13	30.00
1,2-Dichlorobenzene	250	198	79	5.00	244	4880*	70.0-130	21	30.00
n-Butylbenzene	250	201	80	5.00	227	4530*	70.0-130	12	30.00
1,2-Dibromo-3-chloropropane	1500	1110	74	30.0	1280	4268*	70.0-130	14	30.00
1,2,4-Trichlorobenzene	250	197	79	5.00	227	4540*	70.0-130	14	30.00
Hexachlorobutadiene	250	208	83	5.00	218	4350*	70.0-130	4.7	30.00
Naphthalene	250	206	82	5.00	231	4610*	70.0-130	11	30.00
trans-1,4-Dichloro-2-butene	1250	1020	82	25.0	1170	4688*	70.0-130	14	30.00
1,2,3-Trichlorobenzene	250	198	79	5.00	228	4560*	70.0-130	14	30.00

Blank Spike Summary

Blank Spike ID: LCS-S for HBN 26873 [VXX/3785]
Blank Spike Lab ID: 84392
Date Analyzed: 08/08/2012 10:33

Spike Duplicate ID: LCSD-S for HBN 26873 [VXX/3785
Spike Duplicate Lab ID: 84393
Matrix: Soil-Solid as dry weight

QC for Samples: 31202487006

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			93			95	55.0-173		
Toluene d8			105			103	57.0-134		
4-Bromofluorobenzene			101			101	23.0-141		

Batch Information

Analytical Batch: **VMS2457**
Analytical Method: **SW-846 8260B**
Instrument: **MSD3**
Analyst: **BWS**

Prep Batch: **VXX3785**
Prep Method: **SW-846 5035 SM**
Prep Date/Time: **08/08/2012 08:08**
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: VXX3787
Prep Date: 08/09/2012 08:19

Client Sample ID	Lab Sample ID	Analysis Date	Analytical Batch	Instrument	Analyst
LCS-S for HBN 26881 [VXX/3787]	84435	08/09/2012 09:43	VMS2459	MSD9	DVO
LCSD-S for HBN 26881 [VXX/3787	84436	08/09/2012 10:09	VMS2459	MSD9	DVO
MB-S for HBN 26881 [VXX/3787]	84437	08/09/2012 11:02	VMS2459	MSD9	DVO
105DPT-12 (6-7ft)(83867DUP)	84698	08/09/2012 16:04	VMS2459	MSD9	DVO
105DPT-13 (6-7ft)(83868MS)	84700	08/09/2012 16:46	VMS2459	MSD9	DVO
103DPT-05 (7-8ft)	31202487005	08/09/2012 19:00	VMS2459	MSD9	DVO
103DPT-07 (7-8ft)	31202487007	08/09/2012 19:26	VMS2459	MSD9	DVO
103DPT-02 (5-5.5ft)	31202487002	08/09/2012 20:20	VMS2459	MSD9	DVO

SGS ANALYTICAL PERSPECTIVES

Method Blank

Blank ID: MB-S for HBN 26881 [VXX/3787]
Blank Lab ID: 84437
QC for Samples:
31202487002, 31202487005, 31202487007

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	1.67	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 26881 [VXX/3787]
Blank Lab ID: 84437
QC for Samples:
31202487002, 31202487005, 31202487007

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	112			55.0-173	%	1
Toluene d8	105			57.0-134	%	1
4-Bromofluorobenzene	99.0			23.0-141	%	1

Batch Information

Analytical Batch: VMS2459
Analytical Method: SW-846 8260B
Instrument: MSD9
Analyst: DVO
Analytical Date/Time: 8/9/2012 11:02:00AM

Prep Batch: VXX3787
Prep Method: SW-846 5035 SL
Prep Date/Time: 8/9/2012 8:19:52AM
Prep Initial Wt./Vol.: 5 g
Prep Extract Vol: 5 mL

Print Date: 08/16/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Blank Spike Summary

Blank Spike ID: LCS-S for HBN 26881 [VXX/3787]
Blank Spike Lab ID: 84435
Date Analyzed: 08/09/2012 09:43

Spike Duplicate ID: LCSD-S for HBN 26881 [VXX/3787
Spike Duplicate Lab ID: 84436
Matrix: Soil-Solid as dry weight

QC for Samples: 31202487002, 31202487005, 31202487007

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	30.0	100	30.0	31.3	104	52.0-133	4.2	30.00
Chloromethane	30.0	29.0	97	30.0	31.0	103	64.0-126	6.7	30.00
Vinyl chloride	30.0	29.7	99	30.0	30.8	103	69.0-120	3.6	30.00
Bromomethane	30.0	42.3	141	30.0	38.5	128	41.0-160	9.4	30.00
Chloroethane	30.0	34.6	115	30.0	33.6	112	69.0-126	2.9	30.00
Trichlorofluoromethane	30.0	30.7	102	30.0	32.3	108	72.0-123	5.1	30.00
1,1-Dichloroethene	30.0	31.4	105	30.0	30.2	101	78.0-113	3.9	30.00
Acetone	75.0	75.4	101	75.0	81.6	109	0.00-243	7.9	30.00
Methylene chloride	30.0	30.0	100	30.0	29.2	97	40.0-156	2.7	30.00
trans-1,2-Dichloroethene	30.0	31.4	105	30.0	30.0	100	78.0-111	4.6	30.00
tert-Butyl methyl ether (MTBE)	30.0	29.7	99	30.0	29.2	97	68.0-138	1.7	30.00
1,1-Dichloroethane	30.0	30.6	102	30.0	30.0	100	71.0-121	2.0	30.00
Diisopropyl Ether	30.0	30.5	102	30.0	29.9	100	60.0-141	2.0	30.00
2,2-Dichloropropane	30.0	28.8	96	30.0	27.9	93	79.0-127	3.2	30.00
cis-1,2-Dichloroethene	30.0	31.4	105	30.0	31.2	104	80.0-114	0.64	30.00
2-Butanone	75.0	70.3	94	75.0	76.3	102	31.0-189	8.2	30.00
Bromochloromethane	30.0	33.1	110	30.0	31.4	105	81.0-115	5.3	30.00
Chloroform	30.0	31.0	103	30.0	30.5	102	76.0-114	1.6	30.00
1,1,1-Trichloroethane	30.0	30.2	101	30.0	29.6	99	79.0-117	2.0	30.00
Carbon tetrachloride	30.0	30.1	100	30.0	28.9	96	82.0-119	4.1	30.00
1,1-Dichloropropene	30.0	30.5	102	30.0	29.7	99	82.0-114	2.7	30.00
Benzene	30.0	30.2	101	30.0	29.0	97	82.0-113	4.1	30.00
1,2-Dichloroethane	30.0	31.1	104	30.0	29.7	99	72.0-126	4.6	30.00
Trichloroethene	30.0	30.0	100	30.0	28.6	95	82.0-108	4.8	30.00
1,2-Dichloropropane	30.0	29.3	98	30.0	28.6	95	78.0-116	2.4	30.00
Dibromomethane	30.0	30.5	102	30.0	29.8	99	79.0-125	2.3	30.00
Bromodichloromethane	30.0	29.3	98	30.0	28.1	94	79.0-122	4.2	30.00
cis-1,3-Dichloropropene	30.0	27.4	91	30.0	26.7	89	75.0-127	2.6	30.00
4-Methyl-2-pentanone	75.0	68.6	91	75.0	72.7	97	57.0-159	5.8	30.00
Toluene	30.0	30.7	102	30.0	29.8	99	83.0-111	3.0	30.00
Methyl iodide	30.0	29.2	97	30.0	27.6	92	63.0-137	5.6	30.00
trans-1,3-Dichloropropene	30.0	26.6	89	30.0	26.1	87	75.0-134	1.9	30.00
Carbon disulfide	30.0	29.5	98	30.0	28.2	94	72.0-116	4.5	30.00
1,1,2-Trichloroethane	30.0	30.5	102	30.0	29.6	99	73.0-121	3.0	30.00

