PRELIMINARY SITE ASSESSMENT
FOR
PARCEL 105, VINCENT PEELE PROPERTY, LLC
GREENVILLE AWNING AND SCOTT'S CLEANERS
111 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

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 105, Vincent Peele Property, LLC. The parcel/property is located at 111 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:

> *Currently ...*the site*... operates as a dry cleaner (eastern portion) and awning supplier (western portion). The eastern portion of the site operated as a gas station, historically. The site is located in the southwest quadrant of West 10th Street and East Evans Street. According to NCDENR's UST Section Registry the facility ID and groundwater incidents could not be identified for this site. UST vents were observed behind the building approximately 45 feet from East Evans Street.*

According to NCDOT acquisition of the right of way (ROW), including this entire parcel is necessary for roadway construction (State Project U-3315) and specifically at the above referenced parcel (Parcel 105). 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 at the parcel with particular emphasis on the vicinity of proposed excavations for drainage, utilities, and slope stake cuts within the NCDOT ROW, controlled access boundary (CA), or easement.
- 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 105, Vincent Peele Property, LLC property (currently Greenville Awning and Scott's Cleaners), 111 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 82. Per NCDOT request, borings (soil samples) were located near known or suspect UST systems and proposed drainage features (as indicated on NCDOT provided plan sheets). The NCDOT Conventional Plan Sheet Symbols are provided on Sheet 1A. Accessible proposed drainage features at the site include drainage piping and catch basin numbers 1106 and 1117 (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 coordinated site work with Scott's Cleaners so as to minimize business interruptions. The majority of field work was conducted after business hours. CATLIN's field activities began at the site on July 16, 2012 and concluded on August 3, 2012.

2.1 FIELD METHODS

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

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

CATLIN personnel gathered subsurface soil data at the site by Direct Push Technology (DPT) boring advancement using an AMS PowerProbe™ 9600D (PowerProbe). Borings were identified by the parcel number 105 followed by "DPT" and consecutive numbers starting with "01" (example: 105DPT-01). Borings were located at proposed catch basin numbers 1106 and 1117, along associated proposed piping, and near suspected UST and UST system locations. 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, 14 borings were advanced for soil sample collection.

Also shown on Sheet 2 are locations where hand auger borings were

attempted behind the Scott's Cleaners building. Concrete, asphalt or brick was encountered at one (1) to two (2) feet BLS at each location. Therefore, soil samples were not collected.

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: 105DPT-01(7-8 ft)]. The sample identifications are included on the Boring Logs in Appendix B and the laboratory analytical Chain of Custody in Appendix C.

Thirteen (13) of the 14 PowerProbe borings were terminated at approximately six (6) to eight (8) feet BLS. The 105DPT-10 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 14 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

Three (3) 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, and contaminated soil volume in the cut section. There were no other proposed utilities requiring excavation identified at the site. 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 pipe width to one (1) foot below the final drainage feature installation invert elevation. 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 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 DSCA site is located approximately 300 feet northeast.

Historical aerial photographs were also reviewed and local "historians" were interviewed. Based on review of the historical aerial photographs and locals with knowledge of the area, the site was previously utilized as an Amoco gas/service station, a dry cleaners with onsite operations, Bob Barbour Honda Dealership, and before that a Buick dealership. According to the interviewed locals, the dealerships utilized the current awning shop building as the dealership showroom and offices. The current dry cleaning building was the dealership service department.

Geophysical Investigation

The complete geophysical investigation report by Schnabel is included in Appendix A. The ground penetrating radar (GPR) data collected near the northeast corner of the parcel indicates the presence of a probable UST. The data indicates that probable UST No. 1 is buried approximately two (2) to three (3) feet below ground surface, and is about three (3) feet in diameter and about five (5) feet long, equivalent to a capacity of about 270 gallons. The probable UST location is illustrated on Figures included in the Schnabel report and on Sheet 2.

Site Reconnaissance

CATLIN personnel identified the proposed drainage feature locations and 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, there are two (2) buildings at the site. The current tenants include a dry cleaners drop off/pickup facility and an awning shop.

The interior of the buildings were inspected for signs of previous operations and potential environmental impacts. There were no indications of dry cleaning operations on-site in either building. Additionally, the locations of suspected hydraulic lifts were not apparent inside the Scott's Cleaners. The floor is currently carpeted and tiled. No signs of hydraulic lifts were noted in the current awning shop building.

Soil and Groundwater

Four (4) hand auger boring were attempted for soil sample collection and laboratory analysis behind the Scott's Cleaner building. Hand auger boring attempt locations are illustrated on Sheet 2. Concrete and/or bricks were encountered at one (1) to two (2) feet BLS. No soil samples were collected for laboratory analysis from the hand auger borings.

Sandy clay / clayey sand and silty sand soils with varying amounts of clean sands were encountered across the project site. Petroleum hydrocarbon odor was noted in soils collected from boring 105DPT-09 below 3.5 feet deep. No petroleum/hydrocarbon odor was noted in soils collected from any other

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 above the UST Section Soil-To-Groundwater (STGW) MSCC of 7.4 micrograms per kilogram (ug/kg) and the IHSB Protection of Groundwater Preliminary SRG of 5 ug/kg in the soil samples collected from borings 105DPT-02, -03, -05, -07, -11 and -12. The boring 105DPT-11 is located at proposed catch basin number 1117. The "Perc" concentrations ranged from 16.9 ug/kg (at boring 105DPT-12) to 359 ug/kg (at boring 105DPT-03). While these levels exceed the UST Section "Perc" STGW MSCC of 7.4 ug/kg and IHSB Protection of Groundwater Preliminary SRG of 5 ug/kg, they are well below the IHSB Preliminary Health-Based Soil Remediation Goal of 17,000 ug/kg.

The sample collected from boring 105DPT-09 revealed Naphthalene and 2-Methlynapthalene concentrations above the corresponding STGW MSCCs and IHSB Protection of Groundwater Preliminary SRG. The sample collected from boring 105DPT-09 also revealed 4-Isopropyltoluene above the corresponding STGW MSCC.

No contaminant concentrations were detected above the Residential MSCCs. No contaminant concentrations were detected above the lowest MSCCs at the proposed catch basin 1106 location (boring 105DPT-10) or at borings 105DPT-08 and 105DPT-14 along proposed drainage. No other EPA Method 8260B or EPA Method 8270D BN parameters were revealed above the lowest MSCC in any of the soil samples.

Summarized groundwater sample analytical results are provided on Table 2 and Sheet 2. Minor concentrations of Diisopropyl Ether and Xylenes were detected well below the corresponding North Carolina Administrative Code T15A:02L Groundwater Quality Standards (2L GWQS). No other EPA Method 8260B parameters or any EPA Method 8270D BN parameters were detected. Depth to groundwater was measured at approximately 12.4 feet BLS after boring termination. Adjacent property static water table measurements indicate a depth to water of approximately nine (9) feet BLS. It is assumed the static water table at the site is roughly nine (9) 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 or IHSB SRG will be considered impacted for handling and disposal purposes. The estimated extent of Tetrachloroethene and/or petroleum contaminated soil greater than the lowest MSCC or IHSB SRG 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 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 nine (9) feet BLS.

The area illustrated with a red dashed line and skull symbols on Sheet 2 is roughly 11,675 square feet. If all soils within this area were excavated to nine (9) feet deep, the volume would be approximately 3,891 cubic yards.

The estimated contaminated soil volume to be removed for installation of the proposed piping is based on an assumed excavation width of four (4) feet for installation of a 24 inch wide pipe (according to NCDOT). Also, it is assumed, (based on information provided by NCDOT) that the current surface elevation along the proposed drainage piping is 48 feet (from just north of proposed catch basin 1106) and the bottom of the excavation necessary for proposed drainage feature construction will be approximately 42 feet. Therefore, an excavation for drainage feature installation near boring 105DPT-09 will be approximately 21.5 linear feet long (from halfway between borings 105DPT-08 and -09 to halfway between borings 105DPT-09 to -10) by four (4) feet wide, and roughly six (6) feet deep, which equals roughly 19 cubic yards.

The proposed cut section near Alignment -L- Station 82 that is within the estimated extent of contaminated soil is approximately 189 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 impacted with "Perc" and petroleum constituents were revealed in samples collected from along the proposed drainage features and within the subject site. No groundwater impacts were detected in the groundwater sample collected from the proposed catch basin 1106 locations. A soil sample collected from the proposed catch basin 1117 location revealed "Perc" impacts and groundwater in the area may also be impacted. The

potential source for the "Perc" is likely associated with former dry cleaning operations at the site. Petroleum impacts are likely related to previous gas/service station operations including USTs and suspected hydraulic lifts at the site.

A rough volume estimate of the contaminated soil volume within the property is approximately 3,891 cubic yards. The approximate contaminated soil volume to be removed within the property for drainage feature installation north of catch basin 1106 is 19 cubic yards. The cut section within the estimated extent of contaminated soil is roughly 189 cubic yards. However, these volume estimates include soil near the surface that may not be contaminated. Also it should be noted that the soil contamination may be a result of groundwater impacts and not reflective of vadose zone soils. 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.

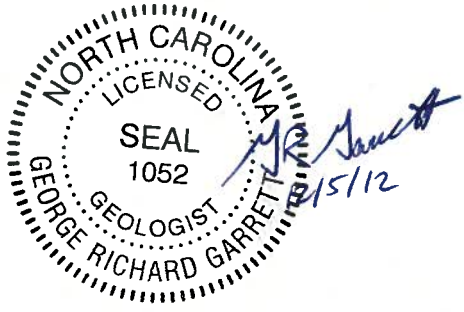
Based on geophysical survey results, site reconnaissance, and NCDENR file review information, there is one (1) probable UST location at the site. Additionally, there may be three (3) under/in ground hydraulic lifts in the Scott's Cleaners building. No hydraulic lifts are suspected in the awning shop building.

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 105, Vincent Peele Property, LLC – Greenville Awning & Scott's Cleaners (Carolina Cleaners) and Former Amoco Service Station
111 W. 10th Street

Sample ID	Method →		EPA Method 8260B													EPA Method 8270D Base Neutral				
	Contaminant of Concern →		1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	4-Isopropyltoluene	Acetone	Carbon disulfide	cis-1,2-Dichloroethene	Isopropylbenzene (Cumene)	Methylene chloride	Naphthalene	n-Propylbenzene	Tetrachloroethene ("Perc")	Toluene	Trichloroethene (TCE)	All other EPA Method 8260B Parameters	2-Methylnaphthalene	Fluorene	Naphthalene	Phenanthrene	All other EPA Method 8270D Base Neutral Parameters
	Date Collected	Location																			
105 DPT-01 (7-8ft)	7/16/12	@ curb in front of Cleaners	<0.974	<0.896	<0.947	<1.13	<0.786	<0.705	<0.877	1.46 J	<1.10	<0.888	2.53 J	<0.737	<0.762	BMDL	<26.1	<17.1	<27.8	<21.2	BMDL
105 DPT-02 (5-6ft)	7/16/12	≈25' East of DPT-01	<4.31	<5.06	<3.44	<38.7	<4.75	18.4 J	<3.89	<6.81	<3.83	<5.06	**290**	<5.96	<5.60	BMDL	<27.8	<18.2	<29.6	<22.6	BMDL
105 DPT-03 (5-6ft)	7/16/12	Near SE corner of Cleaners	<4.35	<5.12	<3.48	<39.1	<4.80	12.2 J	<3.93	<6.88	<3.87	<5.12	**359**	<6.02	14.0 J	BMDL	<26.0	<17.0	<27.7	<21.1	BMDL
105 DPT-04 (7-8ft)	7/16/12	≈25' West of DPT-01	<1.04	<0.957	<1.01	<1.21	<0.840	<0.754	<0.936	2.83 J	<1.18	<0.948	<0.731	<0.788	<0.814	BMDL	<27.8	<18.3	<29.7	<22.7	BMDL
105 DPT-05 (4-5ft)	7/17/12	South of Probable UST	<4.39	<5.16	<3.51	<39.5	<4.84	<6.21	<3.97	<6.94	<3.90	<5.16	**268**	<6.07	<5.71	BMDL	<27.0	<17.7	<28.8	<22.0	BMDL
105 DPT-06 (4-5ft)	7/17/12	Western edge of former dispenser island	<1.03	<0.943	<0.997	<1.19	<0.828	<0.743	<0.923	<0.669	<1.16	<0.935	<0.721	<0.776	<0.802	BMDL	<26.8	<17.6	<28.6	<21.8	BMDL
105 DPT-07 (2-4ft)	7/17/12	Between DPT-03 and DPT-05	<0.961	<0.883	<0.934	<1.11	<0.776	<0.696	<0.865	<0.627	<1.09	<0.875	**59.8**	<0.727	1.67 J	BMDL	<30.2	<19.8	<32.2	<24.6	BMDL
105 DPT-08 (3-4ft)	7/17/12	Edge of curb along proposed drainage	<0.861	<0.791	<0.836	<0.997	<0.695	<0.623	<0.775	<0.561	<0.973	<0.784	<0.605	<0.651	<0.673	BMDL	<28.8	<18.9	<30.7	<23.4	BMDL
105 DPT-09 (4-5ft)	7/17/12	@ Eastern driveway entrance along proposed drainage	3,610	1,180	**284**	<143	34.7 J	<22.5	47.9 J	<25.1†	**492**	362	<25.6†	<22.0	<20.6†	BMDL	**22,200**	193 J	**10,800**	158 J	BMDL
105 DPT-10 (4-5ft)	7/18/12	@ CB 1106	<1.00	<0.923	<0.976	11.7 J	<0.811	<0.727	<0.903	0.957 J	<1.14	<0.915	<0.706	<0.760	<0.785	BMDL	<35.6	<23.3	<38.0	<29.0	BMDL
105DPT-11 (4.5-5ft)	7/25/12	@ CB 1117	<4.60	<5.41	<3.68	<41.3	<5.07	<6.51	<4.16	18.2 J	<4.09	<5.41	**290**	<6.36	<5.98	BMDL	<32.7	<21.5	<34.9	<26.7	BMDL
105DPT-12 (6-7ft)	8/3/12	≈20' West of DPT-09	<0.629	<0.601	<0.637	10.4 J	<0.517	<0.604	<0.615	3.16 J	<0.898	<0.723	**16.9**	0.761 J	<0.832	BMDL	<34.1	<22.4	<36.4	<27.7	BMDL
105DPT-13 (6-7ft)	8/3/12	≈20' West of DPT-10	<0.685	<0.654	<0.694	<4.31	<0.563	<0.657	<0.669	<1.13	<0.978	<0.787	<0.808	<0.740	<0.906	BMDL	<35.4	<23.3	<37.8	<28.9	BMDL
105DPT-14 (4.5-5ft)	8/3/12	Near SW corner of 10th St. and Evans St.	<0.534	<0.510	<0.541	<3.36	<0.439	<0.513	<0.522	1.91 J	<0.763	<0.614	<0.630	<0.577	<0.707	BMDL	<30.8	<20.2	<32.9	<25.1	BMDL
Preliminary Residential Health Based SRG (ug/kg)			12,000	160,000	NE	12,000,000	160,000	32,000	270,000	56,000	3,600	260,000	17,000	820,000	880	Varies	46,000	460,000	3,600	NE	Varies
Preliminary Industrial Health Based SRG (ug/kg)			52,000	180,000	NE	100,000,000	740,000	400,000	270,000	620,000	18,000	260,000	82,000	820,000	4,000	Varies	370,000	4,40,000	18,000	NE	Varies
Protection of Groundwater Preliminary SRG(ug/kg)			6,700	6,700	680	24,000	3,800	350	1,300	23	210	1,500	5	5,500	18	Varies	1,600	56,000	210	68,000	Varies
Residential MSCC (ug/kg)			782,000	782,000	100,000	14,000,000	1,564,000	156,000	1,564,000	85,000	313,000	626,000	1,100	1,200,000	4,600	Varies	63,000	620,000	313,000	469,000	Varies
Industrial/Commercial MSCC (ug/kg)			20,440,000	20,440,000	4,000,000	360,000,000	40,880,000	4,000,000	40,880,000	763,000	8,176,000	16,350,000	10,000	32,000,000	120,000	Varies	1,635,000	16,400,000	8,176,000	12,264,000	Varies
STGW MSCC (ug/kg)			8,500	8,300	120	24,000	4,300	350	1,700	20	160	1,700	7.4	4,300	19	Varies	3,600	47,000	160	56,000	Varies
NC "Contained-Out" Level for Unrestricted Use (ug/kg)			7,500	7,300	NE	2,800	4,900	350	1,700	20	580	1,700	7.4	7,300	18	Varies	1,700	44,000	580	60,000	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 analytical report for a complete list of parameters and detection limits
< = Less than method detection limit
† = Detection limit is higher than the lowest Maximum Soil Contaminant Concentration (MSCC) or Soil Remediation Goal (SRG)
J = Estimated Concentration
NE = None Established
NC "Contained-Out" Levels for Unrestricted Use are provided for general information and are not applicable for comparison to in-situ soil samples results.
Bold results indicate concentrations above the lowest MSCC or SRG.

TABLE 2

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

Parcel 105, Vincent Peele Property, LLC – Greenville Awning
& Scott's Cleaners (Carolina Cleaners) and Former Amoco Service Station
111 W. 10th Street

Sample ID	Method →		EPA Method 8260B			EPA Method 8270D BN
	Contaminant of Concern →		Diisopropyl Ether	Xylene (total)	All other EPA Method 8260B Parameters	All EPA Method 8270D Base Neutral (BN) Parameters
	Date Collected	Location				
105DPT-10	7/18&25/2012	@ CB 1106	1.17	1.94 J	BMDL	BMDL
2L GWQS (ug/L)			70	500	Varies	Varies

All results in micrograms per liter (ug/L).
BN = Base Neutral
BMDL = Below Method Detection Limit, refer to analytical report for a complete list of parameters and detection limits
CB = Proposed Catch Basin
J = Estimated Concentration

SHEETS

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

GeoEnvironmental

0 2,000 4,000

FEET

PARCEL 105

PROJECT REFERENCE NO.	SHEET NO.
U-3325	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
- Buffer Zone 1
- Buffer Zone 2
- Flow Arrow
- Disappearing Stream
- Spring
- Wetland
- Proposed Lateral, Tail, Head Ditch
- False Sump

RAILROADS:

- Standard Gauge
- RR Signal Milepost
- 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
- Proposed Temporary Construction Easement
- Proposed Temporary Drainage Easement
- Proposed Permanent Drainage Easement
- Proposed Permanent Drainage / Utility Easement
- Proposed Permanent Utility Easement
- Proposed Temporary Utility Easement
- Proposed Aerial Utility Easement
- Proposed Permanent Easement with Iron Pin and Cap Marker

ROADS AND RELATED FEATURES:

- Existing Edge of Pavement
- Existing Curb
- Proposed Slope Stakes Cut
- Proposed Slope Stakes Fill
- Proposed Curb Ramp
- 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

EXISTING STRUCTURES:

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

MINOR:
- Head and End Wall
- Pipe Culvert
- Footbridge
- Drainage Box: Catch Basin, DI or JB
- Paved Ditch Gutter
- Storm Sewer Manhole
- 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
- Designated U/G Fiber Optics Cable (S.U.E.*)

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

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

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

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

MISCELLANEOUS:
- Utility Pole
- Utility Pole with Base
- Utility Located Object
- Utility Traffic Signal Box
- Utility Unknown U/G Line
- U/G Tank; Water, Gas, Oil
- Underground Storage Tank, Approx. Loc.
- 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 105, Vincent Peele Property, LLC – Greenville Awning & Scott's Cleaners (Carolina Cleaners) and Former Amoco Service Station
111 W. 10th Street

Sample ID	Method →	EPA Method 8260B														EPA Method 8270D Base Neutral				
	Contaminant of Concern →	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	4-Isopropyltoluene	Acetone	Carbon disulfide	cis-1,2-Dichloroethene	Isopropylbenzene (Cumene)	Methylene chloride	Naphthalene	n-Propylbenzene	Tetrachloroethene (“Perc”)	Toluene	Trichloroethene (TCE)	All other EPA Method 8260B Parameters	2-Methylnaphthalene	Fluorene	Naphthalene	Phenanthrene	All other EPA Method 8270D Base Neutral Parameters
Date Collected / Location																				
105 DPT-01 (7-8ft)	7/16/12 @ curb in front of Cleaners	<0.974	<0.896	<0.947	<1.13	<0.786	<0.705	<0.877	1.46 J	<1.10	<0.888	2.53 J	<0.737	<0.762	BMDL	<26.1	<17.1	<27.8	<21.2	BMDL
105 DPT-02 (5-6ft)	7/16/12 ≈25' East of DPT-01	<4.31	<5.06	<3.44	<38.7	<4.75	18.4 J	<3.89	<6.81	<3.83	<5.06	**290**	<5.96	<5.60	BMDL	<27.8	<18.2	<29.6	<22.6	BMDL
105 DPT-03 (5-6ft)	7/16/12 Near SE corner of Cleaners	<4.35	<5.12	<3.48	<39.1	<4.80	12.2 J	<3.93	<6.88	<3.87	<5.12	**359**	<6.02	14.0 J	BMDL	<28.0	<17.0	<27.7	<21.1	BMDL
105 DPT-04 (7-8ft)	7/16/12 ≈25' West of DPT-01	<1.04	<0.957	<1.01	<1.21	<0.840	<0.754	<0.936	2.83 J	<1.18	<0.948	<0.731	<0.788	<0.814	BMDL	<27.8	<18.3	<29.7	<22.7	BMDL
105 DPT-05 (4-5ft)	7/17/12 South of Probable UST	<4.39	<5.16	<3.51	<39.5	<4.84	<6.21	<3.97	<6.94	<3.90	<5.16	**268**	<6.07	<5.71	BMDL	<27.0	<17.7	<28.8	<22.0	BMDL
105 DPT-06 (4-5ft)	7/17/12 Western edge of former dispenser island	<1.03	<0.943	<0.997	<1.19	<0.828	<0.743	<0.923	<0.669	<1.16	<0.935	<0.721	<0.776	<0.802	BMDL	<26.8	<17.6	<28.6	<21.8	BMDL
105 DPT-07 (2-4ft)	7/17/12 Between DPT-03 and DPT-05	<0.961	<0.883	<0.934	<1.11	<0.776	<0.696	<0.865	<0.627	<1.09	<0.875	**59.8**	<0.727	1.67 J	BMDL	<30.2	<19.8	<32.2	<24.6	BMDL
105 DPT-08 (3-4ft)	7/17/12 Edge of curb along proposed drainage	<0.861	<0.791	<0.836	<0.997	<0.695	<0.623	<0.775	<0.561	<0.973	<0.784	<0.605	<0.651	<0.673	BMDL	<28.8	<18.9	<30.7	<23.4	BMDL
105 DPT-09 (4-5ft)	7/17/12 @ Eastern driveway entrance along proposed drainage	3,610	1,180	**284**	<143	34.7 J	<22.5	47.9 J	<25.1†	**492**	362	<25.6†	<22.0	<20.6†	BMDL	**22,200**	193 J	**10,800**	158 J	BMDL
105 DPT-10 (4-5ft)	7/18/12 @ CB 1106	<1.00	<0.923	<0.976	11.7 J	<0.811	<0.727	<0.903	0.957 J	<1.14	<0.915	<0.706	<0.760	<0.785	BMDL	<35.6	<23.3	<38.0	<29.0	BMDL
105DPT-11 (4.5-5ft)	7/25/12 @ CB 1117	<4.60	<5.41	<3.68	<41.3	<5.07	<6.51	<4.16	18.2 J	<4.09	<5.41	**290**	<6.36	<5.98	BMDL	<32.7	<21.5	<34.9	<26.7	BMDL
105DPT-12 (6-7ft)	8/3/12 ≈20' West of DPT-09	<0.629	<0.601	<0.637	10.4 J	<0.517	<0.604	<0.615	3.16 J	<0.898	<0.723	**16.9**	0.761 J	<0.832	BMDL	<34.1	<22.4	<36.4	<27.7	BMDL
105DPT-13 (6-7ft)	8/3/12 ≈20' West of DPT-10	<0.685	<0.654	<0.694	<4.31	<0.563	<0.657	<0.669	<1.13	<0.978	<0.787	<0.808	<0.740	<0.906	BMDL	<35.4	<23.3	<37.8	<28.9	BMDL
105DPT-14 (4.5-5ft)	8/3/12 Near SW corner of 10th St. and Evans St.	<0.534	<0.510	<0.541	<3.36	<0.439	<0.513	<0.522	1.91 J	<0.763	<0.614	<0.630	<0.577	<0.707	BMDL	<30.8	<20.2	<32.9	<25.1	BMDL
Preliminary Residential Health Based SRG (ug/kg)		12,000	160,000	NE	12,000,000	160,000	32,000	270,000	56,000	3,600	260,000	17,000	820,000	880	Varies	46,000	460,000	3,600	NE	Varies
Preliminary Industrial Health Based SRG (ug/kg)		52,000	180,000	NE	100,000,000	740,000	400,000	270,000	820,000	18,000	260,000	82,000	820,000	4,000	Varies	370,000	4,400,000	18,000	NE	Varies
Protection of Groundwater Preliminary SRG(ug/kg)		6,700	6,700	680	24,000	3,800	350	1,300	23	210	1,500	5	5,500	18	Varies	1,600	56,000	210	68,000	Varies
Residential MSCC (ug/kg)		782,000	782,000	100,000	14,000,000	1,584,000	156,000	1,564,000	85,000	313,000	626,000	1,100	1,200,000	4,800	Varies	1,835,00	620,000	313,000	469,000	Varies
Industrial/Commercial MSCC (ug/kg)		20,440,000	20,440,000	4,000,000	360,000,000	40,880,000	4,000,000	40,880,000	763,000	6,176,000	16,350,000	10,000	32,000,000	120,000	Varies	0	16,400,000	8,176,000	12,264,000	Varies
STGW MSCC (ug/kg)		8,500	8,300	120	24,000	4,900	350	1,700	20	160	1,700	7.4	4,300	19	Varies	3,600	47,000	160	56,000	Varies
NC "Contained-Out" Level for Unrestricted Use (ug/kg)		7,500	7,300	NE	2,800	4,900	350	1,700	20	580	1,700	7.4	7,300	18	Varies	1,700	44,000	580	60,000	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 analytical report for a complete list of parameters and detection limits
< = Less than method detection limit
† = Detection limit is higher than the lowest Maximum Soil Contaminant Concentration (MSCC) or Soil Remediation Goal (SRG)
J = Estimated Concentration
NE = None Established
NC "Contained-Out" Levels for Unrestricted Use are provided for general information and are not applicable for comparison to in-situ soil samples results.
Bold results indicate concentrations above the lowest MSCC or SRG.

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

Parcel 105, Vincent Peele Property, LLC – Greenville Awning
& Scott's Cleaners (Carolina Cleaners) and Former Amoco Service Station
111 W. 10th Street

Sample ID	Method →	EPA Method 8260B			EPA Method 8270D BN
	Contaminant of Concern →	Diisopropyl Ether	Xylene (total)	All other EPA Method 8260B Parameters	All EPA Method 8270D Base Neutral (BN) Parameters
Date Collected / Location					
105DPT-10	7/18&25/2012 @ CB 1106	1.17	1.94 J	BMDL	BMDL
2L GWQS (ug/L)		70	500	Varies	Varies

All results in micrograms per liter (ug/L).
BN = Base Neutral
BMDL = Below Method Detection Limit, refer to analytical report for a complete list of parameters and detection limits
CB = Proposed Catch Basin
J = Estimated Concentration

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

W. 10TH ST.
S. EVANS ST.
VINCENT PEELE PROPERTIES LLC
111 W. 10TH ST.
105
WARD HOLDINGS, LLC
102
1117
1017
1023
1106
DPT-01
DPT-02
DPT-03
DPT-04
DPT-05
DPT-06
DPT-07
DPT-08
DPT-09
DPT-10
DPT-11
DPT-12
DPT-13
DPT-14
APPROXIMATE LOCATION PROBABLE UST NO. 1
HAND AUGER ATTEMPTS
195DPT-01
BST
SOIL
CONC
DUCT
82+00
20+00

NOTES:
- BORING ID'S PREFACED WITH "105" UNLESS OTHERWISE NOTED
- DARK GRAYSCALE BORINGS ASSOCIATED WITH NEARBY PROJECTS
- AERIAL PHOTOGRAPHS OBTAINED FROM NCDOT
- PROPOSED DETAILS OBTAINED FROM NCDOT

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 105, Vincent Peele Properties LLC, Greenville, North Carolina

Dear Mr. Garrett:

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

INTRODUCTION

The work described in this report was performed on July 12 and 26 and August 1, 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 southwest quadrant of W 10th Street and E Evans Street in Greenville, NC. The purpose of the geophysical surveys was to investigate the presence of metal underground storage tanks (USTs) in the accessible areas of the right-of-way and/or easement.

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

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

FIELD METHODOLOGY

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

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

DISCUSSION OF RESULTS

The contoured EM61 data collected over Parcel 105 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 known site features (Figures 3 and 4). The GPR data indicate that the EM anomalies of unknown cause are probably caused by reinforced concrete. The GPR data collected near the northeast corner of the parcel indicate the presence of a probable UST, as shown on Figures 3 and 4. Example GPR images showing the reflections from the probable UST are shown on Figures 3 and 4. The GPR data indicate that probable UST No. 1 is buried approximately 2.0 to 3.0 feet below ground surface, and is about 3 feet in diameter and about 5 feet long, equivalent to a capacity of about 270 gallons. Photographs of the approximate location of the probable UST that was marked in the field are included on Figure 5.

CONCLUSIONS

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

The geophysical data indicate the presence of a probable UST within the right-of-way/easement on Parcel 105. Probable UST No. 1 is about 270-gallon capacity and is buried about 2.0 to 3.0 feet below ground surface.

LIMITATIONS

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

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

Sincerely,

SCHNABEL ENGINEERING SOUTH, PC

James W. Whitt, LG
Senior Staff Geophysicist

Jeremy S. Strohmeyer, LG
Project Manager

JW:JS
Attachments: Figures (5)
CC: NCDOT, Gordon Box
FILE: G:\2011-SDE-JOBS\11821014_00_NCDOT_2011_GEOTECHNICAL_UNIT_SERVICES\11821014_17_U-3315_PITT_COUNTY\REPORT\PARCEL 105\SCHNABEL GEOPHYSICAL REPORT ON PARCEL 105 (U-3315).DOCX

Parcel 105 (Vincent Peele Property LLC), looking south

Parcel 105 (Vincent Peele Property LLC), looking west

Schnabel ENGINEERING

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

PARCEL 105
SITE PHOTOS

FIGURE 1

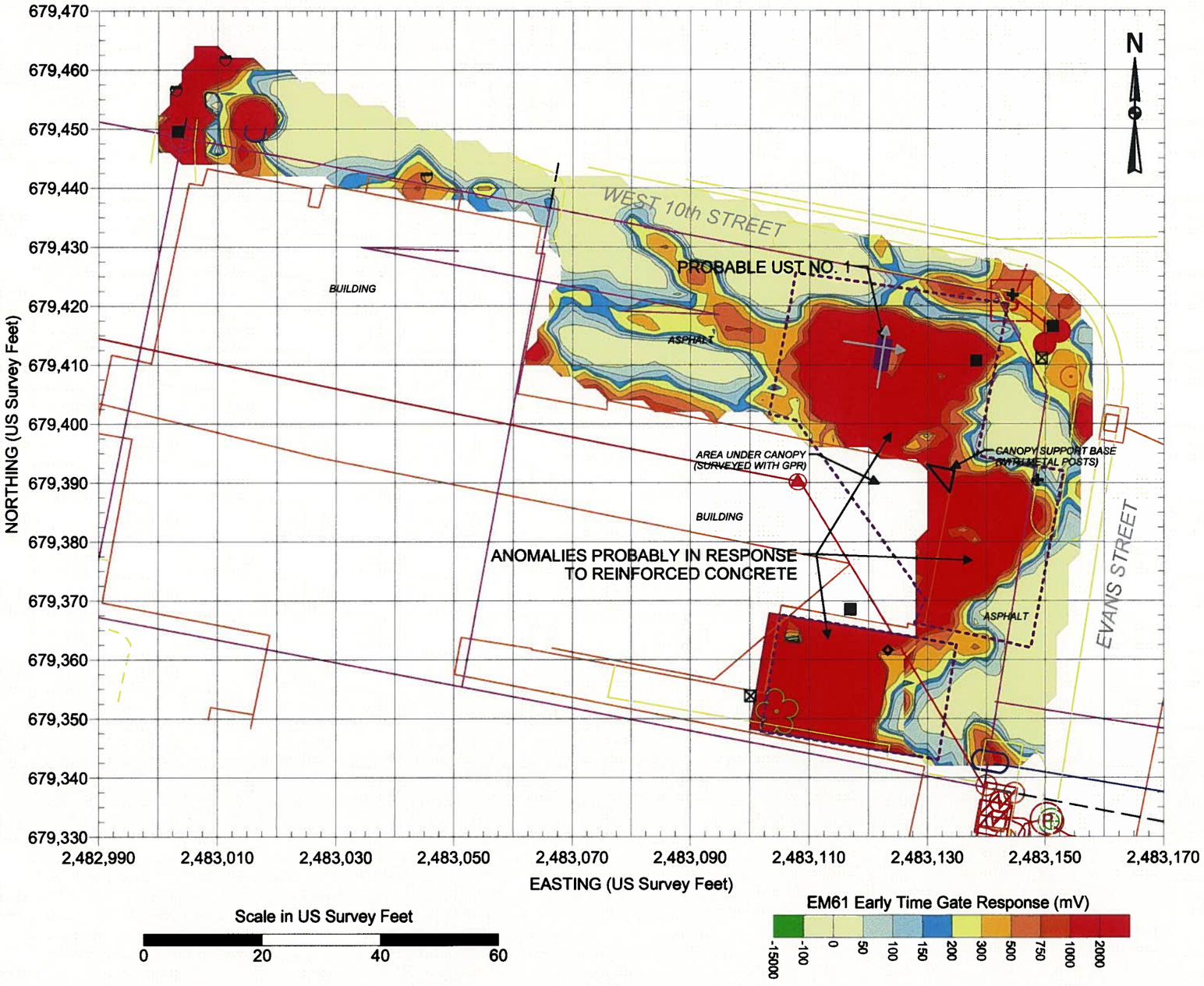
Geonics EM61-MK2 Metal Detector with Trimble DGPS Unit

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 105



Scale in US Survey Feet

0 20 40 60

EM61 Early Time Gate Response (mV)

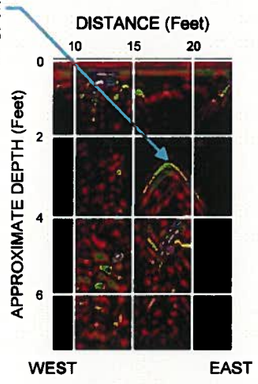
-15000 -100 0 50 100 150 200 300 500 750 1000 2000

EXPLANATION

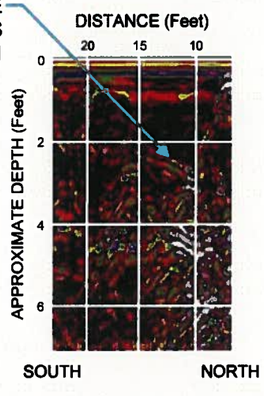
- SIGN
- MISCELLANEOUS METALLIC OBJECT
- UTILITY MANHOLE, METER, BOX, ETC.
- POSSIBLE FILLPORT OR VENT PIPE
- GUY WIRE
- EDGE OF NCDOT PROPOSED R/W
- PROPERTY LINE
- EXAMPLE GPR LINE LOCATION
- GPR SURVEY AREA
- LOCATION OF KNOWN OR SUSPECT USTS MARKED ON SITE

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

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



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



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 12, 2012, using a Geonics EM61-MK2 instrument. Positioning for the EM61 survey was provided using a submeter Trimble ProXRS DGPS system. Coordinates are in the US State Plane 1983 System, North Carolina Zone 3200, using the NAD 1983 datum. GPR data were acquired on July 26 and August 1, 2012, using a Geophysical Survey Systems SIR 3000 equipped with a 400 MHz antenna.

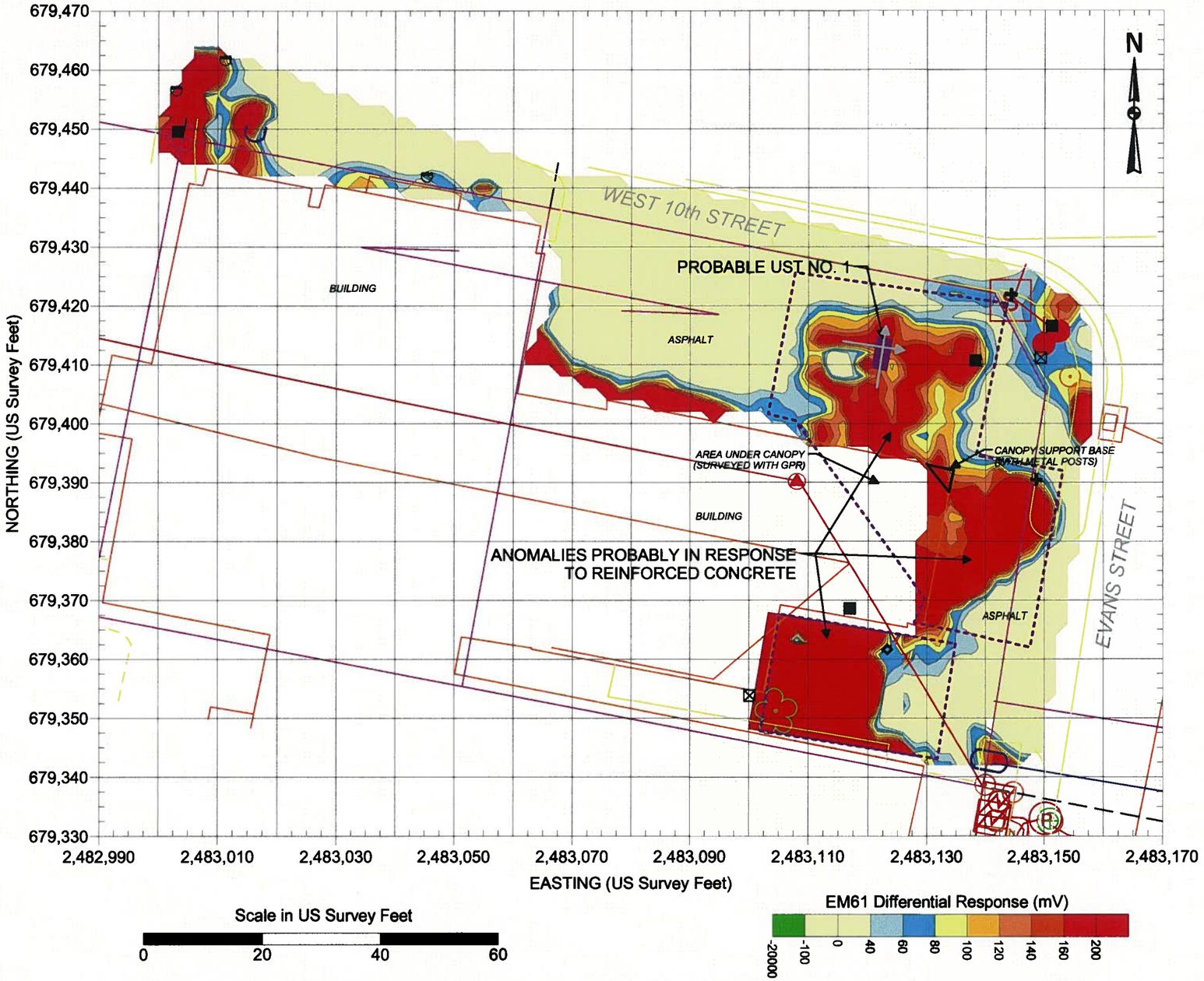
Schnabel ENGINEERING

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

EM61
EARLY TIME GATE
RESPONSE

FIGURE 3

PARCEL 105



Scale in US Survey Feet

0 20 40 60

EM61 Differential Response (mV)

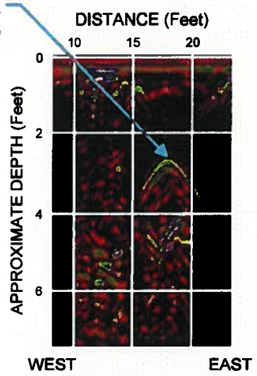
-20000 -100 0 40 60 80 100 120 140 160 200

EXPLANATION

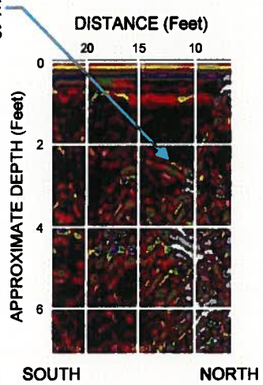
- SIGN
- MISCELLANEOUS METALLIC OBJECT
- UTILITY MANHOLE, METER, BOX, ETC.
- POSSIBLE FILLPORT OR VENT PIPE
- GUY WIRE
- EDGE OF NCDOT PROPOSED R/W
- PROPERTY LINE
- EXAMPLE GPR LINE LOCATION
- GPR SURVEY AREA
- LOCATION OF KNOWN OR SUSPECT USTS MARKED ON SITE

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

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



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



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 12, 2012, using a Geonics EM61-MK2 instrument. Positioning for the EM61 survey was provided using a submeter Trimble ProXRS DGPS system. Coordinates are in the US State Plane 1983 System, North Carolina 3200 Zone, using the NAD 1983 datum. GPR data were acquired on July 26 and August 1, 2012, using a Geophysical Survey Systems SIR 3000 equipped with a 400 MHz antenna.

Schnabel ENGINEERING

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

EM61
DIFFERENTIAL
RESPONSE

FIGURE 4

Parcel 105 (Vincent Peele Property LLC), looking west. Photo shows approximate marked location of probable UST No. 1 near the northeast corner of the parcel.

Parcel 105 (Vincent Peele Property LLC), looking sourth. Photo shows approximate marked location of probable UST No. 1 near the northeast corner of the parcel.