Blank Spike Summary

Blank Spike ID: LCS-S for HBN 26881 [VXX/3787]
Blank Spike Lab ID: 84435
Date Analyzed: 08/09/2012 09:43

Spike Duplicate ID: LCSD-S for HBN 26881 [VXX/3787
Spike Duplicate Lab ID: 84436
Matrix: Soil-Solid as dry weight

QC for Samples: 31202487002, 31202487005, 31202487007

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	29.9	100	30.0	29.3	98	60.0-118	2.0	30.00
1,3-Dichloropropane	30.0	30.3	101	30.0	28.7	96	76.0-121	5.4	30.00
2-Hexanone	75.0	68.4	91	75.0	69.3	92	41.0-171	1.3	30.00
Dibromochloromethane	30.0	28.9	96	30.0	27.4	91	77.0-126	5.3	30.00
1,2-Dibromoethane	30.0	29.3	98	30.0	29.7	99	76.0-125	1.4	30.00
Chlorobenzene	30.0	29.8	99	30.0	29.1	97	78.0-109	2.4	30.00
1,1,1,2-Tetrachloroethane	30.0	28.6	95	30.0	28.0	93	81.0-117	2.1	30.00
Bromoform	30.0	26.4	88	30.0	25.3	84	72.0-134	4.3	30.00
Bromobenzene	30.0	29.0	97	30.0	28.1	94	76.0-113	3.2	30.00
1,1,2,2-Tetrachloroethane	30.0	29.0	97	30.0	29.1	97	76.0-129	0.34	30.00
1,2,3-Trichloropropane	30.0	29.1	97	30.0	28.8	96	70.0-145	1.0	30.00
Ethyl Benzene	30.0	30.0	100	30.0	28.6	95	72.0-115	4.8	30.00
m,p-Xylene	60.0	62.8	105	60.0	58.6	98	73.0-114	6.9	30.00
Styrene	30.0	30.3	101	30.0	29.0	97	74.0-114	4.4	30.00
o-Xylene	30.0	30.6	102	30.0	29.5	98	74.0-113	3.7	30.00
Isopropylbenzene (Cumene)	30.0	30.4	101	30.0	29.0	97	72.0-115	4.7	30.00
n-Propylbenzene	30.0	31.2	104	30.0	29.3	98	71.0-117	6.3	30.00
2-Chlorotoluene	30.0	31.1	104	30.0	29.7	99	76.0-111	4.6	30.00
4-Chlorotoluene	30.0	31.2	104	30.0	29.0	97	75.0-113	7.3	30.00
1,3,5-Trimethylbenzene	30.0	30.5	102	30.0	28.8	96	72.0-115	5.7	30.00
tert-Butylbenzene	30.0	29.8	99	30.0	28.6	95	74.0-112	4.1	30.00
1,2,4-Trimethylbenzene	30.0	30.6	102	30.0	29.0	97	73.0-114	5.4	30.00
sec-Butylbenzene	30.0	29.6	99	30.0	28.3	94	72.0-115	4.5	30.00
1,3-Dichlorobenzene	30.0	30.4	101	30.0	29.4	98	75.0-110	3.3	30.00
4-Isopropyltoluene	30.0	29.2	97	30.0	28.2	94	73.0-114	3.5	30.00
1,4-Dichlorobenzene	30.0	30.4	101	30.0	29.5	98	76.0-110	3.0	30.00
1,2-Dichlorobenzene	30.0	30.3	101	30.0	28.5	95	77.0-109	6.1	30.00
n-Butylbenzene	30.0	29.6	99	30.0	28.4	95	72.0-118	4.1	30.00
1,2-Dibromo-3-chloropropane	180	160	89	180	163	91	54.0-166	1.9	30.00
1,2,4-Trichlorobenzene	30.0	29.7	99	30.0	26.9	90	76.0-115	9.9	30.00
Hexachlorobutadiene	30.0	27.8	93	30.0	26.3	88	70.0-111	5.5	30.00
Naphthalene	30.0	28.8	96	30.0	27.9	93	71.0-129	3.2	30.00
trans-1,4-Dichloro-2-butene	150	144	96	150	145	97	62.0-164	0.69	30.00
1,2,3-Trichlorobenzene	30.0	29.1	97	30.0	26.7	89	78.0-115	8.6	30.00

Blank Spike Summary

Blank Spike ID: LCS-S for HBN 26881 [VXX/3787]
Blank Spike Lab ID: 84435
Date Analyzed: 08/09/2012 09:43

Spike Duplicate ID: LCSD-S for HBN 26881 [VXX/3787
Spike Duplicate Lab ID: 84436
Matrix: Soil-Solid as dry weight

QC for Samples: 31202487002, 31202487005, 31202487007

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			105			107	55.0-173		
Toluene d8			101			101	57.0-134		
4-Bromofluorobenzene			101			100	23.0-141		

Batch Information

Analytical Batch: VMS2459
Analytical Method: SW-846 8260B
Instrument: MSD9
Analyst: DVO

Prep Batch: VXX3787
Prep Method: SW-846 5035 SL
Prep Date/Time: 08/09/2012 08:19
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 5030B
Prep Batch: VXX3789
Prep Date: 08/09/2012 08:38

Client Sample ID	Lab Sample ID	Analysis Date	Analytical Batch	Instrument	Analyst
LCSD for HBN 26888 [VXX/3789]	84442	08/09/2012 10:14	VMS2461	MSD3	BWS
LCS for HBN 26888 [VXX/3789]	84441	08/09/2012 11:29	VMS2461	MSD3	BWS
MB for HBN 26888 [VXX/3789]	84443	08/09/2012 12:44	VMS2461	MSD3	BWS
103DPT-01	31202487008	08/09/2012 19:24	VMS2461	MSD3	BWS
SRW1(84377MS)	84638	08/09/2012 20:14	VMS2461	MSD3	BWS
SRW1(84377MSD)	84639	08/09/2012 20:39	VMS2461	MSD3	BWS

Print Date: 08/16/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Method Blank

Blank ID: MB for HBN 26888 [VXX/3789]
Blank Lab ID: 84443
QC for Samples:
31202487008