Schnabel ENGINEERING	STATE PROJECT U-3315 NC DEPT. OF TRANSPORTATION PITT COUNTY, NORTH CAROLINA PROJECT NO. 11821014.17	PHOTOS OF UST LOCATIONS FIGURE 5

APPENDIX 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 105 - Vincent Peele Prop. LLC - Greenville Awning, Scott's Cleaners, & Former Amoco Serv. Station.		LOGGED BY: Ben Ashba		BORING ID: 105DPT-01	
		DRILLER: William J. Miller			
NORTHING: 679,430.00	EASTING: 2,483,103.00	CREW: Corey Futral			
SYSTEM: NCSP NAD 83 (USft)	BORING LOCATION: Centerally located in front of Cleaners @ curb			LAND ELEV.: NM	
DRILL MACHINE: Power Probe	METHOD: CPT / DPT		0 HOUR DTW: N/A	BORING DEPTH: 8.0	
START DATE: 7/16/12	FINISH DATE: 7/16/12		24 HOUR DTW: N/A	ROCK DEPTH: --	

DEPTH	BLOW COUNT 0.5 0.5 0.5 0.5	MOI.	PID RESULTS (ppm) 0 250 500 750 1,000	LAB.	USCS	LOG	DEPTH	SOIL AND ROCK DESCRIPTION	ELEVATION
							0.0	LAND SURFACE	
0.0					SW		0.5	Gray Gravelly SAND to Sandy GRAVEL	
		D	▲0						
2.0									
		D	▲1		SC/ SM			Dk gray Silty SAND color shift to orangish brown w/depth and grading to Clayey SAND.	
4.0									
		D	▲1				5.5		
6.0									
		D	▲2		SP			Tan, f. to med. SAND. Poorly graded.	
7.0									
			▲2	DPT-01 (7-8')			8.0		
8.0								Boring Terminated at Depth 8.0 ft	

▽ = 0hr. DTW ▼ = 24hr. DTW

CATLIN ENVIRO LOG 212077_GREENVILLE-PSAS_U3315.GPJ CATLIN.GDT 10/3/12

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 105 - Vincent Peele Prop. LLC - Greenville Awning, Scott's Cleaners, & Former Amoco Serv. Station.		LOGGED BY: Ben Ashba		BORING ID: 105DPT-02	
		DRILLER: William J. Miller			
NORTHING: 679,434.00	EASTING: 2,483,078.00	CREW: Corey Futral			
SYSTEM: NCSP NAD 83 (USft)	BORING LOCATION: E side of cleaners 25' E of curb			LAND ELEV.: NM	
DRILL MACHINE: Power Probe	METHOD: CPT / DPT		0 HOUR DTW: N/A	BORING DEPTH: 8.0	
START DATE: 7/16/12	FINISH DATE: 7/16/12		24 HOUR DTW: N/A	ROCK DEPTH: --	

DEPTH	BLOW COUNT 0.5 0.5 0.5 0.5	MOI.	PID RESULTS (ppm) 0 250 500 750 1,000	LAB.	USCS	LOG	DEPTH	SOIL AND ROCK DESCRIPTION	ELEVATION
							0.0	LAND SURFACE	
0.0					SW		0.5	Gravely SAND to Sandy GRAVEL	
		D	▲2		SC		2.5	Brown, Clayey SAND	
2.0					CL		3.0	Soft Sandy CLAY	
		D	▲5		SC		5.5	Brown, Clayey, f. to med. SAND	
4.0		D	▲6						
5.0			▲6	DPT-02 (5-6')					
6.0		D	▲4		SP		7.0	Tan, f. SAND. Poorly graded.	
					SC		8.0	Clayey, f. to med. SAND	
8.0								Boring Terminated at Depth 8.0 ft	

▽ = 0hr. DTW ▼ = 24hr. DTW

CATLIN ENVIRO LOG 212077_GREENVILLE-PSAS_U3315.GPJ CATLIN.GDT 10/3/12

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 105 - Vincent Peele Prop. LLC - Greenville Awning, Scott's Cleaners, & Former Amoco Serv. Station		LOGGED BY: Ben Ashba		BORING ID: 105DPT-03	
		DRILLER: William J. Miller			
NORTHING: 679,410.00	EASTING: 2,483,073.00	CREW: Corey Futral			
SYSTEM: NCSP NAD 83 (USft)	BORING LOCATION:			LAND ELEV.: NM	
DRILL MACHINE: Power Probe	METHOD: CPT / DPT		0 HOUR DTW: N/A	BORING DEPTH: 8.0	
START DATE: 7/16/12	FINISH DATE: 7/16/12		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							0.5	Concrete	
		D	▲16		SC		3.5	Clayey, v.f. to f. SAND	
2.0		D	▲9						
4.0		D	▲25		CL		6.0	Sandy CLAY. Grayish, orangish, brownish mottling throughout	
5.0			▲25	DPT-03 (5-6')					
6.0		D	▲8		SC		7.5	Clayey, med. SAND	
					SC/CL		8.0	Clayey, f. SAND with increase in clay content.	
8.0								Boring Terminated at Depth 8.0 ft	

▽ = 0hr. DTW ▼ = 24hr. DTW

CATLIN ENVIRO LOG 212077 GREENVILLE-PSAS U3315.GPJ CATLIN.GDT 10/3/12

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 105 - Vincent Peele Prop. LLC - Greenville Awning, Scott's Cleaners, & Former Amoco Serv. Station.		LOGGED BY: Ben Ashba		BORING ID: 105DPT-04	
		DRILLER: William J. Miller			
NORTHING: 679,426.00	EASTING: 2,483,123.00	CREW: Corey Futral			
SYSTEM: NCSP NAD 83 (USft)	BORING LOCATION: 25' W of DPT01			LAND ELEV.: NM	
DRILL MACHINE: Power Probe	METHOD: CPT / DPT		0 HOUR DTW: N/A	BORING DEPTH: 8.0	
START DATE: 7/16/12	FINISH DATE: 7/16/12		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							0.5	Concrete	
		D	▲0		GW		1.0	Sandy gravel fill	
2.0		D	▲3		SC			Med brown to orangish brown. Clayey, f. SAND	
4.0		D	▲4						
6.0		D	▲5		SP		6.0	Tan, f. to med. SAND. Poorly graded.	
7.0		D	▲5	DPT-04 (7-8')					
8.0							8.0	Boring Terminated at Depth 8.0 ft	

▽ = 0hr. DTW ▼ = 24hr. DTW

CATLIN ENVIRO LOG 212077 GREENVILLE PSAS U3315.GPJ CATLIN.GDT 10/3/12

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 105 - Vincent Peele Prop. LLC - Greenville Awning, Scott's Cleaners, & Former Amoco Serv. Station.		LOGGED BY: Ben Ashba		BORING ID: 105DPT-05	
		DRILLER: William J. Miller			
NORTHING: 679,400.00	EASTING: 2,483,124.00	CREW: Corey Futral			
SYSTEM: NCSP NAD 83 (USft)	BORING LOCATION: Near NE corner of bld.			LAND ELEV.: NM	
DRILL MACHINE: Power Probe	METHOD: CPT / DPT		0 HOUR DTW: N/A	BORING DEPTH: 8.0	
START DATE: 7/17/12	FINISH DATE: 7/17/12		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							0.3	CONCRETE	
					GW		0.5	GRAVEL Fill	
			▲2		SC/ SM			Orange brown, Silty to Clayey, f. SAND.	
2.0							2.0		
								NO RETURN. Chunk of cement in sample.	
4.0			▲4	DPT-05 (4-5')	SC		5.5	Brown, Clayey, f. to med. SAND	
5.0					SP		7.0	Tan, f. SAND. Poorly graded.	
					SC		8.0	Clayey, f. to med. SAND	
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 105 - Vincent Peele Prop. LLC - Greenville Awning, Scott's Cleaners, & Former Amoco Serv. Station.		LOGGED BY: Ben Ashba		BORING ID: 105DPT-06	
		DRILLER: William J. Miller			
NORTHING: 679,417.00	EASTING: 2,483,112.00	CREW: Corey Futral			
SYSTEM: NCSP NAD 83 (USft)	BORING LOCATION: W. edge of former dispenser island			LAND ELEV.: NM	
DRILL MACHINE: Power Probe	METHOD: CPT / DPT		0 HOUR DTW: N/A	BORING DEPTH: 5.0	
START DATE: 7/17/12	FINISH DATE: 7/17/12		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							0.3	CONCRETE	
					GW		0.5	GRAVEL Fill	
		D	▲1						
2.0									
		D	▲2		SC/ SM			Silty to Clayey, f. to v.f. SAND. Shades of gray.	
4.0				DPT-06 (4-5')					
5.0							5.0		
								Boring Terminated at Depth 5.0 ft	
					SP			Tan, f. SAND. Poorly graded. No HCO.	
							8.0		

▽ = 0hr. DTW ▼ = 24hr. DTW

CATLIN ENVIRO LOG 212077 GREENVILLE-PSAS U3315.GPJ CATLIN.GDT 10/3/12

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 105 - Vincent Peele Prop. LLC - Greenville Awning, Scott's Cleaners, & Former Amoco Serv. Station.		LOGGED BY: Ben Ashba		BORING ID: 105DPT-07	
		DRILLER: William J. Miller			
NORTHING: 679,405.00	EASTING: 2,483,100.00	CREW: Corey Futral			
SYSTEM: NCSP NAD 83 (USft)	BORING LOCATION: Between DPT-03 & DPT-05			LAND ELEV.: NM	
DRILL MACHINE: Power Probe	METHOD: CPT / DPT		0 HOUR DTW: N/A	BORING DEPTH: 8.0	
START DATE: 7/17/12	FINISH DATE: 7/17/12		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							0.3	CONCRETE	
					GW		0.5	GRAVEL Fill	
			▲7		SC			Brown, Clayey, f. SAND.	
2.0							3.0		
			▲8	DPR-07 (2-4')	CL			Brown, Sandy CLAY.	
4.0							4.5		
			▲6		SC			Light brown, Clayey SAND.	
5.0							6.5		
					SP			Tan, f. SAND. Poorly graded.	
8.0							8.0		
								Boring Terminated at Depth 8.0 ft	

▽ = 0hr. DTW ▼ = 24hr. DTW

CATLIN ENVIRO LOG_212077_GREENVILLE-PSAS_U3315.GPJ_CATLIN.GDT_10/3/12

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 105 - Vincent Peele Prop. LLC - Greenville Awning, Scott's Cleaners, & Former Amoco Serv. Station.		LOGGED BY: Ben Ashba		BORING ID: 105DPT-08	
		DRILLER: William J. Miller			
NORTHING: 679,400.00	EASTING: 2,483,147.00	CREW: Corey Futral			
SYSTEM: NCSP NAD 83 (USft)	BORING LOCATION: Edge of curb along drainage			LAND ELEV.: NM	
DRILL MACHINE: Power Probe	METHOD: CPT / DPT		0 HOUR DTW: N/A	BORING DEPTH: 8.0	
START DATE: 7/17/12	FINISH DATE: 7/17/12		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							0.3	CONCRETE	
					GW		0.5	GRAVEL Fill	
			▲1		SC			Clayey, f. SAND.	
2.0			▲2				2.5		
3.0			▲2	DPT-08 (3-4')	CL			Dark brown, Sandy CLAY.	
4.0			▲1				5.0		
5.0					CH			Mottled orange, brown, and gray, CLAY w/high plast. Med. stiff.	
8.0							8.0	Boring Terminated at Depth 8.0 ft	

▽ = 0hr. DTW ▼ = 24hr. DTW

CATLIN ENVIRO LOG 212077 GREENVILLE-PSAS U3315.GPJ CATLIN.GDT 10/3/12

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 105 - Vincent Peele Prop. LLC - Greenville Awning, Scott's Cleaners, & Former Amoco Serv. Station.		LOGGED BY: Ben Ashba	BORING ID: 105DPT-09
		DRILLER: William J. Miller	
NORTHING: 679,382.00	EASTING: 2,483,149.00	CREW: Corey Futral	
SYSTEM: NCSP NAD 83 (USft)	BORING LOCATION: Near NE corner of bld.		LAND ELEV.: NM
DRILL MACHINE: Power Probe	METHOD: CPT / DPT	0 HOUR DTW: N/A	BORING DEPTH: 8.0
START DATE: 7/17/12	FINISH DATE: 7/17/12	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							0.3	CONCRETE	
			▲1		GW		1.0	GRAVEL Fill	
2.0			▲2		SM		3.5	Light tan, Silty, f. SAND.	
					CL		4.0	Orange brown, Sandy CLAY. Slight HCO.	
4.0			1,000+▲	DPT-09 (4-5')	CL		5.5	Sandy CLAY. Black staining. Strong HCO.	
5.0					CH		8.0	Mottled orange, brown, and gray, CLAY w/high plast. HCO.	
8.0								Boring Terminated at Depth 8.0 ft	

▽ = 0hr. DTW ▼ = 24hr. DTW

CATLIN ENVIRO_LOG_212077_GREENVILLE-PSAS_U3315.GPJ_CATLIN.GDT_10/3/12

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 105 - Vincent Peele Prop. LLC - Greenville Awning, Scott's Cleaners, & Former Amoco Serv. Station.		LOGGED BY: Ben Ashba		BORING ID: 105DPT-10	
		DRILLER: William J. Miller			
NORTHING: 679,356.00	EASTING: 2,483,154.00	CREW: Corey Futral			
SYSTEM: NCSP NAD 83 (USft)	BORING LOCATION: At CB 1106			LAND ELEV.: NM	
DRILL MACHINE: Power Probe	METHOD: CPT / DPT		0 HOUR DTW: 12.4	BORING DEPTH: 16.0	
START DATE: 7/18/12	FINISH DATE: 7/18/12		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							0.3	CONCRETE	
			▲0		GW		1.0	GRAVEL Fill	
2.0			▲0		SC/ SM			Brown to lt. brown, Silty to Clayey SAND. Clay increases w/depth.	
4.0			▲3	DPT-10 (4-5')	CL		5.0	Sandy CLAY.	
					CH			Mottled orange and gray, CLAY w/high plast.	
				▽			8.0	NO RECOVERY	
16.0							16.0	Boring Terminated at Depth 16.0 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 105 - Vincent Peele Prop. LLC - Greenville Awning, Scott's Cleaners, & Former Amoco Serv. Station.		LOGGED BY: Ben Ashba		BORING ID: 105DPT-11	
		DRILLER: William J. Miller			
NORTHING: 679,436.00	EASTING: 2,483,005.00	CREW: Corey Futral			
SYSTEM: NCSP NAD 83 (USft)	BORING LOCATION: At CB 1117			LAND ELEV.: NM	
DRILL MACHINE: Power Probe	METHOD: CPT / DPT		0 HOUR DTW: N/A	BORING DEPTH: 6.0	
START DATE: 7/25/12	FINISH DATE: 7/25/12		24 HOUR DTW: N/A	ROCK DEPTH: --	

DEPTH	BLOW COUNT 0.5 0.5 0.5 0.5	MOI.	PID RESULTS (ppm) 0 250 500 750 1,000	LAB.	USCS	LOG	DEPTH	SOIL AND ROCK DESCRIPTION	ELEVATION
							0.0	LAND SURFACE	
0.0					GW		0.5	GRAVEL FILL	
			▲0		SM		2.0	Silty SAND. Varying browns.	
2.0			▲0		CL		6.0	Sandy CLAY. Sand content decreases w/depth. Mottling w/depth.	
4.0									
4.5			▲0	DPT-11 (4.5-5.2')					
5.2									
6.0								Boring Terminated at Depth 6.0 ft	

▽ = 0hr. DTW ▼ = 24hr. DTW

CATLIN ENVIRO LOG 212077_GREENVILLE-PSAS_U3315.GPJ_CATLIN.GDT 10/3/12

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 105 - Vincent Peele Prop. LLC - Greenville Awning, Scott's Cleaners, & Former Amoco Serv. Station.		LOGGED BY: Ben Ashba		BORING ID: 105DPT-12	
		DRILLER: William J. Miller			
NORTHING: 679,387.00	EASTING: 2,483,135.00	CREW: Corey Futral			
SYSTEM: NCSP NAD 83 (USft)	BORING LOCATION: 25' W. of 105DPT-09			LAND ELEV.: NM	
DRILL MACHINE: Power Probe	METHOD: CPT / DPT		0 HOUR DTW: N/A	BORING DEPTH: 7.0	
START DATE: 8/3/12	FINISH DATE: 8/3/12		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	CONCRETE.	
			▲4						
2.0					SP			Orange w/brown, f. SAND.	
			▲0						
4.0							4.0		
			▲4		CL			Dk brown w/tr. orange mottling, Sandy CLAY.	
6.0				DPT-12 (6-7')			6.0		
			▲2		CH			Gray w/orange mottling, CLAY. REFUSAL @ 7' BLS.	
7.0							7.0		
								Boring Terminated at Depth 7.0 ft	

▽ = 0hr. DTW ▼ = 24hr. DTW

CATLIN ENVIRO LOG 212077_GREENVILLE-PSAS_U3315.GPJ_CATLIN.GDT_10/3/12

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 105 - Vincent Peele Prop. LLC - Greenville Awning, Scott's Cleaners, & Former Amoco Serv. Station.		LOGGED BY: Ben Ashba	BORING ID: 105DPT-13
		DRILLER: William J. Miller	
NORTHING: 679,364.00	EASTING: 2,483,130.00	CREW: Corey Futral	
SYSTEM: NCSP NAD 83 (USft)	BORING LOCATION: 25' W. of 105DPT-10		LAND ELEV.: NM
DRILL MACHINE: Power Probe	METHOD: CPT / DPT	0 HOUR DTW: N/A	BORING DEPTH: 8.0
START DATE: 8/3/12	FINISH DATE: 8/3/12	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	CONCRETE.	
			▲2		CL		2.0	Dk brown w/orange mottling, Sandy CLAY.	
2.0					SM		3.0	Tan, Silty SAND.	
			▲4		SC		4.0	Dk brown w/orange mottling, Clayey SAND.	
4.0									
			▲4						
6.0				DPT-13 (6-7')	CH			Gray w/orange mottling, CLAY.	
			▲4						
7.0									
			▲4						
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 105 - Vincent Peele Prop. LLC - Greenville Awning, Scott's Cleaners, & Former Amoco Serv. Station.		LOGGED BY: Ben Ashba	BORING ID: 105DPT-14
		DRILLER: William J. Miller	
NORTHING: 679,419.00	EASTING: 2,483,144.00	CREW: Corey Futral	
SYSTEM: NCSP NAD 83 (USft)	BORING LOCATION: NE corner of parcel		LAND ELEV.: NM
DRILL MACHINE: Power Probe	METHOD: CPT / DPT	0 HOUR DTW: N/A	BORING DEPTH: 8.0
START DATE: 8/3/12	FINISH DATE: 8/3/12	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					SP/SM			TOPSOIL.	
			▲3				1.0		
					SM			Brown grading to tan, Silty SAND.	
2.0							2.0		
			▲2						
4.0					SC/CL			Brown, Sandy CLAY to Clayey SAND.	
			▲2						
4.5			▲2	DPT- 14 (4.5-5')					
5.0									
			▲2						
6.0							6.0		
					CH			Gray w/orange and red mottling and staining, CLAY.	
			▲2						
8.0							8.0		
								Boring Terminated at Depth 8.0 ft	

▽ = 0hr. DTW ▼ = 24hr. DTW

CATLIN ENVIRO LOG 212077_GREENVILLE-PSAS_U3315.GPJ CATLIN.GDT 10/3/12

APPENDIX C

LABORATORY REPORT AND CHAIN OF CUSTODY RECORD

Laboratory Report of Analysis

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

Report Number: **31202364**

Client Project: **NCDOT Parcel 105**

Dear Ben Ashba,

Enclosed are the results of the analytical services performed under the referenced project for the received samples and associated QC as applicable. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of five years in the event they are required for future reference. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. Any samples submitted to our laboratory will be retained for a maximum of thirty (30) days from the date of this report unless other arrangements are requested.

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

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

Sincerely,
SGS North America Inc.

Barbara A. Hager
2012.08.06 13:15:46 -05'00'

Barbara A. Hager — Date

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

Print Date: 08/06/2012

N.C. Certification # 481

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

Laboratory Qualifiers

Report Definitions

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

Qualifier Definitions

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

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

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

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

Sample Summary

Client Sample ID	Lab Sample ID	Collected	Received	Matrix
105DPT-10	31202364001	07/25/2012 09:00	07/26/2012 16:42	Water
105DPT-11 (4-5-5.2')	31202364002	07/25/2012 09:30	07/26/2012 16:42	Soil-Solid as dry weight

Print Date: 08/06/2012

N.C. Certification # 481

Case Narrative

105DPT-11 (4.5-5.2') (S4)

8260 - An MS/MSD was not analyzed with batch VMS2422 due to an auto-sampler error.

LCSD-S for HBN 26279 [VXX/3730

8260 - An MS/MSD was not analyzed with batch VMS2422 due to an auto-sampler error.

LCS-S for HBN 26279 [VXX/3730]

8260 - An MS/MSD was not analyzed with batch VMS2422 due to an auto-sampler error.

MB-S for HBN 26279 [VXX/3730]

8260 - An MS/MSD was not analyzed with batch VMS2422 due to an auto-sampler error.

Detectable Results Summary

Client Sample ID: **105DPT-11** (4.5-5.2') (84)
Lab Sample ID: 31202364002-D

SW-846 8260B

Parameter	Result	Units	
Methylene chloride	18.2	ug/Kg	J
Tetrachloroethene	290	ug/Kg	

Print Date: 08/06/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 105DPT-10

Client Sample ID: **105DPT-10**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202364001-A
Lab Project ID: 31202364

Collection Date: 07/25/2012 09:00
Received Date: 07/26/2012 16:42
Matrix: Water

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,2,4-Trichlorobenzene	ND	U	1.77	5.12	ug/L	1	08/2/2012 18:38
1,2-Dichlorobenzene	ND	U	1.75	5.12	ug/L	1	08/2/2012 18:38
1,3-Dichlorobenzene	ND	U	1.69	5.12	ug/L	1	08/2/2012 18:38
1,4-Dichlorobenzene	ND	U	1.67	5.12	ug/L	1	08/2/2012 18:38
2,4,5-Trichlorophenol	ND	U	2.13	5.12	ug/L	1	08/2/2012 18:38
2,4,6-Trichlorophenol	ND	U	2.08	5.12	ug/L	1	08/2/2012 18:38
2,4-Dichlorophenol	ND	U	2.11	5.12	ug/L	1	08/2/2012 18:38
2,4-Dinitrophenol	ND	U	0.684	25.6	ug/L	1	08/2/2012 18:38
2,4-Dinitrotoluene	ND	U	1.88	5.12	ug/L	1	08/2/2012 18:38
2,6-Dinitrotoluene	ND	U	1.92	5.12	ug/L	1	08/2/2012 18:38
2-Chloronaphthalene	ND	U	2.05	5.12	ug/L	1	08/2/2012 18:38
2-Chlorophenol	ND	U	2.88	5.12	ug/L	1	08/2/2012 18:38
2-Methylnaphthalene	ND	U	1.99	5.12	ug/L	1	08/2/2012 18:38
2-Methylphenol	ND	U	2.12	5.12	ug/L	1	08/2/2012 18:38
2-Nitroaniline	ND	U	1.73	5.12	ug/L	1	08/2/2012 18:38
2-Nitrophenol	ND	U	2.02	5.12	ug/L	1	08/2/2012 18:38
3 and/or 4-Methylphenol	ND	U	2.29	5.12	ug/L	1	08/2/2012 18:38
3,3'-Dichlorobenzidine	ND	U	1.79	10.2	ug/L	1	08/2/2012 18:38
3-Nitroaniline	ND	U	1.69	25.6	ug/L	1	08/2/2012 18:38
4,6-Dinitro-2-methylphenol	ND	U	0.506	25.6	ug/L	1	08/2/2012 18:38
4-Chloro-3-methylphenol	ND	U	2.03	5.12	ug/L	1	08/2/2012 18:38
4-Chloroaniline	ND	U	1.92	25.6	ug/L	1	08/2/2012 18:38
4-Chlorophenyl phenyl ether	ND	U	2.52	5.12	ug/L	1	08/2/2012 18:38
Acenaphthene	ND	U	2.11	5.12	ug/L	1	08/2/2012 18:38
Acenaphthylene	ND	U	2.05	5.12	ug/L	1	08/2/2012 18:38
Anthracene	ND	U	1.98	5.12	ug/L	1	08/2/2012 18:38
Benzo(a)anthracene	ND	U	2.01	5.12	ug/L	1	08/2/2012 18:38
Benzo(a)pyrene	ND	U	1.90	5.12	ug/L	1	08/2/2012 18:38
Benzo(b)fluoranthene	ND	U	2.01	5.12	ug/L	1	08/2/2012 18:38
Benzo(g,h,i)perylene	ND	U	2.20	5.12	ug/L	1	08/2/2012 18:38
Benzo(k)fluoranthene	ND	U	2.36	5.12	ug/L	1	08/2/2012 18:38
Benzoic acid	ND	U	2.33	5.12	ug/L	1	08/2/2012 18:38
Bis(2-Chloroethoxy)methane	ND	U	2.17	5.12	ug/L	1	08/2/2012 18:38
Bis(2-Chloroethyl)ether	ND	U	2.26	5.12	ug/L	1	08/2/2012 18:38
Bis(2-Chloroisopropyl)ether	ND	U	2.09	5.12	ug/L	1	08/2/2012 18:38
Bis(2-Ethylhexyl)phthalate	ND	U	2.00	5.12	ug/L	1	08/2/2012 18:38
4-Bromophenyl phenyl ether	ND	U	2.09	5.12	ug/L	1	08/2/2012 18:38
Butyl benzyl phthalate	ND	U	1.93	5.12	ug/L	1	08/2/2012 18:38
Chrysene	ND	U	2.25	5.12	ug/L	1	08/2/2012 18:38
Di-n-butyl phthalate	ND	U	1.95	5.12	ug/L	1	08/2/2012 18:38
Di-n-octyl phthalate	ND	U	1.49	5.12	ug/L	1	08/2/2012 18:38
Dibenz(a,h)anthracene	ND	U	2.07	5.12	ug/L	1	08/2/2012 18:38
Dibenzofuran	ND	U	2.27	5.12	ug/L	1	08/2/2012 18:38
Diethyl phthalate	ND	U	2.15	5.12	ug/L	1	08/2/2012 18:38

Print Date: 08/06/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 105DPT-10

Client Sample ID: **105DPT-10**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202364001-A
Lab Project ID: 31202364

Collection Date: 07/25/2012 09:00
Received Date: 07/26/2012 16:42
Matrix: Water

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
Dimethyl phthalate	ND	U	2.19	5.12	ug/L	1	08/2/2012 18:38
2,4-Dimethylphenol	ND	U	2.26	5.12	ug/L	1	08/2/2012 18:38
Diphenylamine	ND	U	2.07	5.12	ug/L	1	08/2/2012 18:38
Fluoranthene	ND	U	2.07	5.12	ug/L	1	08/2/2012 18:38
Fluorene	ND	U	2.50	5.12	ug/L	1	08/2/2012 18:38
Hexachlorobenzene	ND	U	1.98	5.12	ug/L	1	08/2/2012 18:38
Hexachlorobutadiene	ND	U	1.56	5.12	ug/L	1	08/2/2012 18:38
Hexachlorocyclopentadiene	ND	U	0.807	10.2	ug/L	1	08/2/2012 18:38
Hexachloroethane	ND	U	1.43	5.12	ug/L	1	08/2/2012 18:38
Indeno(1,2,3-cd)pyrene	ND	U	2.07	5.12	ug/L	1	08/2/2012 18:38
Isophorone	ND	U	2.14	5.12	ug/L	1	08/2/2012 18:38
Naphthalene	ND	U	1.99	5.12	ug/L	1	08/2/2012 18:38
4-Nitroaniline	ND	U	1.72	25.6	ug/L	1	08/2/2012 18:38
Nitrobenzene	ND	U	2.24	5.12	ug/L	1	08/2/2012 18:38
4-Nitrophenol	ND	U	1.30	25.6	ug/L	1	08/2/2012 18:38
Pentachlorophenol	ND	U	1.59	25.6	ug/L	1	08/2/2012 18:38
Phenanthrene	ND	U	2.04	5.12	ug/L	1	08/2/2012 18:38
Phenol	ND	U	2.42	5.12	ug/L	1	08/2/2012 18:38
Pyrene	ND	U	2.06	5.12	ug/L	1	08/2/2012 18:38
n-Nitrosodi-n-propylamine	ND	U	2.28	5.12	ug/L	1	08/2/2012 18:38
Surrogates							
2,4,6-Tribromophenol	112			29.3-152	%	1	08/2/2012 18:38
2-Fluorobiphenyl	93.0			50.0-107	%	1	08/2/2012 18:38
2-Fluorophenol	84.0			33.1-118	%	1	08/2/2012 18:38
Nitrobenzene-d5	128*			46.0-118	%	1	08/2/2012 18:38
Phenol-d6	103			49.0-120	%	1	08/2/2012 18:38
Terphenyl-d14	106			22.1-142	%	1	08/2/2012 18:38

Batch Information

Analytical Batch: **XMS1620**
Analytical Method: **SW-846 8270D**
Instrument: **MSD10**
Analyst: **CMP**
Analytical Date/Time: **08/02/2012 18:38**

Prep Batch: **XXX2865**
Prep Method: **SW-846 3520C**
Prep Date/Time: **07/30/2012 09:06**
Prep Initial Wt./Vol.: **977 mL**
Prep Extract Vol: **5 mL**

Print Date: 08/06/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 105DPT-11

Client Sample ID: **105DPT-11** (4.5-5.2') BA
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202364002-D
Lab Project ID: 31202364

Collection Date: 07/25/2012 09:30
Received Date: 07/26/2012 16:42
Matrix: Soil-Solid as dry weight
Solids (%): 77.70

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	U	4.98	47.8	ug/Kg	50	07/30/2012 18:32
1,1,1-Trichloroethane	ND	U	5.89	47.8	ug/Kg	50	07/30/2012 18:32
1,1,2,2-Tetrachloroethane	ND	U	7.46	47.8	ug/Kg	50	07/30/2012 18:32
1,1,2-Trichloroethane	ND	U	6.03	47.8	ug/Kg	50	07/30/2012 18:32
1,1-Dichloroethane	ND	U	7.90	47.8	ug/Kg	50	07/30/2012 18:32
1,1-Dichloroethene	ND	U	10.1	47.8	ug/Kg	50	07/30/2012 18:32
1,1-Dichloropropene	ND	U	4.13	47.8	ug/Kg	50	07/30/2012 18:32
1,2,3-Trichlorobenzene	ND	U	5.26	47.8	ug/Kg	50	07/30/2012 18:32
1,2,3-Trichloropropane	ND	U	10.1	47.8	ug/Kg	50	07/30/2012 18:32
1,2,4-Trichlorobenzene	ND	U	4.37	47.8	ug/Kg	50	07/30/2012 18:32
1,2,4-Trimethylbenzene	ND	U	4.60	47.8	ug/Kg	50	07/30/2012 18:32
1,2-Dibromo-3-chloropropane	ND	U	35.8	239	ug/Kg	50	07/30/2012 18:32
1,2-Dibromoethane	ND	U	5.74	47.8	ug/Kg	50	07/30/2012 18:32
1,2-Dichlorobenzene	ND	U	6.56	47.8	ug/Kg	50	07/30/2012 18:32
1,2-Dichloroethane	ND	U	7.99	47.8	ug/Kg	50	07/30/2012 18:32
1,2-Dichloropropane	ND	U	7.80	47.8	ug/Kg	50	07/30/2012 18:32
1,3,5-Trimethylbenzene	ND	U	5.41	47.8	ug/Kg	50	07/30/2012 18:32
1,3-Dichlorobenzene	ND	U	4.93	47.8	ug/Kg	50	07/30/2012 18:32
1,3-Dichloropropane	ND	U	6.22	47.8	ug/Kg	50	07/30/2012 18:32
1,4-Dichlorobenzene	ND	U	6.22	47.8	ug/Kg	50	07/30/2012 18:32
2,2-Dichloropropane	ND	U	18.8	47.8	ug/Kg	50	07/30/2012 18:32
2-Butanone	ND	U	34.6	1200	ug/Kg	50	07/30/2012 18:32
2-Chlorotoluene	ND	U	5.41	47.8	ug/Kg	50	07/30/2012 18:32
2-Hexanone	ND	U	34.8	239	ug/Kg	50	07/30/2012 18:32
4-Chlorotoluene	ND	U	5.98	47.8	ug/Kg	50	07/30/2012 18:32
4-Isopropyltoluene	ND	U	3.68	47.8	ug/Kg	50	07/30/2012 18:32
4-Methyl-2-pentanone	ND	U	26.7	239	ug/Kg	50	07/30/2012 18:32
Acetone	ND	U	41.3	1200	ug/Kg	50	07/30/2012 18:32
Benzene	ND	U	5.41	47.8	ug/Kg	50	07/30/2012 18:32
Bromobenzene	ND	U	5.26	47.8	ug/Kg	50	07/30/2012 18:32
Bromochloromethane	ND	U	10.1	47.8	ug/Kg	50	07/30/2012 18:32
Bromodichloromethane	ND	U	5.26	47.8	ug/Kg	50	07/30/2012 18:32
Bromoform	ND	U	4.66	47.8	ug/Kg	50	07/30/2012 18:32
Bromomethane	ND	U	11.3	47.8	ug/Kg	50	07/30/2012 18:32
n-Butylbenzene	ND	U	3.68	47.8	ug/Kg	50	07/30/2012 18:32
Carbon disulfide	ND	U	5.07	47.8	ug/Kg	50	07/30/2012 18:32
Carbon tetrachloride	ND	U	4.83	47.8	ug/Kg	50	07/30/2012 18:32
Chlorobenzene	ND	U	5.55	47.8	ug/Kg	50	07/30/2012 18:32
Chloroethane	ND	U	14.9	47.8	ug/Kg	50	07/30/2012 18:32
Chloroform	ND	U	6.65	47.8	ug/Kg	50	07/30/2012 18:32
Chloromethane	ND	U	21.4	47.8	ug/Kg	50	07/30/2012 18:32
Dibromochloromethane	ND	U	6.41	47.8	ug/Kg	50	07/30/2012 18:32
Dibromomethane	ND	U	8.04	47.8	ug/Kg	50	07/30/2012 18:32
Dichlorodifluoromethane	ND	U	8.18	239	ug/Kg	50	07/30/2012 18:32

Print Date: 08/06/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 105DPT-11

Client Sample ID: **105DPT-11** (4.5-5.2') EA
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202364002-D
Lab Project ID: 31202364

Collection Date: 07/25/2012 09:30
Received Date: 07/26/2012 16:42
Matrix: Soil-Solid as dry weight
Solids (%): 77.70

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	U	3.67	47.8	ug/Kg	50	07/30/2012 18:32
trans-1,3-Dichloropropene	ND	U	4.12	47.8	ug/Kg	50	07/30/2012 18:32
Diisopropyl Ether	ND	U	14.1	47.8	ug/Kg	50	07/30/2012 18:32
Ethyl Benzene	ND	U	4.20	47.8	ug/Kg	50	07/30/2012 18:32
Hexachlorobutadiene	ND	U	3.79	47.8	ug/Kg	50	07/30/2012 18:32
Isopropylbenzene (Cumene)	ND	U	4.16	47.8	ug/Kg	50	07/30/2012 18:32
Methyl iodide	ND	U	5.50	47.8	ug/Kg	50	07/30/2012 18:32
Methylene chloride	**18.2**	J	7.27	239	ug/Kg	50	07/30/2012 18:32
Naphthalene	ND	U	4.09	47.8	ug/Kg	50	07/30/2012 18:32
Styrene	ND	U	4.88	47.8	ug/Kg	50	07/30/2012 18:32
Tetrachloroethene	**290**		7.42	47.8	ug/Kg	50	07/30/2012 18:32
Toluene	ND	U	6.36	47.8	ug/Kg	50	07/30/2012 18:32
Trichloroethene	ND	U	5.98	47.8	ug/Kg	50	07/30/2012 18:32
Trichlorofluoromethane	ND	U	6.56	47.8	ug/Kg	50	07/30/2012 18:32
Vinyl chloride	ND	U	5.93	47.8	ug/Kg	50	07/30/2012 18:32
Xylene (total)	ND	U	8.71	95.7	ug/Kg	50	07/30/2012 18:32
cis-1,2-Dichloroethene	ND	U	6.51	47.8	ug/Kg	50	07/30/2012 18:32
m,p-Xylene	ND	U	8.71	95.7	ug/Kg	50	07/30/2012 18:32
n-Propylbenzene	ND	U	5.41	47.8	ug/Kg	50	07/30/2012 18:32
o-Xylene	ND	U	4.18	47.8	ug/Kg	50	07/30/2012 18:32
sec-Butylbenzene	ND	U	5.36	47.8	ug/Kg	50	07/30/2012 18:32
tert-Butyl methyl ether (MTBE)	ND	U	6.89	47.8	ug/Kg	50	07/30/2012 18:32
tert-Butylbenzene	ND	U	4.09	47.8	ug/Kg	50	07/30/2012 18:32
trans-1,2-Dichloroethene	ND	U	10.7	47.8	ug/Kg	50	07/30/2012 18:32
trans-1,4-Dichloro-2-butene	ND	U	19.8	239	ug/Kg	50	07/30/2012 18:32
Surrogates							
1,2-Dichloroethane-d4	101			55.0-173	%	50	07/30/2012 18:32
4-Bromofluorobenzene	104			23.0-141	%	50	07/30/2012 18:32
Toluene d8	102			57.0-134	%	50	07/30/2012 18:32

Batch Information

Analytical Batch: **VMS2422**
Analytical Method: **SW-846 8260B**
Instrument: **MSD3**
Analyst: **BWS**
Analytical Date/Time: **07/30/2012 18:32**

Prep Batch: **VXX3730**
Prep Method: **SW-846 5035 SM**
Prep Date/Time: **07/27/2012 10:33**
Prep Initial Wt./Vol.: **6.72 g**
Prep Extract Vol: **5 mL**

Print Date: 08/06/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 105DPT-11

Client Sample ID: **105DPT-11** (4-5-5,2') (BA)
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202364002-E
Lab Project ID: 31202364

Collection Date: 07/25/2012 09:30
Received Date: 07/26/2012 16:42
Matrix: Soil-Solid as dry weight
Solids (%): 77.70

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,2,4-Trichlorobenzene	ND	U	35.7	405	ug/Kg	1	07/30/2012 19:45
1,2-Dichlorobenzene	ND	U	20.2	405	ug/Kg	1	07/30/2012 19:45
1,3-Dichlorobenzene	ND	U	27.3	405	ug/Kg	1	07/30/2012 19:45
1,4-Dichlorobenzene	ND	U	28.6	405	ug/Kg	1	07/30/2012 19:45
2,4,5-Trichlorophenol	ND	U	27.0	405	ug/Kg	1	07/30/2012 19:45
2,4,6-Trichlorophenol	ND	U	27.4	405	ug/Kg	1	07/30/2012 19:45
2,4-Dichlorophenol	ND	U	23.4	405	ug/Kg	1	07/30/2012 19:45
2,4-Dinitrophenol	ND	U	37.5	809	ug/Kg	1	07/30/2012 19:45
2,4-Dinitrotoluene	ND	U	20.4	405	ug/Kg	1	07/30/2012 19:45
2,6-Dinitrotoluene	ND	U	29.0	405	ug/Kg	1	07/30/2012 19:45
2-Chloronaphthalene	ND	U	23.8	405	ug/Kg	1	07/30/2012 19:45
2-Chlorophenol	ND	U	21.5	405	ug/Kg	1	07/30/2012 19:45
2-Methylnaphthalene	ND	U	32.7	405	ug/Kg	1	07/30/2012 19:45
2-Methylphenol	ND	U	22.4	405	ug/Kg	1	07/30/2012 19:45
2-Nitroaniline	ND	U	26.7	405	ug/Kg	1	07/30/2012 19:45
2-Nitrophenol	ND	U	19.4	405	ug/Kg	1	07/30/2012 19:45
3 and/or 4-Methylphenol	ND	U	26.3	405	ug/Kg	1	07/30/2012 19:45
3,3'-Dichlorobenzidine	ND	U	19.4	405	ug/Kg	1	07/30/2012 19:45
3-Nitroaniline	ND	U	18.2	405	ug/Kg	1	07/30/2012 19:45
4,6-Dinitro-2-methylphenol	ND	U	19.0	405	ug/Kg	1	07/30/2012 19:45
4-Chloro-3-methylphenol	ND	U	20.2	405	ug/Kg	1	07/30/2012 19:45
4-Chloroaniline	ND	U	32.3	405	ug/Kg	1	07/30/2012 19:45
4-Chlorophenyl phenyl ether	ND	U	43.2	405	ug/Kg	1	07/30/2012 19:45
Acenaphthene	ND	U	18.4	405	ug/Kg	1	07/30/2012 19:45
Acenaphthylene	ND	U	17.1	405	ug/Kg	1	07/30/2012 19:45
Anthracene	ND	U	18.0	405	ug/Kg	1	07/30/2012 19:45
Benzo(a)anthracene	ND	U	22.3	405	ug/Kg	1	07/30/2012 19:45
Benzo(a)pyrene	ND	U	22.9	405	ug/Kg	1	07/30/2012 19:45
Benzo(b)fluoranthene	ND	U	23.3	405	ug/Kg	1	07/30/2012 19:45
Benzo(g,h,i)perylene	ND	U	64.4	405	ug/Kg	1	07/30/2012 19:45
Benzo(k)fluoranthene	ND	U	48.5	405	ug/Kg	1	07/30/2012 19:45
Benzoic acid	ND	U	8.98	405	ug/Kg	1	07/30/2012 19:45
Bis(2-Chloroethoxy)methane	ND	U	18.2	405	ug/Kg	1	07/30/2012 19:45
Bis(2-Chloroethyl)ether	ND	U	37.8	405	ug/Kg	1	07/30/2012 19:45
Bis(2-Chloroisopropyl)ether	ND	U	35.3	405	ug/Kg	1	07/30/2012 19:45
Bis(2-Ethylhexyl)phthalate	ND	U	19.4	405	ug/Kg	1	07/30/2012 19:45
4-Bromophenyl phenyl ether	ND	U	26.7	405	ug/Kg	1	07/30/2012 19:45
Butyl benzyl phthalate	ND	U	35.2	405	ug/Kg	1	07/30/2012 19:45
Chrysene	ND	U	47.1	405	ug/Kg	1	07/30/2012 19:45
Di-n-butyl phthalate	ND	U	19.1	405	ug/Kg	1	07/30/2012 19:45
Di-n-octyl phthalate	ND	U	22.4	405	ug/Kg	1	07/30/2012 19:45
Dibenz(a,h)anthracene	ND	U	18.2	405	ug/Kg	1	07/30/2012 19:45
Dibenzofuran	ND	U	31.7	405	ug/Kg	1	07/30/2012 19:45
Diethyl phthalate	ND	U	21.9	405	ug/Kg	1	07/30/2012 19:45

Print Date: 08/06/2012

N.C. Certification # 481

Results of 105DPT-11

Client Sample ID: **105DPT-11** (4.5-5.2') (B4)
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202364002-E
Lab Project ID: 31202364

Collection Date: 07/25/2012 09:30
Received Date: 07/26/2012 16:42
Matrix: Soil-Solid as dry weight
Solids (%): 77.70

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
Dimethyl phthalate	ND	U	31.1	405	ug/Kg	1	07/30/2012 19:45
2,4-Dimethylphenol	ND	U	29.6	405	ug/Kg	1	07/30/2012 19:45
Diphenylamine	ND	U	18.2	405	ug/Kg	1	07/30/2012 19:45
Fluoranthene	ND	U	38.0	405	ug/Kg	1	07/30/2012 19:45
Fluorene	ND	U	21.5	405	ug/Kg	1	07/30/2012 19:45
Hexachlorobenzene	ND	U	38.3	405	ug/Kg	1	07/30/2012 19:45
Hexachlorobutadiene	ND	U	24.2	405	ug/Kg	1	07/30/2012 19:45
Hexachlorocyclopentadiene	ND	U	123	405	ug/Kg	1	07/30/2012 19:45
Hexachloroethane	ND	U	23.3	405	ug/Kg	1	07/30/2012 19:45
Indeno(1,2,3-cd)pyrene	ND	U	31.6	405	ug/Kg	1	07/30/2012 19:45
Isophorone	ND	U	18.4	405	ug/Kg	1	07/30/2012 19:45
Naphthalene	ND	U	34.9	405	ug/Kg	1	07/30/2012 19:45
4-Nitroaniline	ND	U	23.3	405	ug/Kg	1	07/30/2012 19:45
Nitrobenzene	ND	U	23.3	405	ug/Kg	1	07/30/2012 19:45
4-Nitrophenol	ND	U	39.9	405	ug/Kg	1	07/30/2012 19:45
Pentachlorophenol	ND	U	32.3	405	ug/Kg	1	07/30/2012 19:45
Phenanthrene	ND	U	26.7	405	ug/Kg	1	07/30/2012 19:45
Phenol	ND	U	37.8	405	ug/Kg	1	07/30/2012 19:45
Pyrene	ND	U	17.1	405	ug/Kg	1	07/30/2012 19:45
n-Nitrosodi-n-propylamine	ND	U	116	405	ug/Kg	1	07/30/2012 19:45
Surrogates							
2,4,6-Tribromophenol	96.0			41.0-129	%	1	07/30/2012 19:45
2-Fluorobiphenyl	87.0			48.0-123	%	1	07/30/2012 19:45
2-Fluorophenol	81.0			42.0-123	%	1	07/30/2012 19:45
Nitrobenzene-d5	87.0			46.0-117	%	1	07/30/2012 19:45
Phenol-d6	93.0			48.0-125	%	1	07/30/2012 19:45
Terphenyl-d14	104			44.0-140	%	1	07/30/2012 19:45