Matrix: Water

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF
Dichlorodifluoromethane	ND	U	0.283	5.00	ug/L	1
Chloromethane	ND	U	0.295	1.00	ug/L	1
Vinyl chloride	ND	U	0.386	1.00	ug/L	1
Bromomethane	ND	U	0.507	1.00	ug/L	1
Chloroethane	ND	U	0.902	1.00	ug/L	1
Trichlorofluoromethane	ND	U	0.308	1.00	ug/L	1
1,1-Dichloroethene	ND	U	0.202	1.00	ug/L	1
Acetone	ND	U	2.56	25.0	ug/L	1
Methylene chloride	**0.230**	J	0.199	5.00	ug/L	1
trans-1,2-Dichloroethene	ND	U	0.247	1.00	ug/L	1
tert-Butyl methyl ether (MTBE)	ND	U	0.195	1.00	ug/L	1
1,1-Dichloroethane	ND	U	0.162	1.00	ug/L	1
Diisopropyl Ether	ND	U	0.134	1.00	ug/L	1
2,2-Dichloropropane	ND	U	0.194	1.00	ug/L	1
cis-1,2-Dichloroethene	ND	U	0.179	1.00	ug/L	1
2-Butanone	ND	U	1.39	25.0	ug/L	1
Bromochloromethane	ND	U	0.134	1.00	ug/L	1
Chloroform	ND	U	0.205	1.00	ug/L	1
1,1,1-Trichloroethane	ND	U	0.221	1.00	ug/L	1
Carbon tetrachloride	ND	U	0.169	1.00	ug/L	1
1,1-Dichloropropene	ND	U	0.176	1.00	ug/L	1
Benzene	ND	U	0.156	1.00	ug/L	1
1,2-Dichloroethane	ND	U	0.139	1.00	ug/L	1
Trichloroethene	ND	U	0.199	1.00	ug/L	1
1,2-Dichloropropane	ND	U	0.158	1.00	ug/L	1
Dibromomethane	ND	U	0.171	1.00	ug/L	1
Bromodichloromethane	ND	U	0.222	1.00	ug/L	1
cis-1,3-Dichloropropene	ND	U	0.185	1.00	ug/L	1
4-Methyl-2-pentanone	ND	U	1.15	5.00	ug/L	1
Toluene	ND	U	0.180	1.00	ug/L	1
Methyl Iodide	ND	U	0.247	1.00	ug/L	1
trans-1,3-Dichloropropene	ND	U	0.167	1.00	ug/L	1
Carbon disulfide	ND	U	0.197	1.00	ug/L	1
1,1,2-Trichloroethane	ND	U	0.216	1.00	ug/L	1
1,3-Dichloropropane	ND	U	0.198	1.00	ug/L	1
2-Hexanone	ND	U	1.39	5.00	ug/L	1
Dibromochloromethane	ND	U	0.173	1.00	ug/L	1
1,2-Dibromoethane	ND	U	0.179	1.00	ug/L	1
Chlorobenzene	ND	U	0.158	1.00	ug/L	1
1,1,1,2-Tetrachloroethane	ND	U	0.175	1.00	ug/L	1
Bromoform	ND	U	0.208	1.00	ug/L	1
Bromobenzene	ND	U	0.205	1.00	ug/L	1

Print Date: 08/16/2012

N.C. Certification # 481

Method Blank

Blank ID: MB for HBN 26888 [VXX/3789]
Blank Lab ID: 84443
QC for Samples:
31202487008

Matrix: Water

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF
1,1,2,2-Tetrachloroethane	ND	U	0.223	1.00	ug/L	1
1,2,3-Trichloropropane	ND	U	0.210	1.00	ug/L	1
Ethyl Benzene	ND	U	0.186	1.00	ug/L	1
m,p-Xylene	ND	U	0.407	2.00	ug/L	1
Styrene	ND	U	0.207	1.00	ug/L	1
o-Xylene	ND	U	0.195	1.00	ug/L	1
Xylene (total)	ND	U	0.602	2.00	ug/L	1
Isopropylbenzene (Cumene)	ND	U	0.196	1.00	ug/L	1
n-Propylbenzene	ND	U	0.185	1.00	ug/L	1
2-Chlorotoluene	ND	U	0.160	1.00	ug/L	1
4-Chlorotoluene	ND	U	0.259	1.00	ug/L	1
1,3,5-Trimethylbenzene	ND	U	0.159	1.00	ug/L	1
tert-Butylbenzene	ND	U	0.239	1.00	ug/L	1
1,2,4-Trimethylbenzene	ND	U	0.179	1.00	ug/L	1
sec-Butylbenzene	ND	U	0.151	1.00	ug/L	1
1,3-Dichlorobenzene	ND	U	0.180	1.00	ug/L	1
4-Isopropyltoluene	ND	U	0.170	1.00	ug/L	1
1,4-Dichlorobenzene	ND	U	0.243	1.00	ug/L	1
1,2-Dichlorobenzene	ND	U	0.214	1.00	ug/L	1
n-Butylbenzene	ND	U	0.168	1.00	ug/L	1
1,2-Dibromo-3-chloropropane	ND	U	1.88	5.00	ug/L	1
1,2,4-Trichlorobenzene	ND	U	0.220	1.00	ug/L	1
Hexachlorobutadiene	ND	U	0.365	1.00	ug/L	1
Naphthalene	ND	U	0.260	1.00	ug/L	1
trans-1,4-Dichloro-2-butene	ND	U	1.25	5.00	ug/L	1
1,2,3-Trichlorobenzene	ND	U	0.246	1.00	ug/L	1
Surrogates						
1,2-Dichloroethane-d4	94.0			64.0-140	%	1
Toluene d8	104			82.0-117	%	1
4-Bromofluorobenzene	100			85.0-115	%	1

Batch Information

Analytical Batch: VMS2461
Analytical Method: SW-846 8260B
Instrument: MSD3
Analyst: BWS
Analytical Date/Time: 8/9/2012 12:44:00PM

Prep Batch: VXX3789
Prep Method: SW-846 5030B
Prep Date/Time: 8/9/2012 8:38:27AM
Prep Initial Wt./Vol.: 40 mL
Prep Extract Vol: 40 mL

Print Date: 08/16/2012

N.C. Certification # 481

Blank Spike Summary

Blank Spike ID: LCS for HBN 26888 [VXX/3789]
Blank Spike Lab ID: 84441
Date Analyzed: 08/09/2012 11:29

Spike Duplicate ID: LCSD for HBN 26888 [VXX/3789]
Spike Duplicate Lab ID: 84442
Date Analyzed: 08/09/2012 10:14
Matrix: Water

QC for Samples: 31202487008

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	5.06	101	5.00	4.42	88	33.0-170	14	30.00
Chloromethane	5.00	5.06	101	5.00	4.52	90	57.0-132	11	30.00
Vinyl chloride	5.00	4.89	98	5.00	4.53	91	59.0-138	7.6	30.00
Bromomethane	5.00	7.15	143*	5.00	4.92	98	51.0-134	37*	30.00
Chloroethane	5.00	4.51	90	5.00	4.29	86	64.0-145	5.0	30.00
Trichlorofluoromethane	5.00	4.52	90	5.00	4.01	80	64.0-133	12	30.00
1,1-Dichloroethene	5.00	4.54	91	5.00	4.10	82	71.0-128	10	30.00
Acetone	25.0	21.8	87	25.0	19.9	80	52.0-140	9.1	30.00
Methylene chloride	5.00	4.77	95	5.00	4.41	88	70.0-113	7.8	30.00
trans-1,2-Dichloroethene	5.00	5.07	101	5.00	4.70	94	57.0-138	7.6	30.00
tert-Butyl methyl ether (MTBE)	5.00	4.83	97	5.00	4.37	87	47.0-142	10	30.00
1,1-Dichloroethane	5.00	4.88	98	5.00	4.26	85	68.0-133	14	30.00
Diisopropyl Ether	5.00	4.96	99	5.00	4.77	95	66.0-132	3.9	30.00
2,2-Dichloropropane	5.00	4.72	94	5.00	4.33	87	74.0-125	8.6	30.00
cis-1,2-Dichloroethene	5.00	5.34	107	5.00	4.95	99	73.0-128	7.6	30.00
2-Butanone	25.0	23.5	94	25.0	21.8	87	58.0-134	7.5	30.00
Bromochloromethane	5.00	5.13	103	5.00	4.71	94	73.0-128	8.5	30.00
Chloroform	5.00	4.71	94	5.00	4.32	86	74.0-124	8.6	30.00
1,1,1-Trichloroethane	5.00	4.51	90	5.00	4.18	84	76.0-119	7.6	30.00
Carbon tetrachloride	5.00	4.59	92	5.00	4.25	85	75.0-120	7.7	30.00
1,1-Dichloropropene	5.00	4.89	98	5.00	4.53	91	76.0-124	7.6	30.00
Benzene	5.00	4.96	99	5.00	4.65	93	76.0-124	6.5	30.00
1,2-Dichloroethane	5.00	4.67	93	5.00	4.40	88	76.0-119	6.0	30.00
Trichloroethene	5.00	4.93	99	5.00	4.68	94	74.0-121	5.2	30.00
1,2-Dichloropropane	5.00	4.88	98	5.00	4.45	89	74.0-124	9.2	30.00
Dibromomethane	5.00	4.92	98	5.00	4.46	89	71.0-128	9.8	30.00
Bromodichloromethane	5.00	4.50	90	5.00	4.09	82	72.0-120	9.5	30.00
cis-1,3-Dichloropropene	5.00	4.62	92	5.00	4.21	84	73.0-122	9.3	30.00
4-Methyl-2-pentanone	25.0	23.5	94	25.0	21.8	87	65.0-124	7.5	30.00
Toluene	5.00	5.19	104	5.00	4.69	94	75.0-123	10	30.00
Methyl iodide	5.00	5.35	107	5.00	5.11	102	55.0-123	4.6	30.00
trans-1,3-Dichloropropene	5.00	4.82	96	5.00	4.48	90	70.0-125	7.3	30.00
Carbon disulfide	5.00	4.30	86	5.00	3.80	76	65.0-132	12	30.00
1,1,2-Trichloroethane	5.00	4.84	97	5.00	4.50	90	76.0-121	7.3	30.00