Batch Information

Analytical Batch: **XMS1614**
Analytical Method: **SW-846 8270D**
Instrument: **MSD10**
Analyst: **CMP**
Analytical Date/Time: **07/30/2012 19:45**

Prep Batch: **XXX2863**
Prep Method: **SW-846 3541**
Prep Date/Time: **07/27/2012 10:01**
Prep Initial Wt./Vol.: **31.81 g**
Prep Extract Vol: **10 mL**

Print Date: 08/06/2012

N.C. Certification # 481

Batch Summary

Analytical Method: SW-846 8260B

Prep Method: SW-846 5035 SM
Prep Batch: VXX3730
Prep Date: 07/30/2012 08:44

Client Sample ID	Lab Sample ID	Analysis Date	Analytical Batch	Instrument	Analyst
LCS-S for HBN 26279 [VXX/3730]	82680	07/30/2012 09:45	VMS2422	MSD3	BWS
LCSD-S for HBN 26279 [VXX/3730	82681	07/30/2012 10:10	VMS2422	MSD3	BWS
MB-S for HBN 26279 [VXX/3730]	82679	07/30/2012 11:26	VMS2422	MSD3	BWS
105DPT-11 (4.5-5.2') BA	31202364002	07/30/2012 18:32	VMS2422	MSD3	BWS

Method Blank

Blank ID: MB-S for HBN 26279 [VXX/3730]
Blank Lab ID: 82679
QC for Samples:
31202364002

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	ND	U	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: 08/06/2012

N.C. Certification # 481

Method Blank

Blank ID: MB-S for HBN 26279 [VXX/3730]
Blank Lab ID: 82679
QC for Samples:
31202364002

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	105			55.0-173	%	50
Toluene d8	101			57.0-134	%	50
4-Bromofluorobenzene	102			23.0-141	%	50

Batch Information

Analytical Batch: VMS2422
Analytical Method: SW-846 8260B
Instrument: MSD3
Analyst: BWS
Analytical Date/Time: 7/30/2012 11:26:00AM

Prep Batch: VXX3730
Prep Method: SW-846 5035 SM
Prep Date/Time: 7/30/2012 8:44:55AM
Prep Initial Wt./Vol.: 5 g
Prep Extract Vol: 5 mL

Print Date: 08/06/2012

N.C. Certification # 481

Blank Spike Summary

Blank Spike ID: LCS-S for HBN 26279 [VXX/3730]
Blank Spike Lab ID: 82680
Date Analyzed: 07/30/2012 09:45

Spike Duplicate ID: LCSD-S for HBN 26279 [VXX/3730
Spike Duplicate Lab ID: 82681
Matrix: Soil-Solid as dry weight

QC for Samples: 31202364002

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	278	111	250	190	76	70.0-130	38*	30.00
Chloromethane	250	281	112	250	183	73	70.0-130	42*	30.00
Vinyl chloride	250	278	111	250	197	79	70.0-130	34*	30.00
Bromomethane	250	541	216*	250	350	140*	70.0-130	43*	30.00
Chloroethane	250	289	115	250	221	88	70.0-130	27	30.00
Trichlorofluoromethane	250	263	105	250	186	74	70.0-130	34*	30.00
1,1-Dichloroethene	250	247	99	250	234	93	70.0-130	5.4	30.00
Acetone	1250	1200	96	1250	1080	87	70.0-130	11	30.00
Methylene chloride	250	241	96	250	226	90	70.0-130	6.4	30.00
trans-1,2-Dichloroethene	250	255	102	250	228	91	70.0-130	11	30.00
tert-Butyl methyl ether (MTBE)	250	235	94	250	232	93	70.0-130	1.3	30.00
1,1-Dichloroethane	250	238	95	250	233	93	70.0-130	2.1	30.00
Diisopropyl Ether	250	221	88	250	210	84	70.0-130	5.1	30.00
2,2-Dichloropropane	250	278	111	250	256	102	70.0-130	8.2	30.00
cis-1,2-Dichloroethene	250	252	101	250	229	92	70.0-130	9.6	30.00
2-Butanone	1250	1020	82	1250	1010	81	70.0-130	0.99	30.00
Bromochloromethane	250	274	109	250	240	96	70.0-130	13	30.00
Chloroform	250	237	95	250	233	93	70.0-130	1.7	30.00
1,1,1-Trichloroethane	250	244	98	250	234	93	70.0-130	4.2	30.00
Carbon tetrachloride	250	260	104	250	243	97	70.0-130	6.8	30.00
1,1-Dichloropropene	250	233	93	250	229	92	70.0-130	1.7	30.00
Benzene	250	232	93	250	226	90	70.0-130	2.6	30.00
1,2-Dichloroethane	250	241	96	250	223	89	70.0-130	7.8	30.00
Trichloroethene	250	231	92	250	226	90	70.0-130	2.2	30.00
1,2-Dichloropropane	250	208	83	250	218	87	70.0-130	4.7	30.00
Dibromomethane	250	234	94	250	220	88	70.0-130	6.2	30.00
Bromodichloromethane	250	236	94	250	223	89	70.0-130	5.7	30.00
cis-1,3-Dichloropropene	250	248	99	250	235	94	70.0-130	5.4	30.00
4-Methyl-2-pentanone	1250	1010	81	1250	952	76	70.0-130	5.9	30.00
Toluene	250	234	93	250	236	94	70.0-130	0.85	30.00
Methyl iodide	250	222	89	250	213	85	70.0-130	4.1	30.00
trans-1,3-Dichloropropene	250	235	94	250	228	91	70.0-130	3.0	30.00
Carbon disulfide	250	243	97	250	227	91	70.0-130	6.8	30.00
1,1,2-Trichloroethane	250	221	88	250	228	91	70.0-130	3.1	30.00

Blank Spike Summary

Blank Spike ID: LCS-S for HBN 26279 [VXX/3730]
Blank Spike Lab ID: 82680
Date Analyzed: 07/30/2012 09:45

Spike Duplicate ID: LCSD-S for HBN 26279 [VXX/3730
Spike Duplicate Lab ID: 82681
Matrix: Soil-Solid as dry weight

QC for Samples: 31202364002

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	249	99	250	242	97	70.0-130	2.9	30.00
1,3-Dichloropropane	250	204	81	250	201	80	70.0-130	1.5	30.00
2-Hexanone	1250	906	72	1250	887	71	70.0-130	2.1	30.00
Dibromochloromethane	250	249	100	250	247	99	70.0-130	0.81	30.00
1,2-Dibromoethane	250	209	83	250	211	84	70.0-130	0.95	30.00
Chlorobenzene	250	218	87	250	203	81	70.0-130	7.1	30.00
1,1,1,2-Tetrachloroethane	250	230	92	250	231	92	70.0-130	0.43	30.00
Bromoform	250	254	102	250	255	102	70.0-130	0.39	30.00
Bromobenzene	250	220	88	250	220	88	70.0-130	0.0	30.00
1,1,2,2-Tetrachloroethane	250	199	79	250	202	81	70.0-130	1.5	30.00
1,2,3-Trichloropropane	250	236	94	250	226	90	70.0-130	4.3	30.00
Ethyl Benzene	250	209	83	250	203	81	70.0-130	2.9	30.00
m,p-Xylene	500	447	89	500	432	86	70.0-130	3.4	30.00
Styrene	250	203	81	250	201	80	70.0-130	0.99	30.00
o-Xylene	250	209	83	250	213	85	70.0-130	1.9	30.00
Isopropylbenzene (Cumene)	250	224	89	250	222	89	70.0-130	0.90	30.00
n-Propylbenzene	250	211	84	250	204	82	70.0-130	3.4	30.00
2-Chlorotoluene	250	206	82	250	215	86	70.0-130	4.3	30.00
4-Chlorotoluene	250	231	92	250	234	94	70.0-130	1.3	30.00
1,3,5-Trimethylbenzene	250	224	89	250	227	91	70.0-130	1.3	30.00
tert-Butylbenzene	250	211	84	250	209	83	70.0-130	0.95	30.00
1,2,4-Trimethylbenzene	250	226	90	250	224	90	70.0-130	0.89	30.00
sec-Butylbenzene	250	227	91	250	224	89	70.0-130	1.3	30.00
1,3-Dichlorobenzene	250	212	85	250	217	87	70.0-130	2.3	30.00
4-Isopropyltoluene	250	221	88	250	225	90	70.0-130	1.8	30.00
1,4-Dichlorobenzene	250	208	83	250	203	81	70.0-130	2.4	30.00
1,2-Dichlorobenzene	250	219	88	250	210	84	70.0-130	4.2	30.00
n-Butylbenzene	250	224	90	250	220	88	70.0-130	1.8	30.00
1,2-Dibromo-3-chloropropane	1500	1250	83	1500	1190	79	70.0-130	4.9	30.00
1,2,4-Trichlorobenzene	250	234	93	250	225	90	70.0-130	3.9	30.00
Hexachlorobutadiene	250	233	93	250	229	91	70.0-130	1.7	30.00
Naphthalene	250	227	91	250	223	89	70.0-130	1.8	30.00
trans-1,4-Dichloro-2-butene	1250	1160	93	1250	1130	90	70.0-130	2.6	30.00
1,2,3-Trichlorobenzene	250	234	93	250	227	91	70.0-130	3.0	30.00

Blank Spike Summary

Blank Spike ID: LCS-S for HBN 26279 [VXX/3730]
Blank Spike Lab ID: 82680
Date Analyzed: 07/30/2012 09:45

Spike Duplicate ID: LCSD-S for HBN 26279 [VXX/3730
Spike Duplicate Lab ID: 82681
Matrix: Soil-Solid as dry weight

QC for Samples: 31202364002

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			103			104	55.0-173		
Toluene d8			103			103	57.0-134		
4-Bromofluorobenzene			101			102	23.0-141		

Batch Information

Analytical Batch: VMS2422
Analytical Method: SW-846 8260B
Instrument: MSD3
Analyst: BWS

Prep Batch: VXX3730
Prep Method: SW-846 5035 SM
Prep Date/Time: 07/30/2012 08:44
Spike Init Wt./Vol.: 5 g Extract Vol: 5 mL
Dupe Init Wt./Vol.: 5 g Extract Vol: 5 mL

Batch Summary

Analytical Method: SW-846 8270D

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

Client Sample ID	Lab Sample ID	Analysis Date	Analytical Batch	Instrument	Analyst
MB for HBN 26126 [XXX/2863]	82374	07/30/2012 15:09	XMS1614	MSD10	CMP
LCS for HBN 26126 [XXX/2863]	82375	07/30/2012 15:55	XMS1614	MSD10	CMP
107DPT-01 (4.5-5ft)(82319MS)	82376	07/30/2012 17:27	XMS1614	MSD10	CMP
107DPT-01 (4.5-5ft)(82319MSD)	82377	07/30/2012 17:50	XMS1614	MSD10	CMP
105DPT-11 (4.5-5.2') (SA)	31202364002	07/30/2012 19:45	XMS1614	MSD10	CMP

Print Date: 08/06/2012

N.C. Certification # 481

Method Blank

Blank ID: MB for HBN 26126 [XXX/2863]
Blank Lab ID: 82374
QC for Samples:
31202364002

Matrix: Soil-Solid as dry weight

Results by SW-846 8270D

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

Print Date: 08/06/2012

N.C. Certification # 481

Method Blank

Blank ID: MB for HBN 26126 [XXX/2863]
Blank Lab ID: 82374
QC for Samples:
31202364002

Matrix: Soil-Solid as dry weight

Results by SW-846 8270D

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

Batch Information

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

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

Print Date: 08/06/2012

N.C. Certification # 481

Blank Spike Summary

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

Matrix: Soil-Solid as dry weight

QC for Samples: 31202364002

Results by SW-846 8270D

Blank Spike (ug/Kg)

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

Print Date: 08/06/2012

N.C. Certification # 481

Blank Spike Summary

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

Matrix: Soil-Solid as dry weight

QC for Samples: 31202364002

Results by SW-846 8270D

Blank Spike (ug/Kg)

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

Print Date: 08/06/2012

N.C. Certification # 481

Blank Spike Summary

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

Matrix: Soil-Solid as dry weight

QC for Samples: 31202364002

Results by SW-846 8270D

Blank Spike (%)

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

Batch Information

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

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

Batch Summary

Analytical Method: SW-846 8270D

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

Client Sample ID	Lab Sample ID	Analysis Date	Analytical Batch	Instrument	Analyst
MB for HBN 26268 [XXX/2865]	82587	08/02/2012 12:33	XMS1620	MSD10	CMP
LCS for HBN 26268 [XXX/2865]	82588	08/02/2012 12:56	XMS1620	MSD10	CMP
LCSD for HBN 26268 [XXX/2865]	82589	08/02/2012 13:19	XMS1620	MSD10	CMP
105DPT-10	31202364001	08/02/2012 18:38	XMS1620	MSD10	CMP

Method Blank

Blank ID: MB for HBN 26268 [XXX/2865]
Blank Lab ID: 82587
QC for Samples:
31202364001

Matrix: Water

Results by SW-846 8270D

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

Print Date: 08/06/2012

N.C. Certification # 481

Method Blank

Blank ID: MB for HBN 26268 [XXX/2865]
Blank Lab ID: 82587
QC for Samples:
31202364001

Matrix: Water

Results by SW-846 8270D

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

Batch Information

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

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

Print Date: 08/06/2012

N.C. Certification # 481

Blank Spike Summary

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

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

QC for Samples: 31202364001

Results by SW-846 8270D

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

Blank Spike Summary

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

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

QC for Samples: 31202364001

Results by SW-846 8270D

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

Print Date: 08/06/2012

N.C. Certification # 481

Blank Spike Summary

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

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

QC for Samples: 31202364001

Results by SW-846 8270D

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

Batch Information

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

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

CHAIN OF CUSTODY

SGS ANALYTICAL PERSPECTIVES

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

CLIENT: CATLIN / NCDOT
CONTACT: Ben Ashba e CATLIN **PHONE NO:** (910) 452-5861
PROJECT: NCDOT Parcel 105 **SITE / PWSID / WBS #:** 35781.1.2 U-3315 Pitt County
REPORTS TO: Ben Ashba
EMAIL: ben.ashba@catlinusa.com
INVOICE TO: NCDOT **QUOTE #** **P.O. NUMBER** NCDOT

SGS Reference #: 3120236 4

PAGE 1 **OF** 1

Preservatives used: Sodium bisulfate / MeOH
Analysis required: 8260/8270; 8270

LAB NO.	SAMPLE IDENTIFICATION	DATE 7/25/12	TIME	MATRIX	# CONTAINERS	SAMPLE TYPE (C= COMP, G= GRAB)	8260/8270	8270								REMARKS
	105 DPT-10	7/25/12	0900	H2O		G	✓	✓								e CB1106
	105 DPT-11 (4.5-5.2)	7.25.12	930	SOIL	5	G	✓									e CB1117

May have not label?

COLLECTED/RELINQUISHED BY: (1)	DATE	TIME	RECEIVED BY:
Ben Ashba (signature)	7-26-12	1642	(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 (circled: ABSENT) Sample Receipt Temp: C 0.8°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.: **31202364**

1. ___ Shipped
   _X_ Hand Delivered

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

3. ___ Custody Tape on Container
   _X_ No Custody Tape

4. _X_ Samples Intact
   ___ Samples Broken / Leaking

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

6. _X_ Sufficient Sample Submitted
   ___ Insufficient Sample Submitted

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

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

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

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

Notes:

Comments:

Inspected and Logged in by: JJ

Date: Fri-7/27/12 00:00

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

SGS ANALYTICAL PERSPECTIVES

Laboratory Report of Analysis

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

Report Number: **31202266**

Client Project: **NCDOT Parcel 105**

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
2012.07.26 16:02:16 -05'00'

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

Date

Print Date: 07/26/2012

N.C. Certification # 481

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

Laboratory Qualifiers

Report Definitions

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

Qualifier Definitions

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

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

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

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

Print Date: 07/26/2012

N.C. Certification # 481

Sample Summary

Client Sample ID	Lab Sample ID	Collected	Received	Matrix
105 DPT-01 (7-8ft)	31202266001	07/16/2012 19:15	07/18/2012 16:30	Soil-Solid as dry weight
105 DPT-02 (5-6ft)	31202266002	07/16/2012 19:25	07/18/2012 16:30	Soil-Solid as dry weight
105 DPT-03 (5-6ft)	31202266003	07/16/2012 19:40	07/18/2012 16:30	Soil-Solid as dry weight
105 DPT-04 (7-8ft)	31202266004	07/16/2012 20:10	07/18/2012 16:30	Soil-Solid as dry weight
105 DPT-05 (4-5ft)	31202266005	07/17/2012 18:45	07/18/2012 16:30	Soil-Solid as dry weight
105 DPT-06 (4-5ft)	31202266006	07/17/2012 19:10	07/18/2012 16:30	Soil-Solid as dry weight
105 DPT-07 (2-4ft)	31202266007	07/17/2012 19:20	07/18/2012 16:30	Soil-Solid as dry weight
105 DPT-08 (3-4ft)	31202266008	07/17/2012 19:40	07/18/2012 16:30	Soil-Solid as dry weight
105 DPT-09 (4-5ft)	31202266009	07/17/2012 20:10	07/18/2012 16:30	Soil-Solid as dry weight
105 DPT-10 (4-5ft)	31202266010	07/18/2012 08:20	07/18/2012 16:30	Soil-Solid as dry weight
105 DPT-10	31202266011	07/18/2012 13:00	07/18/2012 16:30	Water
Trip Blank (Not on COC) Water	31202266012	07/18/2012 00:00	07/18/2012 16:30	Water
Trip Blank (Not on COC) Soil	31202266013	07/18/2012 00:00	07/18/2012 16:30	Soil-Solid as dry weight

SGS ANALYTICAL PERSPECTIVES

Case Narrative

105 DPT-01 (7-8ft)
8260 - The batch Duplicate was not analyzed due to a leaking vial cap.

105 DPT-02 (5-6ft)
8260 - The batch Duplicate was not analyzed due to a leaking vial cap.

105 DPT-04 (7-8ft)
8260 - The batch Duplicate was not analyzed due to a leaking vial cap.

105 DPT-06 (4-5ft)
8260 - The batch Duplicate was not analyzed due to a leaking vial cap.

105 DPT-09 (4-5ft)
J - The quantitation is an estimation.

LCSD-S for HBN 25851 [VXX/3672
8260 - The batch Duplicate was not analyzed due to a leaking vial cap.

LCS-S for HBN 25851 [VXX/3672]
8260 - The batch Duplicate was not analyzed due to a leaking vial cap.

MB-S for HBN 25851 [VXX/3672]
8260 - The batch Duplicate was not analyzed due to a leaking vial cap.

Trip Blank (Not on COC) Soil
8260 - This Trip Blank has a reported 'J' concentration for Methylene Chloride.

UST-1 C(81140MS)
8260 - The batch Duplicate was not analyzed due to a leaking vial cap.

Detectable Results Summary

Client Sample ID: **105 DPT-01 (7-8ft)**				
Lab Sample ID: 31202266001-A	Parameter	Result	Units	
SW-846 8260B	Methylene chloride	1.46	ug/Kg	J
	Tetrachloroethene	2.53	ug/Kg	J
Client Sample ID: **105 DPT-02 (5-6ft)**				
Lab Sample ID: 31202266002-C	Parameter	Result	Units	
SW-846 8260B	Tetrachloroethene	290	ug/Kg	
	cis-1,2-Dichloroethene	18.4	ug/Kg	J
Client Sample ID: **105 DPT-03 (5-6ft)**				
Lab Sample ID: 31202266003-D	Parameter	Result	Units	
SW-846 8260B	Tetrachloroethene	359	ug/Kg	
	Trichloroethene	14.0	ug/Kg	J
	cis-1,2-Dichloroethene	12.2	ug/Kg	J
Client Sample ID: **105 DPT-04 (7-8ft)**				
Lab Sample ID: 31202266004-A	Parameter	Result	Units	
SW-846 8260B	Methylene chloride	2.83	ug/Kg	J
Client Sample ID: **105 DPT-05 (4-5ft)**				
Lab Sample ID: 31202266005-D	Parameter	Result	Units	
SW-846 8260B	Tetrachloroethene	268	ug/Kg	
Client Sample ID: **105 DPT-07 (2-4ft)**				
Lab Sample ID: 31202266007-A	Parameter	Result	Units	
SW-846 8260B	Tetrachloroethene	59.8	ug/Kg	
	Trichloroethene	1.67	ug/Kg	J
Client Sample ID: **105 DPT-09 (4-5ft)**				
Lab Sample ID: 31202266009-D	Parameter	Result	Units	
SW-846 8260B	1,2,4-Trimethylbenzene	3610	ug/Kg	
	1,3,5-Trimethylbenzene	1180	ug/Kg	
	4-Isopropyltoluene	284	ug/Kg	
	Carbon disulfide	34.7	ug/Kg	J
	Isopropylbenzene (Cumene)	47.9	ug/Kg	J
	Naphthalene	492	ug/Kg	
	n-Propylbenzene	362	ug/Kg	
SW-846 8270D	2-Methylnaphthalene	22200	ug/Kg	
	Fluorene	193	ug/Kg	J
	Naphthalene	10800	ug/Kg	
	Phenanthrene	158	ug/Kg	J
Client Sample ID: **105 DPT-10 (4-5ft)**				
Lab Sample ID: 31202266010-A	Parameter	Result	Units	
SW-846 8260B	Acetone	11.7	ug/Kg	J
	Methylene chloride	0.957	ug/Kg	J
Client Sample ID: **105 DPT-10**				
Lab Sample ID: 31202266011-A	Parameter	Result	Units	
SW-846 8260B	Diisopropyl Ether	1.17	ug/L	
	Xylene (total)	1.94	ug/L	J
	m,p-Xylene	1.94	ug/L	J

Print Date: 07/26/2012

N.C. Certification # 481

Detectable Results Summary

Client Sample ID: **Trip Blank (Not on COC) Water**

Lab Sample ID: 31202266012-A	Parameter	Result	Units	
SW-846 8260B	Methylene chloride	0.380	ug/L	J

Client Sample ID: **Trip Blank (Not on COC) Soil**

Lab Sample ID: 31202266013-A	Parameter	Result	Units	
SW-846 8260B	Methylene chloride	2.45	ug/Kg	J

Print Date: 07/26/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 105 DPT-01 (7-8ft)

Client Sample ID: **105 DPT-01 (7-8ft)**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202266001-A
Lab Project ID: 31202266

Collection Date: 07/16/2012 19:15
Received Date: 07/18/2012 16:30
Matrix: Soil-Solid as dry weight
Solids (%): 95.90

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	U	0.965	4.55	ug/Kg	1	07/20/2012 16:49
1,1,1-Trichloroethane	ND	U	0.708	4.55	ug/Kg	1	07/20/2012 16:49
1,1,2,2-Tetrachloroethane	ND	U	1.03	4.55	ug/Kg	1	07/20/2012 16:49
1,1,2-Trichloroethane	ND	U	0.947	4.55	ug/Kg	1	07/20/2012 16:49
1,1-Dichloroethane	ND	U	0.786	4.55	ug/Kg	1	07/20/2012 16:49
1,1-Dichloroethene	ND	U	0.822	4.55	ug/Kg	1	07/20/2012 16:49
1,1-Dichloropropene	ND	U	0.839	4.55	ug/Kg	1	07/20/2012 16:49
1,2,3-Trichlorobenzene	ND	U	1.27	4.55	ug/Kg	1	07/20/2012 16:49
1,2,3-Trichloropropane	ND	U	1.01	4.55	ug/Kg	1	07/20/2012 16:49
1,2,4-Trichlorobenzene	ND	U	1.08	4.55	ug/Kg	1	07/20/2012 16:49
1,2,4-Trimethylbenzene	ND	U	0.974	4.55	ug/Kg	1	07/20/2012 16:49
1,2-Dibromo-3-chloropropane	ND	U	5.29	27.3	ug/Kg	1	07/20/2012 16:49
1,2-Dibromoethane	ND	U	0.690	4.55	ug/Kg	1	07/20/2012 16:49
1,2-Dichlorobenzene	ND	U	1.17	4.55	ug/Kg	1	07/20/2012 16:49
1,2-Dichloroethane	ND	U	0.806	4.55	ug/Kg	1	07/20/2012 16:49
1,2-Dichloropropane	ND	U	0.733	4.55	ug/Kg	1	07/20/2012 16:49
1,3,5-Trimethylbenzene	ND	U	0.896	4.55	ug/Kg	1	07/20/2012 16:49
1,3-Dichlorobenzene	ND	U	1.06	4.55	ug/Kg	1	07/20/2012 16:49
1,3-Dichloropropane	ND	U	0.734	4.55	ug/Kg	1	07/20/2012 16:49
1,4-Dichlorobenzene	ND	U	1.00	4.55	ug/Kg	1	07/20/2012 16:49
2,2-Dichloropropane	ND	U	0.759	4.55	ug/Kg	1	07/20/2012 16:49
2-Butanone	ND	U	1.42	22.8	ug/Kg	1	07/20/2012 16:49
2-Chlorotoluene	ND	U	1.02	4.55	ug/Kg	1	07/20/2012 16:49
2-Hexanone	ND	U	1.78	11.4	ug/Kg	1	07/20/2012 16:49
4-Chlorotoluene	ND	U	1.01	4.55	ug/Kg	1	07/20/2012 16:49
4-Isopropyltoluene	ND	U	0.947	4.55	ug/Kg	1	07/20/2012 16:49
4-Methyl-2-pentanone	ND	U	2.92	11.4	ug/Kg	1	07/20/2012 16:49
Acetone	ND	U	1.13	45.5	ug/Kg	1	07/20/2012 16:49
Benzene	ND	U	0.813	4.55	ug/Kg	1	07/20/2012 16:49
Bromobenzene	ND	U	0.898	4.55	ug/Kg	1	07/20/2012 16:49
Bromochloromethane	ND	U	0.795	4.55	ug/Kg	1	07/20/2012 16:49
Bromodichloromethane	ND	U	0.740	4.55	ug/Kg	1	07/20/2012 16:49
Bromoform	ND	U	0.609	4.55	ug/Kg	1	07/20/2012 16:49
Bromomethane	ND	U	1.60	4.55	ug/Kg	1	07/20/2012 16:49
n-Butylbenzene	ND	U	0.983	4.55	ug/Kg	1	07/20/2012 16:49
Carbon disulfide	ND	U	0.786	4.55	ug/Kg	1	07/20/2012 16:49
Carbon tetrachloride	ND	U	0.792	4.55	ug/Kg	1	07/20/2012 16:49
Chlorobenzene	ND	U	0.705	4.55	ug/Kg	1	07/20/2012 16:49
Chloroethane	ND	U	0.419	4.55	ug/Kg	1	07/20/2012 16:49
Chloroform	ND	U	0.739	4.55	ug/Kg	1	07/20/2012 16:49
Chloromethane	ND	U	0.660	4.55	ug/Kg	1	07/20/2012 16:49
Dibromochloromethane	ND	U	0.771	4.55	ug/Kg	1	07/20/2012 16:49
Dibromomethane	ND	U	0.739	4.55	ug/Kg	1	07/20/2012 16:49
Dichlorodifluoromethane	ND	U	0.662	4.55	ug/Kg	1	07/20/2012 16:49

Print Date: 07/26/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 105 DPT-01 (7-8ft)

Client Sample ID: **105 DPT-01 (7-8ft)**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202266001-A
Lab Project ID: 31202266

Collection Date: 07/16/2012 19:15
Received Date: 07/18/2012 16:30
Matrix: Soil-Solid as dry weight
Solids (%): 95.90

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	U	0.784	4.55	ug/Kg	1	07/20/2012 16:49
trans-1,3-Dichloropropene	ND	U	0.816	4.55	ug/Kg	1	07/20/2012 16:49
Diisopropyl Ether	ND	U	0.817	4.55	ug/Kg	1	07/20/2012 16:49
Ethyl Benzene	ND	U	0.753	4.55	ug/Kg	1	07/20/2012 16:49
Hexachlorobutadiene	ND	U	1.25	4.55	ug/Kg	1	07/20/2012 16:49
Isopropylbenzene (Cumene)	ND	U	0.877	4.55	ug/Kg	1	07/20/2012 16:49
Methyl iodide	ND	U	0.770	4.55	ug/Kg	1	07/20/2012 16:49
Methylene chloride	1.46	J	0.635	18.2	ug/Kg	1	07/20/2012 16:49
Naphthalene	ND	U	1.10	4.55	ug/Kg	1	07/20/2012 16:49
Styrene	ND	U	0.898	4.55	ug/Kg	1	07/20/2012 16:49
Tetrachloroethene	2.53	J	0.685	4.55	ug/Kg	1	07/20/2012 16:49
Toluene	ND	U	0.737	4.55	ug/Kg	1	07/20/2012 16:49
Trichloroethene	ND	U	0.762	4.55	ug/Kg	1	07/20/2012 16:49
Trichlorofluoromethane	ND	U	0.686	4.55	ug/Kg	1	07/20/2012 16:49
Vinyl chloride	ND	U	0.670	4.55	ug/Kg	1	07/20/2012 16:49
Xylene (total)	ND	U	1.61	9.10	ug/Kg	1	07/20/2012 16:49
cis-1,2-Dichloroethene	ND	U	0.705	4.55	ug/Kg	1	07/20/2012 16:49
m,p-Xylene	ND	U	1.61	9.10	ug/Kg	1	07/20/2012 16:49
n-Propylbenzene	ND	U	0.888	4.55	ug/Kg	1	07/20/2012 16:49
o-Xylene	ND	U	0.919	4.55	ug/Kg	1	07/20/2012 16:49
sec-Butylbenzene	ND	U	0.947	4.55	ug/Kg	1	07/20/2012 16:49
tert-Butyl methyl ether (MTBE)	ND	U	0.776	4.55	ug/Kg	1	07/20/2012 16:49
tert-Butylbenzene	ND	U	0.825	4.55	ug/Kg	1	07/20/2012 16:49
trans-1,2-Dichloroethene	ND	U	0.784	4.55	ug/Kg	1	07/20/2012 16:49
trans-1,4-Dichloro-2-butene	ND	U	4.92	22.8	ug/Kg	1	07/20/2012 16:49
Surrogates							
1,2-Dichloroethane-d4	120			55.0-173	%	1	07/20/2012 16:49
4-Bromofluorobenzene	103			23.0-141	%	1	07/20/2012 16:49
Toluene d8	103			57.0-134	%	1	07/20/2012 16:49

Batch Information

Analytical Batch: **VMS2395**
Analytical Method: **SW-846 8260B**
Instrument: **MSD9**
Analyst: **DVO**
Analytical Date/Time: **07/20/2012 16:49**

Prep Batch: **VXX3672**
Prep Method: **SW-846 5035 SL**
Prep Date/Time: **07/19/2012 13:36**
Prep Initial Wt./Vol.: **5.73 g**
Prep Extract Vol: **5 mL**

Print Date: 07/26/2012

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SGS ANALYTICAL PERSPECTIVES

Results of 105 DPT-01 (7-8ft)

Client Sample ID: **105 DPT-01 (7-8ft)**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202266001-E
Lab Project ID: 31202266

Collection Date: 07/16/2012 19:15
Received Date: 07/18/2012 16:30
Matrix: Soil-Solid as dry weight
Solids (%): 95.90

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,2,4-Trichlorobenzene	ND	U	28.5	323	ug/Kg	1	07/20/2012 16:33
1,2-Dichlorobenzene	ND	U	16.1	323	ug/Kg	1	07/20/2012 16:33
1,3-Dichlorobenzene	ND	U	21.8	323	ug/Kg	1	07/20/2012 16:33
1,4-Dichlorobenzene	ND	U	22.8	323	ug/Kg	1	07/20/2012 16:33
2,4,5-Trichlorophenol	ND	U	21.6	323	ug/Kg	1	07/20/2012 16:33
2,4,6-Trichlorophenol	ND	U	21.9	323	ug/Kg	1	07/20/2012 16:33
2,4-Dichlorophenol	ND	U	18.7	323	ug/Kg	1	07/20/2012 16:33
2,4-Dinitrophenol	ND	U	29.9	645	ug/Kg	1	07/20/2012 16:33
2,4-Dinitrotoluene	ND	U	16.3	323	ug/Kg	1	07/20/2012 16:33
2,6-Dinitrotoluene	ND	U	23.1	323	ug/Kg	1	07/20/2012 16:33
2-Chloronaphthalene	ND	U	19.0	323	ug/Kg	1	07/20/2012 16:33
2-Chlorophenol	ND	U	17.1	323	ug/Kg	1	07/20/2012 16:33
2-Methylnaphthalene	ND	U	26.1	323	ug/Kg	1	07/20/2012 16:33
2-Methylphenol	ND	U	17.8	323	ug/Kg	1	07/20/2012 16:33
2-Nitroaniline	ND	U	21.2	323	ug/Kg	1	07/20/2012 16:33
2-Nitrophenol	ND	U	15.5	323	ug/Kg	1	07/20/2012 16:33
3 and/or 4-Methylphenol	ND	U	20.9	323	ug/Kg	1	07/20/2012 16:33
3,3'-Dichlorobenzidine	ND	U	15.5	323	ug/Kg	1	07/20/2012 16:33
3-Nitroaniline	ND	U	14.5	323	ug/Kg	1	07/20/2012 16:33
4,6-Dinitro-2-methylphenol	ND	U	15.2	323	ug/Kg	1	07/20/2012 16:33
4-Chloro-3-methylphenol	ND	U	16.1	323	ug/Kg	1	07/20/2012 16:33
4-Chloroaniline	ND	U	25.8	323	ug/Kg	1	07/20/2012 16:33
4-Chlorophenyl phenyl ether	ND	U	34.4	323	ug/Kg	1	07/20/2012 16:33
Acenaphthene	ND	U	14.6	323	ug/Kg	1	07/20/2012 16:33
Acenaphthylene	ND	U	13.6	323	ug/Kg	1	07/20/2012 16:33
Anthracene	ND	U	14.3	323	ug/Kg	1	07/20/2012 16:33
Benzo(a)anthracene	ND	U	17.7	323	ug/Kg	1	07/20/2012 16:33
Benzo(a)pyrene	ND	U	18.3	323	ug/Kg	1	07/20/2012 16:33
Benzo(b)fluoranthene	ND	U	18.6	323	ug/Kg	1	07/20/2012 16:33
Benzo(g,h,i)perylene	ND	U	51.4	323	ug/Kg	1	07/20/2012 16:33
Benzo(k)fluoranthene	ND	U	38.7	323	ug/Kg	1	07/20/2012 16:33
Benzoic acid	ND	U	7.16	323	ug/Kg	1	07/20/2012 16:33
Bis(2-Chloroethoxy)methane	ND	U	14.5	323	ug/Kg	1	07/20/2012 16:33
Bis(2-Chloroethyl)ether	ND	U	30.1	323	ug/Kg	1	07/20/2012 16:33
Bis(2-Chloroisopropyl)ether	ND	U	28.2	323	ug/Kg	1	07/20/2012 16:33
Bis(2-Ethylhexyl)phthalate	ND	U	15.5	323	ug/Kg	1	07/20/2012 16:33
4-Bromophenyl phenyl ether	ND	U	21.2	323	ug/Kg	1	07/20/2012 16:33
Butyl benzyl phthalate	ND	U	28.0	323	ug/Kg	1	07/20/2012 16:33
Chrysene	ND	U	37.5	323	ug/Kg	1	07/20/2012 16:33
Di-n-butyl phthalate	ND	U	15.3	323	ug/Kg	1	07/20/2012 16:33
Di-n-octyl phthalate	ND	U	17.8	323	ug/Kg	1	07/20/2012 16:33
Dibenz(a,h)anthracene	ND	U	14.5	323	ug/Kg	1	07/20/2012 16:33
Dibenzofuran	ND	U	25.3	323	ug/Kg	1	07/20/2012 16:33
Diethyl phthalate	ND	U	17.4	323	ug/Kg	1	07/20/2012 16:33

Print Date: 07/26/2012

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SGS ANALYTICAL PERSPECTIVES

Results of 105 DPT-01 (7-8ft)

Client Sample ID: **105 DPT-01 (7-8ft)**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202266001-E
Lab Project ID: 31202266

Collection Date: 07/16/2012 19:15
Received Date: 07/18/2012 16:30
Matrix: Soil-Solid as dry weight
Solids (%): 95.90

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
Dimethyl phthalate	ND	U	24.7	323	ug/Kg	1	07/20/2012 16:33
2,4-Dimethylphenol	ND	U	23.6	323	ug/Kg	1	07/20/2012 16:33
Diphenylamine	ND	U	14.5	323	ug/Kg	1	07/20/2012 16:33
Fluoranthene	ND	U	30.3	323	ug/Kg	1	07/20/2012 16:33
Fluorene	ND	U	17.1	323	ug/Kg	1	07/20/2012 16:33
Hexachlorobenzene	ND	U	30.5	323	ug/Kg	1	07/20/2012 16:33
Hexachlorobutadiene	ND	U	19.3	323	ug/Kg	1	07/20/2012 16:33
Hexachlorocyclopentadiene	ND	U	97.7	323	ug/Kg	1	07/20/2012 16:33
Hexachloroethane	ND	U	18.6	323	ug/Kg	1	07/20/2012 16:33
Indeno(1,2,3-cd)pyrene	ND	U	25.2	323	ug/Kg	1	07/20/2012 16:33
Isophorone	ND	U	14.6	323	ug/Kg	1	07/20/2012 16:33
Naphthalene	ND	U	27.8	323	ug/Kg	1	07/20/2012 16:33
4-Nitroaniline	ND	U	18.6	323	ug/Kg	1	07/20/2012 16:33
Nitrobenzene	ND	U	18.6	323	ug/Kg	1	07/20/2012 16:33
4-Nitrophenol	ND	U	31.8	323	ug/Kg	1	07/20/2012 16:33
Pentachlorophenol	ND	U	25.8	323	ug/Kg	1	07/20/2012 16:33
Phenanthrene	ND	U	21.2	323	ug/Kg	1	07/20/2012 16:33
Phenol	ND	U	30.1	323	ug/Kg	1	07/20/2012 16:33
Pyrene	ND	U	13.6	323	ug/Kg	1	07/20/2012 16:33
n-Nitrosodi-n-propylamine	ND	U	92.4	323	ug/Kg	1	07/20/2012 16:33
Surrogates							
2,4,6-Tribromophenol	100			41.0-129	%	1	07/20/2012 16:33
2-Fluorobiphenyl	95.0			48.0-123	%	1	07/20/2012 16:33
2-Fluorophenol	81.0			42.0-123	%	1	07/20/2012 16:33
Nitrobenzene-d5	90.0			46.0-117	%	1	07/20/2012 16:33
Phenol-d6	94.0			48.0-125	%	1	07/20/2012 16:33
Terphenyl-d14	100			44.0-140	%	1	07/20/2012 16:33

Batch Information

Analytical Batch: **XMS1606**
Analytical Method: **SW-846 8270D**
Instrument: **MSD10**
Analyst: **CMP**
Analytical Date/Time: **07/20/2012 16:33**

Prep Batch: **XXX2635**
Prep Method: **SW-846 3541**
Prep Date/Time: **07/19/2012 10:33**
Prep Initial Wt./Vol.: **32.37 g**
Prep Extract Vol: **10 mL**

Print Date: 07/26/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 105 DPT-02 (5-6ft)

Client Sample ID: **105 DPT-02 (5-6ft)**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202266002-C
Lab Project ID: 31202266

Collection Date: 07/16/2012 19:25
Received Date: 07/18/2012 16:30
Matrix: Soil-Solid as dry weight
Solids (%): 88.40

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	U	4.66	44.8	ug/Kg	50	07/25/2012 18:17
1,1,1-Trichloroethane	ND	U	5.51	44.8	ug/Kg	50	07/25/2012 18:17
1,1,2,2-Tetrachloroethane	ND	U	6.99	44.8	ug/Kg	50	07/25/2012 18:17
1,1,2-Trichloroethane	ND	U	5.64	44.8	ug/Kg	50	07/25/2012 18:17
1,1-Dichloroethane	ND	U	7.39	44.8	ug/Kg	50	07/25/2012 18:17
1,1-Dichloroethene	ND	U	9.50	44.8	ug/Kg	50	07/25/2012 18:17
1,1-Dichloropropene	ND	U	3.87	44.8	ug/Kg	50	07/25/2012 18:17
1,2,3-Trichlorobenzene	ND	U	4.93	44.8	ug/Kg	50	07/25/2012 18:17
1,2,3-Trichloropropane	ND	U	9.50	44.8	ug/Kg	50	07/25/2012 18:17
1,2,4-Trichlorobenzene	ND	U	4.09	44.8	ug/Kg	50	07/25/2012 18:17
1,2,4-Trimethylbenzene	ND	U	4.31	44.8	ug/Kg	50	07/25/2012 18:17
1,2-Dibromo-3-chloropropane	ND	U	33.5	224	ug/Kg	50	07/25/2012 18:17
1,2-Dibromoethane	ND	U	5.38	44.8	ug/Kg	50	07/25/2012 18:17
1,2-Dichlorobenzene	ND	U	6.14	44.8	ug/Kg	50	07/25/2012 18:17
1,2-Dichloroethane	ND	U	7.48	44.8	ug/Kg	50	07/25/2012 18:17
1,2-Dichloropropane	ND	U	7.30	44.8	ug/Kg	50	07/25/2012 18:17
1,3,5-Trimethylbenzene	ND	U	5.06	44.8	ug/Kg	50	07/25/2012 18:17
1,3-Dichlorobenzene	ND	U	4.61	44.8	ug/Kg	50	07/25/2012 18:17
1,3-Dichloropropane	ND	U	5.82	44.8	ug/Kg	50	07/25/2012 18:17
1,4-Dichlorobenzene	ND	U	5.82	44.8	ug/Kg	50	07/25/2012 18:17
2,2-Dichloropropane	ND	U	17.6	44.8	ug/Kg	50	07/25/2012 18:17
2-Butanone	ND	U	32.4	1120	ug/Kg	50	07/25/2012 18:17
2-Chlorotoluene	ND	U	5.06	44.8	ug/Kg	50	07/25/2012 18:17
2-Hexanone	ND	U	32.6	224	ug/Kg	50	07/25/2012 18:17
4-Chlorotoluene	ND	U	5.60	44.8	ug/Kg	50	07/25/2012 18:17
4-Isopropyltoluene	ND	U	3.44	44.8	ug/Kg	50	07/25/2012 18:17
4-Methyl-2-pentanone	ND	U	25.0	224	ug/Kg	50	07/25/2012 18:17
Acetone	ND	U	38.7	1120	ug/Kg	50	07/25/2012 18:17
Benzene	ND	U	5.06	44.8	ug/Kg	50	07/25/2012 18:17
Bromobenzene	ND	U	4.93	44.8	ug/Kg	50	07/25/2012 18:17
Bromochloromethane	ND	U	9.45	44.8	ug/Kg	50	07/25/2012 18:17
Bromodichloromethane	ND	U	4.93	44.8	ug/Kg	50	07/25/2012 18:17
Bromoform	ND	U	4.36	44.8	ug/Kg	50	07/25/2012 18:17
Bromomethane	ND	U	10.6	44.8	ug/Kg	50	07/25/2012 18:17
n-Butylbenzene	ND	U	3.44	44.8	ug/Kg	50	07/25/2012 18:17
Carbon disulfide	ND	U	4.75	44.8	ug/Kg	50	07/25/2012 18:17
Carbon tetrachloride	ND	U	4.52	44.8	ug/Kg	50	07/25/2012 18:17
Chlorobenzene	ND	U	5.20	44.8	ug/Kg	50	07/25/2012 18:17
Chloroethane	ND	U	13.9	44.8	ug/Kg	50	07/25/2012 18:17
Chloroform	ND	U	6.23	44.8	ug/Kg	50	07/25/2012 18:17
Chloromethane	ND	U	20.1	44.8	ug/Kg	50	07/25/2012 18:17
Dibromochloromethane	ND	U	6.00	44.8	ug/Kg	50	07/25/2012 18:17
Dibromomethane	ND	U	7.53	44.8	ug/Kg	50	07/25/2012 18:17
Dichlorodifluoromethane	ND	U	7.66	224	ug/Kg	50	07/25/2012 18:17