SGS ANALYTICAL PERSPECTIVES

Blank Spike Summary

Blank Spike ID: LCS for HBN 26888 [VXX/3789]
Blank Spike Lab ID: 84441
Date Analyzed: 08/09/2012 11:29

Spike Duplicate ID: LCSD for HBN 26888 [VXX/3789]
Spike Duplicate Lab ID: 84442
Date Analyzed: 08/09/2012 10:14
Matrix: Water

QC for Samples: 31202487008

Results by SW-846 8260B

	Blank Spike (ug/L)			Spike Duplicate (ug/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
1,3-Dichloropropane	5.00	4.88	98	5.00	4.55	91	74.0-120	7.0	30.00
2-Hexanone	25.0	22.2	89	25.0	20.8	83	56.0-133	6.5	30.00
Dibromochloromethane	5.00	4.28	86	5.00	3.93	79	67.0-122	8.5	30.00
1,2-Dibromoethane	5.00	4.56	91	5.00	4.11	82	74.0-119	10	30.00
Chlorobenzene	5.00	4.75	95	5.00	4.39	88	74.0-120	7.9	30.00
1,1,1,2-Tetrachloroethane	5.00	4.38	88	5.00	4.10	82	73.0-119	6.6	30.00
Bromoform	5.00	4.62	92	5.00	4.45	89	62.0-127	3.7	30.00
Bromobenzene	5.00	4.96	99	5.00	4.49	90	75.0-120	9.9	30.00
1,1,2,2-Tetrachloroethane	5.00	5.04	101	5.00	4.50	90	68.0-129	11	30.00
1,2,3-Trichloropropane	5.00	4.51	90	5.00	4.25	85	67.0-126	5.9	30.00
Ethyl Benzene	5.00	4.64	93	5.00	4.41	88	76.0-123	5.1	30.00
m,p-Xylene	10.0	9.35	94	10.0	8.77	88	76.0-124	6.4	30.00
Styrene	5.00	4.72	94	5.00	4.33	87	76.0-121	8.6	30.00
o-Xylene	5.00	5.10	102	5.00	4.66	93	75.0-124	9.0	30.00
Isopropylbenzene (Cumene)	5.00	4.80	96	5.00	4.52	90	77.0-120	6.0	30.00
n-Propylbenzene	5.00	4.80	96	5.00	4.70	94	77.0-123	2.1	30.00
2-Chlorotoluene	5.00	4.90	98	5.00	4.53	91	74.0-127	7.8	30.00
4-Chlorotoluene	5.00	4.62	92	5.00	4.38	88	77.0-123	5.3	30.00
1,3,5-Trimethylbenzene	5.00	4.64	93	5.00	4.35	87	76.0-122	6.5	30.00
tert-Butylbenzene	5.00	4.88	98	5.00	4.49	90	67.0-122	8.3	30.00
1,2,4-Trimethylbenzene	5.00	4.66	93	5.00	4.54	91	76.0-124	2.6	30.00
sec-Butylbenzene	5.00	4.69	94	5.00	4.59	92	78.0-121	2.2	30.00
1,3-Dichlorobenzene	5.00	4.70	94	5.00	4.52	90	75.0-120	3.9	30.00
4-Isopropyltoluene	5.00	4.67	93	5.00	4.49	90	77.0-120	3.9	30.00
1,4-Dichlorobenzene	5.00	4.81	96	5.00	4.48	90	70.0-125	7.1	30.00
1,2-Dichlorobenzene	5.00	4.73	95	5.00	4.35	87	76.0-118	8.4	30.00
n-Butylbenzene	5.00	4.56	91	5.00	4.30	86	78.0-118	5.9	30.00
1,2-Dibromo-3-chloropropane	30.0	24.6	82	30.0	22.4	75	62.0-130	9.4	30.00
1,2,4-Trichlorobenzene	5.00	4.41	88	5.00	4.50	90	72.0-119	2.0	30.00
Hexachlorobutadiene	5.00	4.37	87	5.00	4.08	82	69.0-121	6.9	30.00
Naphthalene	5.00	4.27	85	5.00	4.27	85	67.0-122	0.0	30.00
trans-1,4-Dichloro-2-butene	25.0	20.7	83	25.0	20.6	82	61.0-132	0.48	30.00
1,2,3-Trichlorobenzene	5.00	4.50	90	5.00	4.35	87	68.0-123	3.4	30.00

Surrogates

Blank Spike Summary

Blank Spike ID: LCS for HBN 26888 [VXX/3789]
Blank Spike Lab ID: 84441
Date Analyzed: 08/09/2012 11:29

Spike Duplicate ID: LCSD for HBN 26888 [VXX/3789]
Spike Duplicate Lab ID: 84442
Date Analyzed: 08/09/2012 10:14
Matrix: Water

QC for Samples: 31202487008

Results by SW-846 8260B

	Blank Spike (%)			Spike Duplicate (%)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
1,2-Dichloroethane-d4			92			91	64.0-140		
Toluene d8			103			104	82.0-117		
4-Bromofluorobenzene			102			102	85.0-115		

Batch Information

Analytical Batch: VMS2461
Analytical Method: SW-846 8260B
Instrument: MSD3
Analyst: BWS

Prep Batch: VXX3789
Prep Method: SW-846 5030B
Prep Date/Time: 08/09/2012 08:38
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 8270D

Prep Method: SW-846 3541
Prep Batch: XXX2893
Prep Date: 08/06/2012 16:36

Client Sample ID	Lab Sample ID	Analysis Date	Analytical Batch	Instrument	Analyst
MB for HBN 26791 [XXX/2893]	83981	08/07/2012 11:22	XMS1627	MSD10	CMP
LCS for HBN 26791 [XXX/2893]	83982	08/07/2012 11:45	XMS1627	MSD10	CMP
SB-1(83503MS)	83983	08/07/2012 14:02	XMS1627	MSD10	CMP
SB-1(83503MSD)	83984	08/07/2012 14:25	XMS1627	MSD10	CMP
103DPT-01 (6-6.5ft)	31202487001	08/07/2012 18:35	XMS1627	MSD10	CMP
103DPT-02 (5-5.5ft)	31202487002	08/07/2012 18:58	XMS1627	MSD10	CMP
103DPT-03 (5.5-6ft)	31202487003	08/07/2012 19:21	XMS1627	MSD10	CMP