Print Date: 07/26/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 105 DPT-02 (5-6ft)

Client Sample ID: **105 DPT-02 (5-6ft)**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202266002-C
Lab Project ID: 31202266

Collection Date: 07/16/2012 19:25
Received Date: 07/18/2012 16:30
Matrix: Soil-Solid as dry weight
Solids (%): 88.40

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	U	3.44	44.8	ug/Kg	50	07/25/2012 18:17
trans-1,3-Dichloropropene	ND	U	3.86	44.8	ug/Kg	50	07/25/2012 18:17
Diisopropyl Ether	ND	U	13.2	44.8	ug/Kg	50	07/25/2012 18:17
Ethyl Benzene	ND	U	3.93	44.8	ug/Kg	50	07/25/2012 18:17
Hexachlorobutadiene	ND	U	3.55	44.8	ug/Kg	50	07/25/2012 18:17
Isopropylbenzene (Cumene)	ND	U	3.89	44.8	ug/Kg	50	07/25/2012 18:17
Methyl iodide	ND	U	5.15	44.8	ug/Kg	50	07/25/2012 18:17
Methylene chloride	ND	U	6.81	224	ug/Kg	50	07/25/2012 18:17
Naphthalene	ND	U	3.83	44.8	ug/Kg	50	07/25/2012 18:17
Styrene	ND	U	4.57	44.8	ug/Kg	50	07/25/2012 18:17
Tetrachloroethene	**290**		6.94	44.8	ug/Kg	50	07/25/2012 18:17
Toluene	ND	U	5.96	44.8	ug/Kg	50	07/25/2012 18:17
Trichloroethene	ND	U	5.60	44.8	ug/Kg	50	07/25/2012 18:17
Trichlorofluoromethane	ND	U	6.14	44.8	ug/Kg	50	07/25/2012 18:17
Vinyl chloride	ND	U	5.55	44.8	ug/Kg	50	07/25/2012 18:17
Xylene (total)	ND	U	8.15	89.6	ug/Kg	50	07/25/2012 18:17
cis-1,2-Dichloroethene	**18.4**	J	6.09	44.8	ug/Kg	50	07/25/2012 18:17
m,p-Xylene	ND	U	8.15	89.6	ug/Kg	50	07/25/2012 18:17
n-Propylbenzene	ND	U	5.06	44.8	ug/Kg	50	07/25/2012 18:17
o-Xylene	ND	U	3.92	44.8	ug/Kg	50	07/25/2012 18:17
sec-Butylbenzene	ND	U	5.02	44.8	ug/Kg	50	07/25/2012 18:17
tert-Butyl methyl ether (MTBE)	ND	U	6.45	44.8	ug/Kg	50	07/25/2012 18:17
tert-Butylbenzene	ND	U	3.83	44.8	ug/Kg	50	07/25/2012 18:17
trans-1,2-Dichloroethene	ND	U	9.99	44.8	ug/Kg	50	07/25/2012 18:17
trans-1,4-Dichloro-2-butene	ND	U	18.5	224	ug/Kg	50	07/25/2012 18:17
Surrogates							
1,2-Dichloroethane-d4	107			55.0-173	%	50	07/25/2012 18:17
4-Bromofluorobenzene	100			23.0-141	%	50	07/25/2012 18:17
Toluene d8	101			57.0-134	%	50	07/25/2012 18:17

Batch Information

Analytical Batch: **VMS2410**
Analytical Method: **SW-846 8260B**
Instrument: **MSD3**
Analyst: **BWS**
Analytical Date/Time: **07/25/2012 18:17**

Prep Batch: **VXX3704**
Prep Method: **SW-846 5035 SM**
Prep Date/Time: **07/19/2012 13:39**
Prep Initial Wt./Vol.: **6.31 g**
Prep Extract Vol: **5 mL**

Print Date: 07/26/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 105 DPT-02 (5-6ft)

Client Sample ID: **105 DPT-02 (5-6ft)**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202266002-E
Lab Project ID: 31202266

Collection Date: 07/16/2012 19:25
Received Date: 07/18/2012 16:30
Matrix: Soil-Solid as dry weight
Solids (%): 88.40

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,2,4-Trichlorobenzene	ND	U	30.3	344	ug/Kg	1	07/20/2012 16:56
1,2-Dichlorobenzene	ND	U	17.1	344	ug/Kg	1	07/20/2012 16:56
1,3-Dichlorobenzene	ND	U	23.2	344	ug/Kg	1	07/20/2012 16:56
1,4-Dichlorobenzene	ND	U	24.3	344	ug/Kg	1	07/20/2012 16:56
2,4,5-Trichlorophenol	ND	U	22.9	344	ug/Kg	1	07/20/2012 16:56
2,4,6-Trichlorophenol	ND	U	23.3	344	ug/Kg	1	07/20/2012 16:56
2,4-Dichlorophenol	ND	U	19.9	344	ug/Kg	1	07/20/2012 16:56
2,4-Dinitrophenol	ND	U	31.8	686	ug/Kg	1	07/20/2012 16:56
2,4-Dinitrotoluene	ND	U	17.3	344	ug/Kg	1	07/20/2012 16:56
2,6-Dinitrotoluene	ND	U	24.6	344	ug/Kg	1	07/20/2012 16:56
2-Chloronaphthalene	ND	U	20.2	344	ug/Kg	1	07/20/2012 16:56
2-Chlorophenol	ND	U	18.2	344	ug/Kg	1	07/20/2012 16:56
2-Methylnaphthalene	ND	U	27.8	344	ug/Kg	1	07/20/2012 16:56
2-Methylphenol	ND	U	19.0	344	ug/Kg	1	07/20/2012 16:56
2-Nitroaniline	ND	U	22.6	344	ug/Kg	1	07/20/2012 16:56
2-Nitrophenol	ND	U	16.5	344	ug/Kg	1	07/20/2012 16:56
3 and/or 4-Methylphenol	ND	U	22.3	344	ug/Kg	1	07/20/2012 16:56
3,3'-Dichlorobenzidine	ND	U	16.5	344	ug/Kg	1	07/20/2012 16:56
3-Nitroaniline	ND	U	15.5	344	ug/Kg	1	07/20/2012 16:56
4,6-Dinitro-2-methylphenol	ND	U	16.1	344	ug/Kg	1	07/20/2012 16:56
4-Chloro-3-methylphenol	ND	U	17.1	344	ug/Kg	1	07/20/2012 16:56
4-Chloroaniline	ND	U	27.4	344	ug/Kg	1	07/20/2012 16:56
4-Chlorophenyl phenyl ether	ND	U	36.7	344	ug/Kg	1	07/20/2012 16:56
Acenaphthene	ND	U	15.6	344	ug/Kg	1	07/20/2012 16:56
Acenaphthylene	ND	U	14.5	344	ug/Kg	1	07/20/2012 16:56
Anthracene	ND	U	15.3	344	ug/Kg	1	07/20/2012 16:56
Benzo(a)anthracene	ND	U	18.9	344	ug/Kg	1	07/20/2012 16:56
Benzo(a)pyrene	ND	U	19.4	344	ug/Kg	1	07/20/2012 16:56
Benzo(b)fluoranthene	ND	U	19.8	344	ug/Kg	1	07/20/2012 16:56
Benzo(g,h,i)perylene	ND	U	54.7	344	ug/Kg	1	07/20/2012 16:56
Benzo(k)fluoranthene	ND	U	41.2	344	ug/Kg	1	07/20/2012 16:56
Benzoic acid	ND	U	7.62	344	ug/Kg	1	07/20/2012 16:56
Bis(2-Chloroethoxy)methane	ND	U	15.5	344	ug/Kg	1	07/20/2012 16:56
Bis(2-Chloroethyl)ether	ND	U	32.1	344	ug/Kg	1	07/20/2012 16:56
Bis(2-Chloroisopropyl)ether	ND	U	30.0	344	ug/Kg	1	07/20/2012 16:56
Bis(2-Ethylhexyl)phthalate	ND	U	16.5	344	ug/Kg	1	07/20/2012 16:56
4-Bromophenyl phenyl ether	ND	U	22.6	344	ug/Kg	1	07/20/2012 16:56
Butyl benzyl phthalate	ND	U	29.9	344	ug/Kg	1	07/20/2012 16:56
Chrysene	ND	U	40.0	344	ug/Kg	1	07/20/2012 16:56
Di-n-butyl phthalate	ND	U	16.2	344	ug/Kg	1	07/20/2012 16:56
Di-n-octyl phthalate	ND	U	19.0	344	ug/Kg	1	07/20/2012 16:56
Dibenz(a,h)anthracene	ND	U	15.5	344	ug/Kg	1	07/20/2012 16:56
Dibenzofuran	ND	U	26.9	344	ug/Kg	1	07/20/2012 16:56
Diethyl phthalate	ND	U	18.6	344	ug/Kg	1	07/20/2012 16:56

Print Date: 07/26/2012

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SGS ANALYTICAL PERSPECTIVES

Results of 105 DPT-02 (5-6ft)

Client Sample ID: **105 DPT-02 (5-6ft)**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202266002-E
Lab Project ID: 31202266

Collection Date: 07/16/2012 19:25
Received Date: 07/18/2012 16:30
Matrix: Soil-Solid as dry weight
Solids (%): 88.40

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
Dimethyl phthalate	ND	U	26.3	344	ug/Kg	1	07/20/2012 16:56
2,4-Dimethylphenol	ND	U	25.1	344	ug/Kg	1	07/20/2012 16:56
Diphenylamine	ND	U	15.5	344	ug/Kg	1	07/20/2012 16:56
Fluoranthene	ND	U	32.3	344	ug/Kg	1	07/20/2012 16:56
Fluorene	ND	U	18.2	344	ug/Kg	1	07/20/2012 16:56
Hexachlorobenzene	ND	U	32.5	344	ug/Kg	1	07/20/2012 16:56
Hexachlorobutadiene	ND	U	20.5	344	ug/Kg	1	07/20/2012 16:56
Hexachlorocyclopentadiene	ND	U	104	344	ug/Kg	1	07/20/2012 16:56
Hexachloroethane	ND	U	19.8	344	ug/Kg	1	07/20/2012 16:56
Indeno(1,2,3-cd)pyrene	ND	U	26.8	344	ug/Kg	1	07/20/2012 16:56
Isophorone	ND	U	15.6	344	ug/Kg	1	07/20/2012 16:56
Naphthalene	ND	U	29.6	344	ug/Kg	1	07/20/2012 16:56
4-Nitroaniline	ND	U	19.8	344	ug/Kg	1	07/20/2012 16:56
Nitrobenzene	ND	U	19.8	344	ug/Kg	1	07/20/2012 16:56
4-Nitrophenol	ND	U	33.8	344	ug/Kg	1	07/20/2012 16:56
Pentachlorophenol	ND	U	27.4	344	ug/Kg	1	07/20/2012 16:56
Phenanthrene	ND	U	22.6	344	ug/Kg	1	07/20/2012 16:56
Phenol	ND	U	32.1	344	ug/Kg	1	07/20/2012 16:56
Pyrene	ND	U	14.5	344	ug/Kg	1	07/20/2012 16:56
n-Nitrosodi-n-propylamine	ND	U	98.4	344	ug/Kg	1	07/20/2012 16:56
Surrogates							
2,4,6-Tribromophenol	94.0			41.0-129	%	1	07/20/2012 16:56
2-Fluorobiphenyl	85.0			48.0-123	%	1	07/20/2012 16:56
2-Fluorophenol	75.0			42.0-123	%	1	07/20/2012 16:56
Nitrobenzene-d5	82.0			46.0-117	%	1	07/20/2012 16:56
Phenol-d6	90.0			48.0-125	%	1	07/20/2012 16:56
Terphenyl-d14	97.0			44.0-140	%	1	07/20/2012 16:56

Batch Information

Analytical Batch: **XMS1606**
Analytical Method: **SW-846 8270D**
Instrument: **MSD10**
Analyst: **CMP**
Analytical Date/Time: **07/20/2012 16:56**

Prep Batch: **XXX2635**
Prep Method: **SW-846 3541**
Prep Date/Time: **07/19/2012 10:33**
Prep Initial Wt./Vol.: **32.96 g**
Prep Extract Vol: **10 mL**

Print Date: 07/26/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 105 DPT-03 (5-6ft)

Client Sample ID: **105 DPT-03 (5-6ft)**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202266003-D
Lab Project ID: 31202266

Collection Date: 07/16/2012 19:40
Received Date: 07/18/2012 16:30
Matrix: Soil-Solid as dry weight
Solids (%): 88.50

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	U	4.71	45.3	ug/Kg	50	07/23/2012 18:16
1,1,1-Trichloroethane	ND	U	5.57	45.3	ug/Kg	50	07/23/2012 18:16
1,1,2,2-Tetrachloroethane	ND	U	7.06	45.3	ug/Kg	50	07/23/2012 18:16
1,1,2-Trichloroethane	ND	U	5.71	45.3	ug/Kg	50	07/23/2012 18:16
1,1-Dichloroethane	ND	U	7.47	45.3	ug/Kg	50	07/23/2012 18:16
1,1-Dichloroethene	ND	U	9.60	45.3	ug/Kg	50	07/23/2012 18:16
1,1-Dichloropropene	ND	U	3.91	45.3	ug/Kg	50	07/23/2012 18:16
1,2,3-Trichlorobenzene	ND	U	4.98	45.3	ug/Kg	50	07/23/2012 18:16
1,2,3-Trichloropropane	ND	U	9.60	45.3	ug/Kg	50	07/23/2012 18:16
1,2,4-Trichlorobenzene	ND	U	4.13	45.3	ug/Kg	50	07/23/2012 18:16
1,2,4-Trimethylbenzene	ND	U	4.35	45.3	ug/Kg	50	07/23/2012 18:16
1,2-Dibromo-3-chloropropane	ND	U	33.9	226	ug/Kg	50	07/23/2012 18:16
1,2-Dibromoethane	ND	U	5.43	45.3	ug/Kg	50	07/23/2012 18:16
1,2-Dichlorobenzene	ND	U	6.20	45.3	ug/Kg	50	07/23/2012 18:16
1,2-Dichloroethane	ND	U	7.56	45.3	ug/Kg	50	07/23/2012 18:16
1,2-Dichloropropane	ND	U	7.38	45.3	ug/Kg	50	07/23/2012 18:16
1,3,5-Trimethylbenzene	ND	U	5.12	45.3	ug/Kg	50	07/23/2012 18:16
1,3-Dichlorobenzene	ND	U	4.66	45.3	ug/Kg	50	07/23/2012 18:16
1,3-Dichloropropane	ND	U	5.89	45.3	ug/Kg	50	07/23/2012 18:16
1,4-Dichlorobenzene	ND	U	5.89	45.3	ug/Kg	50	07/23/2012 18:16
2,2-Dichloropropane	ND	U	17.8	45.3	ug/Kg	50	07/23/2012 18:16
2-Butanone	ND	U	32.7	1130	ug/Kg	50	07/23/2012 18:16
2-Chlorotoluene	ND	U	5.12	45.3	ug/Kg	50	07/23/2012 18:16
2-Hexanone	ND	U	33.0	226	ug/Kg	50	07/23/2012 18:16
4-Chlorotoluene	ND	U	5.66	45.3	ug/Kg	50	07/23/2012 18:16
4-Isopropyltoluene	ND	U	3.48	45.3	ug/Kg	50	07/23/2012 18:16
4-Methyl-2-pentanone	ND	U	25.3	226	ug/Kg	50	07/23/2012 18:16
Acetone	ND	U	39.1	1130	ug/Kg	50	07/23/2012 18:16
Benzene	ND	U	5.12	45.3	ug/Kg	50	07/23/2012 18:16
Bromobenzene	ND	U	4.98	45.3	ug/Kg	50	07/23/2012 18:16
Bromochloromethane	ND	U	9.55	45.3	ug/Kg	50	07/23/2012 18:16
Bromodichloromethane	ND	U	4.98	45.3	ug/Kg	50	07/23/2012 18:16
Bromoform	ND	U	4.41	45.3	ug/Kg	50	07/23/2012 18:16
Bromomethane	ND	U	10.7	45.3	ug/Kg	50	07/23/2012 18:16
n-Butylbenzene	ND	U	3.48	45.3	ug/Kg	50	07/23/2012 18:16
Carbon disulfide	ND	U	4.80	45.3	ug/Kg	50	07/23/2012 18:16
Carbon tetrachloride	ND	U	4.57	45.3	ug/Kg	50	07/23/2012 18:16
Chlorobenzene	ND	U	5.25	45.3	ug/Kg	50	07/23/2012 18:16
Chloroethane	ND	U	14.1	45.3	ug/Kg	50	07/23/2012 18:16
Chloroform	ND	U	6.29	45.3	ug/Kg	50	07/23/2012 18:16
Chloromethane	ND	U	20.3	45.3	ug/Kg	50	07/23/2012 18:16
Dibromochloromethane	ND	U	6.07	45.3	ug/Kg	50	07/23/2012 18:16
Dibromomethane	ND	U	7.61	45.3	ug/Kg	50	07/23/2012 18:16
Dichlorodifluoromethane	ND	U	7.74	226	ug/Kg	50	07/23/2012 18:16

Print Date: 07/26/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 105 DPT-03 (5-6ft)

Client Sample ID: **105 DPT-03 (5-6ft)**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202266003-D
Lab Project ID: 31202266

Collection Date: 07/16/2012 19:40
Received Date: 07/18/2012 16:30
Matrix: Soil-Solid as dry weight
Solids (%): 88.50

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	U	3.47	45.3	ug/Kg	50	07/23/2012 18:16
trans-1,3-Dichloropropene	ND	U	3.90	45.3	ug/Kg	50	07/23/2012 18:16
Diisopropyl Ether	ND	U	13.3	45.3	ug/Kg	50	07/23/2012 18:16
Ethyl Benzene	ND	U	3.97	45.3	ug/Kg	50	07/23/2012 18:16
Hexachlorobutadiene	ND	U	3.59	45.3	ug/Kg	50	07/23/2012 18:16
Isopropylbenzene (Cumene)	ND	U	3.93	45.3	ug/Kg	50	07/23/2012 18:16
Methyl iodide	ND	U	5.21	45.3	ug/Kg	50	07/23/2012 18:16
Methylene chloride	ND	U	6.88	226	ug/Kg	50	07/23/2012 18:16
Naphthalene	ND	U	3.87	45.3	ug/Kg	50	07/23/2012 18:16
Styrene	ND	U	4.62	45.3	ug/Kg	50	07/23/2012 18:16
Tetrachloroethene	359		7.02	45.3	ug/Kg	50	07/23/2012 18:16
Toluene	ND	U	6.02	45.3	ug/Kg	50	07/23/2012 18:16
Trichloroethene	14.0	J	5.66	45.3	ug/Kg	50	07/23/2012 18:16
Trichlorofluoromethane	ND	U	6.20	45.3	ug/Kg	50	07/23/2012 18:16
Vinyl chloride	ND	U	5.61	45.3	ug/Kg	50	07/23/2012 18:16
Xylene (total)	ND	U	8.24	90.6	ug/Kg	50	07/23/2012 18:16
cis-1,2-Dichloroethene	12.2	J	6.16	45.3	ug/Kg	50	07/23/2012 18:16
m,p-Xylene	ND	U	8.24	90.6	ug/Kg	50	07/23/2012 18:16
n-Propylbenzene	ND	U	5.12	45.3	ug/Kg	50	07/23/2012 18:16
o-Xylene	ND	U	3.96	45.3	ug/Kg	50	07/23/2012 18:16
sec-Butylbenzene	ND	U	5.07	45.3	ug/Kg	50	07/23/2012 18:16
tert-Butyl methyl ether (MTBE)	ND	U	6.52	45.3	ug/Kg	50	07/23/2012 18:16
tert-Butylbenzene	ND	U	3.87	45.3	ug/Kg	50	07/23/2012 18:16
trans-1,2-Dichloroethene	ND	U	10.1	45.3	ug/Kg	50	07/23/2012 18:16
trans-1,4-Dichloro-2-butene	ND	U	18.7	226	ug/Kg	50	07/23/2012 18:16
Surrogates							
1,2-Dichloroethane-d4	95.0			55.0-173	%	50	07/23/2012 18:16
4-Bromofluorobenzene	91.0			23.0-141	%	50	07/23/2012 18:16
Toluene d8	95.0			57.0-134	%	50	07/23/2012 18:16

Batch Information

Analytical Batch: **VMS2399**
Analytical Method: **SW-846 8260B**
Instrument: **MSD4**
Analyst: **DVO**
Analytical Date/Time: **07/23/2012 18:16**

Prep Batch: **VXX3689**
Prep Method: **SW-846 5035 SM**
Prep Date/Time: **07/19/2012 13:42**
Prep Initial Wt./Vol.: **6.24 g**
Prep Extract Vol: **5 mL**

Print Date: 07/26/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 105 DPT-03 (5-6ft)

Client Sample ID: **105 DPT-03 (5-6ft)**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202266003-E
Lab Project ID: 31202266

Collection Date: 07/16/2012 19:40
Received Date: 07/18/2012 16:30
Matrix: Soil-Solid as dry weight
Solids (%): 88.50

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,2,4-Trichlorobenzene	ND	U	28.3	321	ug/Kg	1	07/20/2012 17:19
1,2-Dichlorobenzene	ND	U	16.0	321	ug/Kg	1	07/20/2012 17:19
1,3-Dichlorobenzene	ND	U	21.7	321	ug/Kg	1	07/20/2012 17:19
1,4-Dichlorobenzene	ND	U	22.7	321	ug/Kg	1	07/20/2012 17:19
2,4,5-Trichlorophenol	ND	U	21.5	321	ug/Kg	1	07/20/2012 17:19
2,4,6-Trichlorophenol	ND	U	21.8	321	ug/Kg	1	07/20/2012 17:19
2,4-Dichlorophenol	ND	U	18.6	321	ug/Kg	1	07/20/2012 17:19
2,4-Dinitrophenol	ND	U	29.8	642	ug/Kg	1	07/20/2012 17:19
2,4-Dinitrotoluene	ND	U	16.2	321	ug/Kg	1	07/20/2012 17:19
2,6-Dinitrotoluene	ND	U	23.0	321	ug/Kg	1	07/20/2012 17:19
2-Chloronaphthalene	ND	U	18.9	321	ug/Kg	1	07/20/2012 17:19
2-Chlorophenol	ND	U	17.0	321	ug/Kg	1	07/20/2012 17:19
2-Methylnaphthalene	ND	U	26.0	321	ug/Kg	1	07/20/2012 17:19
2-Methylphenol	ND	U	17.8	321	ug/Kg	1	07/20/2012 17:19
2-Nitroaniline	ND	U	21.1	321	ug/Kg	1	07/20/2012 17:19
2-Nitrophenol	ND	U	15.4	321	ug/Kg	1	07/20/2012 17:19
3 and/or 4-Methylphenol	ND	U	20.8	321	ug/Kg	1	07/20/2012 17:19
3,3'-Dichlorobenzidine	ND	U	15.4	321	ug/Kg	1	07/20/2012 17:19
3-Nitroaniline	ND	U	14.5	321	ug/Kg	1	07/20/2012 17:19
4,6-Dinitro-2-methylphenol	ND	U	15.1	321	ug/Kg	1	07/20/2012 17:19
4-Chloro-3-methylphenol	ND	U	16.0	321	ug/Kg	1	07/20/2012 17:19
4-Chloroaniline	ND	U	25.7	321	ug/Kg	1	07/20/2012 17:19
4-Chlorophenyl phenyl ether	ND	U	34.3	321	ug/Kg	1	07/20/2012 17:19
Acenaphthene	ND	U	14.6	321	ug/Kg	1	07/20/2012 17:19
Acenaphthylene	ND	U	13.6	321	ug/Kg	1	07/20/2012 17:19
Anthracene	ND	U	14.3	321	ug/Kg	1	07/20/2012 17:19
Benzo(a)anthracene	ND	U	17.7	321	ug/Kg	1	07/20/2012 17:19
Benzo(a)pyrene	ND	U	18.2	321	ug/Kg	1	07/20/2012 17:19
Benzo(b)fluoranthene	ND	U	18.5	321	ug/Kg	1	07/20/2012 17:19
Benzo(g,h,i)perylene	ND	U	51.1	321	ug/Kg	1	07/20/2012 17:19
Benzo(k)fluoranthene	ND	U	38.5	321	ug/Kg	1	07/20/2012 17:19
Benzoic acid	ND	U	7.12	321	ug/Kg	1	07/20/2012 17:19
Bis(2-Chloroethoxy)methane	ND	U	14.5	321	ug/Kg	1	07/20/2012 17:19
Bis(2-Chloroethyl)ether	ND	U	30.0	321	ug/Kg	1	07/20/2012 17:19
Bis(2-Chloroisopropyl)ether	ND	U	28.0	321	ug/Kg	1	07/20/2012 17:19
Bis(2-Ethylhexyl)phthalate	ND	U	15.4	321	ug/Kg	1	07/20/2012 17:19
4-Bromophenyl phenyl ether	ND	U	21.1	321	ug/Kg	1	07/20/2012 17:19
Butyl benzyl phthalate	ND	U	27.9	321	ug/Kg	1	07/20/2012 17:19
Chrysene	ND	U	37.4	321	ug/Kg	1	07/20/2012 17:19
Di-n-butyl phthalate	ND	U	15.2	321	ug/Kg	1	07/20/2012 17:19
Di-n-octyl phthalate	ND	U	17.8	321	ug/Kg	1	07/20/2012 17:19
Dibenz(a,h)anthracene	ND	U	14.5	321	ug/Kg	1	07/20/2012 17:19
Dibenzofuran	ND	U	25.2	321	ug/Kg	1	07/20/2012 17:19
Diethyl phthalate	ND	U	17.3	321	ug/Kg	1	07/20/2012 17:19

Print Date: 07/26/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 105 DPT-03 (5-6ft)

Client Sample ID: **105 DPT-03 (5-6ft)**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202266003-E
Lab Project ID: 31202266

Collection Date: 07/16/2012 19:40
Received Date: 07/18/2012 16:30
Matrix: Soil-Solid as dry weight
Solids (%): 88.50

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
Dimethyl phthalate	ND	U	24.6	321	ug/Kg	1	07/20/2012 17:19
2,4-Dimethylphenol	ND	U	23.5	321	ug/Kg	1	07/20/2012 17:19
Diphenylamine	ND	U	14.5	321	ug/Kg	1	07/20/2012 17:19
Fluoranthene	ND	U	30.2	321	ug/Kg	1	07/20/2012 17:19
Fluorene	ND	U	17.0	321	ug/Kg	1	07/20/2012 17:19
Hexachlorobenzene	ND	U	30.4	321	ug/Kg	1	07/20/2012 17:19
Hexachlorobutadiene	ND	U	19.2	321	ug/Kg	1	07/20/2012 17:19
Hexachlorocyclopentadiene	ND	U	97.2	321	ug/Kg	1	07/20/2012 17:19
Hexachloroethane	ND	U	18.5	321	ug/Kg	1	07/20/2012 17:19
Indeno(1,2,3-cd)pyrene	ND	U	25.0	321	ug/Kg	1	07/20/2012 17:19
Isophorone	ND	U	14.6	321	ug/Kg	1	07/20/2012 17:19
Naphthalene	ND	U	27.7	321	ug/Kg	1	07/20/2012 17:19
4-Nitroaniline	ND	U	18.5	321	ug/Kg	1	07/20/2012 17:19
Nitrobenzene	ND	U	18.5	321	ug/Kg	1	07/20/2012 17:19
4-Nitrophenol	ND	U	31.6	321	ug/Kg	1	07/20/2012 17:19
Pentachlorophenol	ND	U	25.7	321	ug/Kg	1	07/20/2012 17:19
Phenanthrene	ND	U	21.1	321	ug/Kg	1	07/20/2012 17:19
Phenol	ND	U	30.0	321	ug/Kg	1	07/20/2012 17:19
Pyrene	ND	U	13.6	321	ug/Kg	1	07/20/2012 17:19
n-Nitrosodi-n-propylamine	ND	U	92.0	321	ug/Kg	1	07/20/2012 17:19
Surrogates							
2,4,6-Tribromophenol	97.0			41.0-129	%	1	07/20/2012 17:19
2-Fluorobiphenyl	90.0			48.0-123	%	1	07/20/2012 17:19
2-Fluorophenol	79.0			42.0-123	%	1	07/20/2012 17:19
Nitrobenzene-d5	89.0			46.0-117	%	1	07/20/2012 17:19
Phenol-d6	92.0			48.0-125	%	1	07/20/2012 17:19
Terphenyl-d14	95.0			44.0-140	%	1	07/20/2012 17:19

Batch Information

Analytical Batch: **XMS1606**
Analytical Method: **SW-846 8270D**
Instrument: **MSD10**
Analyst: **CMP**
Analytical Date/Time: **07/20/2012 17:19**

Prep Batch: **XXX2835**
Prep Method: **SW-846 3541**
Prep Date/Time: **07/19/2012 10:33**
Prep Initial Wt./Vol.: **35.23 g**
Prep Extract Vol: **10 mL**

Print Date: 07/26/2012

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SGS ANALYTICAL PERSPECTIVES

Results of 105 DPT-04 (7-8ft)

Client Sample ID: **105 DPT-04 (7-8ft)**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202266004-A
Lab Project ID: 31202266

Collection Date: 07/16/2012 20:10
Received Date: 07/18/2012 16:30
Matrix: Soil-Solid as dry weight
Solids (%): 93.20

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	U	1.03	4.86	ug/Kg	1	07/20/2012 17:43
1,1,1-Trichloroethane	ND	U	0.756	4.86	ug/Kg	1	07/20/2012 17:43
1,1,2,2-Tetrachloroethane	ND	U	1.10	4.86	ug/Kg	1	07/20/2012 17:43
1,1,2-Trichloroethane	ND	U	1.01	4.86	ug/Kg	1	07/20/2012 17:43
1,1-Dichloroethane	ND	U	0.839	4.86	ug/Kg	1	07/20/2012 17:43
1,1-Dichloroethene	ND	U	0.878	4.86	ug/Kg	1	07/20/2012 17:43
1,1-Dichloropropene	ND	U	0.896	4.86	ug/Kg	1	07/20/2012 17:43
1,2,3-Trichlorobenzene	ND	U	1.35	4.86	ug/Kg	1	07/20/2012 17:43
1,2,3-Trichloropropane	ND	U	1.08	4.86	ug/Kg	1	07/20/2012 17:43
1,2,4-Trichlorobenzene	ND	U	1.16	4.86	ug/Kg	1	07/20/2012 17:43
1,2,4-Trimethylbenzene	ND	U	1.04	4.86	ug/Kg	1	07/20/2012 17:43
1,2-Dibromo-3-chloropropane	ND	U	5.65	29.2	ug/Kg	1	07/20/2012 17:43
1,2-Dibromoethane	ND	U	0.737	4.86	ug/Kg	1	07/20/2012 17:43
1,2-Dichlorobenzene	ND	U	1.25	4.86	ug/Kg	1	07/20/2012 17:43
1,2-Dichloroethane	ND	U	0.861	4.86	ug/Kg	1	07/20/2012 17:43
1,2-Dichloropropane	ND	U	0.783	4.86	ug/Kg	1	07/20/2012 17:43
1,3,5-Trimethylbenzene	ND	U	0.957	4.86	ug/Kg	1	07/20/2012 17:43
1,3-Dichlorobenzene	ND	U	1.13	4.86	ug/Kg	1	07/20/2012 17:43
1,3-Dichloropropane	ND	U	0.784	4.86	ug/Kg	1	07/20/2012 17:43
1,4-Dichlorobenzene	ND	U	1.07	4.86	ug/Kg	1	07/20/2012 17:43
2,2-Dichloropropane	ND	U	0.811	4.86	ug/Kg	1	07/20/2012 17:43
2-Butanone	ND	U	1.52	24.3	ug/Kg	1	07/20/2012 17:43
2-Chlorotoluene	ND	U	1.09	4.86	ug/Kg	1	07/20/2012 17:43
2-Hexanone	ND	U	1.90	12.2	ug/Kg	1	07/20/2012 17:43
4-Chlorotoluene	ND	U	1.08	4.86	ug/Kg	1	07/20/2012 17:43
4-Isopropyltoluene	ND	U	1.01	4.86	ug/Kg	1	07/20/2012 17:43
4-Methyl-2-pentanone	ND	U	3.12	12.2	ug/Kg	1	07/20/2012 17:43
Acetone	ND	U	1.21	48.6	ug/Kg	1	07/20/2012 17:43
Benzene	ND	U	0.868	4.86	ug/Kg	1	07/20/2012 17:43
Bromobenzene	ND	U	0.959	4.86	ug/Kg	1	07/20/2012 17:43
Bromochloromethane	ND	U	0.849	4.86	ug/Kg	1	07/20/2012 17:43
Bromodichloromethane	ND	U	0.790	4.86	ug/Kg	1	07/20/2012 17:43
Bromoform	ND	U	0.650	4.86	ug/Kg	1	07/20/2012 17:43
Bromomethane	ND	U	1.71	4.86	ug/Kg	1	07/20/2012 17:43
n-Butylbenzene	ND	U	1.05	4.86	ug/Kg	1	07/20/2012 17:43
Carbon disulfide	ND	U	0.840	4.86	ug/Kg	1	07/20/2012 17:43
Carbon tetrachloride	ND	U	0.846	4.86	ug/Kg	1	07/20/2012 17:43
Chlorobenzene	ND	U	0.753	4.86	ug/Kg	1	07/20/2012 17:43
Chloroethane	ND	U	0.447	4.86	ug/Kg	1	07/20/2012 17:43
Chloroform	ND	U	0.790	4.86	ug/Kg	1	07/20/2012 17:43
Chloromethane	ND	U	0.705	4.86	ug/Kg	1	07/20/2012 17:43
Dibromochloromethane	ND	U	0.824	4.86	ug/Kg	1	07/20/2012 17:43
Dibromomethane	ND	U	0.790	4.86	ug/Kg	1	07/20/2012 17:43
Dichlorodifluoromethane	ND	U	0.707	4.86	ug/Kg	1	07/20/2012 17:43

Print Date: 07/26/2012

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SGS ANALYTICAL PERSPECTIVES

Results of 105 DPT-04 (7-8ft)

Client Sample ID: **105 DPT-04 (7-8ft)**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202266004-A
Lab Project ID: 31202266

Collection Date: 07/16/2012 20:10
Received Date: 07/18/2012 16:30
Matrix: Soil-Solid as dry weight
Solids (%): 93.20

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	U	0.837	4.86	ug/Kg	1	07/20/2012 17:43
trans-1,3-Dichloropropene	ND	U	0.871	4.86	ug/Kg	1	07/20/2012 17:43
Diisopropyl Ether	ND	U	0.873	4.86	ug/Kg	1	07/20/2012 17:43
Ethyl Benzene	ND	U	0.804	4.86	ug/Kg	1	07/20/2012 17:43
Hexachlorobutadiene	ND	U	1.33	4.86	ug/Kg	1	07/20/2012 17:43
Isopropylbenzene (Cumene)	ND	U	0.936	4.86	ug/Kg	1	07/20/2012 17:43
Methyl iodide	ND	U	0.823	4.86	ug/Kg	1	07/20/2012 17:43
Methylene chloride	2.83	J	0.679	19.4	ug/Kg	1	07/20/2012 17:43
Naphthalene	ND	U	1.18	4.86	ug/Kg	1	07/20/2012 17:43
Styrene	ND	U	0.959	4.86	ug/Kg	1	07/20/2012 17:43
Tetrachloroethene	ND	U	0.731	4.86	ug/Kg	1	07/20/2012 17:43
Toluene	ND	U	0.788	4.86	ug/Kg	1	07/20/2012 17:43
Trichloroethene	ND	U	0.814	4.86	ug/Kg	1	07/20/2012 17:43
Trichlorofluoromethane	ND	U	0.733	4.86	ug/Kg	1	07/20/2012 17:43
Vinyl chloride	ND	U	0.716	4.86	ug/Kg	1	07/20/2012 17:43
Xylene (total)	ND	U	1.72	9.72	ug/Kg	1	07/20/2012 17:43
cis-1,2-Dichloroethene	ND	U	0.754	4.86	ug/Kg	1	07/20/2012 17:43
m,p-Xylene	ND	U	1.72	9.72	ug/Kg	1	07/20/2012 17:43
n-Propylbenzene	ND	U	0.948	4.86	ug/Kg	1	07/20/2012 17:43
o-Xylene	ND	U	0.982	4.86	ug/Kg	1	07/20/2012 17:43
sec-Butylbenzene	ND	U	1.01	4.86	ug/Kg	1	07/20/2012 17:43
tert-Butyl methyl ether (MTBE)	ND	U	0.828	4.86	ug/Kg	1	07/20/2012 17:43
tert-Butylbenzene	ND	U	0.881	4.86	ug/Kg	1	07/20/2012 17:43
trans-1,2-Dichloroethene	ND	U	0.837	4.86	ug/Kg	1	07/20/2012 17:43
trans-1,4-Dichloro-2-butene	ND	U	5.26	24.3	ug/Kg	1	07/20/2012 17:43
Surrogates							
1,2-Dichloroethane-d4	122			55.0-173	%	1	07/20/2012 17:43
4-Bromofluorobenzene	101			23.0-141	%	1	07/20/2012 17:43
Toluene d8	103			57.0-134	%	1	07/20/2012 17:43

Batch Information

Analytical Batch: **VMS2395**
Analytical Method: **SW-846 8260B**
Instrument: **MSD9**
Analyst: **DVO**
Analytical Date/Time: **07/20/2012 17:43**

Prep Batch: **VXX3672**
Prep Method: **SW-846 5035 SL**
Prep Date/Time: **07/19/2012 13:44**
Prep Initial Wt./Vol.: **5.52 g**
Prep Extract Vol: **5 mL**

Print Date: 07/26/2012

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SGS ANALYTICAL PERSPECTIVES

Results of 105 DPT-04 (7-8ft)

Client Sample ID: **105 DPT-04 (7-8ft)**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202266004-E
Lab Project ID: 31202266

Collection Date: 07/16/2012 20:10
Received Date: 07/18/2012 16:30
Matrix: Soil-Solid as dry weight
Solids (%): 93.20

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,2,4-Trichlorobenzene	ND	U	30.4	344	ug/Kg	1	07/20/2012 17:42
1,2-Dichlorobenzene	ND	U	17.2	344	ug/Kg	1	07/20/2012 17:42
1,3-Dichlorobenzene	ND	U	23.2	344	ug/Kg	1	07/20/2012 17:42
1,4-Dichlorobenzene	ND	U	24.3	344	ug/Kg	1	07/20/2012 17:42
2,4,5-Trichlorophenol	ND	U	23.0	344	ug/Kg	1	07/20/2012 17:42
2,4,6-Trichlorophenol	ND	U	23.3	344	ug/Kg	1	07/20/2012 17:42
2,4-Dichlorophenol	ND	U	19.9	344	ug/Kg	1	07/20/2012 17:42
2,4-Dinitrophenol	ND	U	31.9	688	ug/Kg	1	07/20/2012 17:42
2,4-Dinitrotoluene	ND	U	17.4	344	ug/Kg	1	07/20/2012 17:42
2,6-Dinitrotoluene	ND	U	24.6	344	ug/Kg	1	07/20/2012 17:42
2-Chloronaphthalene	ND	U	20.2	344	ug/Kg	1	07/20/2012 17:42
2-Chlorophenol	ND	U	18.3	344	ug/Kg	1	07/20/2012 17:42
2-Methylnaphthalene	ND	U	27.8	344	ug/Kg	1	07/20/2012 17:42
2-Methylphenol	ND	U	19.0	344	ug/Kg	1	07/20/2012 17:42
2-Nitroaniline	ND	U	22.7	344	ug/Kg	1	07/20/2012 17:42
2-Nitrophenol	ND	U	16.5	344	ug/Kg	1	07/20/2012 17:42
3 and/or 4-Methylphenol	ND	U	22.3	344	ug/Kg	1	07/20/2012 17:42
3,3'-Dichlorobenzidine	ND	U	16.5	344	ug/Kg	1	07/20/2012 17:42
3-Nitroaniline	ND	U	15.5	344	ug/Kg	1	07/20/2012 17:42
4,6-Dinitro-2-methylphenol	ND	U	16.2	344	ug/Kg	1	07/20/2012 17:42
4-Chloro-3-methylphenol	ND	U	17.2	344	ug/Kg	1	07/20/2012 17:42
4-Chloroaniline	ND	U	27.5	344	ug/Kg	1	07/20/2012 17:42
4-Chlorophenyl phenyl ether	ND	U	36.7	344	ug/Kg	1	07/20/2012 17:42
Acenaphthene	ND	U	15.6	344	ug/Kg	1	07/20/2012 17:42
Acenaphthylene	ND	U	14.5	344	ug/Kg	1	07/20/2012 17:42
Anthracene	ND	U	15.3	344	ug/Kg	1	07/20/2012 17:42
Benzo(a)anthracene	ND	U	18.9	344	ug/Kg	1	07/20/2012 17:42
Benzo(a)pyrene	ND	U	19.5	344	ug/Kg	1	07/20/2012 17:42
Benzo(b)fluoranthene	ND	U	19.8	344	ug/Kg	1	07/20/2012 17:42
Benzo(g,h,i)perylene	ND	U	54.8	344	ug/Kg	1	07/20/2012 17:42
Benzo(k)fluoranthene	ND	U	41.3	344	ug/Kg	1	07/20/2012 17:42
Benzoic acid	ND	U	7.64	344	ug/Kg	1	07/20/2012 17:42
Bis(2-Chloroethoxy)methane	ND	U	15.5	344	ug/Kg	1	07/20/2012 17:42
Bis(2-Chloroethyl)ether	ND	U	32.1	344	ug/Kg	1	07/20/2012 17:42
Bis(2-Chloroisopropyl)ether	ND	U	30.0	344	ug/Kg	1	07/20/2012 17:42
Bis(2-Ethylhexyl)phthalate	ND	U	16.5	344	ug/Kg	1	07/20/2012 17:42
4-Bromophenyl phenyl ether	ND	U	22.7	344	ug/Kg	1	07/20/2012 17:42
Butyl benzyl phthalate	ND	U	29.9	344	ug/Kg	1	07/20/2012 17:42
Chrysene	ND	U	40.0	344	ug/Kg	1	07/20/2012 17:42
Di-n-butyl phthalate	ND	U	16.3	344	ug/Kg	1	07/20/2012 17:42
Di-n-octyl phthalate	ND	U	19.0	344	ug/Kg	1	07/20/2012 17:42
Dibenz(a,h)anthracene	ND	U	15.5	344	ug/Kg	1	07/20/2012 17:42
Dibenzofuran	ND	U	27.0	344	ug/Kg	1	07/20/2012 17:42
Diethyl phthalate	ND	U	18.6	344	ug/Kg	1	07/20/2012 17:42