Print Date: 08/16/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Method Blank

Blank ID: MB for HBN 26791 [XXX/2893]
Blank Lab ID: 83981
QC for Samples:
31202487001, 31202487002, 31202487003

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: 08/16/2012

N.C. Certification # 481

Method Blank

Blank ID: MB for HBN 26791 [XXX/2893]
Blank Lab ID: 83981
QC for Samples:
31202487001, 31202487002, 31202487003

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	79.0			42.0-123	%	1
Phenol-d6	92.0			48.0-125	%	1
Nitrobenzene-d5	92.0			46.0-117	%	1
2-Fluorobiphenyl	97.0			48.0-123	%	1
2,4,6-Tribromophenol	81.0			41.0-129	%	1
Terphenyl-d14	102			44.0-140	%	1

Batch Information

Analytical Batch: XMS1627
Analytical Method: SW-846 8270D
Instrument: MSD10
Analyst: CMP
Analytical Date/Time: 8/7/2012 11:22:00AM

Prep Batch: XXX2893
Prep Method: SW-846 3541
Prep Date/Time: 8/6/2012 4:36:35PM
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 26791 [XXX/2893]
Blank Spike Lab ID: 83982
Date Analyzed: 08/07/2012 11:45

Matrix: Soil-Solid as dry weight

QC for Samples: 31202487001, 31202487002, 31202487003

Results by SW-846 8270D

	Blank Spike (ug/Kg)			
Parameter	Spike	Result	Rec (%)	CL
Phenol	3130	3100	99	67.0-112
Bis(2-Chloroethyl)ether	3130	2930	94	63.0-116
2-Chlorophenol	3130	3010	96	67.0-109
1,3-Dichlorobenzene	3130	2890	93	66.0-109
1,4-Dichlorobenzene	3130	2900	93	65.0-112
1,2-Dichlorobenzene	3130	2930	94	67.0-110
2-Methylphenol	3130	3110	100	68.0-110
3 and/or 4-Methylphenol	6250	6630	106	66.0-113
Bis(2-Chloroisopropyl)ether	3130	2910	93	64.0-114
n-Nitrosodi-n-propylamine	3130	3040	97	66.0-111
Hexachloroethane	3130	2950	94	64.0-110
Nitrobenzene	3130	3090	99	69.0-112
Isophorone	3130	3230	103	69.0-108
2-Nitrophenol	3130	3010	96	65.0-117
2,4-Dimethylphenol	3130	3190	102	69.0-112
Bis(2-Chloroethoxy)methane	3130	3180	102	68.0-112
Benzoic acid	3130	2260	72	0.00-203
2,4-Dichlorophenol	3130	3240	104	67.0-118
1,2,4-Trichlorobenzene	3130	3080	99	65.0-114
Naphthalene	3130	3160	101	70.0-111
4-Chloroaniline	3130	2070	66	41.0-93.0
Hexachlorobutadiene	3130	3120	100	63.0-124
4-Chloro-3-methylphenol	3130	3440	110	70.0-114
2-Methylnaphthalene	3130	3190	102	69.0-110
Hexachlorocyclopentadiene	3130	3460	111	0.00-1080
2,4,5-Trichlorophenol	3130	3510	112	66.0-119
2,4,6-Trichlorophenol	3130	3160	101	67.0-119
2-Chloronaphthalene	3130	2850	91	57.0-96.0
2-Nitroaniline	3130	2760	88	61.0-100
3-Nitroaniline	3130	2630	84	48.0-103
Dimethyl phthalate	3130	3150	101	69.0-118
2,6-Dinitrotoluene	3130	3250	104	69.0-122
Acenaphthene	3130	3200	102	68.0-111
2,4-Dinitrophenol	3130	2730	87	12.0-125

Blank Spike Summary

Blank Spike ID: LCS for HBN 26791 [XXX/2893]
Blank Spike Lab ID: 83982
Date Analyzed: 08/07/2012 11:45

Matrix: Soil-Solid as dry weight

QC for Samples: 31202487001, 31202487002, 31202487003

Results by SW-846 8270D

	Blank Spike (ug/Kg)			
Parameter	Spike	Result	Rec (%)	CL
4-Nitrophenol	3130	3210	103	45.0-120
Dibenzofuran	3130	3220	103	71.0-114
2,4-Dinitrotoluene	3130	3230	103	68.0-123
Fluorene	3130	3330	107	66.0-116
Diethyl phthalate	3130	3210	103	68.0-114
4-Chlorophenyl phenyl ether	3130	3330	107	66.0-120
4-Nitroaniline	3130	2970	95	66.0-114
4,6-Dinitro-2-methylphenol	3130	2950	94	24.0-123
Diphenylamine	3130	3210	103	60.0-118
4-Bromophenyl phenyl ether	3130	3230	103	63.0-118
Hexachlorobenzene	3130	3170	101	62.0-112
Pentachlorophenol	3130	2940	94	34.0-125
Phenanthrene	3130	3370	108	60.0-122
Anthracene	3130	3430	110	63.0-113
Di-n-butyl phthalate	3130	3590	115	64.0-121
Fluoranthene	3130	3460	111	64.0-118
Pyrene	3130	3140	100	67.0-116
Butyl benzyl phthalate	3130	3030	97	68.0-118
Benzo(a)anthracene	3130	3090	99	65.0-118
3,3'-Dichlorobenzidine	3130	2820	90	54.0-118
Chrysene	3130	3090	99	66.0-118
Bis(2-Ethylhexyl)phthalate	3130	3150	101	67.0-123
Di-n-octyl phthalate	3130	3410	109	62.0-131
Benzo(b)fluoranthene	3130	2940	94	63.0-119
Benzo(k)fluoranthene	3130	3420	109	69.0-118
Benzo(a)pyrene	3130	3300	106	69.0-113
Indeno(1,2,3-cd)pyrene	3130	3460	111	64.0-123
Dibenz(a,h)anthracene	3130	3480	111	64.0-123
Benzo(g,h,i)perylene	3130	3580	115	57.0-128
Acenaphthylene	3130	3360	107	72.0-115
Surrogates				
2-Fluorophenol			85	42.0-123
Phenol-d6			100	48.0-125
Nitrobenzene-d5			98	46.0-117

Print Date: 08/16/2012

N.C. Certification # 481

Blank Spike Summary

Blank Spike ID: LCS for HBN 26791 [XXX/2893]
Blank Spike Lab ID: 83982
Date Analyzed: 08/07/2012 11:45

Matrix: Soil-Solid as dry weight

QC for Samples: 31202487001, 31202487002, 31202487003

Results by SW-846 8270D

		Blank Spike (%)		
Parameter	Spike	Result	Rec (%)	CL
2-Fluorobiphenyl			102	48.0-123
2,4,6-Tribromophenol			111	41.0-129
Terphenyl-d14			98	44.0-140

Batch Information

Analytical Batch: XMS1627
Analytical Method: SW-846 8270D
Instrument: MSD10
Analyst: CMP

Prep Batch: XXX2893
Prep Method: SW-846 3541
Prep Date/Time: 08/06/2012 16:36
Spike Init Wt./Vol.: 32 g Extract Vol: 10 mL
Dupe Init Wt./Vol.: Extract Vol:

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)	31202487004	08/08/2012 12:10	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
103DPT-05 (7-8ft)	31202487005	08/08/2012 13:18	XMS1628	MSD10	CMP
103DPT-06 (7-8ft)	31202487006	08/08/2012 13:41	XMS1628	MSD10	CMP
103DPT-07 (7-8ft)	31202487007	08/08/2012 14:04	XMS1628	MSD10	CMP