Print Date: 07/26/2012

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SGS ANALYTICAL PERSPECTIVES

Results of 105 DPT-04 (7-8ft)

Client Sample ID: **105 DPT-04 (7-8ft)**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202266004-E
Lab Project ID: 31202266

Collection Date: 07/16/2012 20:10
Received Date: 07/18/2012 16:30
Matrix: Soil-Solid as dry weight
Solids (%): 93.20

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
Dimethyl phthalate	ND	U	26.4	344	ug/Kg	1	07/20/2012 17:42
2,4-Dimethylphenol	ND	U	25.2	344	ug/Kg	1	07/20/2012 17:42
Diphenylamine	ND	U	15.5	344	ug/Kg	1	07/20/2012 17:42
Fluoranthene	ND	U	32.3	344	ug/Kg	1	07/20/2012 17:42
Fluorene	ND	U	18.3	344	ug/Kg	1	07/20/2012 17:42
Hexachlorobenzene	ND	U	32.6	344	ug/Kg	1	07/20/2012 17:42
Hexachlorobutadiene	ND	U	20.6	344	ug/Kg	1	07/20/2012 17:42
Hexachlorocyclopentadiene	ND	U	104	344	ug/Kg	1	07/20/2012 17:42
Hexachloroethane	ND	U	19.8	344	ug/Kg	1	07/20/2012 17:42
Indeno(1,2,3-cd)pyrene	ND	U	26.8	344	ug/Kg	1	07/20/2012 17:42
Isophorone	ND	U	15.6	344	ug/Kg	1	07/20/2012 17:42
Naphthalene	ND	U	29.7	344	ug/Kg	1	07/20/2012 17:42
4-Nitroaniline	ND	U	19.8	344	ug/Kg	1	07/20/2012 17:42
Nitrobenzene	ND	U	19.8	344	ug/Kg	1	07/20/2012 17:42
4-Nitrophenol	ND	U	33.9	344	ug/Kg	1	07/20/2012 17:42
Pentachlorophenol	ND	U	27.5	344	ug/Kg	1	07/20/2012 17:42
Phenanthrene	ND	U	22.7	344	ug/Kg	1	07/20/2012 17:42
Phenol	ND	U	32.1	344	ug/Kg	1	07/20/2012 17:42
Pyrene	ND	U	14.5	344	ug/Kg	1	07/20/2012 17:42
n-Nitrosodi-n-propylamine	ND	U	98.6	344	ug/Kg	1	07/20/2012 17:42
Surrogates							
2,4,6-Tribromophenol	101			41.0-129	%	1	07/20/2012 17:42
2-Fluorobiphenyl	100			48.0-123	%	1	07/20/2012 17:42
2-Fluorophenol	85.0			42.0-123	%	1	07/20/2012 17:42
Nitrobenzene-d5	94.0			46.0-117	%	1	07/20/2012 17:42
Phenol-d6	99.0			48.0-125	%	1	07/20/2012 17:42
Terphenyl-d14	105			44.0-140	%	1	07/20/2012 17:42

Batch Information

Analytical Batch: **XMS1606**
Analytical Method: **SW-846 8270D**
Instrument: **MSD10**
Analyst: **CMP**
Analytical Date/Time: **07/20/2012 17:42**

Prep Batch: **XXX2835**
Prep Method: **SW-846 3541**
Prep Date/Time: **07/19/2012 10:33**
Prep Initial Wt./Vol.: **31.22 g**
Prep Extract Vol: **10 mL**

Print Date: 07/26/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 105 DPT-05 (4-5ft)

Client Sample ID: **105 DPT-05 (4-5ft)**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202266005-D
Lab Project ID: 31202266

Collection Date: 07/17/2012 18:45
Received Date: 07/18/2012 16:30
Matrix: Soil-Solid as dry weight
Solids (%): 91.40

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	U	4.75	45.7	ug/Kg	50	07/23/2012 18:41
1,1,1-Trichloroethane	ND	U	5.62	45.7	ug/Kg	50	07/23/2012 18:41
1,1,2,2-Tetrachloroethane	ND	U	7.12	45.7	ug/Kg	50	07/23/2012 18:41
1,1,2-Trichloroethane	ND	U	5.75	45.7	ug/Kg	50	07/23/2012 18:41
1,1-Dichloroethane	ND	U	7.54	45.7	ug/Kg	50	07/23/2012 18:41
1,1-Dichloroethene	ND	U	9.68	45.7	ug/Kg	50	07/23/2012 18:41
1,1-Dichloropropene	ND	U	3.94	45.7	ug/Kg	50	07/23/2012 18:41
1,2,3-Trichlorobenzene	ND	U	5.02	45.7	ug/Kg	50	07/23/2012 18:41
1,2,3-Trichloropropane	ND	U	9.68	45.7	ug/Kg	50	07/23/2012 18:41
1,2,4-Trichlorobenzene	ND	U	4.17	45.7	ug/Kg	50	07/23/2012 18:41
1,2,4-Trimethylbenzene	ND	U	4.39	45.7	ug/Kg	50	07/23/2012 18:41
1,2-Dibromo-3-chloropropane	ND	U	34.2	228	ug/Kg	50	07/23/2012 18:41
1,2-Dibromoethane	ND	U	5.48	45.7	ug/Kg	50	07/23/2012 18:41
1,2-Dichlorobenzene	ND	U	6.26	45.7	ug/Kg	50	07/23/2012 18:41
1,2-Dichloroethane	ND	U	7.63	45.7	ug/Kg	50	07/23/2012 18:41
1,2-Dichloropropane	ND	U	7.44	45.7	ug/Kg	50	07/23/2012 18:41
1,3,5-Trimethylbenzene	ND	U	5.16	45.7	ug/Kg	50	07/23/2012 18:41
1,3-Dichlorobenzene	ND	U	4.70	45.7	ug/Kg	50	07/23/2012 18:41
1,3-Dichloropropane	ND	U	5.94	45.7	ug/Kg	50	07/23/2012 18:41
1,4-Dichlorobenzene	ND	U	5.94	45.7	ug/Kg	50	07/23/2012 18:41
2,2-Dichloropropane	ND	U	17.9	45.7	ug/Kg	50	07/23/2012 18:41
2-Butanone	ND	U	33.0	1140	ug/Kg	50	07/23/2012 18:41
2-Chlorotoluene	ND	U	5.16	45.7	ug/Kg	50	07/23/2012 18:41
2-Hexanone	ND	U	33.2	228	ug/Kg	50	07/23/2012 18:41
4-Chlorotoluene	ND	U	5.71	45.7	ug/Kg	50	07/23/2012 18:41
4-Isopropyltoluene	ND	U	3.51	45.7	ug/Kg	50	07/23/2012 18:41
4-Methyl-2-pentanone	ND	U	25.5	228	ug/Kg	50	07/23/2012 18:41
Acetone	ND	U	39.5	1140	ug/Kg	50	07/23/2012 18:41
Benzene	ND	U	5.16	45.7	ug/Kg	50	07/23/2012 18:41
Bromobenzene	ND	U	5.02	45.7	ug/Kg	50	07/23/2012 18:41
Bromochloromethane	ND	U	9.64	45.7	ug/Kg	50	07/23/2012 18:41
Bromodichloromethane	ND	U	5.02	45.7	ug/Kg	50	07/23/2012 18:41
Bromoform	ND	U	4.45	45.7	ug/Kg	50	07/23/2012 18:41
Bromomethane	ND	U	10.8	45.7	ug/Kg	50	07/23/2012 18:41
n-Butylbenzene	ND	U	3.51	45.7	ug/Kg	50	07/23/2012 18:41
Carbon disulfide	ND	U	4.84	45.7	ug/Kg	50	07/23/2012 18:41
Carbon tetrachloride	ND	U	4.61	45.7	ug/Kg	50	07/23/2012 18:41
Chlorobenzene	ND	U	5.30	45.7	ug/Kg	50	07/23/2012 18:41
Chloroethane	ND	U	14.2	45.7	ug/Kg	50	07/23/2012 18:41
Chloroform	ND	U	6.35	45.7	ug/Kg	50	07/23/2012 18:41
Chloromethane	ND	U	20.5	45.7	ug/Kg	50	07/23/2012 18:41
Dibromochloromethane	ND	U	6.12	45.7	ug/Kg	50	07/23/2012 18:41
Dibromomethane	ND	U	7.67	45.7	ug/Kg	50	07/23/2012 18:41
Dichlorodifluoromethane	ND	U	7.81	228	ug/Kg	50	07/23/2012 18:41

Print Date: 07/26/2012

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SGS ANALYTICAL PERSPECTIVES

Results of 105 DPT-05 (4-5ft)

Client Sample ID: **105 DPT-05 (4-5ft)**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202266005-D
Lab Project ID: 31202266

Collection Date: 07/17/2012 18:45
Received Date: 07/18/2012 16:30
Matrix: Soil-Solid as dry weight
Solids (%): 91.40

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	U	3.50	45.7	ug/Kg	50	07/23/2012 18:41
trans-1,3-Dichloropropene	ND	U	3.94	45.7	ug/Kg	50	07/23/2012 18:41
Diisopropyl Ether	ND	U	13.4	45.7	ug/Kg	50	07/23/2012 18:41
Ethyl Benzene	ND	U	4.00	45.7	ug/Kg	50	07/23/2012 18:41
Hexachlorobutadiene	ND	U	3.62	45.7	ug/Kg	50	07/23/2012 18:41
Isopropylbenzene (Cumene)	ND	U	3.97	45.7	ug/Kg	50	07/23/2012 18:41
Methyl iodide	ND	U	5.25	45.7	ug/Kg	50	07/23/2012 18:41
Methylene chloride	ND	U	6.94	228	ug/Kg	50	07/23/2012 18:41
Naphthalene	ND	U	3.90	45.7	ug/Kg	50	07/23/2012 18:41
Styrene	ND	U	4.66	45.7	ug/Kg	50	07/23/2012 18:41
Tetrachloroethene	268		7.08	45.7	ug/Kg	50	07/23/2012 18:41
Toluene	ND	U	6.07	45.7	ug/Kg	50	07/23/2012 18:41
Trichloroethene	ND	U	5.71	45.7	ug/Kg	50	07/23/2012 18:41
Trichlorofluoromethane	ND	U	6.26	45.7	ug/Kg	50	07/23/2012 18:41
Vinyl chloride	ND	U	5.66	45.7	ug/Kg	50	07/23/2012 18:41
Xylene (total)	ND	U	8.31	91.3	ug/Kg	50	07/23/2012 18:41
cis-1,2-Dichloroethene	ND	U	6.21	45.7	ug/Kg	50	07/23/2012 18:41
m,p-Xylene	ND	U	8.31	91.3	ug/Kg	50	07/23/2012 18:41
n-Propylbenzene	ND	U	5.16	45.7	ug/Kg	50	07/23/2012 18:41
o-Xylene	ND	U	3.99	45.7	ug/Kg	50	07/23/2012 18:41
sec-Butylbenzene	ND	U	5.11	45.7	ug/Kg	50	07/23/2012 18:41
tert-Butyl methyl ether (MTBE)	ND	U	6.58	45.7	ug/Kg	50	07/23/2012 18:41
tert-Butylbenzene	ND	U	3.90	45.7	ug/Kg	50	07/23/2012 18:41
trans-1,2-Dichloroethene	ND	U	10.2	45.7	ug/Kg	50	07/23/2012 18:41
trans-1,4-Dichloro-2-butene	ND	U	18.9	228	ug/Kg	50	07/23/2012 18:41
Surrogates							
1,2-Dichloroethane-d4	94.0			55.0-173	%	50	07/23/2012 18:41
4-Bromofluorobenzene	90.0			23.0-141	%	50	07/23/2012 18:41
Toluene d8	94.0			57.0-134	%	50	07/23/2012 18:41

Batch Information

Analytical Batch: **VMS2399**
Analytical Method: **SW-846 8260B**
Instrument: **MSD4**
Analyst: **DVO**
Analytical Date/Time: **07/23/2012 18:41**

Prep Batch: **VXX3689**
Prep Method: **SW-846 5035 SM**
Prep Date/Time: **07/19/2012 13:47**
Prep Initial Wt./Vol.: **5.99 g**
Prep Extract Vol: **5 mL**

Print Date: 07/26/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 105 DPT-05 (4-5ft)

Client Sample ID: **105 DPT-05 (4-5ft)**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202266005-E
Lab Project ID: 31202266

Collection Date: 07/17/2012 18:45
Received Date: 07/18/2012 16:30
Matrix: Soil-Solid as dry weight
Solids (%): 91.40

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,2,4-Trichlorobenzene	ND	U	29.4	334	ug/Kg	1	07/20/2012 18:05
1,2-Dichlorobenzene	ND	U	16.6	334	ug/Kg	1	07/20/2012 18:05
1,3-Dichlorobenzene	ND	U	22.5	334	ug/Kg	1	07/20/2012 18:05
1,4-Dichlorobenzene	ND	U	23.6	334	ug/Kg	1	07/20/2012 18:05
2,4,5-Trichlorophenol	ND	U	22.3	334	ug/Kg	1	07/20/2012 18:05
2,4,6-Trichlorophenol	ND	U	22.6	334	ug/Kg	1	07/20/2012 18:05
2,4-Dichlorophenol	ND	U	19.3	334	ug/Kg	1	07/20/2012 18:05
2,4-Dinitrophenol	ND	U	30.9	667	ug/Kg	1	07/20/2012 18:05
2,4-Dinitrotoluene	ND	U	16.9	334	ug/Kg	1	07/20/2012 18:05
2,6-Dinitrotoluene	ND	U	23.9	334	ug/Kg	1	07/20/2012 18:05
2-Chloronaphthalene	ND	U	19.6	334	ug/Kg	1	07/20/2012 18:05
2-Chlorophenol	ND	U	17.7	334	ug/Kg	1	07/20/2012 18:05
2-Methylnaphthalene	ND	U	27.0	334	ug/Kg	1	07/20/2012 18:05
2-Methylphenol	ND	U	18.5	334	ug/Kg	1	07/20/2012 18:05
2-Nitroaniline	ND	U	22.0	334	ug/Kg	1	07/20/2012 18:05
2-Nitrophenol	ND	U	16.0	334	ug/Kg	1	07/20/2012 18:05
3 and/or 4-Methylphenol	ND	U	21.7	334	ug/Kg	1	07/20/2012 18:05
3,3'-Dichlorobenzidine	ND	U	16.0	334	ug/Kg	1	07/20/2012 18:05
3-Nitroaniline	ND	U	15.0	334	ug/Kg	1	07/20/2012 18:05
4,6-Dinitro-2-methylphenol	ND	U	15.7	334	ug/Kg	1	07/20/2012 18:05
4-Chloro-3-methylphenol	ND	U	16.6	334	ug/Kg	1	07/20/2012 18:05
4-Chloroaniline	ND	U	26.7	334	ug/Kg	1	07/20/2012 18:05
4-Chlorophenyl phenyl ether	ND	U	35.6	334	ug/Kg	1	07/20/2012 18:05
Acenaphthene	ND	U	15.1	334	ug/Kg	1	07/20/2012 18:05
Acenaphthylene	ND	U	14.1	334	ug/Kg	1	07/20/2012 18:05
Anthracene	ND	U	14.8	334	ug/Kg	1	07/20/2012 18:05
Benzo(a)anthracene	ND	U	18.3	334	ug/Kg	1	07/20/2012 18:05
Benzo(a)pyrene	ND	U	18.9	334	ug/Kg	1	07/20/2012 18:05
Benzo(b)fluoranthene	ND	U	19.2	334	ug/Kg	1	07/20/2012 18:05
Benzo(g,h,i)perylene	ND	U	53.1	334	ug/Kg	1	07/20/2012 18:05
Benzo(k)fluoranthene	ND	U	40.0	334	ug/Kg	1	07/20/2012 18:05
Benzoic acid	ND	U	7.40	334	ug/Kg	1	07/20/2012 18:05
Bis(2-Chloroethoxy)methane	ND	U	15.0	334	ug/Kg	1	07/20/2012 18:05
Bis(2-Chloroethyl)ether	ND	U	31.2	334	ug/Kg	1	07/20/2012 18:05
Bis(2-Chloroisopropyl)ether	ND	U	29.1	334	ug/Kg	1	07/20/2012 18:05
Bis(2-Ethylhexyl)phthalate	ND	U	16.0	334	ug/Kg	1	07/20/2012 18:05
4-Bromophenyl phenyl ether	ND	U	22.0	334	ug/Kg	1	07/20/2012 18:05
Butyl benzyl phthalate	ND	U	29.0	334	ug/Kg	1	07/20/2012 18:05
Chrysene	ND	U	38.8	334	ug/Kg	1	07/20/2012 18:05
Di-n-butyl phthalate	ND	U	15.8	334	ug/Kg	1	07/20/2012 18:05
Di-n-octyl phthalate	ND	U	18.5	334	ug/Kg	1	07/20/2012 18:05
Dibenz(a,h)anthracene	ND	U	15.0	334	ug/Kg	1	07/20/2012 18:05
Dibenzofuran	ND	U	26.1	334	ug/Kg	1	07/20/2012 18:05
Diethyl phthalate	ND	U	18.0	334	ug/Kg	1	07/20/2012 18:05

Print Date: 07/26/2012

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SGS ANALYTICAL PERSPECTIVES

Results of 105 DPT-05 (4-5ft)

Client Sample ID: **105 DPT-05 (4-5ft)**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202266005-E
Lab Project ID: 31202266

Collection Date: 07/17/2012 18:45
Received Date: 07/18/2012 16:30
Matrix: Soil-Solid as dry weight
Solids (%): 91.40

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
Dimethyl phthalate	ND	U	25.6	334	ug/Kg	1	07/20/2012 18:05
2,4-Dimethylphenol	ND	U	24.4	334	ug/Kg	1	07/20/2012 18:05
Diphenylamine	ND	U	15.0	334	ug/Kg	1	07/20/2012 18:05
Fluoranthene	ND	U	31.4	334	ug/Kg	1	07/20/2012 18:05
Fluorene	ND	U	17.7	334	ug/Kg	1	07/20/2012 18:05
Hexachlorobenzene	ND	U	31.6	334	ug/Kg	1	07/20/2012 18:05
Hexachlorobutadiene	ND	U	19.9	334	ug/Kg	1	07/20/2012 18:05
Hexachlorocyclopentadiene	ND	U	101	334	ug/Kg	1	07/20/2012 18:05
Hexachloroethane	ND	U	19.2	334	ug/Kg	1	07/20/2012 18:05
Indeno(1,2,3-cd)pyrene	ND	U	26.0	334	ug/Kg	1	07/20/2012 18:05
Isophorone	ND	U	15.1	334	ug/Kg	1	07/20/2012 18:05
Naphthalene	ND	U	28.8	334	ug/Kg	1	07/20/2012 18:05
4-Nitroaniline	ND	U	19.2	334	ug/Kg	1	07/20/2012 18:05
Nitrobenzene	ND	U	19.2	334	ug/Kg	1	07/20/2012 18:05
4-Nitrophenol	ND	U	32.9	334	ug/Kg	1	07/20/2012 18:05
Pentachlorophenol	ND	U	26.7	334	ug/Kg	1	07/20/2012 18:05
Phenanthrene	ND	U	22.0	334	ug/Kg	1	07/20/2012 18:05
Phenol	ND	U	31.2	334	ug/Kg	1	07/20/2012 18:05
Pyrene	ND	U	14.1	334	ug/Kg	1	07/20/2012 18:05
n-Nitrosodi-n-propylamine	ND	U	95.6	334	ug/Kg	1	07/20/2012 18:05
Surrogates							
2,4,6-Tribromophenol	98.0			41.0-129	%	1	07/20/2012 18:05
2-Fluorobiphenyl	92.0			48.0-123	%	1	07/20/2012 18:05
2-Fluorophenol	81.0			42.0-123	%	1	07/20/2012 18:05
Nitrobenzene-d5	89.0			46.0-117	%	1	07/20/2012 18:05
Phenol-d6	94.0			48.0-125	%	1	07/20/2012 18:05
Terphenyl-d14	95.0			44.0-140	%	1	07/20/2012 18:05

Batch Information

Analytical Batch: **XMS1606**
Analytical Method: **SW-846 8270D**
Instrument: **MSD10**
Analyst: **CMP**
Analytical Date/Time: **07/20/2012 18:05**

Prep Batch: **XXX2835**
Prep Method: **SW-846 3541**
Prep Date/Time: **07/19/2012 10:33**
Prep Initial Wt./Vol.: **32.82 g**
Prep Extract Vol: **10 mL**

Print Date: 07/26/2012

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SGS ANALYTICAL PERSPECTIVES

Results of 105 DPT-06 (4-5ft)

Client Sample ID: **105 DPT-06 (4-5ft)**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202266006-A
Lab Project ID: 31202266

Collection Date: 07/17/2012 19:10
Received Date: 07/18/2012 16:30
Matrix: Soil-Solid as dry weight
Solids (%): 95.20

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	U	1.02	4.79	ug/Kg	1	07/20/2012 18:11
1,1,1-Trichloroethane	ND	U	0.746	4.79	ug/Kg	1	07/20/2012 18:11
1,1,2,2-Tetrachloroethane	ND	U	1.08	4.79	ug/Kg	1	07/20/2012 18:11
1,1,2-Trichloroethane	ND	U	0.997	4.79	ug/Kg	1	07/20/2012 18:11
1,1-Dichloroethane	ND	U	0.827	4.79	ug/Kg	1	07/20/2012 18:11
1,1-Dichloroethene	ND	U	0.866	4.79	ug/Kg	1	07/20/2012 18:11
1,1-Dichloropropene	ND	U	0.884	4.79	ug/Kg	1	07/20/2012 18:11
1,2,3-Trichlorobenzene	ND	U	1.33	4.79	ug/Kg	1	07/20/2012 18:11
1,2,3-Trichloropropane	ND	U	1.06	4.79	ug/Kg	1	07/20/2012 18:11
1,2,4-Trichlorobenzene	ND	U	1.14	4.79	ug/Kg	1	07/20/2012 18:11
1,2,4-Trimethylbenzene	ND	U	1.03	4.79	ug/Kg	1	07/20/2012 18:11
1,2-Dibromo-3-chloropropane	ND	U	5.57	28.8	ug/Kg	1	07/20/2012 18:11
1,2-Dibromoethane	ND	U	0.727	4.79	ug/Kg	1	07/20/2012 18:11
1,2-Dichlorobenzene	ND	U	1.24	4.79	ug/Kg	1	07/20/2012 18:11
1,2-Dichloroethane	ND	U	0.849	4.79	ug/Kg	1	07/20/2012 18:11
1,2-Dichloropropane	ND	U	0.772	4.79	ug/Kg	1	07/20/2012 18:11
1,3,5-Trimethylbenzene	ND	U	0.943	4.79	ug/Kg	1	07/20/2012 18:11
1,3-Dichlorobenzene	ND	U	1.11	4.79	ug/Kg	1	07/20/2012 18:11
1,3-Dichloropropane	ND	U	0.773	4.79	ug/Kg	1	07/20/2012 18:11
1,4-Dichlorobenzene	ND	U	1.05	4.79	ug/Kg	1	07/20/2012 18:11
2,2-Dichloropropane	ND	U	0.799	4.79	ug/Kg	1	07/20/2012 18:11
2-Butanone	ND	U	1.50	24.0	ug/Kg	1	07/20/2012 18:11
2-Chlorotoluene	ND	U	1.07	4.79	ug/Kg	1	07/20/2012 18:11
2-Hexanone	ND	U	1.87	12.0	ug/Kg	1	07/20/2012 18:11
4-Chlorotoluene	ND	U	1.06	4.79	ug/Kg	1	07/20/2012 18:11
4-Isopropyltoluene	ND	U	0.997	4.79	ug/Kg	1	07/20/2012 18:11
4-Methyl-2-pentanone	ND	U	3.08	12.0	ug/Kg	1	07/20/2012 18:11
Acetone	ND	U	1.19	47.9	ug/Kg	1	07/20/2012 18:11
Benzene	ND	U	0.856	4.79	ug/Kg	1	07/20/2012 18:11
Bromobenzene	ND	U	0.945	4.79	ug/Kg	1	07/20/2012 18:11
Bromochloromethane	ND	U	0.837	4.79	ug/Kg	1	07/20/2012 18:11
Bromodichloromethane	ND	U	0.779	4.79	ug/Kg	1	07/20/2012 18:11
Bromoform	ND	U	0.641	4.79	ug/Kg	1	07/20/2012 18:11
Bromomethane	ND	U	1.69	4.79	ug/Kg	1	07/20/2012 18:11
n-Butylbenzene	ND	U	1.04	4.79	ug/Kg	1	07/20/2012 18:11
Carbon disulfide	ND	U	0.828	4.79	ug/Kg	1	07/20/2012 18:11
Carbon tetrachloride	ND	U	0.834	4.79	ug/Kg	1	07/20/2012 18:11
Chlorobenzene	ND	U	0.742	4.79	ug/Kg	1	07/20/2012 18:11
Chloroethane	ND	U	0.441	4.79	ug/Kg	1	07/20/2012 18:11
Chloroform	ND	U	0.778	4.79	ug/Kg	1	07/20/2012 18:11
Chloromethane	ND	U	0.695	4.79	ug/Kg	1	07/20/2012 18:11
Dibromochloromethane	ND	U	0.812	4.79	ug/Kg	1	07/20/2012 18:11
Dibromomethane	ND	U	0.778	4.79	ug/Kg	1	07/20/2012 18:11
Dichlorodifluoromethane	ND	U	0.697	4.79	ug/Kg	1	07/20/2012 18:11

Print Date: 07/26/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 105 DPT-06 (4-5ft)

Client Sample ID: **105 DPT-06 (4-5ft)**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202266006-A
Lab Project ID: 31202266

Collection Date: 07/17/2012 19:10
Received Date: 07/18/2012 16:30
Matrix: Soil-Solid as dry weight
Solids (%): 95.20

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	U	0.825	4.79	ug/Kg	1	07/20/2012 18:11
trans-1,3-Dichloropropene	ND	U	0.859	4.79	ug/Kg	1	07/20/2012 18:11
Diisopropyl Ether	ND	U	0.861	4.79	ug/Kg	1	07/20/2012 18:11
Ethyl Benzene	ND	U	0.793	4.79	ug/Kg	1	07/20/2012 18:11
Hexachlorobutadiene	ND	U	1.31	4.79	ug/Kg	1	07/20/2012 18:11
Isopropylbenzene (Cumene)	ND	U	0.923	4.79	ug/Kg	1	07/20/2012 18:11
Methyl iodide	ND	U	0.811	4.79	ug/Kg	1	07/20/2012 18:11
Methylene chloride	ND	U	0.669	19.2	ug/Kg	1	07/20/2012 18:11
Naphthalene	ND	U	1.16	4.79	ug/Kg	1	07/20/2012 18:11
Styrene	ND	U	0.945	4.79	ug/Kg	1	07/20/2012 18:11
Tetrachloroethene	ND	U	0.721	4.79	ug/Kg	1	07/20/2012 18:11
Toluene	ND	U	0.776	4.79	ug/Kg	1	07/20/2012 18:11
Trichloroethene	ND	U	0.802	4.79	ug/Kg	1	07/20/2012 18:11
Trichlorofluoromethane	ND	U	0.723	4.79	ug/Kg	1	07/20/2012 18:11
Vinyl chloride	ND	U	0.705	4.79	ug/Kg	1	07/20/2012 18:11
Xylene (total)	ND	U	1.70	9.58	ug/Kg	1	07/20/2012 18:11
cis-1,2-Dichloroethene	ND	U	0.743	4.79	ug/Kg	1	07/20/2012 18:11
m,p-Xylene	ND	U	1.70	9.58	ug/Kg	1	07/20/2012 18:11
n-Propylbenzene	ND	U	0.935	4.79	ug/Kg	1	07/20/2012 18:11
o-Xylene	ND	U	0.968	4.79	ug/Kg	1	07/20/2012 18:11
sec-Butylbenzene	ND	U	0.997	4.79	ug/Kg	1	07/20/2012 18:11
tert-Butyl methyl ether (MTBE)	ND	U	0.817	4.79	ug/Kg	1	07/20/2012 18:11
tert-Butylbenzene	ND	U	0.868	4.79	ug/Kg	1	07/20/2012 18:11
trans-1,2-Dichloroethene	ND	U	0.825	4.79	ug/Kg	1	07/20/2012 18:11
trans-1,4-Dichloro-2-butene	ND	U	5.19	24.0	ug/Kg	1	07/20/2012 18:11
Surrogates							
1,2-Dichloroethane-d4	121			55.0-173	%	1	07/20/2012 18:11
4-Bromofluorobenzene	104			23.0-141	%	1	07/20/2012 18:11
Toluene d8	102			57.0-134	%	1	07/20/2012 18:11

Batch Information

Analytical Batch: **VMS2395**
Analytical Method: **SW-846 8260B**
Instrument: **MSD9**
Analyst: **DVO**
Analytical Date/Time: **07/20/2012 18:11**

Prep Batch: **VXX3672**
Prep Method: **SW-846 5035 SL**
Prep Date/Time: **07/19/2012 13:52**
Prep Initial Wt./Vol.: **5.48 g**
Prep Extract Vol: **5 mL**

Print Date: 07/26/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 105 DPT-06 (4-5ft)

Client Sample ID: **105 DPT-06 (4-5ft)**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202266006-E
Lab Project ID: 31202266

Collection Date: 07/17/2012 19:10
Received Date: 07/18/2012 16:30
Matrix: Soil-Solid as dry weight
Solids (%): 95.20

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,2,4-Trichlorobenzene	ND	U	29.2	332	ug/Kg	1	07/23/2012 15:44
1,2-Dichlorobenzene	ND	U	16.5	332	ug/Kg	1	07/23/2012 15:44
1,3-Dichlorobenzene	ND	U	22.4	332	ug/Kg	1	07/23/2012 15:44
1,4-Dichlorobenzene	ND	U	23.4	332	ug/Kg	1	07/23/2012 15:44
2,4,5-Trichlorophenol	ND	U	22.1	332	ug/Kg	1	07/23/2012 15:44
2,4,6-Trichlorophenol	ND	U	22.5	332	ug/Kg	1	07/23/2012 15:44
2,4-Dichlorophenol	ND	U	19.2	332	ug/Kg	1	07/23/2012 15:44
2,4-Dinitrophenol	ND	U	30.7	662	ug/Kg	1	07/23/2012 15:44
2,4-Dinitrotoluene	ND	U	16.7	332	ug/Kg	1	07/23/2012 15:44
2,6-Dinitrotoluene	ND	U	23.7	332	ug/Kg	1	07/23/2012 15:44
2-Chloronaphthalene	ND	U	19.5	332	ug/Kg	1	07/23/2012 15:44
2-Chlorophenol	ND	U	17.6	332	ug/Kg	1	07/23/2012 15:44
2-Methylnaphthalene	ND	U	26.8	332	ug/Kg	1	07/23/2012 15:44
2-Methylphenol	ND	U	18.3	332	ug/Kg	1	07/23/2012 15:44
2-Nitroaniline	ND	U	21.8	332	ug/Kg	1	07/23/2012 15:44
2-Nitrophenol	ND	U	15.9	332	ug/Kg	1	07/23/2012 15:44
3 and/or 4-Methylphenol	ND	U	21.5	332	ug/Kg	1	07/23/2012 15:44
3,3'-Dichlorobenzidine	ND	U	15.9	332	ug/Kg	1	07/23/2012 15:44
3-Nitroaniline	ND	U	14.9	332	ug/Kg	1	07/23/2012 15:44
4,6-Dinitro-2-methylphenol	ND	U	15.6	332	ug/Kg	1	07/23/2012 15:44
4-Chloro-3-methylphenol	ND	U	16.5	332	ug/Kg	1	07/23/2012 15:44
4-Chloroaniline	ND	U	26.5	332	ug/Kg	1	07/23/2012 15:44
4-Chlorophenyl phenyl ether	ND	U	35.4	332	ug/Kg	1	07/23/2012 15:44
Acenaphthene	ND	U	15.0	332	ug/Kg	1	07/23/2012 15:44
Acenaphthylene	ND	U	14.0	332	ug/Kg	1	07/23/2012 15:44
Anthracene	ND	U	14.7	332	ug/Kg	1	07/23/2012 15:44
Benzo(a)anthracene	ND	U	18.2	332	ug/Kg	1	07/23/2012 15:44
Benzo(a)pyrene	ND	U	18.8	332	ug/Kg	1	07/23/2012 15:44
Benzo(b)fluoranthene	ND	U	19.1	332	ug/Kg	1	07/23/2012 15:44
Benzo(g,h,i)perylene	ND	U	52.8	332	ug/Kg	1	07/23/2012 15:44
Benzo(k)fluoranthene	ND	U	39.7	332	ug/Kg	1	07/23/2012 15:44
Benzoic acid	ND	U	7.35	332	ug/Kg	1	07/23/2012 15:44
Bis(2-Chloroethoxy)methane	ND	U	14.9	332	ug/Kg	1	07/23/2012 15:44
Bis(2-Chloroethyl)ether	ND	U	30.9	332	ug/Kg	1	07/23/2012 15:44
Bis(2-Chloroisopropyl)ether	ND	U	28.9	332	ug/Kg	1	07/23/2012 15:44
Bis(2-Ethylhexyl)phthalate	ND	U	15.9	332	ug/Kg	1	07/23/2012 15:44
4-Bromophenyl phenyl ether	ND	U	21.8	332	ug/Kg	1	07/23/2012 15:44
Butyl benzyl phthalate	ND	U	28.8	332	ug/Kg	1	07/23/2012 15:44
Chrysene	ND	U	38.6	332	ug/Kg	1	07/23/2012 15:44
Di-n-butyl phthalate	ND	U	15.7	332	ug/Kg	1	07/23/2012 15:44
Di-n-octyl phthalate	ND	U	18.3	332	ug/Kg	1	07/23/2012 15:44
Dibenz(a,h)anthracene	ND	U	14.9	332	ug/Kg	1	07/23/2012 15:44
Dibenzofuran	ND	U	26.0	332	ug/Kg	1	07/23/2012 15:44
Diethyl phthalate	ND	U	17.9	332	ug/Kg	1	07/23/2012 15:44

Print Date: 07/26/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 105 DPT-06 (4-5ft)

Client Sample ID: **105 DPT-06 (4-5ft)**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202266006-E
Lab Project ID: 31202266

Collection Date: 07/17/2012 19:10
Received Date: 07/18/2012 16:30
Matrix: Soil-Solid as dry weight
Solids (%): 95.20

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
Dimethyl phthalate	ND	U	25.4	332	ug/Kg	1	07/23/2012 15:44
2,4-Dimethylphenol	ND	U	24.3	332	ug/Kg	1	07/23/2012 15:44
Diphenylamine	ND	U	14.9	332	ug/Kg	1	07/23/2012 15:44
Fluoranthene	ND	U	31.1	332	ug/Kg	1	07/23/2012 15:44
Fluorene	ND	U	17.6	332	ug/Kg	1	07/23/2012 15:44
Hexachlorobenzene	ND	U	31.4	332	ug/Kg	1	07/23/2012 15:44
Hexachlorobutadiene	ND	U	19.8	332	ug/Kg	1	07/23/2012 15:44
Hexachlorocyclopentadiene	ND	U	100	332	ug/Kg	1	07/23/2012 15:44
Hexachloroethane	ND	U	19.1	332	ug/Kg	1	07/23/2012 15:44
Indeno(1,2,3-cd)pyrene	ND	U	25.9	332	ug/Kg	1	07/23/2012 15:44
Isophorone	ND	U	15.0	332	ug/Kg	1	07/23/2012 15:44
Naphthalene	ND	U	28.6	332	ug/Kg	1	07/23/2012 15:44
4-Nitroaniline	ND	U	19.1	332	ug/Kg	1	07/23/2012 15:44
Nitrobenzene	ND	U	19.1	332	ug/Kg	1	07/23/2012 15:44
4-Nitrophenol	ND	U	32.6	332	ug/Kg	1	07/23/2012 15:44
Pentachlorophenol	ND	U	26.5	332	ug/Kg	1	07/23/2012 15:44
Phenanthrene	ND	U	21.8	332	ug/Kg	1	07/23/2012 15:44
Phenol	ND	U	30.9	332	ug/Kg	1	07/23/2012 15:44
Pyrene	ND	U	14.0	332	ug/Kg	1	07/23/2012 15:44
n-Nitrosodi-n-propylamine	ND	U	94.9	332	ug/Kg	1	07/23/2012 15:44
Surrogates							
2,4,6-Tribromophenol	92.0			41.0-129	%	1	07/23/2012 15:44
2-Fluorobiphenyl	88.0			48.0-123	%	1	07/23/2012 15:44
2-Fluorophenol	77.0			42.0-123	%	1	07/23/2012 15:44
Nitrobenzene-d5	85.0			46.0-117	%	1	07/23/2012 15:44
Phenol-d6	89.0			48.0-125	%	1	07/23/2012 15:44
Terphenyl-d14	88.0			44.0-140	%	1	07/23/2012 15:44

Batch Information

Analytical Batch: **XMS1608**
Analytical Method: **SW-846 8270D**
Instrument: **MSD10**
Analyst: **CMP**
Analytical Date/Time: **07/23/2012 15:44**

Prep Batch: **XXX2841**
Prep Method: **SW-846 3541**
Prep Date/Time: **07/20/2012 11:30**
Prep Initial Wt./Vol.: **31.73 g**
Prep Extract Vol: **10 mL**

Print Date: 07/26/2012

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SGS ANALYTICAL PERSPECTIVES

Results of 105 DPT-07 (2-4ft)

Client Sample ID: **105 DPT-07 (2-4ft)**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202266007-A
Lab Project ID: 31202266

Collection Date: 07/17/2012 19:20
Received Date: 07/18/2012 16:30
Matrix: Soil-Solid as dry weight
Solids (%): 84.90

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	U	0.952	4.49	ug/Kg	1	07/23/2012 17:12
1,1,1-Trichloroethane	ND	U	0.698	4.49	ug/Kg	1	07/23/2012 17:12
1,1,2,2-Tetrachloroethane	ND	U	1.01	4.49	ug/Kg	1	07/23/2012 17:12
1,1,2-Trichloroethane	ND	U	0.934	4.49	ug/Kg	1	07/23/2012 17:12
1,1-Dichloroethane	ND	U	0.775	4.49	ug/Kg	1	07/23/2012 17:12
1,1-Dichloroethene	ND	U	0.811	4.49	ug/Kg	1	07/23/2012 17:12
1,1-Dichloropropene	ND	U	0.828	4.49	ug/Kg	1	07/23/2012 17:12
1,2,3-Trichlorobenzene	ND	U	1.25	4.49	ug/Kg	1	07/23/2012 17:12
1,2,3-Trichloropropane	ND	U	0.997	4.49	ug/Kg	1	07/23/2012 17:12
1,2,4-Trichlorobenzene	ND	U	1.07	4.49	ug/Kg	1	07/23/2012 17:12
1,2,4-Trimethylbenzene	ND	U	0.961	4.49	ug/Kg	1	07/23/2012 17:12
1,2-Dibromo-3-chloropropane	ND	U	5.22	26.9	ug/Kg	1	07/23/2012 17:12
1,2-Dibromoethane	ND	U	0.681	4.49	ug/Kg	1	07/23/2012 17:12
1,2-Dichlorobenzene	ND	U	1.16	4.49	ug/Kg	1	07/23/2012 17:12
1,2-Dichloroethane	ND	U	0.795	4.49	ug/Kg	1	07/23/2012 17:12
1,2-Dichloropropane	ND	U	0.723	4.49	ug/Kg	1	07/23/2012 17:12
1,3,5-Trimethylbenzene	ND	U	0.883	4.49	ug/Kg	1	07/23/2012 17:12
1,3-Dichlorobenzene	ND	U	1.04	4.49	ug/Kg	1	07/23/2012 17:12
1,3-Dichloropropane	ND	U	0.724	4.49	ug/Kg	1	07/23/2012 17:12
1,4-Dichlorobenzene	ND	U	0.988	4.49	ug/Kg	1	07/23/2012 17:12
2,2-Dichloropropane	ND	U	0.749	4.49	ug/Kg	1	07/23/2012 17:12
2-Butanone	ND	U	1.40	22.4	ug/Kg	1	07/23/2012 17:12
2-Chlorotoluene	ND	U	1.01	4.49	ug/Kg	1	07/23/2012 17:12
2-Hexanone	ND	U	1.75	11.2	ug/Kg	1	07/23/2012 17:12
4-Chlorotoluene	ND	U	0.997	4.49	ug/Kg	1	07/23/2012 17:12
4-Isopropyltoluene	ND	U	0.934	4.49	ug/Kg	1	07/23/2012 17:12
4-Methyl-2-pentanone	ND	U	2.88	11.2	ug/Kg	1	07/23/2012 17:12
Acetone	ND	U	1.11	44.9	ug/Kg	1	07/23/2012 17:12
Benzene	ND	U	0.802	4.49	ug/Kg	1	07/23/2012 17:12
Bromobenzene	ND	U	0.885	4.49	ug/Kg	1	07/23/2012 17:12
Bromochloromethane	ND	U	0.784	4.49	ug/Kg	1	07/23/2012 17:12
Bromodichloromethane	ND	U	0.730	4.49	ug/Kg	1	07/23/2012 17:12
Bromoform	ND	U	0.601	4.49	ug/Kg	1	07/23/2012 17:12
Bromomethane	ND	U	1.58	4.49	ug/Kg	1	07/23/2012 17:12
n-Butylbenzene	ND	U	0.970	4.49	ug/Kg	1	07/23/2012 17:12
Carbon disulfide	ND	U	0.776	4.49	ug/Kg	1	07/23/2012 17:12
Carbon tetrachloride	ND	U	0.781	4.49	ug/Kg	1	07/23/2012 17:12
Chlorobenzene	ND	U	0.695	4.49	ug/Kg	1	07/23/2012 17:12
Chloroethane	ND	U	0.413	4.49	ug/Kg	1	07/23/2012 17:12
Chloroform	ND	U	0.729	4.49	ug/Kg	1	07/23/2012 17:12
Chloromethane	ND	U	0.651	4.49	ug/Kg	1	07/23/2012 17:12
Dibromochloromethane	ND	U	0.760	4.49	ug/Kg	1	07/23/2012 17:12
Dibromomethane	ND	U	0.729	4.49	ug/Kg	1	07/23/2012 17:12
Dichlorodifluoromethane	ND	U	0.653	4.49	ug/Kg	1	07/23/2012 17:12

Print Date: 07/26/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 105 DPT-07 (2-4ft)

Client Sample ID: **105 DPT-07 (2-4ft)**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202266007-A
Lab Project ID: 31202266

Collection Date: 07/17/2012 19:20
Received Date: 07/18/2012 16:30
Matrix: Soil-Solid as dry weight
Solids (%): 84.90