Print Date: 08/16/2012

N.C. Certification # 481

Method Blank

Blank ID: MB for HBN 26827 [XXX/2895]
Blank Lab ID: 84201
QC for Samples:
31202487004, 31202487005, 31202487006, 31202487007

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: 08/16/2012

N.C. Certification # 481

Method Blank

Blank ID: MB for HBN 26827 [XXX/2895]
Blank Lab ID: 84201
QC for Samples:
31202487004, 31202487005, 31202487006, 31202487007

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	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: 31202487004, 31202487005, 31202487006, 31202487007

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

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: 31202487004, 31202487005, 31202487006, 31202487007

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: 31202487004, 31202487005, 31202487006, 31202487007

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:

Matrix Spike Summary

Original Sample ID: 31202487004 (103DPT-04 (5-5.5ft)) Analysis Date: 08/08/2012 12:10
MS Sample ID: 84203 Analysis Date: 08/08/2012 12:33
MSD Sample ID: 84204 Analysis Date: 08/08/2012 12:56
Matrix: Soil-Solid as dry weight

QC for Samples: 31202487004, 31202487005, 31202487006, 31202487007

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	3968	3850	97	4424	4290	97	68.9-119	11	30.00
1,2-Dichlorobenzene	ND	3968	3610	91	4424	4130	93	73.3-121	14	30.00
1,3-Dichlorobenzene	ND	3968	3590	90	4424	4070	92	69.7-119	13	30.00
1,4-Dichlorobenzene	ND	3968	3600	91	4424	4060	92	70.6-117	12	30.00
2,4,5-Trichlorophenol	ND	3968	4180	105	4424	4780	108	72.4-118	13	30.00
2,4,6-Trichlorophenol	ND	3968	3940	99	4424	4520	102	67.9-116	14	30.00
2,4-Dichlorophenol	ND	3968	4040	102	4424	4600	104	74.5-115	13	30.00
2,4-Dinitrophenol	ND	3968	3740	94	4424	4330	98	20.4-130	15	30.00
2,4-Dinitrotoluene	ND	3968	3680	93	4424	4340	98	67.6-136	16	30.00
2,6-Dinitrotoluene	ND	3968	3780	95	4424	4380	99	69.3-131	15	30.00
2-Chloronaphthalene	ND	3968	3370	85	4424	3830	86	70.3-124	12	30.00
2-Chlorophenol	ND	3968	3740	94	4424	4260	96	77.1-111	13	30.00
2-Methylnaphthalene	ND	3968	3810	96	4424	4300	97	74.1-111	12	30.00
2-Methylphenol	ND	3968	3690	93	4424	4310	97	78.7-116	15	30.00
2-Nitroaniline	ND	3968	3020	76	4424	3480	79	70.0-129	14	30.00
2-Nitrophenol	ND	3968	3900	98	4424	4400	99	63.3-112	12	30.00
3 and/or 4-Methylphenol	ND	7922	7790	98	8861	8880	100	71.2-101	13	30.00
3,3'-Dichlorobenzidine	ND	3968	3120	79	4424	3770	85	14.2-302	19	30.00
3-Nitroaniline	ND	3968	3190	80	4424	4050	91	76.6-356	24	30.00
4,6-Dinitro-2-methylphenol	ND	3968	3730	94	4424	4400	99	39.4-126	17	30.00
4-Chloro-3-methylphenol	ND	3968	4000	101	4424	4480	101	80.0-115	11	30.00
4-Chloroaniline	ND	3968	2660	67	4424	3610	81	25.1-237	30	30.00
4-Chlorophenyl phenyl ether	ND	3968	3830	96	4424	4440	100	72.8-125	15	30.00
Acenaphthene	ND	3968	3670	92	4424	4200	95	71.0-125	14	30.00
Acenaphthylene	ND	3968	3860	97	4424	4400	99	73.0-140	13	30.00
Anthracene	ND	3968	3850	97	4424	4330	98	66.9-119	12	30.00
Benzo(a)anthracene	ND	3968	3680	93	4424	4140	93	51.8-127	12	30.00
Benzo(a)pyrene	ND	3968	3850	97	4424	4320	97	78.5-137	11	30.00
Benzo(b)fluoranthene	ND	3968	3590	90	4424	4090	92	62.3-134	13	30.00
Benzo(g,h,i)perylene	ND	3968	4140	104	4424	4830	109	56.2-149	15	30.00
Benzo(k)fluoranthene	ND	3968	3780	95	4424	4320	97	79.7-133	13	30.00
Benzoic acid	ND	3968	3450	87	4424	4190	94	1.00-140	19	30.00
Bis(2-Chloroethoxy)methane	ND	3968	3650	92	4424	4090	92	71.4-123	11	30.00
Bis(2-Chloroethyl)ether	ND	3968	3330	84	4424	3880	87	64.0-120	15	30.00
Bis(2-Chloroisopropyl)ether	ND	3968	2950	74	4424	3400	77	60.5-123	14	30.00
Bis(2-Ethylhexyl)phthalate	ND	3968	3520	89	4424	3970	89	68.5-134	12	30.00
4-Bromophenyl phenyl ether	ND	3968	3830	97	4424	4350	98	65.2-127	12	30.00
Butyl benzyl phthalate	ND	3968	3430	86	4424	3840	87	64.4-133	11	30.00
Chrysene	ND	3968	3660	92	4424	4100	93	72.7-124	11	30.00

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

Matrix Spike Summary

Original Sample ID: 31202487004 (103DPT-04 (5-5.5ft))
MS Sample ID: 84203
MSD Sample ID: 84204

Analysis Date: 08/08/2012 12:10
Analysis Date: 08/08/2012 12:33
Analysis Date: 08/08/2012 12:56
Matrix: Soil-Solid as dry weight

QC for Samples: 31202487004, 31202487005, 31202487006, 31202487007

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	3968	3960	100	4424	4430	100	67.9-125	11	30.00
Di-n-octyl phthalate	ND	3968	3880	98	4424	4420	100	48.9-162	13	30.00
Dibenz(a,h)anthracene	ND	3968	4120	104	4424	4720	107	58.6-146	14	30.00
Dibenzofuran	ND	3968	3680	93	4424	4230	95	70.6-115	14	30.00
Diethyl phthalate	ND	3968	3460	87	4424	4080	92	70.8-127	16	30.00
Dimethyl phthalate	ND	3968	3430	86	4424	4130	93	68.5-122	19	30.00
2,4-Dimethylphenol	ND	3968	3590	91	4424	4010	90	85.4-138	11	30.00
Diphenylamine	ND	3968	3540	89	4424	4020	91	73.6-208	13	30.00
Fluoranthene	ND	3968	4000	101	4424	4510	102	64.6-129	12	30.00
Fluorene	ND	3968	3690	93	4424	4320	98	72.4-128	16	30.00
Hexachlorobenzene	ND	3968	3530	89	4424	4030	91	62.9-124	13	30.00
Hexachlorobutadiene	ND	3968	3890	98	4424	4370	99	69.1-118	12	30.00
Hexachlorocyclopentadiene	ND	3968	3980	100	4424	4610	104	1.00-176	15	30.00
Hexachloroethane	ND	3968	3520	89	4424	4010	90	68.0-122	13	30.00
Indeno(1,2,3-cd)pyrene	ND	3968	4070	103	4424	4680	106	29.1-157	14	30.00
Isophorone	ND	3968	3530	89	4424	3990	90	65.2-143	12	30.00
Naphthalene	ND	3968	3780	95	4424	4240	96	49.9-137	11	30.00
4-Nitroaniline	ND	3968	3540	89	4424	4100	93	50.8-178	15	30.00
Nitrobenzene	ND	3968	3530	89	4424	3960	89	71.4-122	11	30.00
4-Nitrophenol	ND	3968	3740	94	4424	4240	96	56.8-133	13	30.00
Pentachlorophenol	ND	3968	3690	93	4424	4210	95	29.2-108	13	30.00
Phenanthrene	ND	3968	3840	97	4424	4330	98	55.8-128	12	30.00
Phenol	ND	3968	3690	93	4424	4210	95	71.2-120	13	30.00
Pyrene	ND	3968	3700	93	4424	4120	93	68.5-140	11	30.00
n-Nitrosodi-n-propylamine	ND	3968	3080	78	4424	3580	81	74.3-133	15	30.00
Surrogates										
2,4,6-Tribromophenol				101			100	41.0-129		
2-Fluorobiphenyl				90			87	48.0-123		
2-Fluorophenol				83			82	42.0-123		
Nitrobenzene-d5				90			87	46.0-117		
Phenol-d6				96			96	48.0-125		
Terphenyl-d14				87			85	44.0-140		