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	U	0.773	4.49	ug/Kg	1	07/23/2012 17:12
trans-1,3-Dichloropropene	ND	U	0.804	4.49	ug/Kg	1	07/23/2012 17:12
Diisopropyl Ether	ND	U	0.806	4.49	ug/Kg	1	07/23/2012 17:12
Ethyl Benzene	ND	U	0.742	4.49	ug/Kg	1	07/23/2012 17:12
Hexachlorobutadiene	ND	U	1.23	4.49	ug/Kg	1	07/23/2012 17:12
Isopropylbenzene (Cumene)	ND	U	0.865	4.49	ug/Kg	1	07/23/2012 17:12
Methyl iodide	ND	U	0.760	4.49	ug/Kg	1	07/23/2012 17:12
Methylene chloride	ND	U	0.627	18.0	ug/Kg	1	07/23/2012 17:12
Naphthalene	ND	U	1.09	4.49	ug/Kg	1	07/23/2012 17:12
Styrene	ND	U	0.885	4.49	ug/Kg	1	07/23/2012 17:12
Tetrachloroethene	**59.8**		0.675	4.49	ug/Kg	1	07/23/2012 17:12
Toluene	ND	U	0.727	4.49	ug/Kg	1	07/23/2012 17:12
Trichloroethene	**1.67**	J	0.751	4.49	ug/Kg	1	07/23/2012 17:12
Trichlorofluoromethane	ND	U	0.677	4.49	ug/Kg	1	07/23/2012 17:12
Vinyl chloride	ND	U	0.661	4.49	ug/Kg	1	07/23/2012 17:12
Xylene (total)	ND	U	1.59	8.98	ug/Kg	1	07/23/2012 17:12
cis-1,2-Dichloroethene	ND	U	0.696	4.49	ug/Kg	1	07/23/2012 17:12
m,p-Xylene	ND	U	1.59	8.98	ug/Kg	1	07/23/2012 17:12
n-Propylbenzene	ND	U	0.875	4.49	ug/Kg	1	07/23/2012 17:12
o-Xylene	ND	U	0.907	4.49	ug/Kg	1	07/23/2012 17:12
sec-Butylbenzene	ND	U	0.934	4.49	ug/Kg	1	07/23/2012 17:12
tert-Butyl methyl ether (MTBE)	ND	U	0.765	4.49	ug/Kg	1	07/23/2012 17:12
tert-Butylbenzene	ND	U	0.813	4.49	ug/Kg	1	07/23/2012 17:12
trans-1,2-Dichloroethene	ND	U	0.773	4.49	ug/Kg	1	07/23/2012 17:12
trans-1,4-Dichloro-2-butene	ND	U	4.86	22.4	ug/Kg	1	07/23/2012 17:12
Surrogates							
1,2-Dichloroethane-d4	136			55.0-173	%	1	07/23/2012 17:12
4-Bromofluorobenzene	106			23.0-141	%	1	07/23/2012 17:12
Toluene d8	104			57.0-134	%	1	07/23/2012 17:12

Batch Information

Analytical Batch: **VMS2400**
Analytical Method: **SW-846 8260B**
Instrument: **MSD9**
Analyst: **DVO**
Analytical Date/Time: **07/23/2012 17:12**

Prep Batch: **VXX3683**
Prep Method: **SW-846 5035 SL**
Prep Date/Time: **07/19/2012 13:54**
Prep Initial Wt./Vol.: **6.56 g**
Prep Extract Vol: **5 mL**

Print Date: 07/26/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 105 DPT-07 (2-4ft)

Client Sample ID: **105 DPT-07 (2-4ft)**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202266007-E
Lab Project ID: 31202266

Collection Date: 07/17/2012 19:20
Received Date: 07/18/2012 16:30
Matrix: Soil-Solid as dry weight
Solids (%): 84.90

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,2,4-Trichlorobenzene	ND	U	33.0	374	ug/Kg	1	07/23/2012 16:07
1,2-Dichlorobenzene	ND	U	18.6	374	ug/Kg	1	07/23/2012 16:07
1,3-Dichlorobenzene	ND	U	25.2	374	ug/Kg	1	07/23/2012 16:07
1,4-Dichlorobenzene	ND	U	26.4	374	ug/Kg	1	07/23/2012 16:07
2,4,5-Trichlorophenol	ND	U	25.0	374	ug/Kg	1	07/23/2012 16:07
2,4,6-Trichlorophenol	ND	U	25.3	374	ug/Kg	1	07/23/2012 16:07
2,4-Dichlorophenol	ND	U	21.6	374	ug/Kg	1	07/23/2012 16:07
2,4-Dinitrophenol	ND	U	34.6	746	ug/Kg	1	07/23/2012 16:07
2,4-Dinitrotoluene	ND	U	18.9	374	ug/Kg	1	07/23/2012 16:07
2,6-Dinitrotoluene	ND	U	26.8	374	ug/Kg	1	07/23/2012 16:07
2-Chloronaphthalene	ND	U	22.0	374	ug/Kg	1	07/23/2012 16:07
2-Chlorophenol	ND	U	19.8	374	ug/Kg	1	07/23/2012 16:07
2-Methylnaphthalene	ND	U	30.2	374	ug/Kg	1	07/23/2012 16:07
2-Methylphenol	ND	U	20.7	374	ug/Kg	1	07/23/2012 16:07
2-Nitroaniline	ND	U	24.6	374	ug/Kg	1	07/23/2012 16:07
2-Nitrophenol	ND	U	17.9	374	ug/Kg	1	07/23/2012 16:07
3 and/or 4-Methylphenol	ND	U	24.2	374	ug/Kg	1	07/23/2012 16:07
3,3'-Dichlorobenzidine	ND	U	17.9	374	ug/Kg	1	07/23/2012 16:07
3-Nitroaniline	ND	U	16.8	374	ug/Kg	1	07/23/2012 16:07
4,6-Dinitro-2-methylphenol	ND	U	17.6	374	ug/Kg	1	07/23/2012 16:07
4-Chloro-3-methylphenol	ND	U	18.6	374	ug/Kg	1	07/23/2012 16:07
4-Chloroaniline	ND	U	29.9	374	ug/Kg	1	07/23/2012 16:07
4-Chlorophenyl phenyl ether	ND	U	39.9	374	ug/Kg	1	07/23/2012 16:07
Acenaphthene	ND	U	17.0	374	ug/Kg	1	07/23/2012 16:07
Acenaphthylene	ND	U	15.8	374	ug/Kg	1	07/23/2012 16:07
Anthracene	ND	U	16.6	374	ug/Kg	1	07/23/2012 16:07
Benzo(a)anthracene	ND	U	20.5	374	ug/Kg	1	07/23/2012 16:07
Benzo(a)pyrene	ND	U	21.1	374	ug/Kg	1	07/23/2012 16:07
Benzo(b)fluoranthene	ND	U	21.5	374	ug/Kg	1	07/23/2012 16:07
Benzo(g,h,i)perylene	ND	U	59.5	374	ug/Kg	1	07/23/2012 16:07
Benzo(k)fluoranthene	ND	U	44.8	374	ug/Kg	1	07/23/2012 16:07
Benzoic acid	ND	U	8.29	374	ug/Kg	1	07/23/2012 16:07
Bis(2-Chloroethoxy)methane	ND	U	16.8	374	ug/Kg	1	07/23/2012 16:07
Bis(2-Chloroethyl)ether	ND	U	34.9	374	ug/Kg	1	07/23/2012 16:07
Bis(2-Chloroisopropyl)ether	ND	U	32.6	374	ug/Kg	1	07/23/2012 16:07
Bis(2-Ethylhexyl)phthalate	ND	U	17.9	374	ug/Kg	1	07/23/2012 16:07
4-Bromophenyl phenyl ether	ND	U	24.6	374	ug/Kg	1	07/23/2012 16:07
Butyl benzyl phthalate	ND	U	32.5	374	ug/Kg	1	07/23/2012 16:07
Chrysene	ND	U	43.5	374	ug/Kg	1	07/23/2012 16:07
Di-n-butyl phthalate	ND	U	17.7	374	ug/Kg	1	07/23/2012 16:07
Di-n-octyl phthalate	ND	U	20.7	374	ug/Kg	1	07/23/2012 16:07
Dibenz(a,h)anthracene	ND	U	16.8	374	ug/Kg	1	07/23/2012 16:07
Dibenzofuran	ND	U	29.3	374	ug/Kg	1	07/23/2012 16:07
Diethyl phthalate	ND	U	20.2	374	ug/Kg	1	07/23/2012 16:07

Print Date: 07/26/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 105 DPT-07 (2-4ft)

Client Sample ID: **105 DPT-07 (2-4ft)**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202266007-E
Lab Project ID: 31202266

Collection Date: 07/17/2012 19:20
Received Date: 07/18/2012 16:30
Matrix: Soil-Solid as dry weight
Solids (%): 84.90

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
Dimethyl phthalate	ND	U	28.7	374	ug/Kg	1	07/23/2012 16:07
2,4-Dimethylphenol	ND	U	27.4	374	ug/Kg	1	07/23/2012 16:07
Diphenylamine	ND	U	16.8	374	ug/Kg	1	07/23/2012 16:07
Fluoranthene	ND	U	35.1	374	ug/Kg	1	07/23/2012 16:07
Fluorene	ND	U	19.8	374	ug/Kg	1	07/23/2012 16:07
Hexachlorobenzene	ND	U	35.4	374	ug/Kg	1	07/23/2012 16:07
Hexachlorobutadiene	ND	U	22.3	374	ug/Kg	1	07/23/2012 16:07
Hexachlorocyclopentadiene	ND	U	113	374	ug/Kg	1	07/23/2012 16:07
Hexachloroethane	ND	U	21.5	374	ug/Kg	1	07/23/2012 16:07
Indeno(1,2,3-cd)pyrene	ND	U	29.1	374	ug/Kg	1	07/23/2012 16:07
Isophorone	ND	U	17.0	374	ug/Kg	1	07/23/2012 16:07
Naphthalene	ND	U	32.2	374	ug/Kg	1	07/23/2012 16:07
4-Nitroaniline	ND	U	21.5	374	ug/Kg	1	07/23/2012 16:07
Nitrobenzene	ND	U	21.5	374	ug/Kg	1	07/23/2012 16:07
4-Nitrophenol	ND	U	36.8	374	ug/Kg	1	07/23/2012 16:07
Pentachlorophenol	ND	U	29.9	374	ug/Kg	1	07/23/2012 16:07
Phenanthrene	ND	U	24.6	374	ug/Kg	1	07/23/2012 16:07
Phenol	ND	U	34.9	374	ug/Kg	1	07/23/2012 16:07
Pyrene	ND	U	15.8	374	ug/Kg	1	07/23/2012 16:07
n-Nitrosodi-n-propylamine	ND	U	107	374	ug/Kg	1	07/23/2012 16:07
Surrogates							
2,4,6-Tribromophenol	78.0			41.0-129	%	1	07/23/2012 16:07
2-Fluorobiphenyl	72.0			48.0-123	%	1	07/23/2012 16:07
2-Fluorophenol	73.0			42.0-123	%	1	07/23/2012 16:07
Nitrobenzene-d5	75.0			46.0-117	%	1	07/23/2012 16:07
Phenol-d6	84.0			48.0-125	%	1	07/23/2012 16:07
Terphenyl-d14	79.0			44.0-140	%	1	07/23/2012 16:07

Batch Information

Analytical Batch: **XMS1608**
Analytical Method: **SW-846 8270D**
Instrument: **MSD10**
Analyst: **CMP**
Analytical Date/Time: **07/23/2012 16:07**

Prep Batch: **XXX2841**
Prep Method: **SW-846 3541**
Prep Date/Time: **07/20/2012 11:30**
Prep Initial Wt./Vol.: **31.56 g**
Prep Extract Vol: **10 mL**

Print Date: 07/26/2012

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SGS ANALYTICAL PERSPECTIVES

Results of 105 DPT-08 (3-4ft)

Client Sample ID: **105 DPT-08 (3-4ft)**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202266008-A
Lab Project ID: 31202266

Collection Date: 07/17/2012 19:40
Received Date: 07/18/2012 16:30
Matrix: Soil-Solid as dry weight
Solids (%): 86.80

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	U	0.853	4.02	ug/Kg	1	07/23/2012 17:40
1,1,1-Trichloroethane	ND	U	0.626	4.02	ug/Kg	1	07/23/2012 17:40
1,1,2,2-Tetrachloroethane	ND	U	0.909	4.02	ug/Kg	1	07/23/2012 17:40
1,1,2-Trichloroethane	ND	U	0.836	4.02	ug/Kg	1	07/23/2012 17:40
1,1-Dichloroethane	ND	U	0.694	4.02	ug/Kg	1	07/23/2012 17:40
1,1-Dichloroethene	ND	U	0.726	4.02	ug/Kg	1	07/23/2012 17:40
1,1-Dichloropropene	ND	U	0.742	4.02	ug/Kg	1	07/23/2012 17:40
1,2,3-Trichlorobenzene	ND	U	1.12	4.02	ug/Kg	1	07/23/2012 17:40
1,2,3-Trichloropropane	ND	U	0.893	4.02	ug/Kg	1	07/23/2012 17:40
1,2,4-Trichlorobenzene	ND	U	0.957	4.02	ug/Kg	1	07/23/2012 17:40
1,2,4-Trimethylbenzene	ND	U	0.861	4.02	ug/Kg	1	07/23/2012 17:40
1,2-Dibromo-3-chloropropane	ND	U	4.67	24.1	ug/Kg	1	07/23/2012 17:40
1,2-Dibromoethane	ND	U	0.610	4.02	ug/Kg	1	07/23/2012 17:40
1,2-Dichlorobenzene	ND	U	1.04	4.02	ug/Kg	1	07/23/2012 17:40
1,2-Dichloroethane	ND	U	0.713	4.02	ug/Kg	1	07/23/2012 17:40
1,2-Dichloropropane	ND	U	0.647	4.02	ug/Kg	1	07/23/2012 17:40
1,3,5-Trimethylbenzene	ND	U	0.791	4.02	ug/Kg	1	07/23/2012 17:40
1,3-Dichlorobenzene	ND	U	0.933	4.02	ug/Kg	1	07/23/2012 17:40
1,3-Dichloropropane	ND	U	0.648	4.02	ug/Kg	1	07/23/2012 17:40
1,4-Dichlorobenzene	ND	U	0.885	4.02	ug/Kg	1	07/23/2012 17:40
2,2-Dichloropropane	ND	U	0.671	4.02	ug/Kg	1	07/23/2012 17:40
2-Butanone	ND	U	1.25	20.1	ug/Kg	1	07/23/2012 17:40
2-Chlorotoluene	ND	U	0.901	4.02	ug/Kg	1	07/23/2012 17:40
2-Hexanone	ND	U	1.57	10.1	ug/Kg	1	07/23/2012 17:40
4-Chlorotoluene	ND	U	0.893	4.02	ug/Kg	1	07/23/2012 17:40
4-Isopropyltoluene	ND	U	0.836	4.02	ug/Kg	1	07/23/2012 17:40
4-Methyl-2-pentanone	ND	U	2.58	10.1	ug/Kg	1	07/23/2012 17:40
Acetone	ND	U	0.997	40.2	ug/Kg	1	07/23/2012 17:40
Benzene	ND	U	0.718	4.02	ug/Kg	1	07/23/2012 17:40
Bromobenzene	ND	U	0.793	4.02	ug/Kg	1	07/23/2012 17:40
Bromochloromethane	ND	U	0.702	4.02	ug/Kg	1	07/23/2012 17:40
Bromodichloromethane	ND	U	0.654	4.02	ug/Kg	1	07/23/2012 17:40
Bromoform	ND	U	0.538	4.02	ug/Kg	1	07/23/2012 17:40
Bromomethane	ND	U	1.42	4.02	ug/Kg	1	07/23/2012 17:40
n-Butylbenzene	ND	U	0.869	4.02	ug/Kg	1	07/23/2012 17:40
Carbon disulfide	ND	U	0.695	4.02	ug/Kg	1	07/23/2012 17:40
Carbon tetrachloride	ND	U	0.700	4.02	ug/Kg	1	07/23/2012 17:40
Chlorobenzene	ND	U	0.623	4.02	ug/Kg	1	07/23/2012 17:40
Chloroethane	ND	U	0.370	4.02	ug/Kg	1	07/23/2012 17:40
Chloroform	ND	U	0.653	4.02	ug/Kg	1	07/23/2012 17:40
Chloromethane	ND	U	0.583	4.02	ug/Kg	1	07/23/2012 17:40
Dibromochloromethane	ND	U	0.681	4.02	ug/Kg	1	07/23/2012 17:40
Dibromomethane	ND	U	0.653	4.02	ug/Kg	1	07/23/2012 17:40
Dichlorodifluoromethane	ND	U	0.585	4.02	ug/Kg	1	07/23/2012 17:40

Print Date: 07/26/2012

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SGS ANALYTICAL PERSPECTIVES

Results of 105 DPT-08 (3-4ft)

Client Sample ID: **105 DPT-08 (3-4ft)**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202266008-A
Lab Project ID: 31202266

Collection Date: 07/17/2012 19:40
Received Date: 07/18/2012 16:30
Matrix: Soil-Solid as dry weight
Solids (%): 86.80

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	U	0.692	4.02	ug/Kg	1	07/23/2012 17:40
trans-1,3-Dichloropropene	ND	U	0.721	4.02	ug/Kg	1	07/23/2012 17:40
Diisopropyl Ether	ND	U	0.722	4.02	ug/Kg	1	07/23/2012 17:40
Ethyl Benzene	ND	U	0.665	4.02	ug/Kg	1	07/23/2012 17:40
Hexachlorobutadiene	ND	U	1.10	4.02	ug/Kg	1	07/23/2012 17:40
Isopropylbenzene (Cumene)	ND	U	0.775	4.02	ug/Kg	1	07/23/2012 17:40
Methyl iodide	ND	U	0.680	4.02	ug/Kg	1	07/23/2012 17:40
Methylene chloride	ND	U	0.561	16.1	ug/Kg	1	07/23/2012 17:40
Naphthalene	ND	U	0.973	4.02	ug/Kg	1	07/23/2012 17:40
Styrene	ND	U	0.793	4.02	ug/Kg	1	07/23/2012 17:40
Tetrachloroethene	ND	U	0.605	4.02	ug/Kg	1	07/23/2012 17:40
Toluene	ND	U	0.651	4.02	ug/Kg	1	07/23/2012 17:40
Trichloroethene	ND	U	0.673	4.02	ug/Kg	1	07/23/2012 17:40
Trichlorofluoromethane	ND	U	0.606	4.02	ug/Kg	1	07/23/2012 17:40
Vinyl chloride	ND	U	0.592	4.02	ug/Kg	1	07/23/2012 17:40
Xylene (total)	ND	U	1.42	8.04	ug/Kg	1	07/23/2012 17:40
cis-1,2-Dichloroethene	ND	U	0.623	4.02	ug/Kg	1	07/23/2012 17:40
m,p-Xylene	ND	U	1.42	8.04	ug/Kg	1	07/23/2012 17:40
n-Propylbenzene	ND	U	0.784	4.02	ug/Kg	1	07/23/2012 17:40
o-Xylene	ND	U	0.812	4.02	ug/Kg	1	07/23/2012 17:40
sec-Butylbenzene	ND	U	0.836	4.02	ug/Kg	1	07/23/2012 17:40
tert-Butyl methyl ether (MTBE)	ND	U	0.685	4.02	ug/Kg	1	07/23/2012 17:40
tert-Butylbenzene	ND	U	0.729	4.02	ug/Kg	1	07/23/2012 17:40
trans-1,2-Dichloroethene	ND	U	0.692	4.02	ug/Kg	1	07/23/2012 17:40
trans-1,4-Dichloro-2-butene	ND	U	4.35	20.1	ug/Kg	1	07/23/2012 17:40
Surrogates							
1,2-Dichloroethane-d4	129			55.0-173	%	1	07/23/2012 17:40
4-Bromofluorobenzene	102			23.0-141	%	1	07/23/2012 17:40
Toluene d8	103			57.0-134	%	1	07/23/2012 17:40

Batch Information

Analytical Batch: **VMS2400**
Analytical Method: **SW-846 8260B**
Instrument: **MSD9**
Analyst: **DVO**
Analytical Date/Time: **07/23/2012 17:40**

Prep Batch: **VXX3683**
Prep Method: **SW-846 5035 SL**
Prep Date/Time: **07/19/2012 13:58**
Prep Initial Wt./Vol.: **7.16 g**
Prep Extract Vol: **5 mL**

Print Date: 07/26/2012

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SGS ANALYTICAL PERSPECTIVES

Results of 105 DPT-08 (3-4ft)

Client Sample ID: **105 DPT-08 (3-4ft)**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202266008-E
Lab Project ID: 31202266

Collection Date: 07/17/2012 19:40
Received Date: 07/18/2012 16:30
Matrix: Soil-Solid as dry weight
Solids (%): 86.80

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,2,4-Trichlorobenzene	ND	U	31.4	356	ug/Kg	1	07/23/2012 16:29
1,2-Dichlorobenzene	ND	U	17.7	356	ug/Kg	1	07/23/2012 16:29
1,3-Dichlorobenzene	ND	U	24.0	356	ug/Kg	1	07/23/2012 16:29
1,4-Dichlorobenzene	ND	U	25.1	356	ug/Kg	1	07/23/2012 16:29
2,4,5-Trichlorophenol	ND	U	23.8	356	ug/Kg	1	07/23/2012 16:29
2,4,6-Trichlorophenol	ND	U	24.1	356	ug/Kg	1	07/23/2012 16:29
2,4-Dichlorophenol	ND	U	20.6	356	ug/Kg	1	07/23/2012 16:29
2,4-Dinitrophenol	ND	U	33.0	711	ug/Kg	1	07/23/2012 16:29
2,4-Dinitrotoluene	ND	U	18.0	356	ug/Kg	1	07/23/2012 16:29
2,6-Dinitrotoluene	ND	U	25.5	356	ug/Kg	1	07/23/2012 16:29
2-Chloronaphthalene	ND	U	20.9	356	ug/Kg	1	07/23/2012 16:29
2-Chlorophenol	ND	U	18.9	356	ug/Kg	1	07/23/2012 16:29
2-Methylnaphthalene	ND	U	28.8	356	ug/Kg	1	07/23/2012 16:29
2-Methylphenol	ND	U	19.7	356	ug/Kg	1	07/23/2012 16:29
2-Nitroaniline	ND	U	23.4	356	ug/Kg	1	07/23/2012 16:29
2-Nitrophenol	ND	U	17.1	356	ug/Kg	1	07/23/2012 16:29
3 and/or 4-Methylphenol	ND	U	23.1	356	ug/Kg	1	07/23/2012 16:29
3,3'-Dichlorobenzidine	ND	U	17.1	356	ug/Kg	1	07/23/2012 16:29
3-Nitroaniline	ND	U	16.0	356	ug/Kg	1	07/23/2012 16:29
4,6-Dinitro-2-methylphenol	ND	U	16.7	356	ug/Kg	1	07/23/2012 16:29
4-Chloro-3-methylphenol	ND	U	17.7	356	ug/Kg	1	07/23/2012 16:29
4-Chloroaniline	ND	U	28.4	356	ug/Kg	1	07/23/2012 16:29
4-Chlorophenyl phenyl ether	ND	U	38.0	356	ug/Kg	1	07/23/2012 16:29
Acenaphthene	ND	U	16.2	356	ug/Kg	1	07/23/2012 16:29
Acenaphthylene	ND	U	15.0	356	ug/Kg	1	07/23/2012 16:29
Anthracene	ND	U	15.8	356	ug/Kg	1	07/23/2012 16:29
Benzo(a)anthracene	ND	U	19.6	356	ug/Kg	1	07/23/2012 16:29
Benzo(a)pyrene	ND	U	20.1	356	ug/Kg	1	07/23/2012 16:29
Benzo(b)fluoranthene	ND	U	20.5	356	ug/Kg	1	07/23/2012 16:29
Benzo(g,h,i)perylene	ND	U	56.6	356	ug/Kg	1	07/23/2012 16:29
Benzo(k)fluoranthene	ND	U	42.7	356	ug/Kg	1	07/23/2012 16:29
Benzoic acid	ND	U	7.89	356	ug/Kg	1	07/23/2012 16:29
Bis(2-Chloroethoxy)methane	ND	U	16.0	356	ug/Kg	1	07/23/2012 16:29
Bis(2-Chloroethyl)ether	ND	U	33.2	356	ug/Kg	1	07/23/2012 16:29
Bis(2-Chloroisopropyl)ether	ND	U	31.1	356	ug/Kg	1	07/23/2012 16:29
Bis(2-Ethylhexyl)phthalate	ND	U	17.1	356	ug/Kg	1	07/23/2012 16:29
4-Bromophenyl phenyl ether	ND	U	23.4	356	ug/Kg	1	07/23/2012 16:29
Butyl benzyl phthalate	ND	U	30.9	356	ug/Kg	1	07/23/2012 16:29
Chrysene	ND	U	41.4	356	ug/Kg	1	07/23/2012 16:29
Di-n-butyl phthalate	ND	U	16.8	356	ug/Kg	1	07/23/2012 16:29
Di-n-octyl phthalate	ND	U	19.7	356	ug/Kg	1	07/23/2012 16:29
Dibenz(a,h)anthracene	ND	U	16.0	356	ug/Kg	1	07/23/2012 16:29
Dibenzofuran	ND	U	27.9	356	ug/Kg	1	07/23/2012 16:29
Diethyl phthalate	ND	U	19.2	356	ug/Kg	1	07/23/2012 16:29

Print Date: 07/26/2012

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SGS ANALYTICAL PERSPECTIVES

Results of 105 DPT-08 (3-4ft)

Client Sample ID: **105 DPT-08 (3-4ft)**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202266008-E
Lab Project ID: 31202266

Collection Date: 07/17/2012 19:40
Received Date: 07/18/2012 16:30
Matrix: Soil-Solid as dry weight
Solids (%): 86.80

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
Dimethyl phthalate	ND	U	27.3	356	ug/Kg	1	07/23/2012 16:29
2,4-Dimethylphenol	ND	U	26.0	356	ug/Kg	1	07/23/2012 16:29
Diphenylamine	ND	U	16.0	356	ug/Kg	1	07/23/2012 16:29
Fluoranthene	ND	U	33.4	356	ug/Kg	1	07/23/2012 16:29
Fluorene	ND	U	18.9	356	ug/Kg	1	07/23/2012 16:29
Hexachlorobenzene	ND	U	33.7	356	ug/Kg	1	07/23/2012 16:29
Hexachlorobutadiene	ND	U	21.3	356	ug/Kg	1	07/23/2012 16:29
Hexachlorocyclopentadiene	ND	U	108	356	ug/Kg	1	07/23/2012 16:29
Hexachloroethane	ND	U	20.5	356	ug/Kg	1	07/23/2012 16:29
Indeno(1,2,3-cd)pyrene	ND	U	27.8	356	ug/Kg	1	07/23/2012 16:29
Isophorone	ND	U	16.2	356	ug/Kg	1	07/23/2012 16:29
Naphthalene	ND	U	30.7	356	ug/Kg	1	07/23/2012 16:29
4-Nitroaniline	ND	U	20.5	356	ug/Kg	1	07/23/2012 16:29
Nitrobenzene	ND	U	20.5	356	ug/Kg	1	07/23/2012 16:29
4-Nitrophenol	ND	U	35.0	356	ug/Kg	1	07/23/2012 16:29
Pentachlorophenol	ND	U	28.4	356	ug/Kg	1	07/23/2012 16:29
Phenanthrene	ND	U	23.4	356	ug/Kg	1	07/23/2012 16:29
Phenol	ND	U	33.2	356	ug/Kg	1	07/23/2012 16:29
Pyrene	ND	U	15.0	356	ug/Kg	1	07/23/2012 16:29
n-Nitrosodi-n-propylamine	ND	U	102	356	ug/Kg	1	07/23/2012 16:29
Surrogates							
2,4,6-Tribromophenol	92.0			41.0-129	%	1	07/23/2012 16:29
2-Fluorobiphenyl	89.0			48.0-123	%	1	07/23/2012 16:29
2-Fluorophenol	83.0			42.0-123	%	1	07/23/2012 16:29
Nitrobenzene-d5	87.0			46.0-117	%	1	07/23/2012 16:29
Phenol-d6	94.0			48.0-125	%	1	07/23/2012 16:29
Terphenyl-d14	91.0			44.0-140	%	1	07/23/2012 16:29

Batch Information

Analytical Batch: **XMS1608**
Analytical Method: **SW-846 8270D**
Instrument: **MSD10**
Analyst: **CMP**
Analytical Date/Time: **07/23/2012 16:29**

Prep Batch: **XXX2841**
Prep Method: **SW-846 3541**
Prep Date/Time: **07/20/2012 11:30**
Prep Initial Wt./Vol.: **32.4 g**
Prep Extract Vol: **10 mL**

Print Date: 07/26/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 105 DPT-09 (4-5ft)

Client Sample ID: **105 DPT-09 (4-5ft)**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202266009-D
Lab Project ID: 31202266

Collection Date: 07/17/2012 20:10
Received Date: 07/18/2012 16:30
Matrix: Soil-Solid as dry weight
Solids (%): 86.10

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	U	17.2	165	ug/Kg	200	07/23/2012 19:05
1,1,1-Trichloroethane	ND	U	20.3	165	ug/Kg	200	07/23/2012 19:05
1,1,2,2-Tetrachloroethane	ND	U	25.8	165	ug/Kg	200	07/23/2012 19:05
1,1,2-Trichloroethane	ND	U	20.8	165	ug/Kg	200	07/23/2012 19:05
1,1-Dichloroethane	ND	U	27.3	165	ug/Kg	200	07/23/2012 19:05
1,1-Dichloroethene	ND	U	35.0	165	ug/Kg	200	07/23/2012 19:05
1,1-Dichloropropene	ND	U	14.3	165	ug/Kg	200	07/23/2012 19:05
1,2,3-Trichlorobenzene	ND	U	18.2	165	ug/Kg	200	07/23/2012 19:05
1,2,3-Trichloropropane	ND	U	35.0	165	ug/Kg	200	07/23/2012 19:05
1,2,4-Trichlorobenzene	ND	U	15.1	165	ug/Kg	200	07/23/2012 19:05
1,2,4-Trimethylbenzene	**3610**		15.9	165	ug/Kg	200	07/23/2012 19:05
1,2-Dibromo-3-chloropropane	ND	U	124	826	ug/Kg	200	07/23/2012 19:05
1,2-Dibromoethane	ND	U	19.8	165	ug/Kg	200	07/23/2012 19:05
1,2-Dichlorobenzene	ND	U	22.6	165	ug/Kg	200	07/23/2012 19:05
1,2-Dichloroethane	ND	U	27.6	165	ug/Kg	200	07/23/2012 19:05
1,2-Dichloropropane	ND	U	26.9	165	ug/Kg	200	07/23/2012 19:05
1,3,5-Trimethylbenzene	**1180**		18.7	165	ug/Kg	200	07/23/2012 19:05
1,3-Dichlorobenzene	ND	U	17.0	165	ug/Kg	200	07/23/2012 19:05
1,3-Dichloropropane	ND	U	21.5	165	ug/Kg	200	07/23/2012 19:05
1,4-Dichlorobenzene	ND	U	21.5	165	ug/Kg	200	07/23/2012 19:05
2,2-Dichloropropane	ND	U	64.9	165	ug/Kg	200	07/23/2012 19:05
2-Butanone	ND	U	119	4130	ug/Kg	200	07/23/2012 19:05
2-Chlorotoluene	ND	U	18.7	165	ug/Kg	200	07/23/2012 19:05
2-Hexanone	ND	U	120	826	ug/Kg	200	07/23/2012 19:05
4-Chlorotoluene	ND	U	20.6	165	ug/Kg	200	07/23/2012 19:05
4-Isopropyltoluene	**284**		12.7	165	ug/Kg	200	07/23/2012 19:05
4-Methyl-2-pentanone	ND	U	92.2	826	ug/Kg	200	07/23/2012 19:05
Acetone	ND	U	143	4130	ug/Kg	200	07/23/2012 19:05
Benzene	ND	U	18.7	165	ug/Kg	200	07/23/2012 19:05
Bromobenzene	ND	U	18.2	165	ug/Kg	200	07/23/2012 19:05
Bromochloromethane	ND	U	34.9	165	ug/Kg	200	07/23/2012 19:05
Bromodichloromethane	ND	U	18.2	165	ug/Kg	200	07/23/2012 19:05
Bromoform	ND	U	16.1	165	ug/Kg	200	07/23/2012 19:05
Bromomethane	ND	U	39.1	165	ug/Kg	200	07/23/2012 19:05
n-Butylbenzene	ND	U	12.7	165	ug/Kg	200	07/23/2012 19:05
Carbon disulfide	**34.7**	J	17.5	165	ug/Kg	200	07/23/2012 19:05
Carbon tetrachloride	ND	U	16.7	165	ug/Kg	200	07/23/2012 19:05
Chlorobenzene	ND	U	19.2	165	ug/Kg	200	07/23/2012 19:05
Chloroethane	ND	U	51.4	165	ug/Kg	200	07/23/2012 19:05
Chloroform	ND	U	23.0	165	ug/Kg	200	07/23/2012 19:05
Chloromethane	ND	U	74.0	165	ug/Kg	200	07/23/2012 19:05
Dibromochloromethane	ND	U	22.1	165	ug/Kg	200	07/23/2012 19:05
Dibromomethane	ND	U	27.7	165	ug/Kg	200	07/23/2012 19:05
Dichlorodifluoromethane	ND	U	28.2	826	ug/Kg	200	07/23/2012 19:05

Print Date: 07/26/2012

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SGS ANALYTICAL PERSPECTIVES

Results of 105 DPT-09 (4-5ft)

Client Sample ID: **105 DPT-09 (4-5ft)**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202266009-D
Lab Project ID: 31202266

Collection Date: 07/17/2012 20:10
Received Date: 07/18/2012 16:30
Matrix: Soil-Solid as dry weight
Solids (%): 86.10

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	U	12.7	165	ug/Kg	200	07/23/2012 19:05
trans-1,3-Dichloropropene	ND	U	14.2	165	ug/Kg	200	07/23/2012 19:05
Diisopropyl Ether	ND	U	48.6	165	ug/Kg	200	07/23/2012 19:05
Ethyl Benzene	ND	U	14.5	165	ug/Kg	200	07/23/2012 19:05
Hexachlorobutadiene	ND	U	13.1	165	ug/Kg	200	07/23/2012 19:05
Isopropylbenzene (Cumene)	47.9	J	14.4	165	ug/Kg	200	07/23/2012 19:05
Methyl iodide	ND	U	19.0	165	ug/Kg	200	07/23/2012 19:05
Methylene chloride	ND	U	25.1	826	ug/Kg	200	07/23/2012 19:05
Naphthalene	492		14.1	165	ug/Kg	200	07/23/2012 19:05
Styrene	ND	U	16.8	165	ug/Kg	200	07/23/2012 19:05
Tetrachloroethene	ND	U	25.6	165	ug/Kg	200	07/23/2012 19:05
Toluene	ND	U	22.0	165	ug/Kg	200	07/23/2012 19:05
Trichloroethene	ND	U	20.6	165	ug/Kg	200	07/23/2012 19:05
Trichlorofluoromethane	ND	U	22.6	165	ug/Kg	200	07/23/2012 19:05
Vinyl chloride	ND	U	20.5	165	ug/Kg	200	07/23/2012 19:05
Xylene (total)	ND	U	30.1	330	ug/Kg	200	07/23/2012 19:05
cis-1,2-Dichloroethene	ND	U	22.5	165	ug/Kg	200	07/23/2012 19:05
m,p-Xylene	ND	U	30.1	330	ug/Kg	200	07/23/2012 19:05
n-Propylbenzene	362		18.7	165	ug/Kg	200	07/23/2012 19:05
o-Xylene	ND	U	14.4	165	ug/Kg	200	07/23/2012 19:05
sec-Butylbenzene	ND	U	18.5	165	ug/Kg	200	07/23/2012 19:05
tert-Butyl methyl ether (MTBE)	ND	U	23.8	165	ug/Kg	200	07/23/2012 19:05
tert-Butylbenzene	ND	U	14.1	165	ug/Kg	200	07/23/2012 19:05
trans-1,2-Dichloroethene	ND	U	36.8	165	ug/Kg	200	07/23/2012 19:05
trans-1,4-Dichloro-2-butene	ND	U	68.4	826	ug/Kg	200	07/23/2012 19:05
Surrogates							
1,2-Dichloroethane-d4	95.0			55.0-173	%	200	07/23/2012 19:05
4-Bromofluorobenzene	106			23.0-141	%	200	07/23/2012 19:05
Toluene d8	99.0			57.0-134	%	200	07/23/2012 19:05

Batch Information

Analytical Batch: **VMS2399**
Analytical Method: **SW-846 8260B**
Instrument: **MSD4**
Analyst: **DVO**
Analytical Date/Time: **07/23/2012 19:05**

Prep Batch: **VXX3689**
Prep Method: **SW-846 5035 SM**
Prep Date/Time: **07/19/2012 14:00**
Prep Initial Wt./Vol.: **7.03 g**
Prep Extract Vol: **5 mL**

Print Date: 07/26/2012

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SGS ANALYTICAL PERSPECTIVES

Results of 105 DPT-09 (4-5ft)

Client Sample ID: **105 DPT-09 (4-5ft)**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202266009-E
Lab Project ID: 31202266

Collection Date: 07/17/2012 20:10
Received Date: 07/18/2012 16:30
Matrix: Soil-Solid as dry weight
Solids (%): 86.10

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,2,4-Trichlorobenzene	ND	U	155	1760	ug/Kg	5	07/24/2012 20:03
1,2-Dichlorobenzene	ND	U	87.7	1760	ug/Kg	5	07/24/2012 20:03
1,3-Dichlorobenzene	ND	U	119	1760	ug/Kg	5	07/24/2012 20:03
1,4-Dichlorobenzene	ND	U	124	1760	ug/Kg	5	07/24/2012 20:03
2,4,5-Trichlorophenol	ND	U	117	1760	ug/Kg	5	07/24/2012 20:03
2,4,6-Trichlorophenol	ND	U	119	1760	ug/Kg	5	07/24/2012 20:03
2,4-Dichlorophenol	ND	U	102	1760	ug/Kg	5	07/24/2012 20:03
2,4-Dinitrophenol	ND	U	163	3510	ug/Kg	5	07/24/2012 20:03
2,4-Dinitrotoluene	ND	U	88.8	1760	ug/Kg	5	07/24/2012 20:03
2,6-Dinitrotoluene	ND	U	126	1760	ug/Kg	5	07/24/2012 20:03
2-Chloronaphthalene	ND	U	103	1760	ug/Kg	5	07/24/2012 20:03
2-Chlorophenol	ND	U	93.3	1760	ug/Kg	5	07/24/2012 20:03
2-Methylnaphthalene	**22200**		142	1760	ug/Kg	5	07/24/2012 20:03
2-Methylphenol	ND	U	97.2	1760	ug/Kg	5	07/24/2012 20:03
2-Nitroaniline	ND	U	116	1760	ug/Kg	5	07/24/2012 20:03
2-Nitrophenol	ND	U	84.3	1760	ug/Kg	5	07/24/2012 20:03
3 and/or 4-Methylphenol	ND	U	114	1760	ug/Kg	5	07/24/2012 20:03
3,3'-Dichlorobenzidine	ND	U	84.3	1760	ug/Kg	5	07/24/2012 20:03
3-Nitroaniline	ND	U	79.2	1760	ug/Kg	5	07/24/2012 20:03
4,6-Dinitro-2-methylphenol	ND	U	82.6	1760	ug/Kg	5	07/24/2012 20:03
4-Chloro-3-methylphenol	ND	U	87.7	1760	ug/Kg	5	07/24/2012 20:03
4-Chloroaniline	ND	U	140	1760	ug/Kg	5	07/24/2012 20:03
4-Chlorophenyl phenyl ether	ND	U	188	1760	ug/Kg	5	07/24/2012 20:03
Acenaphthene	ND	U	79.8	1760	ug/Kg	5	07/24/2012 20:03
Acenaphthylene	ND	U	74.2	1760	ug/Kg	5	07/24/2012 20:03
Anthracene	ND	U	78.1	1760	ug/Kg	5	07/24/2012 20:03
Benzo(a)anthracene	ND	U	96.7	1760	ug/Kg	5	07/24/2012 20:03
Benzo(a)pyrene	ND	U	99.5	1760	ug/Kg	5	07/24/2012 20:03
Benzo(b)fluoranthene	ND	U	101	1760	ug/Kg	5	07/24/2012 20:03
Benzo(g,h,i)perylene	ND	U	280	1760	ug/Kg	5	07/24/2012 20:03
Benzo(k)fluoranthene	ND	U	211	1760	ug/Kg	5	07/24/2012 20:03
Benzoic acid	ND	U	39.0	1760	ug/Kg	5	07/24/2012 20:03
Bis(2-Chloroethoxy)methane	ND	U	79.2	1760	ug/Kg	5	07/24/2012 20:03
Bis(2-Chloroethyl)ether	ND	U	164	1760	ug/Kg	5	07/24/2012 20:03
Bis(2-Chloroisopropyl)ether	ND	U	153	1760	ug/Kg	5	07/24/2012 20:03
Bis(2-Ethylhexyl)phthalate	ND	U	84.3	1760	ug/Kg	5	07/24/2012 20:03
4-Bromophenyl phenyl ether	ND	U	116	1760	ug/Kg	5	07/24/2012 20:03
Butyl benzyl phthalate	ND	U	153	1760	ug/Kg	5	07/24/2012 20:03
Chrysene	ND	U	205	1760	ug/Kg	5	07/24/2012 20:03
Di-n-butyl phthalate	ND	U	83.2	1760	ug/Kg	5	07/24/2012 20:03
Di-n-octyl phthalate	ND	U	97.2	1760	ug/Kg	5	07/24/2012 20:03
Dibenz(a,h)anthracene	ND	U	79.2	1760	ug/Kg	5	07/24/2012 20:03
Dibenzofuran	ND	U	138	1760	ug/Kg	5	07/24/2012 20:03
Diethyl phthalate	ND	U	95.0	1760	ug/Kg	5	07/24/2012 20:03

Print Date: 07/26/2012

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SGS ANALYTICAL PERSPECTIVES

Results of 105 DPT-09 (4-5ft)

Client Sample ID: **105 DPT-09 (4-5ft)**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202266009-E
Lab Project ID: 31202266

Collection Date: 07/17/2012 20:10
Received Date: 07/18/2012 16:30
Matrix: Soil-Solid as dry weight
Solids (%): 86.10

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
Dimethyl phthalate	ND	U	135	1760	ug/Kg	5	07/24/2012 20:03
2,4-Dimethylphenol	ND	U J	129	1760	ug/Kg	5	07/24/2012 20:03
Diphenylamine	ND	U	79.2	1760	ug/Kg	5	07/24/2012 20:03
Fluoranthene	ND	U	165	1760	ug/Kg	5	07/24/2012 20:03
Fluorene	**193**	J	93.3	1760	ug/Kg	5	07/24/2012 20:03
Hexachlorobenzene	ND	U	166	1760	ug/Kg	5	07/24/2012 20:03
Hexachlorobutadiene	ND	U	105	1760	ug/Kg	5	07/24/2012 20:03
Hexachlorocyclopentadiene	ND	U	532	1760	ug/Kg	5	07/24/2012 20:03
Hexachloroethane	ND	U	101	1760	ug/Kg	5	07/24/2012 20:03
Indeno(1,2,3-cd)pyrene	ND	U	137	1760	ug/Kg	5	07/24/2012 20:03
Isophorone	ND	U	79.8	1760	ug/Kg	5	07/24/2012 20:03
Naphthalene	**10800**		152	1760	ug/Kg	5	07/24/2012 20:03
4-Nitroaniline	ND	U	101	1760	ug/Kg	5	07/24/2012 20:03
Nitrobenzene	ND	U	101	1760	ug/Kg	5	07/24/2012 20:03
4-Nitrophenol	ND	U	173	1760	ug/Kg	5	07/24/2012 20:03
Pentachlorophenol	ND	U	140	1760	ug/Kg	5	07/24/2012 20:03
Phenanthrene	**158**	J	116	1760	ug/Kg	5	07/24/2012 20:03
Phenol	ND	U	164	1760	ug/Kg	5	07/24/2012 20:03
Pyrene	ND	U	74.2	1760	ug/Kg	5	07/24/2012 20:03
n-Nitrosodi-n-propylamine	ND	U	504	1760	ug/Kg	5	07/24/2012 20:03
Surrogates							
2,4,6-Tribromophenol	67.0			41.0-129	%	5	07/24/2012 20:03
2-Fluorobiphenyl	79.0			48.0-123	%	5	07/24/2012 20:03
2-Fluorophenol	77.0			42.0-123	%	5	07/24/2012 20:03
Nitrobenzene-d5	94.0			46.0-117	%	5	07/24/2012 20:03
Phenol-d6	93.0			48.0-125	%	5	07/24/2012 20:03
Terphenyl-d14	83.0			44.0-140	%	5	07/24/2012 20:03