Print Date: 08/16/2012

N.C. Certification # 481

Matrix Spike Summary

Original Sample ID: 31202487004 (103DPT-04 (5-5.5ft))
MS Sample ID: 84203
MSD Sample ID: 84204

Analysis Date: 08/08/2012 12:10
Analysis Date: 08/08/2012 12:33
Analysis Date: 08/08/2012 12:56
Matrix: Soil-Solid as dry weight

QC for Samples: 31202487004, 31202487005, 31202487006, 31202487007

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: 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
MS Init Wt./Vol.: 33.82 g Extract Vol.: 10 mL
MSD Init Wt./Vol.: 30.26 g Extract Vol.: 10 mL

Print Date: 08/16/2012

N.C. Certification # 481

Batch Summary

Analytical Method: SW-846 8270D

Prep Method: SW-846 3520C
Prep Batch: XXX2897
Prep Date: 08/07/2012 16:58

Client Sample ID	Lab Sample ID	Analysis Date	Analytical Batch	Instrument	Analyst
MB for HBN 26835 [XXX/2897]	84216	08/09/2012 15:58	XMS1630	MSD10	CMP
LCS for HBN 26835 [XXX/2897]	84217	08/09/2012 16:43	XMS1630	MSD10	CMP
59-BW-6-12 (TCLP)(83302MS)	84218	08/09/2012 18:37	XMS1630	MSD10	CMP
59-BW-6-12 (TCLP)(83302MSD)	84219	08/09/2012 19:00	XMS1630	MSD10	CMP
103DPT-01	31202487008	08/09/2012 20:54	XMS1630	MSD10	CMP

Print Date: 08/16/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Method Blank

Blank ID: MB for HBN 26835 [XXX/2897]
Blank Lab ID: 84216
QC for Samples:
31202487008

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: 08/16/2012

N.C. Certification # 481

Method Blank

Blank ID: MB for HBN 26835 [XXX/2897]
Blank Lab ID: 84216
QC for Samples:
31202487008

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	74.0			33.1-118	%	1
Phenol-d6	87.0			49.0-120	%	1
Nitrobenzene-d5	86.0			46.0-118	%	1
2-Fluorobiphenyl	70.0			50.0-107	%	1
2,4,6-Tribromophenol	93.0			29.3-152	%	1
Terphenyl-d14	96.0			22.1-142	%	1

Batch Information

Analytical Batch: XMS1630
Analytical Method: SW-846 8270D
Instrument: MSD10
Analyst: CMP
Analytical Date/Time: 8/9/2012 3:58:00PM

Prep Batch: XXX2897
Prep Method: SW-846 3520C
Prep Date/Time: 8/7/2012 4:58:06PM
Prep Initial Wt./Vol.: 1000 mL
Prep Extract Vol: 5 mL

Print Date: 08/16/2012

N.C. Certification # 481

Blank Spike Summary

Blank Spike ID: LCS for HBN 26835 [XXX/2897]
Blank Spike Lab ID: 84217
Date Analyzed: 08/09/2012 16:43

Matrix: Water

QC for Samples: 31202487008

Results by SW-846 8270D

Blank Spike (ug/L)

Parameter	Spike	Result	Rec (%)	CL
Phenol	50.0	44.6	89	57.0-113
Bis(2-Chloroethyl)ether	50.0	43.1	86	61.0-117
2-Chlorophenol	50.0	46.1	92	57.0-110
1,3-Dichlorobenzene	50.0	32.4	65	22.0-101
1,4-Dichlorobenzene	50.0	33.3	67	25.0-102
1,2-Dichlorobenzene	50.0	34.6	69	29.0-102
2-Methylphenol	50.0	42.2	84	55.0-110
3 and/or 4-Methylphenol	100	91.6	92	53.0-118
Bis(2-Chloroisopropyl)ether	50.0	36.9	74	56.0-112
n-Nitrosodi-n-propylamine	50.0	38.1	76	53.0-115
Hexachloroethane	50.0	30.9	62	11.0-104
Nitrobenzene	50.0	43.9	88	63.0-115
Isophorone	50.0	45.4	91	64.0-121
2-Nitrophenol	50.0	47.7	95	58.0-115
2,4-Dimethylphenol	50.0	24.8	50	40.0-104
Bis(2-Chloroethoxy)methane	50.0	46.0	92	62.0-107
Benzoic acid	50.0	37.2	74	8.00-186
2,4-Dichlorophenol	50.0	49.7	99	58.0-118
1,2,4-Trichlorobenzene	50.0	43.3	87	45.0-108
Naphthalene	50.0	44.8	90	52.0-110
4-Chloroaniline	50.0	39.2	78	44.0-115
Hexachlorobutadiene	50.0	41.7	83	25.0-115
4-Chloro-3-methylphenol	50.0	48.0	96	56.0-119
2-Methylnaphthalene	50.0	47.5	95	55.0-112
Hexachlorocyclopentadiene	50.0	51.7	103	0.00-1430
2,4,5-Trichlorophenol	50.0	52.8	106	59.0-119
2,4,6-Trichlorophenol	50.0	47.8	96	58.0-116
2-Chloronaphthalene	50.0	42.4	85	57.0-105
2-Nitroaniline	50.0	38.2	76	53.0-108
3-Nitroaniline	50.0	42.4	85	54.0-116
Dimethyl phthalate	50.0	47.2	94	66.0-119
2,6-Dinitrotoluene	50.0	48.9	98	65.0-121
Acenaphthene	50.0	46.3	93	60.0-114
2,4-Dinitrophenol	50.0	46.3	93	1.00-157

Blank Spike Summary

Blank Spike ID: LCS for HBN 26835 [XXX/2897]
Blank Spike Lab ID: 84217
Date Analyzed: 08/09/2012 16:43