Batch Information

Analytical Batch: **XMS1609**
Analytical Method: **SW-846 8270D**
Instrument: **MSD10**
Analyst: **CMP**
Analytical Date/Time: **07/24/2012 20:03**

Prep Batch: **XXX2841**
Prep Method: **SW-846 3541**
Prep Date/Time: **07/20/2012 11:30**
Prep Initial Wt./Vol.: **33.06 g**
Prep Extract Vol: **10 mL**

Print Date: 07/26/2012

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SGS ANALYTICAL PERSPECTIVES

Results of 105 DPT-10 (4-5ft)

Client Sample ID: **105 DPT-10 (4-5ft)**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202266010-A
Lab Project ID: 31202266

Collection Date: 07/18/2012 08:20
Received Date: 07/18/2012 16:30
Matrix: Soil-Solid as dry weight
Solids (%): 77.00

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	U	0.994	4.69	ug/Kg	1	07/25/2012 14:04
1,1,1-Trichloroethane	ND	U	0.730	4.69	ug/Kg	1	07/25/2012 14:04
1,1,2,2-Tetrachloroethane	ND	U	1.06	4.69	ug/Kg	1	07/25/2012 14:04
1,1,2-Trichloroethane	ND	U	0.976	4.69	ug/Kg	1	07/25/2012 14:04
1,1-Dichloroethane	ND	U	0.810	4.69	ug/Kg	1	07/25/2012 14:04
1,1-Dichloroethene	ND	U	0.847	4.69	ug/Kg	1	07/25/2012 14:04
1,1-Dichloropropene	ND	U	0.865	4.69	ug/Kg	1	07/25/2012 14:04
1,2,3-Trichlorobenzene	ND	U	1.30	4.69	ug/Kg	1	07/25/2012 14:04
1,2,3-Trichloropropane	ND	U	1.04	4.69	ug/Kg	1	07/25/2012 14:04
1,2,4-Trichlorobenzene	ND	U	1.12	4.69	ug/Kg	1	07/25/2012 14:04
1,2,4-Trimethylbenzene	ND	U	1.00	4.69	ug/Kg	1	07/25/2012 14:04
1,2-Dibromo-3-chloropropane	ND	U	5.45	28.1	ug/Kg	1	07/25/2012 14:04
1,2-Dibromoethane	ND	U	0.711	4.69	ug/Kg	1	07/25/2012 14:04
1,2-Dichlorobenzene	ND	U	1.21	4.69	ug/Kg	1	07/25/2012 14:04
1,2-Dichloroethane	ND	U	0.831	4.69	ug/Kg	1	07/25/2012 14:04
1,2-Dichloropropane	ND	U	0.755	4.69	ug/Kg	1	07/25/2012 14:04
1,3,5-Trimethylbenzene	ND	U	0.923	4.69	ug/Kg	1	07/25/2012 14:04
1,3-Dichlorobenzene	ND	U	1.09	4.69	ug/Kg	1	07/25/2012 14:04
1,3-Dichloropropane	ND	U	0.756	4.69	ug/Kg	1	07/25/2012 14:04
1,4-Dichlorobenzene	ND	U	1.03	4.69	ug/Kg	1	07/25/2012 14:04
2,2-Dichloropropane	ND	U	0.782	4.69	ug/Kg	1	07/25/2012 14:04
2-Butanone	ND	U	1.46	23.5	ug/Kg	1	07/25/2012 14:04
2-Chlorotoluene	ND	U	1.05	4.69	ug/Kg	1	07/25/2012 14:04
2-Hexanone	ND	U	1.83	11.7	ug/Kg	1	07/25/2012 14:04
4-Chlorotoluene	ND	U	1.04	4.69	ug/Kg	1	07/25/2012 14:04
4-Isopropyltoluene	ND	U	0.976	4.69	ug/Kg	1	07/25/2012 14:04
4-Methyl-2-pentanone	ND	U	3.01	11.7	ug/Kg	1	07/25/2012 14:04
Acetone	11.7	J	1.16	46.9	ug/Kg	1	07/25/2012 14:04
Benzene	ND	U	0.838	4.69	ug/Kg	1	07/25/2012 14:04
Bromobenzene	ND	U	0.925	4.69	ug/Kg	1	07/25/2012 14:04
Bromochloromethane	ND	U	0.819	4.69	ug/Kg	1	07/25/2012 14:04
Bromodichloromethane	ND	U	0.763	4.69	ug/Kg	1	07/25/2012 14:04
Bromoform	ND	U	0.628	4.69	ug/Kg	1	07/25/2012 14:04
Bromomethane	ND	U	1.65	4.69	ug/Kg	1	07/25/2012 14:04
n-Butylbenzene	ND	U	1.01	4.69	ug/Kg	1	07/25/2012 14:04
Carbon disulfide	ND	U	0.811	4.69	ug/Kg	1	07/25/2012 14:04
Carbon tetrachloride	ND	U	0.816	4.69	ug/Kg	1	07/25/2012 14:04
Chlorobenzene	ND	U	0.726	4.69	ug/Kg	1	07/25/2012 14:04
Chloroethane	ND	U	0.432	4.69	ug/Kg	1	07/25/2012 14:04
Chloroform	ND	U	0.762	4.69	ug/Kg	1	07/25/2012 14:04
Chloromethane	ND	U	0.680	4.69	ug/Kg	1	07/25/2012 14:04
Dibromochloromethane	ND	U	0.795	4.69	ug/Kg	1	07/25/2012 14:04
Dibromomethane	ND	U	0.762	4.69	ug/Kg	1	07/25/2012 14:04
Dichlorodifluoromethane	ND	U	0.682	4.69	ug/Kg	1	07/25/2012 14:04

Print Date: 07/26/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 105 DPT-10 (4-5ft)

Client Sample ID: **105 DPT-10 (4-5ft)**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202266010-A
Lab Project ID: 31202266

Collection Date: 07/18/2012 08:20
Received Date: 07/18/2012 16:30
Matrix: Soil-Solid as dry weight
Solids (%): 77.00

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	U	0.808	4.69	ug/Kg	1	07/25/2012 14:04
trans-1,3-Dichloropropene	ND	U	0.841	4.69	ug/Kg	1	07/25/2012 14:04
Diisopropyl Ether	ND	U	0.842	4.69	ug/Kg	1	07/25/2012 14:04
Ethyl Benzene	ND	U	0.776	4.69	ug/Kg	1	07/25/2012 14:04
Hexachlorobutadiene	ND	U	1.29	4.69	ug/Kg	1	07/25/2012 14:04
Isopropylbenzene (Cumene)	ND	U	0.903	4.69	ug/Kg	1	07/25/2012 14:04
Methyl iodide	ND	U	0.794	4.69	ug/Kg	1	07/25/2012 14:04
Methylene chloride	**0.957**	J	0.655	18.8	ug/Kg	1	07/25/2012 14:04
Naphthalene	ND	U	1.14	4.69	ug/Kg	1	07/25/2012 14:04
Styrene	ND	U	0.925	4.69	ug/Kg	1	07/25/2012 14:04
Tetrachloroethene	ND	U	0.706	4.69	ug/Kg	1	07/25/2012 14:04
Toluene	ND	U	0.760	4.69	ug/Kg	1	07/25/2012 14:04
Trichloroethene	ND	U	0.785	4.69	ug/Kg	1	07/25/2012 14:04
Trichlorofluoromethane	ND	U	0.707	4.69	ug/Kg	1	07/25/2012 14:04
Vinyl chloride	ND	U	0.690	4.69	ug/Kg	1	07/25/2012 14:04
Xylene (total)	ND	U	1.66	9.38	ug/Kg	1	07/25/2012 14:04
cis-1,2-Dichloroethene	ND	U	0.727	4.69	ug/Kg	1	07/25/2012 14:04
m,p-Xylene	ND	U	1.66	9.38	ug/Kg	1	07/25/2012 14:04
n-Propylbenzene	ND	U	0.915	4.69	ug/Kg	1	07/25/2012 14:04
o-Xylene	ND	U	0.948	4.69	ug/Kg	1	07/25/2012 14:04
sec-Butylbenzene	ND	U	0.976	4.69	ug/Kg	1	07/25/2012 14:04
tert-Butyl methyl ether (MTBE)	ND	U	0.799	4.69	ug/Kg	1	07/25/2012 14:04
tert-Butylbenzene	ND	U	0.850	4.69	ug/Kg	1	07/25/2012 14:04
trans-1,2-Dichloroethene	ND	U	0.808	4.69	ug/Kg	1	07/25/2012 14:04
trans-1,4-Dichloro-2-butene	ND	U	5.08	23.5	ug/Kg	1	07/25/2012 14:04
Surrogates							
1,2-Dichloroethane-d4	119			55.0-173	%	1	07/25/2012 14:04
4-Bromofluorobenzene	104			23.0-141	%	1	07/25/2012 14:04
Toluene d8	101			57.0-134	%	1	07/25/2012 14:04

Batch Information

Analytical Batch: **VMS2408**
Analytical Method: **SW-846 8260B**
Instrument: **MSD2**
Analyst: **DVO**
Analytical Date/Time: **07/25/2012 14:04**

Prep Batch: **VXX3699**
Prep Method: **SW-846 5035 SL**
Prep Date/Time: **07/19/2012 14:02**
Prep Initial Wt./Vol.: **6.92 g**
Prep Extract Vol: **5 mL**

Print Date: 07/26/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 105 DPT-10 (4-5ft)

Client Sample ID: **105 DPT-10 (4-5ft)**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202266010-E
Lab Project ID: 31202266

Collection Date: 07/18/2012 08:20
Received Date: 07/18/2012 16:30
Matrix: Soil-Solid as dry weight
Solids (%): 77.00

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,2,4-Trichlorobenzene	ND	U	38.8	440	ug/Kg	1	07/23/2012 17:15
1,2-Dichlorobenzene	ND	U	21.9	440	ug/Kg	1	07/23/2012 17:15
1,3-Dichlorobenzene	ND	U	29.7	440	ug/Kg	1	07/23/2012 17:15
1,4-Dichlorobenzene	ND	U	31.1	440	ug/Kg	1	07/23/2012 17:15
2,4,5-Trichlorophenol	ND	U	29.4	440	ug/Kg	1	07/23/2012 17:15
2,4,6-Trichlorophenol	ND	U	29.8	440	ug/Kg	1	07/23/2012 17:15
2,4-Dichlorophenol	ND	U	25.5	440	ug/Kg	1	07/23/2012 17:15
2,4-Dinitrophenol	ND	U	40.8	879	ug/Kg	1	07/23/2012 17:15
2,4-Dinitrotoluene	ND	U	22.2	440	ug/Kg	1	07/23/2012 17:15
2,6-Dinitrotoluene	ND	U	31.5	440	ug/Kg	1	07/23/2012 17:15
2-Chloronaphthalene	ND	U	25.9	440	ug/Kg	1	07/23/2012 17:15
2-Chlorophenol	ND	U	23.3	440	ug/Kg	1	07/23/2012 17:15
2-Methylnaphthalene	ND	U	35.6	440	ug/Kg	1	07/23/2012 17:15
2-Methylphenol	ND	U	24.3	440	ug/Kg	1	07/23/2012 17:15
2-Nitroaniline	ND	U	29.0	440	ug/Kg	1	07/23/2012 17:15
2-Nitrophenol	ND	U	21.1	440	ug/Kg	1	07/23/2012 17:15
3 and/or 4-Methylphenol	ND	U	28.6	440	ug/Kg	1	07/23/2012 17:15
3,3'-Dichlorobenzidine	ND	U	21.1	440	ug/Kg	1	07/23/2012 17:15
3-Nitroaniline	ND	U	19.8	440	ug/Kg	1	07/23/2012 17:15
4,6-Dinitro-2-methylphenol	ND	U	20.7	440	ug/Kg	1	07/23/2012 17:15
4-Chloro-3-methylphenol	ND	U	21.9	440	ug/Kg	1	07/23/2012 17:15
4-Chloroaniline	ND	U	35.2	440	ug/Kg	1	07/23/2012 17:15
4-Chlorophenyl phenyl ether	ND	U	47.0	440	ug/Kg	1	07/23/2012 17:15
Acenaphthene	ND	U	20.0	440	ug/Kg	1	07/23/2012 17:15
Acenaphthylene	ND	U	18.6	440	ug/Kg	1	07/23/2012 17:15
Anthracene	ND	U	19.6	440	ug/Kg	1	07/23/2012 17:15
Benzo(a)anthracene	ND	U	24.2	440	ug/Kg	1	07/23/2012 17:15
Benzo(a)pyrene	ND	U	24.9	440	ug/Kg	1	07/23/2012 17:15
Benzo(b)fluoranthene	ND	U	25.3	440	ug/Kg	1	07/23/2012 17:15
Benzo(g,h,i)perylene	ND	U	70.0	440	ug/Kg	1	07/23/2012 17:15
Benzo(k)fluoranthene	ND	U	52.7	440	ug/Kg	1	07/23/2012 17:15
Benzoic acid	ND	U	9.76	440	ug/Kg	1	07/23/2012 17:15
Bis(2-Chloroethoxy)methane	ND	U	19.8	440	ug/Kg	1	07/23/2012 17:15
Bis(2-Chloroethyl)ether	ND	U	41.1	440	ug/Kg	1	07/23/2012 17:15
Bis(2-Chloroisopropyl)ether	ND	U	38.4	440	ug/Kg	1	07/23/2012 17:15
Bis(2-Ethylhexyl)phthalate	ND	U	21.1	440	ug/Kg	1	07/23/2012 17:15
4-Bromophenyl phenyl ether	ND	U	29.0	440	ug/Kg	1	07/23/2012 17:15
Butyl benzyl phthalate	ND	U	38.3	440	ug/Kg	1	07/23/2012 17:15
Chrysene	ND	U	51.2	440	ug/Kg	1	07/23/2012 17:15
Di-n-butyl phthalate	ND	U	20.8	440	ug/Kg	1	07/23/2012 17:15
Di-n-octyl phthalate	ND	U	24.3	440	ug/Kg	1	07/23/2012 17:15
Dibenz(a,h)anthracene	ND	U	19.8	440	ug/Kg	1	07/23/2012 17:15
Dibenzofuran	ND	U	34.5	440	ug/Kg	1	07/23/2012 17:15
Diethyl phthalate	ND	U	23.8	440	ug/Kg	1	07/23/2012 17:15

Print Date: 07/26/2012

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SGS ANALYTICAL PERSPECTIVES

Results of 105 DPT-10 (4-5ft)

Client Sample ID: **105 DPT-10 (4-5ft)**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202266010-E
Lab Project ID: 31202266

Collection Date: 07/18/2012 08:20
Received Date: 07/18/2012 16:30
Matrix: Soil-Solid as dry weight
Solids (%): 77.00

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
Dimethyl phthalate	ND	U	33.8	440	ug/Kg	1	07/23/2012 17:15
2,4-Dimethylphenol	ND	U	32.2	440	ug/Kg	1	07/23/2012 17:15
Diphenylamine	ND	U	19.8	440	ug/Kg	1	07/23/2012 17:15
Fluoranthene	ND	U	41.4	440	ug/Kg	1	07/23/2012 17:15
Fluorene	ND	U	23.3	440	ug/Kg	1	07/23/2012 17:15
Hexachlorobenzene	ND	U	41.6	440	ug/Kg	1	07/23/2012 17:15
Hexachlorobutadiene	ND	U	26.3	440	ug/Kg	1	07/23/2012 17:15
Hexachlorocyclopentadiene	ND	U	133	440	ug/Kg	1	07/23/2012 17:15
Hexachloroethane	ND	U	25.3	440	ug/Kg	1	07/23/2012 17:15
Indeno(1,2,3-cd)pyrene	ND	U	34.3	440	ug/Kg	1	07/23/2012 17:15
Isophorone	ND	U	20.0	440	ug/Kg	1	07/23/2012 17:15
Naphthalene	ND	U	38.0	440	ug/Kg	1	07/23/2012 17:15
4-Nitroaniline	ND	U	25.3	440	ug/Kg	1	07/23/2012 17:15
Nitrobenzene	ND	U	25.3	440	ug/Kg	1	07/23/2012 17:15
4-Nitrophenol	ND	U	43.3	440	ug/Kg	1	07/23/2012 17:15
Pentachlorophenol	ND	U	35.2	440	ug/Kg	1	07/23/2012 17:15
Phenanthrene	ND	U	29.0	440	ug/Kg	1	07/23/2012 17:15
Phenol	ND	U	41.1	440	ug/Kg	1	07/23/2012 17:15
Pyrene	ND	U	18.6	440	ug/Kg	1	07/23/2012 17:15
n-Nitrosodi-n-propylamine	ND	U	126	440	ug/Kg	1	07/23/2012 17:15
Surrogates							
2,4,6-Tribromophenol	63.0			41.0-129	%	1	07/23/2012 17:15
2-Fluorobiphenyl	59.0			48.0-123	%	1	07/23/2012 17:15
2-Fluorophenol	62.0			42.0-123	%	1	07/23/2012 17:15
Nitrobenzene-d5	61.0			46.0-117	%	1	07/23/2012 17:15
Phenol-d6	73.0			48.0-125	%	1	07/23/2012 17:15
Terphenyl-d14	75.0			44.0-140	%	1	07/23/2012 17:15

Batch Information

Analytical Batch: **XMS1608**
Analytical Method: **SW-846 8270D**
Instrument: **MSD10**
Analyst: **CMP**
Analytical Date/Time: **07/23/2012 17:15**

Prep Batch: **XXX2841**
Prep Method: **SW-846 3541**
Prep Date/Time: **07/20/2012 11:30**
Prep Initial Wt./Vol.: **29.54 g**
Prep Extract Vol: **10 mL**

Print Date: 07/26/2012

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SGS ANALYTICAL PERSPECTIVES

Results of 105 DPT-10

Client Sample ID: **105 DPT-10**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202266011-A
Lab Project ID: 31202266

Collection Date: 07/18/2012 13:00
Received Date: 07/18/2012 16:30
Matrix: Water

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	U	0.104	1.00	ug/L	1	07/20/2012 16:57
1,1,1-Trichloroethane	ND	U	0.123	1.00	ug/L	1	07/20/2012 16:57
1,1,2,2-Tetrachloroethane	ND	U	0.156	1.00	ug/L	1	07/20/2012 16:57
1,1,2-Trichloroethane	ND	U	0.126	1.00	ug/L	1	07/20/2012 16:57
1,1-Dichloroethane	ND	U	0.165	1.00	ug/L	1	07/20/2012 16:57
1,1-Dichloroethene	ND	U	0.212	1.00	ug/L	1	07/20/2012 16:57
1,1-Dichloropropene	ND	U	0.0863	1.00	ug/L	1	07/20/2012 16:57
1,2,3-Trichlorobenzene	ND	U	0.110	1.00	ug/L	1	07/20/2012 16:57
1,2,3-Trichloropropane	ND	U	0.212	1.00	ug/L	1	07/20/2012 16:57
1,2,4-Trichlorobenzene	ND	U	0.0913	1.00	ug/L	1	07/20/2012 16:57
1,2,4-Trimethylbenzene	ND	U	0.0961	1.00	ug/L	1	07/20/2012 16:57
1,2-Dibromo-3-chloropropane	ND	U	0.748	5.00	ug/L	1	07/20/2012 16:57
1,2-Dibromoethane	ND	U	0.120	1.00	ug/L	1	07/20/2012 16:57
1,2-Dichlorobenzene	ND	U	0.137	1.00	ug/L	1	07/20/2012 16:57
1,2-Dichloroethane	ND	U	0.167	1.00	ug/L	1	07/20/2012 16:57
1,2-Dichloropropane	ND	U	0.163	1.00	ug/L	1	07/20/2012 16:57
1,3,5-Trimethylbenzene	ND	U	0.113	1.00	ug/L	1	07/20/2012 16:57
1,3-Dichlorobenzene	ND	U	0.103	1.00	ug/L	1	07/20/2012 16:57
1,3-Dichloropropane	ND	U	0.130	1.00	ug/L	1	07/20/2012 16:57
1,4-Dichlorobenzene	ND	U	0.130	1.00	ug/L	1	07/20/2012 16:57
2,2-Dichloropropane	ND	U	0.393	1.00	ug/L	1	07/20/2012 16:57
2-Butanone	ND	U	0.723	25.0	ug/L	1	07/20/2012 16:57
2-Chlorotoluene	ND	U	0.113	1.00	ug/L	1	07/20/2012 16:57
2-Hexanone	ND	U	0.728	5.00	ug/L	1	07/20/2012 16:57
4-Chlorotoluene	ND	U	0.125	1.00	ug/L	1	07/20/2012 16:57
4-Isopropyltoluene	ND	U	0.0769	1.00	ug/L	1	07/20/2012 16:57
4-Methyl-2-pentanone	ND	U	0.558	5.00	ug/L	1	07/20/2012 16:57
Acetone	ND	U	0.864	25.0	ug/L	1	07/20/2012 16:57
Benzene	ND	U	0.113	1.00	ug/L	1	07/20/2012 16:57
Bromobenzene	ND	U	0.110	1.00	ug/L	1	07/20/2012 16:57
Bromochloromethane	ND	U	0.211	1.00	ug/L	1	07/20/2012 16:57
Bromodichloromethane	ND	U	0.110	1.00	ug/L	1	07/20/2012 16:57
Bromoform	ND	U	0.0974	1.00	ug/L	1	07/20/2012 16:57
Bromomethane	ND	U	0.237	1.00	ug/L	1	07/20/2012 16:57
n-Butylbenzene	ND	U	0.0769	1.00	ug/L	1	07/20/2012 16:57
Carbon disulfide	ND	U	0.106	1.00	ug/L	1	07/20/2012 16:57
Carbon tetrachloride	ND	U	0.101	1.00	ug/L	1	07/20/2012 16:57
Chlorobenzene	ND	U	0.116	1.00	ug/L	1	07/20/2012 16:57
Chloroethane	ND	U	0.311	1.00	ug/L	1	07/20/2012 16:57
Chloroform	ND	U	0.139	1.00	ug/L	1	07/20/2012 16:57
Chloromethane	ND	U	0.448	1.00	ug/L	1	07/20/2012 16:57
Dibromochloromethane	ND	U	0.134	1.00	ug/L	1	07/20/2012 16:57
Dibromomethane	ND	U	0.168	1.00	ug/L	1	07/20/2012 16:57
Dichlorodifluoromethane	ND	U	0.171	5.00	ug/L	1	07/20/2012 16:57

Print Date: 07/26/2012

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SGS ANALYTICAL PERSPECTIVES

Results of 105 DPT-10

Client Sample ID: **105 DPT-10**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202266011-A
Lab Project ID: 31202266

Collection Date: 07/18/2012 13:00
Received Date: 07/18/2012 16:30
Matrix: Water

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	U	0.0767	1.00	ug/L	1	07/20/2012 16:57
trans-1,3-Dichloropropene	ND	U	0.0862	1.00	ug/L	1	07/20/2012 16:57
Diisopropyl Ether	1.17		0.294	1.00	ug/L	1	07/20/2012 16:57
Ethyl Benzene	ND	U	0.0877	1.00	ug/L	1	07/20/2012 16:57
Hexachlorobutadiene	ND	U	0.0792	1.00	ug/L	1	07/20/2012 16:57
Isopropylbenzene (Cumene)	ND	U	0.0869	1.00	ug/L	1	07/20/2012 16:57
Methyl iodide	ND	U	0.115	1.00	ug/L	1	07/20/2012 16:57
Methylene chloride	ND	U	0.152	5.00	ug/L	1	07/20/2012 16:57
Naphthalene	ND	U	0.0855	1.00	ug/L	1	07/20/2012 16:57
Styrene	ND	U	0.102	1.00	ug/L	1	07/20/2012 16:57
Tetrachloroethene	ND	U	0.155	1.00	ug/L	1	07/20/2012 16:57
Toluene	ND	U	0.133	1.00	ug/L	1	07/20/2012 16:57
Trichloroethene	ND	U	0.125	1.00	ug/L	1	07/20/2012 16:57
Trichlorofluoromethane	ND	U	0.137	1.00	ug/L	1	07/20/2012 16:57
Vinyl chloride	ND	U	0.124	1.00	ug/L	1	07/20/2012 16:57
Xylene (total)	1.94	J	0.182	2.00	ug/L	1	07/20/2012 16:57
cis-1,2-Dichloroethene	ND	U	0.136	1.00	ug/L	1	07/20/2012 16:57
m,p-Xylene	1.94	J	0.182	2.00	ug/L	1	07/20/2012 16:57
n-Propylbenzene	ND	U	0.113	1.00	ug/L	1	07/20/2012 16:57
o-Xylene	ND	U	0.0874	1.00	ug/L	1	07/20/2012 16:57
sec-Butylbenzene	ND	U	0.112	1.00	ug/L	1	07/20/2012 16:57
tert-Butyl methyl ether (MTBE)	ND	U	0.144	1.00	ug/L	1	07/20/2012 16:57
tert-Butylbenzene	ND	U	0.0855	1.00	ug/L	1	07/20/2012 16:57
trans-1,2-Dichloroethene	ND	U	0.223	1.00	ug/L	1	07/20/2012 16:57
trans-1,4-Dichloro-2-butene	ND	U	0.414	5.00	ug/L	1	07/20/2012 16:57
Surrogates							
1,2-Dichloroethane-d4	105			64.0-140	%	1	07/20/2012 16:57
4-Bromofluorobenzene	99.0			85.0-115	%	1	07/20/2012 16:57
Toluene d8	101			82.0-117	%	1	07/20/2012 16:57

Batch Information

Analytical Batch: **VMS2398**
Analytical Method: **SW-846 8260B**
Instrument: **MSD3**
Analyst: **BWS**
Analytical Date/Time: **07/20/2012 16:57**

Prep Batch: **VXX3676**
Prep Method: **SW-846 5030B**
Prep Date/Time: **07/20/2012 09:22**
Prep Initial Wt./Vol.: **40 mL**
Prep Extract Vol: **40 mL**

Print Date: 07/26/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of Trip Blank (Not on COC) Water

Client Sample ID: **Trip Blank (Not on COC) Water**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202266012-A
Lab Project ID: 31202266

Collection Date: 07/18/2012 00:00
Received Date: 07/18/2012 16:30
Matrix: Water

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	U	0.104	1.00	ug/L	1	07/20/2012 13:34
1,1,1-Trichloroethane	ND	U	0.123	1.00	ug/L	1	07/20/2012 13:34
1,1,2,2-Tetrachloroethane	ND	U	0.156	1.00	ug/L	1	07/20/2012 13:34
1,1,2-Trichloroethane	ND	U	0.126	1.00	ug/L	1	07/20/2012 13:34
1,1-Dichloroethane	ND	U	0.165	1.00	ug/L	1	07/20/2012 13:34
1,1-Dichloroethene	ND	U	0.212	1.00	ug/L	1	07/20/2012 13:34
1,1-Dichloropropene	ND	U	0.0863	1.00	ug/L	1	07/20/2012 13:34
1,2,3-Trichlorobenzene	ND	U	0.110	1.00	ug/L	1	07/20/2012 13:34
1,2,3-Trichloropropane	ND	U	0.212	1.00	ug/L	1	07/20/2012 13:34
1,2,4-Trichlorobenzene	ND	U	0.0913	1.00	ug/L	1	07/20/2012 13:34
1,2,4-Trimethylbenzene	ND	U	0.0961	1.00	ug/L	1	07/20/2012 13:34
1,2-Dibromo-3-chloropropane	ND	U	0.748	5.00	ug/L	1	07/20/2012 13:34
1,2-Dibromoethane	ND	U	0.120	1.00	ug/L	1	07/20/2012 13:34
1,2-Dichlorobenzene	ND	U	0.137	1.00	ug/L	1	07/20/2012 13:34
1,2-Dichloroethane	ND	U	0.167	1.00	ug/L	1	07/20/2012 13:34
1,2-Dichloropropane	ND	U	0.163	1.00	ug/L	1	07/20/2012 13:34
1,3,5-Trimethylbenzene	ND	U	0.113	1.00	ug/L	1	07/20/2012 13:34
1,3-Dichlorobenzene	ND	U	0.103	1.00	ug/L	1	07/20/2012 13:34
1,3-Dichloropropane	ND	U	0.130	1.00	ug/L	1	07/20/2012 13:34
1,4-Dichlorobenzene	ND	U	0.130	1.00	ug/L	1	07/20/2012 13:34
2,2-Dichloropropane	ND	U	0.393	1.00	ug/L	1	07/20/2012 13:34
2-Butanone	ND	U	0.723	25.0	ug/L	1	07/20/2012 13:34
2-Chlorotoluene	ND	U	0.113	1.00	ug/L	1	07/20/2012 13:34
2-Hexanone	ND	U	0.728	5.00	ug/L	1	07/20/2012 13:34
4-Chlorotoluene	ND	U	0.125	1.00	ug/L	1	07/20/2012 13:34
4-Isopropyltoluene	ND	U	0.0769	1.00	ug/L	1	07/20/2012 13:34
4-Methyl-2-pentanone	ND	U	0.558	5.00	ug/L	1	07/20/2012 13:34
Acetone	ND	U	0.864	25.0	ug/L	1	07/20/2012 13:34
Benzene	ND	U	0.113	1.00	ug/L	1	07/20/2012 13:34
Bromobenzene	ND	U	0.110	1.00	ug/L	1	07/20/2012 13:34
Bromochloromethane	ND	U	0.211	1.00	ug/L	1	07/20/2012 13:34
Bromodichloromethane	ND	U	0.110	1.00	ug/L	1	07/20/2012 13:34
Bromoform	ND	U	0.0974	1.00	ug/L	1	07/20/2012 13:34
Bromomethane	ND	U	0.237	1.00	ug/L	1	07/20/2012 13:34
n-Butylbenzene	ND	U	0.0769	1.00	ug/L	1	07/20/2012 13:34
Carbon disulfide	ND	U	0.106	1.00	ug/L	1	07/20/2012 13:34
Carbon tetrachloride	ND	U	0.101	1.00	ug/L	1	07/20/2012 13:34
Chlorobenzene	ND	U	0.116	1.00	ug/L	1	07/20/2012 13:34
Chloroethane	ND	U	0.311	1.00	ug/L	1	07/20/2012 13:34
Chloroform	ND	U	0.139	1.00	ug/L	1	07/20/2012 13:34
Chloromethane	ND	U	0.448	1.00	ug/L	1	07/20/2012 13:34
Dibromochloromethane	ND	U	0.134	1.00	ug/L	1	07/20/2012 13:34
Dibromomethane	ND	U	0.168	1.00	ug/L	1	07/20/2012 13:34
Dichlorodifluoromethane	ND	U	0.171	5.00	ug/L	1	07/20/2012 13:34

Print Date: 07/26/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of Trip Blank (Not on COC) Water

Client Sample ID: **Trip Blank (Not on COC) Water**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: **31202266012-A**
Lab Project ID: **31202266**

Collection Date: **07/18/2012 00:00**
Received Date: **07/18/2012 16:30**
Matrix: **Water**

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	U	0.0767	1.00	ug/L	1	07/20/2012 13:34
trans-1,3-Dichloropropene	ND	U	0.0862	1.00	ug/L	1	07/20/2012 13:34
Diisopropyl Ether	ND	U	0.294	1.00	ug/L	1	07/20/2012 13:34
Ethyl Benzene	ND	U	0.0877	1.00	ug/L	1	07/20/2012 13:34
Hexachlorobutadiene	ND	U	0.0792	1.00	ug/L	1	07/20/2012 13:34
Isopropylbenzene (Cumene)	ND	U	0.0869	1.00	ug/L	1	07/20/2012 13:34
Methyl iodide	ND	U	0.115	1.00	ug/L	1	07/20/2012 13:34
Methylene chloride	0.380	J	0.152	5.00	ug/L	1	07/20/2012 13:34
Naphthalene	ND	U	0.0855	1.00	ug/L	1	07/20/2012 13:34
Styrene	ND	U	0.102	1.00	ug/L	1	07/20/2012 13:34
Tetrachloroethene	ND	U	0.155	1.00	ug/L	1	07/20/2012 13:34
Toluene	ND	U	0.133	1.00	ug/L	1	07/20/2012 13:34
Trichloroethene	ND	U	0.125	1.00	ug/L	1	07/20/2012 13:34
Trichlorofluoromethane	ND	U	0.137	1.00	ug/L	1	07/20/2012 13:34
Vinyl chloride	ND	U	0.124	1.00	ug/L	1	07/20/2012 13:34
Xylene (total)	ND	U	0.182	2.00	ug/L	1	07/20/2012 13:34
cis-1,2-Dichloroethene	ND	U	0.136	1.00	ug/L	1	07/20/2012 13:34
m,p-Xylene	ND	U	0.182	2.00	ug/L	1	07/20/2012 13:34
n-Propylbenzene	ND	U	0.113	1.00	ug/L	1	07/20/2012 13:34
o-Xylene	ND	U	0.0874	1.00	ug/L	1	07/20/2012 13:34
sec-Butylbenzene	ND	U	0.112	1.00	ug/L	1	07/20/2012 13:34
tert-Butyl methyl ether (MTBE)	ND	U	0.144	1.00	ug/L	1	07/20/2012 13:34
tert-Butylbenzene	ND	U	0.0855	1.00	ug/L	1	07/20/2012 13:34
trans-1,2-Dichloroethene	ND	U	0.223	1.00	ug/L	1	07/20/2012 13:34
trans-1,4-Dichloro-2-butene	ND	U	0.414	5.00	ug/L	1	07/20/2012 13:34
Surrogates							
1,2-Dichloroethane-d4	103			64.0-140	%	1	07/20/2012 13:34
4-Bromofluorobenzene	99.0			85.0-115	%	1	07/20/2012 13:34
Toluene d8	100			82.0-117	%	1	07/20/2012 13:34

Batch Information

Analytical Batch: **VMS2398**
Analytical Method: **SW-846 8260B**
Instrument: **MSD3**
Analyst: **BWS**
Analytical Date/Time: **07/20/2012 13:34**

Prep Batch: **VXX3676**
Prep Method: **SW-846 5030B**
Prep Date/Time: **07/20/2012 09:22**
Prep Initial Wt./Vol.: **40 mL**
Prep Extract Vol: **40 mL**

Print Date: 07/26/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of Trip Blank (Not on COC) Soil

Client Sample ID: **Trip Blank (Not on COC) Soil**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202266013-A
Lab Project ID: 31202266

Collection Date: 07/18/2012 00:00
Received Date: 07/18/2012 16:30
Matrix: Soil-Solid as dry weight
Solids (%): 100.00

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	U	1.06	5.00	ug/Kg	1	07/23/2012 13:27
1,1,1-Trichloroethane	ND	U	0.778	5.00	ug/Kg	1	07/23/2012 13:27
1,1,2,2-Tetrachloroethane	ND	U	1.13	5.00	ug/Kg	1	07/23/2012 13:27
1,1,2-Trichloroethane	ND	U	1.04	5.00	ug/Kg	1	07/23/2012 13:27
1,1-Dichloroethane	ND	U	0.863	5.00	ug/Kg	1	07/23/2012 13:27
1,1-Dichloroethene	ND	U	0.903	5.00	ug/Kg	1	07/23/2012 13:27
1,1-Dichloropropene	ND	U	0.922	5.00	ug/Kg	1	07/23/2012 13:27
1,2,3-Trichlorobenzene	ND	U	1.39	5.00	ug/Kg	1	07/23/2012 13:27
1,2,3-Trichloropropane	ND	U	1.11	5.00	ug/Kg	1	07/23/2012 13:27
1,2,4-Trichlorobenzene	ND	U	1.19	5.00	ug/Kg	1	07/23/2012 13:27
1,2,4-Trimethylbenzene	ND	U	1.07	5.00	ug/Kg	1	07/23/2012 13:27
1,2-Dibromo-3-chloropropane	ND	U	5.81	30.0	ug/Kg	1	07/23/2012 13:27
1,2-Dibromoethane	ND	U	0.758	5.00	ug/Kg	1	07/23/2012 13:27
1,2-Dichlorobenzene	ND	U	1.29	5.00	ug/Kg	1	07/23/2012 13:27
1,2-Dichloroethane	ND	U	0.886	5.00	ug/Kg	1	07/23/2012 13:27
1,2-Dichloropropane	ND	U	0.805	5.00	ug/Kg	1	07/23/2012 13:27
1,3,5-Trimethylbenzene	ND	U	0.984	5.00	ug/Kg	1	07/23/2012 13:27
1,3-Dichlorobenzene	ND	U	1.16	5.00	ug/Kg	1	07/23/2012 13:27
1,3-Dichloropropane	ND	U	0.806	5.00	ug/Kg	1	07/23/2012 13:27
1,4-Dichlorobenzene	ND	U	1.10	5.00	ug/Kg	1	07/23/2012 13:27
2,2-Dichloropropane	ND	U	0.834	5.00	ug/Kg	1	07/23/2012 13:27
2-Butanone	ND	U	1.56	25.0	ug/Kg	1	07/23/2012 13:27
2-Chlorotoluene	ND	U	1.12	5.00	ug/Kg	1	07/23/2012 13:27
2-Hexanone	ND	U	1.95	12.5	ug/Kg	1	07/23/2012 13:27
4-Chlorotoluene	ND	U	1.11	5.00	ug/Kg	1	07/23/2012 13:27
4-Isopropyltoluene	ND	U	1.04	5.00	ug/Kg	1	07/23/2012 13:27
4-Methyl-2-pentanone	ND	U	3.21	12.5	ug/Kg	1	07/23/2012 13:27
Acetone	ND	U	1.24	50.0	ug/Kg	1	07/23/2012 13:27
Benzene	ND	U	0.893	5.00	ug/Kg	1	07/23/2012 13:27
Bromobenzene	ND	U	0.986	5.00	ug/Kg	1	07/23/2012 13:27
Bromochloromethane	ND	U	0.873	5.00	ug/Kg	1	07/23/2012 13:27
Bromodichloromethane	ND	U	0.813	5.00	ug/Kg	1	07/23/2012 13:27
Bromoform	ND	U	0.669	5.00	ug/Kg	1	07/23/2012 13:27
Bromomethane	ND	U	1.76	5.00	ug/Kg	1	07/23/2012 13:27
n-Butylbenzene	ND	U	1.08	5.00	ug/Kg	1	07/23/2012 13:27
Carbon disulfide	ND	U	0.864	5.00	ug/Kg	1	07/23/2012 13:27
Carbon tetrachloride	ND	U	0.870	5.00	ug/Kg	1	07/23/2012 13:27
Chlorobenzene	ND	U	0.774	5.00	ug/Kg	1	07/23/2012 13:27
Chloroethane	ND	U	0.460	5.00	ug/Kg	1	07/23/2012 13:27
Chloroform	ND	U	0.812	5.00	ug/Kg	1	07/23/2012 13:27
Chloromethane	ND	U	0.725	5.00	ug/Kg	1	07/23/2012 13:27
Dibromochloromethane	ND	U	0.847	5.00	ug/Kg	1	07/23/2012 13:27
Dibromomethane	ND	U	0.812	5.00	ug/Kg	1	07/23/2012 13:27
Dichlorodifluoromethane	ND	U	0.727	5.00	ug/Kg	1	07/23/2012 13:27

Print Date: 07/26/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of Trip Blank (Not on COC) Soil

Client Sample ID: **Trip Blank (Not on COC) Soil**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202266013-A
Lab Project ID: 31202266

Collection Date: 07/18/2012 00:00
Received Date: 07/18/2012 16:30
Matrix: Soil-Solid as dry weight
Solids (%): 100.00

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	U	0.861	5.00	ug/Kg	1	07/23/2012 13:27
trans-1,3-Dichloropropene	ND	U	0.896	5.00	ug/Kg	1	07/23/2012 13:27
Diisopropyl Ether	ND	U	0.898	5.00	ug/Kg	1	07/23/2012 13:27
Ethyl Benzene	ND	U	0.827	5.00	ug/Kg	1	07/23/2012 13:27
Hexachlorobutadiene	ND	U	1.37	5.00	ug/Kg	1	07/23/2012 13:27
Isopropylbenzene (Cumene)	ND	U	0.963	5.00	ug/Kg	1	07/23/2012 13:27
Methyl iodide	ND	U	0.846	5.00	ug/Kg	1	07/23/2012 13:27
Methylene chloride	2.45	J	0.698	20.0	ug/Kg	1	07/23/2012 13:27
Naphthalene	ND	U	1.21	5.00	ug/Kg	1	07/23/2012 13:27
Styrene	ND	U	0.986	5.00	ug/Kg	1	07/23/2012 13:27
Tetrachloroethene	ND	U	0.752	5.00	ug/Kg	1	07/23/2012 13:27
Toluene	ND	U	0.810	5.00	ug/Kg	1	07/23/2012 13:27
Trichloroethene	ND	U	0.837	5.00	ug/Kg	1	07/23/2012 13:27
Trichlorofluoromethane	ND	U	0.754	5.00	ug/Kg	1	07/23/2012 13:27
Vinyl chloride	ND	U	0.736	5.00	ug/Kg	1	07/23/2012 13:27
Xylene (total)	ND	U	1.77	10.0	ug/Kg	1	07/23/2012 13:27
cis-1,2-Dichloroethene	ND	U	0.775	5.00	ug/Kg	1	07/23/2012 13:27
m,p-Xylene	ND	U	1.77	10.0	ug/Kg	1	07/23/2012 13:27
n-Propylbenzene	ND	U	0.975	5.00	ug/Kg	1	07/23/2012 13:27
o-Xylene	ND	U	1.01	5.00	ug/Kg	1	07/23/2012 13:27
sec-Butylbenzene	ND	U	1.04	5.00	ug/Kg	1	07/23/2012 13:27
tert-Butyl methyl ether (MTBE)	ND	U	0.852	5.00	ug/Kg	1	07/23/2012 13:27
tert-Butylbenzene	ND	U	0.906	5.00	ug/Kg	1	07/23/2012 13:27
trans-1,2-Dichloroethene	ND	U	0.861	5.00	ug/Kg	1	07/23/2012 13:27
trans-1,4-Dichloro-2-butene	ND	U	5.41	25.0	ug/Kg	1	07/23/2012 13:27
Surrogates							
1,2-Dichloroethane-d4	125			55.0-173	%	1	07/23/2012 13:27
4-Bromofluorobenzene	103			23.0-141	%	1	07/23/2012 13:27
Toluene d8	103			57.0-134	%	1	07/23/2012 13:27

Batch Information

Analytical Batch: **VMS2400**
Analytical Method: **SW-846 8260B**
Instrument: **MSD9**
Analyst: **DVO**
Analytical Date/Time: **07/23/2012 13:27**