Matrix: Water

QC for Samples: 31202487008

Results by SW-846 8270D

	Blank Spike (ug/L)			
Parameter	Spike	Result	Rec (%)	CL
4-Nitrophenol	50.0	42.3	85	38.0-123
Dibenzofuran	50.0	47.6	95	64.0-120
2,4-Dinitrotoluene	50.0	48.1	96	65.0-125
Fluorene	50.0	48.2	96	52.0-120
Diethyl phthalate	50.0	46.7	93	59.0-122
4-Chlorophenyl phenyl ether	50.0	49.7	99	61.0-113
4-Nitroaniline	50.0	43.0	86	53.0-123
4,6-Dinitro-2-methylphenol	50.0	48.9	98	30.0-128
Diphenylamine	50.0	44.5	89	51.0-114
4-Bromophenyl phenyl ether	50.0	48.7	97	61.0-109
Hexachlorobenzene	50.0	46.0	92	53.0-110
Pentachlorophenol	50.0	46.9	94	32.0-132
Phenanthrene	50.0	49.3	99	53.0-115
Anthracene	50.0	44.8	90	50.0-113
Di-n-butyl phthalate	50.0	50.7	101	59.0-123
Fluoranthene	50.0	51.8	104	54.0-119
Pyrene	50.0	46.4	93	60.0-120
Butyl benzyl phthalate	50.0	43.4	87	61.0-128
Benzo(a)anthracene	50.0	45.9	92	57.0-119
3,3'-Dichlorobenzidine	50.0	41.4	83	37.0-136
Chrysene	50.0	47.3	95	59.0-117
Bis(2-Ethylhexyl)phthalate	50.0	45.2	90	63.0-122
Di-n-octyl phthalate	50.0	48.6	97	62.0-129
Benzo(b)fluoranthene	50.0	45.0	90	59.0-120
Benzo(k)fluoranthene	50.0	49.0	98	62.0-124
Benzo(a)pyrene	50.0	46.0	92	54.0-123
Indeno(1,2,3-cd)pyrene	50.0	51.6	103	59.0-127
Dibenz(a,h)anthracene	50.0	52.2	104	59.0-129
Benzo(g,h,i)perylene	50.0	53.4	107	60.0-126
Acenaphthylene	50.0	46.9	94	58.0-117
Surrogates				
2-Fluorophenol			53	33.1-118
Phenol-d6			64	49.0-120
Nitrobenzene-d5			61	46.0-118

Print Date: 08/16/2012

N.C. Certification # 481

Blank Spike Summary

Blank Spike ID: LCS for HBN 26835 [XXX/2897]
Blank Spike Lab ID: 84217
Date Analyzed: 08/09/2012 16:43

Matrix: Water

QC for Samples: 31202487008

Results by SW-846 8270D

		Blank Spike (%)		
Parameter	Spike	Result	Rec (%)	CL
2-Fluorobiphenyl			60	50.0-107
2,4,6-Tribromophenol			73	29.3-152
Terphenyl-d14			63	22.1-142

Batch Information

Analytical Batch: XMS1630
Analytical Method: SW-846 8270D
Instrument: MSD10
Analyst: CMP

Prep Batch: XXX2897
Prep Method: SW-846 3520C
Prep Date/Time: 08/07/2012 16:58
Spike Init Wt./Vol.: 1000 mL Extract Vol: 5 mL
Dupe Init Wt./Vol.: Extract Vol:

SGS ANALYTICAL PERSPECTIVES

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 103 SITE / PWSID / WBS #: 35781.1.2 U-3315 Pitt County

REPORTS TO:

EMAIL: ben.ashba@catlinusa.com

INVOICE TO: NCDOT QUOTE #: P.O. NUMBER: NCDOT

SGS Reference #: 31202487

PAGE 1 OF 1

PRESERVATIVES USED: MeOH

ANALYSIS REQUIRED: Site Tox TPH Diesel/Gas; 8260; 8270 BN

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	# CONTAINERS	SAMPLE TYPE (C= COMP, G= GRAB)	Site tox TPH Diesel/Gas	8260	8270 BN	REMARKS
	103 DPT-01 (6-6.5')	8.1.12	1520	SOIL	3	G	✓	X	X	
	103 DPT-02 (5-5.5')	↓	1530	↓	↓	↓	↓	X	X	
	103 DPT-03 (5.5-6')	↓	1550	↓	↓	↓	↓	X	X	
	103 DPT-04 (5-5.5')	↓	1610	↓	↓	↓	↓	X	X	
	103 DPT-05 (7-8')	8.2.12	740	↓	↓	↓	↓	X	X	
	103 DPT-06 (7-8')	↓	800	↓	↓	↓	↓	X	X	
	103 DPT-07 (7-8')	↓	810	↓	↓	↓	X	X	X	
	103 DPT-01 ~~8/6/12~~	8/1/12	1530	water	5	G		X	X	

COLLECTED/RELINQUISHED BY: (1)	DATE	TIME	RECEIVED BY:
Ben Ashba [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 2.4°C

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

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

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

SPECIAL INSTRUCTIONS:

Shipping Carrier:

Shipping Ticket No:

Notes:

SGS-00055 (06/12)

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

White - Retained by Lab
Yellow - Retained by Client

SGS North America Inc.

Sample Receipt Checklist (SRC)

Client: **NCDOT-Catlin** Work Order No.: **31202487**

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: 2.4
   ___ 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. _X_ No Headspace present in VOC vials
    ___ Headspace present in VOC vials >6mm

Notes:

Comments: The 103DPT-01 liters were not labeled, water sample was not originally on CoC.

Inspected and Logged in by: AV

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

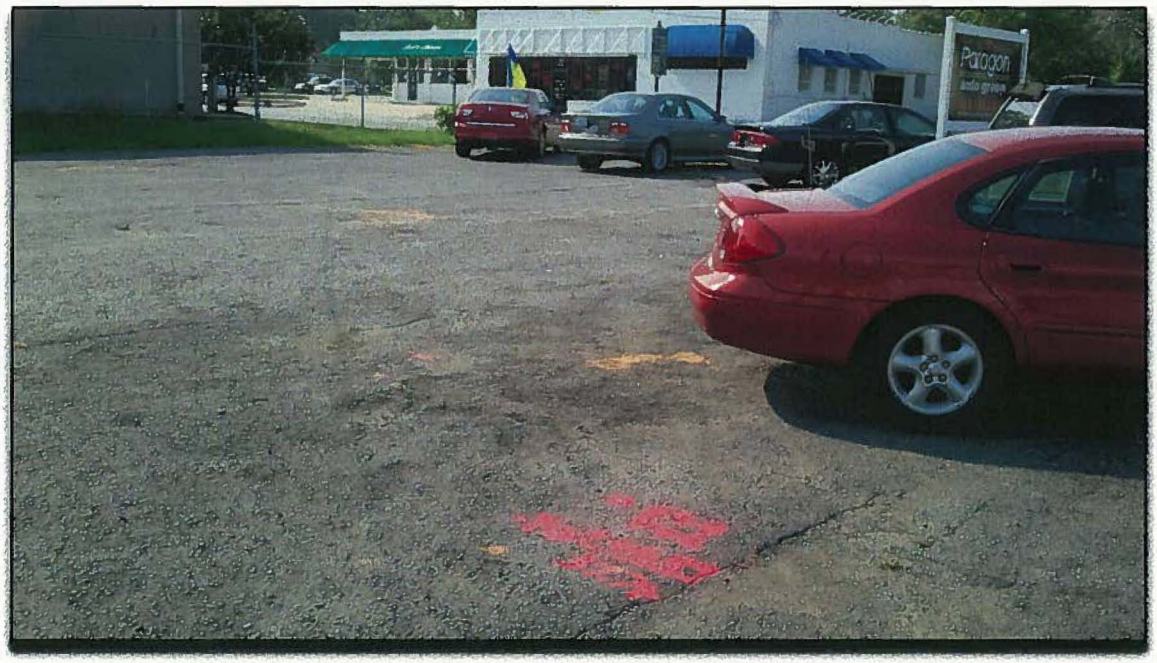
*NCDENR must be notified when collection, holding time or preservation requirements are not met.

MI_11.6

APPENDIX D
PHOTOGRAPHS

PARCEL 103, EARL FAULKNER – PARAGON AUTO GROUP
116 WEST 10TH STREET

From near Eastern property line and proposed easement looking West-southwest across the site.



From Western portion of property near proposed easement looking Southeast.