Prep Batch: **VXX3683**
Prep Method: **SW-846 5035 SL**
Prep Date/Time: **07/19/2012 14:02**
Prep Initial Wt./Vol.: **5 g**
Prep Extract Vol: **5 mL**

Print Date: 07/26/2012

N.C. Certification # 481

Batch Summary

Analytical Method: SW-846 8260B

Prep Method: SW-846 5035 SL
Prep Batch: VXX3672
Prep Date: 07/20/2012 08:18

Client Sample ID	Lab Sample ID	Analysis Date	Analytical Batch	Instrument	Analyst
LCS-S for HBN 25851 [VXX/3672]	81462	07/20/2012 09:28	VMS2395	MSD9	DVO
LCSD-S for HBN 25851 [VXX/3672	81463	07/20/2012 09:55	VMS2395	MSD9	DVO
MB-S for HBN 25851 [VXX/3672]	81464	07/20/2012 11:16	VMS2395	MSD9	DVO
105 DPT-01 (7-8ft)	31202266001	07/20/2012 16:49	VMS2395	MSD9	DVO
105 DPT-04 (7-8ft)	31202266004	07/20/2012 17:43	VMS2395	MSD9	DVO
105 DPT-06 (4-5ft)	31202266006	07/20/2012 18:11	VMS2395	MSD9	DVO
UST-1 C(81140MS)	81756	07/20/2012 20:01	VMS2395	MSD9	DVO

Print Date: 07/26/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Method Blank

Blank ID: MB-S for HBN 25851 [VXX/3672]
Blank Lab ID: 81464
QC for Samples:
31202266001, 31202266004, 31202266006

Matrix: Soil-Solid as dry weight

Results by SW-846 8260B

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

Print Date: 07/26/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Method Blank

Blank ID: MB-S for HBN 25851 [VXX/3672]
Blank Lab ID: 81464
QC for Samples:
31202266001, 31202266004, 31202266006

Matrix: Soil-Solid as dry weight

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF
Bromobenzene	ND	U	0.986	5.00	ug/Kg	1
1,1,2,2-Tetrachloroethane	ND	U	1.13	5.00	ug/Kg	1
1,2,3-Trichloropropane	ND	U	1.11	5.00	ug/Kg	1
Ethyl Benzene	ND	U	0.827	5.00	ug/Kg	1
m,p-Xylene	ND	U	1.77	10.0	ug/Kg	1
Styrene	ND	U	0.986	5.00	ug/Kg	1
o-Xylene	ND	U	1.01	5.00	ug/Kg	1
Xylene (total)	ND	U	1.77	10.0	ug/Kg	1
Isopropylbenzene (Cumene)	ND	U	0.963	5.00	ug/Kg	1
n-Propylbenzene	ND	U	0.975	5.00	ug/Kg	1
2-Chlorotoluene	ND	U	1.12	5.00	ug/Kg	1
4-Chlorotoluene	ND	U	1.11	5.00	ug/Kg	1
1,3,5-Trimethylbenzene	ND	U	0.984	5.00	ug/Kg	1
tert-Butylbenzene	ND	U	0.906	5.00	ug/Kg	1
1,2,4-Trimethylbenzene	ND	U	1.07	5.00	ug/Kg	1
sec-Butylbenzene	ND	U	1.04	5.00	ug/Kg	1
1,3-Dichlorobenzene	ND	U	1.16	5.00	ug/Kg	1
4-Isopropyltoluene	ND	U	1.04	5.00	ug/Kg	1
1,4-Dichlorobenzene	ND	U	1.10	5.00	ug/Kg	1
1,2-Dichlorobenzene	ND	U	1.29	5.00	ug/Kg	1
n-Butylbenzene	ND	U	1.08	5.00	ug/Kg	1
1,2-Dibromo-3-chloropropane	ND	U	5.81	30.0	ug/Kg	1
1,2,4-Trichlorobenzene	ND	U	1.19	5.00	ug/Kg	1
Hexachlorobutadiene	ND	U	1.37	5.00	ug/Kg	1
Naphthalene	ND	U	1.21	5.00	ug/Kg	1
trans-1,4-Dichloro-2-butene	ND	U	5.41	25.0	ug/Kg	1
1,2,3-Trichlorobenzene	ND	U	1.39	5.00	ug/Kg	1
Surrogates						
1,2-Dichloroethane-d4	110			55.0-173	%	1
Toluene d8	101			57.0-134	%	1
4-Bromofluorobenzene	100			23.0-141	%	1

Batch Information

Analytical Batch: VMS2395
Analytical Method: SW-846 8260B
Instrument: MSD9
Analyst: DVO
Analytical Date/Time: 7/20/2012 11:16:00AM

Prep Batch: VXX3672
Prep Method: SW-846 5035 SL
Prep Date/Time: 7/20/2012 8:18:43AM
Prep Initial Wt./Vol.: 5 g
Prep Extract Vol: 5 mL

Print Date: 07/26/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Blank Spike Summary

Blank Spike ID: LCS-S for HBN 25851 [VXX/3672]
Blank Spike Lab ID: 81462
Date Analyzed: 07/20/2012 09:28

Spike Duplicate ID: LCSD-S for HBN 25851 [VXX/3672
Spike Duplicate Lab ID: 81463
Matrix: Soil-Solid as dry weight

QC for Samples: 31202266001, 31202266004, 31202266006

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	29.0	97	30.0	28.2	94	52.0-133	2.8	30.00
Chloromethane	30.0	28.0	93	30.0	27.9	93	64.0-126	0.36	30.00
Vinyl chloride	30.0	29.1	97	30.0	28.4	95	69.0-120	2.4	30.00
Bromomethane	30.0	26.9	90	30.0	30.3	101	41.0-160	12	30.00
Chloroethane	30.0	31.9	106	30.0	31.1	104	69.0-126	2.5	30.00
Trichlorofluoromethane	30.0	30.0	100	30.0	28.5	95	72.0-123	5.1	30.00
1,1-Dichloroethene	30.0	28.3	94	30.0	27.0	90	78.0-113	4.7	30.00
Acetone	75.0	85.1	113	75.0	93.1	124	0.00-243	9.0	30.00
Methylene chloride	30.0	30.8	103	30.0	28.3	94	40.0-156	8.5	30.00
trans-1,2-Dichloroethene	30.0	29.4	98	30.0	27.7	92	78.0-111	6.0	30.00
tert-Butyl methyl ether (MTBE)	30.0	29.6	99	30.0	29.5	98	68.0-138	0.34	30.00
1,1-Dichloroethane	30.0	29.1	97	30.0	27.6	92	71.0-121	5.3	30.00
Diisopropyl Ether	30.0	29.0	97	30.0	27.8	93	60.0-141	4.2	30.00
2,2-Dichloropropane	30.0	30.0	100	30.0	27.4	91	79.0-127	9.1	30.00
cis-1,2-Dichloroethene	30.0	30.8	103	30.0	27.0	90	80.0-114	13	30.00
2-Butanone	75.0	83.3	111	75.0	88.9	119	31.0-189	6.5	30.00
Bromochloromethane	30.0	31.7	106	30.0	29.0	97	81.0-115	8.9	30.00
Chloroform	30.0	30.5	102	30.0	28.3	94	76.0-114	7.5	30.00
1,1,1-Trichloroethane	30.0	29.4	98	30.0	27.8	93	79.0-117	5.6	30.00
Carbon tetrachloride	30.0	29.4	98	30.0	27.0	90	82.0-119	8.5	30.00
1,1-Dichloropropene	30.0	28.8	96	30.0	27.1	90	82.0-114	6.1	30.00
Benzene	30.0	28.9	96	30.0	28.1	94	82.0-113	2.8	30.00
1,2-Dichloroethane	30.0	29.9	100	30.0	30.6	102	72.0-126	2.3	30.00
Trichloroethene	30.0	27.7	92	30.0	28.9	96	82.0-108	4.2	30.00
1,2-Dichloropropane	30.0	29.1	97	30.0	30.5	102	78.0-116	4.7	30.00
Dibromomethane	30.0	30.0	100	30.0	31.4	105	79.0-125	4.6	30.00
Bromodichloromethane	30.0	28.5	95	30.0	30.0	100	79.0-122	5.1	30.00
cis-1,3-Dichloropropene	30.0	30.0	100	30.0	31.9	106	75.0-127	6.1	30.00
4-Methyl-2-pentanone	75.0	80.0	107	75.0	92.5	123	57.0-159	14	30.00
Toluene	30.0	29.3	98	30.0	29.5	98	83.0-111	0.68	30.00
Methyl iodide	30.0	25.4	85	30.0	24.5	82	63.0-137	3.6	30.00
trans-1,3-Dichloropropene	30.0	29.1	97	30.0	30.2	101	75.0-134	3.7	30.00
Carbon disulfide	30.0	24.9	83	30.0	23.7	79	72.0-116	4.9	30.00
1,1,2-Trichloroethane	30.0	29.7	99	30.0	31.5	105	73.0-121	5.9	30.00

SGS ANALYTICAL PERSPECTIVES

Blank Spike Summary

Blank Spike ID: LCS-S for HBN 25851 [VXX/3672]
Blank Spike Lab ID: 81462
Date Analyzed: 07/20/2012 09:28

Spike Duplicate ID: LCSD-S for HBN 25851 [VXX/3672
Spike Duplicate Lab ID: 81463
Matrix: Soil-Solid as dry weight

QC for Samples: 31202266001, 31202266004, 31202266006

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	27.9	93	30.0	28.0	93	60.0-118	0.36	30.00
1,3-Dichloropropane	30.0	29.1	97	30.0	30.7	102	76.0-121	5.4	30.00
2-Hexanone	75.0	78.9	105	75.0	89.8	120	41.0-171	13	30.00
Dibromochloromethane	30.0	29.3	98	30.0	28.9	96	77.0-126	1.4	30.00
1,2-Dibromoethane	30.0	29.5	98	30.0	30.7	102	76.0-125	4.0	30.00
Chlorobenzene	30.0	28.3	94	30.0	29.0	97	78.0-109	2.4	30.00
1,1,1,2-Tetrachloroethane	30.0	28.9	96	30.0	28.2	94	81.0-117	2.5	30.00
Bromoform	30.0	29.5	98	30.0	30.0	100	72.0-134	1.7	30.00
Bromobenzene	30.0	29.1	97	30.0	28.7	96	76.0-113	1.4	30.00
1,1,2,2-Tetrachloroethane	30.0	32.2	107	30.0	35.3	118	76.0-129	9.2	30.00
1,2,3-Trichloropropane	30.0	30.8	103	30.0	34.0	113	70.0-145	9.9	30.00
Ethyl Benzene	30.0	26.8	89	30.0	26.7	89	72.0-115	0.37	30.00
m,p-Xylene	60.0	54.2	90	60.0	55.2	92	73.0-114	1.8	30.00
Styrene	30.0	27.5	92	30.0	27.5	92	74.0-114	0.0	30.00
o-Xylene	30.0	27.3	91	30.0	28.0	93	74.0-113	2.5	30.00
Isopropylbenzene (Cumene)	30.0	27.6	92	30.0	27.6	92	72.0-115	0.0	30.00
n-Propylbenzene	30.0	28.0	93	30.0	29.3	98	71.0-117	4.5	30.00
2-Chlorotoluene	30.0	27.7	92	30.0	29.0	97	76.0-111	4.6	30.00
4-Chlorotoluene	30.0	27.0	90	30.0	28.8	96	75.0-113	6.5	30.00
1,3,5-Trimethylbenzene	30.0	27.4	91	30.0	28.8	96	72.0-115	5.0	30.00
tert-Butylbenzene	30.0	27.0	90	30.0	28.4	95	74.0-112	5.1	30.00
1,2,4-Trimethylbenzene	30.0	27.7	92	30.0	29.6	99	73.0-114	6.6	30.00
sec-Butylbenzene	30.0	27.1	90	30.0	28.6	95	72.0-115	5.4	30.00
1,3-Dichlorobenzene	30.0	27.9	93	30.0	29.2	97	75.0-110	4.6	30.00
4-Isopropyltoluene	30.0	27.3	91	30.0	28.8	96	73.0-114	5.3	30.00
1,4-Dichlorobenzene	30.0	28.5	95	30.0	29.6	99	76.0-110	3.8	30.00
1,2-Dichlorobenzene	30.0	28.3	94	30.0	29.7	99	77.0-109	4.8	30.00
n-Butylbenzene	30.0	27.8	93	30.0	29.2	97	72.0-118	4.9	30.00
1,2-Dibromo-3-chloropropane	180	181	101	180	218	121	54.0-166	19	30.00
1,2,4-Trichlorobenzene	30.0	26.0	87	30.0	28.9	96	76.0-115	11	30.00
Hexachlorobutadiene	30.0	26.3	88	30.0	28.2	94	70.0-111	7.0	30.00
Naphthalene	30.0	28.9	96	30.0	32.8	109	71.0-129	13	30.00
trans-1,4-Dichloro-2-butene	150	151	100	150	165	110	62.0-164	8.9	30.00
1,2,3-Trichlorobenzene	30.0	28.1	94	30.0	29.9	100	78.0-115	6.2	30.00

Blank Spike Summary

Blank Spike ID: LCS-S for HBN 25851 [VXX/3672]
Blank Spike Lab ID: 81462
Date Analyzed: 07/20/2012 09:28

Spike Duplicate ID: LCSD-S for HBN 25851 [VXX/3672
Spike Duplicate Lab ID: 81463
Matrix: Soil-Solid as dry weight

QC for Samples: 31202266001, 31202266004, 31202266006

Results by SW-846 8260B

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

Batch Information

Analytical Batch: VMS2395
Analytical Method: SW-846 8260B
Instrument: MSD9
Analyst: DVO

Prep Batch: VXX3672
Prep Method: SW-846 5035 SL
Prep Date/Time: 07/20/2012 08:18
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: VXX3676
Prep Date: 07/20/2012 08:58

Client Sample ID	Lab Sample ID	Analysis Date	Analytical Batch	Instrument	Analyst
LCS for HBN 25859 [VXX/3676]	81483	07/20/2012 10:37	VMS2398	MSD3	BWS
LCSD for HBN 25859 [VXX/3676]	81484	07/20/2012 11:02	VMS2398	MSD3	BWS
MB for HBN 25859 [VXX/3676]	81485	07/20/2012 12:18	VMS2398	MSD3	BWS
Trip Blank (Not on COC) Water	31202266012	07/20/2012 13:34	VMS2398	MSD3	BWS
105 DPT-10	31202266011	07/20/2012 16:57	VMS2398	MSD3	BWS
MW-16(81222MS)	81638	07/20/2012 20:44	VMS2398	MSD3	BWS
MW-16(81222MSD)	81639	07/20/2012 21:10	VMS2398	MSD3	BWS

Print Date: 07/26/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Method Blank

Blank ID: MB for HBN 25859 [VXX/3676]
Blank Lab ID: 81485
QC for Samples:
31202266011, 31202266012

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: 07/26/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Method Blank

Blank ID: MB for HBN 25859 [VXX/3676]
Blank Lab ID: 81485
QC for Samples:
31202266011, 31202266012

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	100			82.0-117	%	1
4-Bromofluorobenzene	100			85.0-115	%	1

Batch Information

Analytical Batch: VMS2398
Analytical Method: SW-846 8260B
Instrument: MSD3
Analyst: BWS
Analytical Date/Time: 7/20/2012 12:18:00PM

Prep Batch: VXX3676
Prep Method: SW-846 5030B
Prep Date/Time: 7/20/2012 8:58:28AM
Prep Initial Wt./Vol.: 40 mL
Prep Extract Vol: 40 mL

Print Date: 07/26/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Blank Spike Summary

Blank Spike ID: LCS for HBN 25859 [VXX/3676]
Blank Spike Lab ID: 81483
Date Analyzed: 07/20/2012 10:37

Spike Duplicate ID: LCSD for HBN 25859 [VXX/3676]
Spike Duplicate Lab ID: 81484
Date Analyzed: 07/20/2012 11:02
Matrix: Water

QC for Samples: 31202266011, 31202266012

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	5.35	107	5.00	4.47	89	33.0-170	18	30.00
Chloromethane	5.00	6.03	121	5.00	5.52	110	57.0-132	8.8	30.00
Vinyl chloride	5.00	5.83	117	5.00	5.11	102	59.0-138	13	30.00
Bromomethane	5.00	8.33	167*	5.00	5.61	112	51.0-134	39*	30.00
Chloroethane	5.00	6.86	137	5.00	5.93	119	64.0-145	15	30.00
Trichlorofluoromethane	5.00	5.66	113	5.00	4.62	92	64.0-133	20	30.00
1,1-Dichloroethene	5.00	6.18	124	5.00	4.92	98	71.0-128	23	30.00
Acetone	25.0	28.2	113	25.0	23.1	92	52.0-140	20	30.00
Methylene chloride	5.00	5.73	115*	5.00	4.89	98	70.0-113	16	30.00
trans-1,2-Dichloroethene	5.00	6.36	127	5.00	5.23	105	57.0-138	19	30.00
tert-Butyl methyl ether (MTBE)	5.00	5.81	116	5.00	4.74	95	47.0-142	20	30.00
1,1-Dichloroethane	5.00	5.74	115	5.00	4.67	93	68.0-133	21	30.00
Diisopropyl Ether	5.00	5.86	117	5.00	4.68	94	66.0-132	22	30.00
2,2-Dichloropropane	5.00	6.24	125	5.00	5.06	101	74.0-125	21	30.00
cis-1,2-Dichloroethene	5.00	6.24	125	5.00	5.21	104	73.0-128	18	30.00
2-Butanone	25.0	28.3	113	25.0	22.7	91	58.0-134	22	30.00
Bromochloromethane	5.00	5.99	120	5.00	5.31	106	73.0-128	12	30.00
Chloroform	5.00	6.00	120	5.00	4.91	98	74.0-124	20	30.00
1,1,1-Trichloroethane	5.00	5.95	119	5.00	4.84	97	76.0-119	21	30.00
Carbon tetrachloride	5.00	5.94	119	5.00	4.82	96	75.0-120	21	30.00
1,1-Dichloropropene	5.00	5.73	115	5.00	4.81	96	76.0-124	17	30.00
Benzene	5.00	5.80	116	5.00	4.83	97	76.0-124	18	30.00
1,2-Dichloroethane	5.00	5.90	118	5.00	4.97	99	76.0-119	17	30.00
Trichloroethene	5.00	5.70	114	5.00	4.71	94	74.0-121	19	30.00
1,2-Dichloropropane	5.00	5.46	109	5.00	4.47	89	74.0-124	20	30.00
Dibromomethane	5.00	5.75	115	5.00	4.89	98	71.0-128	16	30.00
Bromodichloromethane	5.00	5.40	108	5.00	4.74	95	72.0-120	13	30.00
cis-1,3-Dichloropropene	5.00	5.81	116	5.00	4.99	100	73.0-122	15	30.00
4-Methyl-2-pentanone	25.0	26.6	107	25.0	22.2	89	65.0-124	18	30.00
Toluene	5.00	5.96	119	5.00	4.77	95	75.0-123	22	30.00
Methyl iodide	5.00	4.45	89	5.00	4.08	82	55.0-123	8.7	30.00
trans-1,3-Dichloropropene	5.00	5.61	112	5.00	4.75	95	70.0-125	17	30.00
Carbon disulfide	5.00	5.62	112	5.00	4.70	94	65.0-132	18	30.00
1,1,2-Trichloroethane	5.00	5.89	118	5.00	4.96	99	76.0-121	17	30.00

SGS ANALYTICAL PERSPECTIVES

Blank Spike Summary

Blank Spike ID: LCS for HBN 25859 [VXX/3676]
Blank Spike Lab ID: 81483
Date Analyzed: 07/20/2012 10:37

Spike Duplicate ID: LCSD for HBN 25859 [VXX/3676]
Spike Duplicate Lab ID: 81484
Date Analyzed: 07/20/2012 11:02
Matrix: Water

QC for Samples: 31202266011, 31202266012

Results by SW-846 8260B

	Blank Spike (ug/L)			Spike Duplicate (ug/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Tetrachloroethene	5.00	5.98	120*	5.00	5.06	101	59.0-112	17	30.00
1,3-Dichloropropane	5.00	5.70	114	5.00	4.61	92	74.0-120	21	30.00
2-Hexanone	25.0	26.6	107	25.0	22.0	88	56.0-133	19	30.00
Dibromochloromethane	5.00	5.94	119	5.00	5.09	102	67.0-122	15	30.00
1,2-Dibromoethane	5.00	5.65	113	5.00	4.72	94	74.0-119	18	30.00
Chlorobenzene	5.00	5.72	114	5.00	4.79	96	74.0-120	18	30.00
1,1,1,2-Tetrachloroethane	5.00	5.58	112	5.00	4.82	96	73.0-119	15	30.00
Bromoform	5.00	5.80	116	5.00	5.08	102	62.0-127	13	30.00
Bromobenzene	5.00	5.79	116	5.00	4.86	97	75.0-120	17	30.00
1,1,2,2-Tetrachloroethane	5.00	5.53	111	5.00	4.71	94	68.0-129	16	30.00
1,2,3-Trichloropropane	5.00	5.67	113	5.00	4.81	96	67.0-126	16	30.00
Ethyl Benzene	5.00	5.77	115	5.00	4.66	93	76.0-123	21	30.00
m,p-Xylene	10.0	11.4	114	10.0	9.73	97	76.0-124	16	30.00
Styrene	5.00	5.75	115	5.00	4.70	94	76.0-121	20	30.00
o-Xylene	5.00	5.83	117	5.00	4.76	95	75.0-124	20	30.00
Isopropylbenzene (Cumene)	5.00	5.85	117	5.00	4.93	99	77.0-120	17	30.00
n-Propylbenzene	5.00	5.76	115	5.00	4.65	93	77.0-123	21	30.00
2-Chlorotoluene	5.00	5.95	119	5.00	4.76	95	74.0-127	22	30.00
4-Chlorotoluene	5.00	5.81	116	5.00	4.76	95	77.0-123	20	30.00
1,3,5-Trimethylbenzene	5.00	5.71	114	5.00	4.93	99	76.0-122	15	30.00
tert-Butylbenzene	5.00	5.95	119	5.00	4.62	92	67.0-122	25	30.00
1,2,4-Trimethylbenzene	5.00	5.84	117	5.00	4.90	98	76.0-124	18	30.00
sec-Butylbenzene	5.00	5.72	114	5.00	4.75	95	78.0-121	19	30.00
1,3-Dichlorobenzene	5.00	5.80	116	5.00	4.57	91	75.0-120	24	30.00
4-Isopropyltoluene	5.00	5.74	115	5.00	4.77	95	77.0-120	18	30.00
1,4-Dichlorobenzene	5.00	5.62	112	5.00	4.64	93	70.0-125	19	30.00
1,2-Dichlorobenzene	5.00	5.71	114	5.00	4.74	95	76.0-118	19	30.00
n-Butylbenzene	5.00	5.61	112	5.00	4.79	96	78.0-118	16	30.00
1,2-Dibromo-3-chloropropane	30.0	32.8	109	30.0	26.3	88	62.0-130	22	30.00
1,2,4-Trichlorobenzene	5.00	5.38	108	5.00	4.70	94	72.0-119	13	30.00
Hexachlorobutadiene	5.00	5.68	114	5.00	4.88	98	69.0-121	15	30.00
Naphthalene	5.00	5.63	113	5.00	4.88	98	67.0-122	14	30.00
trans-1,4-Dichloro-2-butene	25.0	28.0	112	25.0	23.2	93	61.0-132	19	30.00
1,2,3-Trichlorobenzene	5.00	5.76	115	5.00	4.97	99	68.0-123	15	30.00

Print Date: 07/26/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Blank Spike Summary

Blank Spike ID: LCS for HBN 25859 [VXX/3676]
Blank Spike Lab ID: 81483
Date Analyzed: 07/20/2012 10:37

Spike Duplicate ID: LCSD for HBN 25859 [VXX/3676]
Spike Duplicate Lab ID: 81484
Date Analyzed: 07/20/2012 11:02
Matrix: Water

QC for Samples: 31202266011, 31202266012

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			102			103	64.0-140		
Toluene d8			101			101	82.0-117		
4-Bromofluorobenzene			101			101	85.0-115		

Batch Information

Analytical Batch: VMS2398
Analytical Method: SW-846 8260B
Instrument: MSD3
Analyst: BWS

Prep Batch: VXX3676
Prep Method: SW-846 5030B
Prep Date/Time: 07/20/2012 08:58
Spike Init Wt./Vol.: 40 mL Extract Vol: 40 mL
Dupe Init Wt./Vol.: 40 mL Extract Vol: 40 mL

SGS ANALYTICAL PERSPECTIVES

Batch Summary

Analytical Method: SW-846 8260B

Prep Method: SW-846 5035 SL
Prep Batch: VXX3683
Prep Date: 07/23/2012 08:30

Client Sample ID	Lab Sample ID	Analysis Date	Analytical Batch	Instrument	Analyst
LCS-S for HBN 25953 [VXX/3683]	81684	07/23/2012 09:50	VMS2400	MSD9	DVO
LCSD-S for HBN 25953 [VXX/3683	81685	07/23/2012 10:16	VMS2400	MSD9	DVO
MB-S for HBN 25953 [VXX/3683]	81686	07/23/2012 11:38	VMS2400	MSD9	DVO
Trip Blank (Not on COC) Soil	31202266013	07/23/2012 13:27	VMS2400	MSD9	DVO
105 DPT-07 (2-4ft)	31202266007	07/23/2012 17:12	VMS2400	MSD9	DVO
105 DPT-08 (3-4ft)	31202266008	07/23/2012 17:40	VMS2400	MSD9	DVO
TC774-S002-2(81666DUP)	81920	07/23/2012 19:58	VMS2400	MSD9	DVO
SB-1(81532MS)	81919	07/23/2012 20:25	VMS2400	MSD9	DVO

Print Date: 07/26/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Method Blank

Blank ID: MB-S for HBN 25953 [VXX/3683]
Blank Lab ID: 81686
QC for Samples:
31202266007, 31202266008, 31202266013

Matrix: Soil-Solid as dry weight

Results by SW-846 8260B

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

Print Date: 07/26/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Method Blank

Blank ID: MB-S for HBN 25953 [VXX/3683]
Blank Lab ID: 81686
QC for Samples:
31202266007, 31202266008, 31202266013

Matrix: Soil-Solid as dry weight

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF
Bromobenzene	ND	U	0.986	5.00	ug/Kg	1
1,1,2,2-Tetrachloroethane	ND	U	1.13	5.00	ug/Kg	1
1,2,3-Trichloropropane	ND	U	1.11	5.00	ug/Kg	1
Ethyl Benzene	ND	U	0.827	5.00	ug/Kg	1
m,p-Xylene	ND	U	1.77	10.0	ug/Kg	1
Styrene	ND	U	0.986	5.00	ug/Kg	1
o-Xylene	ND	U	1.01	5.00	ug/Kg	1
Xylene (total)	ND	U	1.77	10.0	ug/Kg	1
Isopropylbenzene (Cumene)	ND	U	0.963	5.00	ug/Kg	1
n-Propylbenzene	ND	U	0.975	5.00	ug/Kg	1
2-Chlorotoluene	ND	U	1.12	5.00	ug/Kg	1
4-Chlorotoluene	ND	U	1.11	5.00	ug/Kg	1
1,3,5-Trimethylbenzene	ND	U	0.984	5.00	ug/Kg	1
tert-Butylbenzene	ND	U	0.906	5.00	ug/Kg	1
1,2,4-Trimethylbenzene	ND	U	1.07	5.00	ug/Kg	1
sec-Butylbenzene	ND	U	1.04	5.00	ug/Kg	1
1,3-Dichlorobenzene	ND	U	1.16	5.00	ug/Kg	1
4-Isopropyltoluene	ND	U	1.04	5.00	ug/Kg	1
1,4-Dichlorobenzene	ND	U	1.10	5.00	ug/Kg	1
1,2-Dichlorobenzene	ND	U	1.29	5.00	ug/Kg	1
n-Butylbenzene	ND	U	1.08	5.00	ug/Kg	1
1,2-Dibromo-3-chloropropane	ND	U	5.81	30.0	ug/Kg	1
1,2,4-Trichlorobenzene	ND	U	1.19	5.00	ug/Kg	1
Hexachlorobutadiene	ND	U	1.37	5.00	ug/Kg	1
Naphthalene	ND	U	1.21	5.00	ug/Kg	1
trans-1,4-Dichloro-2-butene	ND	U	5.41	25.0	ug/Kg	1
1,2,3-Trichlorobenzene	ND	U	1.39	5.00	ug/Kg	1
Surrogates						
1,2-Dichloroethane-d4	106			55.0-173	%	1
Toluene d8	101			57.0-134	%	1
4-Bromofluorobenzene	100			23.0-141	%	1

Batch Information

Analytical Batch: VMS2400
Analytical Method: SW-846 8260B
Instrument: MSD9
Analyst: DVO
Analytical Date/Time: 7/23/2012 11:38:00AM

Prep Batch: VXX3683
Prep Method: SW-846 5035 SL
Prep Date/Time: 7/23/2012 8:30:44AM
Prep Initial Wt./Vol.: 5 g
Prep Extract Vol: 5 mL

Print Date: 07/26/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Blank Spike Summary

Blank Spike ID: LCS-S for HBN 25953 [VXX/3683]
Blank Spike Lab ID: 81684
Date Analyzed: 07/23/2012 09:50

Spike Duplicate ID: LCSD-S for HBN 25953 [VXX/3683
Spike Duplicate Lab ID: 81685
Matrix: Soil-Solid as dry weight

QC for Samples: 31202266007, 31202266008, 31202266013

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	28.1	94	30.0	33.2	111	52.0-133	17	30.00
Chloromethane	30.0	28.4	95	30.0	32.1	107	64.0-126	12	30.00
Vinyl chloride	30.0	30.1	100	30.0	33.5	112	69.0-120	11	30.00
Bromomethane	30.0	34.4	115	30.0	34.4	115	41.0-160	0.0	30.00
Chloroethane	30.0	31.7	106	30.0	35.2	117	69.0-126	10	30.00
Trichlorofluoromethane	30.0	28.6	95	30.0	32.9	110	72.0-123	14	30.00
1,1-Dichloroethene	30.0	27.9	93	30.0	32.2	107	78.0-113	14	30.00
Acetone	75.0	77.2	103	75.0	97.1	129	0.00-243	23	30.00
Methylene chloride	30.0	29.9	100	30.0	32.3	108	40.0-156	7.7	30.00
trans-1,2-Dichloroethene	30.0	29.8	99	30.0	31.9	106	78.0-111	6.8	30.00
tert-Butyl methyl ether (MTBE)	30.0	29.3	98	30.0	33.1	110	68.0-138	12	30.00
1,1-Dichloroethane	30.0	29.4	98	30.0	32.0	107	71.0-121	8.5	30.00
Diisopropyl Ether	30.0	29.5	98	30.0	32.3	108	60.0-141	9.1	30.00
2,2-Dichloropropane	30.0	31.4	105	30.0	34.9	116	79.0-127	11	30.00
cis-1,2-Dichloroethene	30.0	30.4	101	30.0	31.5	105	80.0-114	3.6	30.00
2-Butanone	75.0	78.6	105	75.0	88.8	118	31.0-189	12	30.00
Bromochloromethane	30.0	31.4	105	30.0	31.9	106	81.0-115	1.6	30.00
Chloroform	30.0	30.2	101	30.0	33.5	112	76.0-114	10	30.00
1,1,1-Trichloroethane	30.0	30.7	102	30.0	34.3	114	79.0-117	11	30.00
Carbon tetrachloride	30.0	30.7	102	30.0	33.9	113	82.0-119	9.9	30.00
1,1-Dichloropropene	30.0	29.6	99	30.0	32.0	107	82.0-114	7.8	30.00
Benzene	30.0	29.1	97	30.0	30.8	103	82.0-113	5.7	30.00
1,2-Dichloroethane	30.0	29.4	98	30.0	33.7	112	72.0-126	14	30.00
Trichloroethene	30.0	28.6	95	30.0	34.7	116*	82.0-108	19	30.00
1,2-Dichloropropane	30.0	29.2	97	30.0	34.8	116	78.0-116	18	30.00
Dibromomethane	30.0	29.4	98	30.0	35.8	119	79.0-125	20	30.00
Bromodichloromethane	30.0	29.5	98	30.0	36.4	121	79.0-122	21	30.00
cis-1,3-Dichloropropene	30.0	31.3	104	30.0	37.4	125	75.0-127	18	30.00
4-Methyl-2-pentanone	75.0	75.3	100	75.0	96.2	128	57.0-159	24	30.00
Toluene	30.0	28.9	96	30.0	35.5	118*	83.0-111	20	30.00
Methyl iodide	30.0	24.2	81	30.0	28.2	94	63.0-137	15	30.00
trans-1,3-Dichloropropene	30.0	30.9	103	30.0	36.2	121	75.0-134	16	30.00
Carbon disulfide	30.0	25.3	84	30.0	28.3	94	72.0-116	11	30.00
1,1,2-Trichloroethane	30.0	27.8	93	30.0	30.9	103	73.0-121	11	30.00

SGS ANALYTICAL PERSPECTIVES

Blank Spike Summary

Blank Spike ID: LCS-S for HBN 25953 [VXX/3683]
Blank Spike Lab ID: 81684
Date Analyzed: 07/23/2012 09:50

Spike Duplicate ID: LCSD-S for HBN 25953 [VXX/3683
Spike Duplicate Lab ID: 81685
Matrix: Soil-Solid as dry weight

QC for Samples: 31202266007, 31202266008, 31202266013

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	27.4	91	30.0	29.5	98	60.0-118	7.4	30.00
1,3-Dichloropropane	30.0	27.6	92	30.0	30.2	101	76.0-121	9.0	30.00
2-Hexanone	75.0	71.8	96	75.0	80.3	107	41.0-171	11	30.00
Dibromochloromethane	30.0	29.5	98	30.0	31.3	104	77.0-126	5.9	30.00
1,2-Dibromoethane	30.0	27.5	92	30.0	30.5	102	76.0-125	10	30.00
Chlorobenzene	30.0	27.5	92	30.0	29.7	99	78.0-109	7.7	30.00
1,1,1,2-Tetrachloroethane	30.0	29.3	98	30.0	30.7	102	81.0-117	4.7	30.00
Bromoform	30.0	29.9	100	30.0	32.4	108	72.0-134	8.0	30.00
Bromobenzene	30.0	27.4	91	30.0	29.7	99	76.0-113	8.1	30.00
1,1,2,2-Tetrachloroethane	30.0	30.5	102	30.0	32.5	108	76.0-129	6.3	30.00
1,2,3-Trichloropropane	30.0	29.4	98	30.0	32.6	109	70.0-145	10	30.00
Ethyl Benzene	30.0	26.1	87	30.0	27.8	93	72.0-115	6.3	30.00
m,p-Xylene	60.0	52.4	87	60.0	56.9	95	73.0-114	8.2	30.00
Styrene	30.0	26.5	88	30.0	27.9	93	74.0-114	5.1	30.00
o-Xylene	30.0	27.0	90	30.0	28.7	96	74.0-113	6.1	30.00
Isopropylbenzene (Cumene)	30.0	26.7	89	30.0	28.8	96	72.0-115	7.6	30.00
n-Propylbenzene	30.0	27.5	92	30.0	29.6	99	71.0-117	7.4	30.00
2-Chlorotoluene	30.0	27.1	90	30.0	29.3	98	76.0-111	7.8	30.00
4-Chlorotoluene	30.0	27.2	91	30.0	28.0	93	75.0-113	2.9	30.00
1,3,5-Trimethylbenzene	30.0	27.0	90	30.0	28.8	96	72.0-115	6.5	30.00
tert-Butylbenzene	30.0	27.0	90	30.0	28.8	96	74.0-112	6.5	30.00
1,2,4-Trimethylbenzene	30.0	27.7	92	30.0	29.2	97	73.0-114	5.3	30.00
sec-Butylbenzene	30.0	26.7	89	30.0	28.3	94	72.0-115	5.8	30.00
1,3-Dichlorobenzene	30.0	27.4	91	30.0	29.0	97	75.0-110	5.7	30.00
4-Isopropyltoluene	30.0	27.2	91	30.0	28.6	95	73.0-114	5.0	30.00
1,4-Dichlorobenzene	30.0	28.0	93	30.0	29.8	99	76.0-110	6.2	30.00
1,2-Dichlorobenzene	30.0	27.3	91	30.0	28.9	96	77.0-109	5.7	30.00
n-Butylbenzene	30.0	27.9	93	30.0	29.1	97	72.0-118	4.2	30.00
1,2-Dibromo-3-chloropropane	180	180	100	180	194	108	54.0-166	7.5	30.00
1,2,4-Trichlorobenzene	30.0	25.7	86	30.0	27.0	90	76.0-115	4.9	30.00
Hexachlorobutadiene	30.0	26.3	88	30.0	27.6	92	70.0-111	4.8	30.00
Naphthalene	30.0	27.6	92	30.0	29.6	99	71.0-129	7.0	30.00
trans-1,4-Dichloro-2-butene	150	146	97	150	158	105	62.0-164	7.9	30.00
1,2,3-Trichlorobenzene	30.0	27.3	91	30.0	29.7	99	78.0-115	8.4	30.00

SGS ANALYTICAL PERSPECTIVES

Blank Spike Summary

Blank Spike ID: LCS-S for HBN 25953 [VXX/3683]
Blank Spike Lab ID: 81684
Date Analyzed: 07/23/2012 09:50

Spike Duplicate ID: LCSD-S for HBN 25953 [VXX/3683
Spike Duplicate Lab ID: 81685
Matrix: Soil-Solid as dry weight

QC for Samples: 31202266007, 31202266008, 31202266013

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			114	55.0-173		
Toluene d8			101			116	57.0-134		
4-Bromofluorobenzene			103			104	23.0-141		

Batch Information

Analytical Batch: VMS2400
Analytical Method: SW-846 8260B
Instrument: MSD9
Analyst: DVO

Prep Batch: VXX3683
Prep Method: SW-846 5035 SL
Prep Date/Time: 07/23/2012 08:30
Spike Init Wt./Vol.: 5 g Extract Vol: 5 mL
Dupe Init Wt./Vol.: 5 g Extract Vol: 5 mL

SGS ANALYTICAL PERSPECTIVES

Batch Summary

Analytical Method: SW-846 8260B

Prep Method: SW-846 5035 SM
Prep Batch: VXX3689
Prep Date: 07/23/2012 08:00

Client Sample ID	Lab Sample ID	Analysis Date	Analytical Batch	Instrument	Analyst
LCS-S for HBN 25982 [VXX/3689]	81845	07/23/2012 09:19	VMS2399	MSD4	DVO
LCSD-S for HBN 25982 [VXX/3689	81846	07/23/2012 09:43	VMS2399	MSD4	DVO
MB-S for HBN 25982 [VXX/3689]	81847	07/23/2012 11:20	VMS2399	MSD4	DVO
105 DPT-03 (5-6ft)	31202266003	07/23/2012 18:16	VMS2399	MSD4	DVO
105 DPT-05 (4-5ft)	31202266005	07/23/2012 18:41	VMS2399	MSD4	DVO
105 DPT-09 (4-5ft)	31202266009	07/23/2012 19:05	VMS2399	MSD4	DVO
105 DPT-09 (4-5ft)(81210MS)	81848	07/23/2012 19:30	VMS2399	MSD4	DVO
105 DPT-09 (4-5ft)(81210MSD)	81849	07/23/2012 19:54	VMS2399	MSD4	DVO

SGS ANALYTICAL PERSPECTIVES

Method Blank

Blank ID: MB-S for HBN 25982 [VXX/3689]
Blank Lab ID: 81847
QC for Samples:
31202266003, 31202266005, 31202266009

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	ND	U	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: 07/26/2012

N.C. Certification # 481

Method Blank

Blank ID: MB-S for HBN 25982 [VXX/3689]
Blank Lab ID: 81847
QC for Samples:
31202266003, 31202266005, 31202266009

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	96.0			55.0-173	%	50
Toluene d8	96.0			57.0-134	%	50
4-Bromofluorobenzene	91.0			23.0-141	%	50

Batch Information

Analytical Batch: VMS2399
Analytical Method: SW-846 8260B
Instrument: MSD4
Analyst: DVO
Analytical Date/Time: 7/23/2012 11:20:00AM

Prep Batch: VXX3689
Prep Method: SW-846 5035 SM
Prep Date/Time: 7/23/2012 8:00:00AM
Prep Initial Wt./Vol.: 5 g
Prep Extract Vol: 5 mL

Print Date: 07/26/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Blank Spike Summary

Blank Spike ID: LCS-S for HBN 25982 [VXX/3689]
Blank Spike Lab ID: 81845
Date Analyzed: 07/23/2012 09:19

Spike Duplicate ID: LCSD-S for HBN 25982 [VXX/3689
Spike Duplicate Lab ID: 81846
Matrix: Soil-Solid as dry weight

QC for Samples: 31202266003, 31202266005, 31202266009

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	219	87	250	240	96	70.0-130	9.2	30.00
Chloromethane	250	254	101	250	277	111	70.0-130	8.7	30.00
Vinyl chloride	250	219	87	250	247	99	70.0-130	12	30.00
Bromomethane	250	298	119	250	329	131*	70.0-130	9.9	30.00
Chloroethane	250	249	100	250	268	107	70.0-130	7.4	30.00
Trichlorofluoromethane	250	223	89	250	251	100	70.0-130	12	30.00
1,1-Dichloroethene	250	243	97	250	258	103	70.0-130	6.0	30.00
Acetone	1250	1200	96	1250	1260	101	70.0-130	4.9	30.00
Methylene chloride	250	238	95	250	242	97	70.0-130	1.7	30.00
trans-1,2-Dichloroethene	250	247	99	250	249	100	70.0-130	0.81	30.00
tert-Butyl methyl ether (MTBE)	250	240	96	250	243	97	70.0-130	1.2	30.00
1,1-Dichloroethane	250	237	95	250	246	98	70.0-130	3.7	30.00
Diisopropyl Ether	250	235	94	250	243	97	70.0-130	3.3	30.00
2,2-Dichloropropane	250	217	87	250	231	92	70.0-130	6.3	30.00
cis-1,2-Dichloroethene	250	241	96	250	249	100	70.0-130	3.3	30.00
2-Butanone	1250	1210	97	1250	1290	103	70.0-130	6.4	30.00
Bromochloromethane	250	246	98	250	243	97	70.0-130	1.2	30.00
Chloroform	250	244	97	250	254	102	70.0-130	4.0	30.00
1,1,1-Trichloroethane	250	227	91	250	238	95	70.0-130	4.7	30.00
Carbon tetrachloride	250	221	88	250	236	94	70.0-130	6.6	30.00
1,1-Dichloropropene	250	245	98	250	259	103	70.0-130	5.6	30.00
Benzene	250	244	98	250	254	102	70.0-130	4.0	30.00
1,2-Dichloroethane	250	235	94	250	242	97	70.0-130	2.9	30.00
Trichloroethene	250	237	95	250	245	98	70.0-130	3.3	30.00
1,2-Dichloropropane	250	243	97	250	249	100	70.0-130	2.4	30.00
Dibromomethane	250	237	95	250	245	98	70.0-130	3.3	30.00
Bromodichloromethane	250	224	89	250	230	92	70.0-130	2.6	30.00
cis-1,3-Dichloropropene	250	246	98	250	255	102	70.0-130	3.6	30.00
4-Methyl-2-pentanone	1250	1230	99	1250	1270	102	70.0-130	3.2	30.00
Toluene	250	249	99	250	254	102	70.0-130	2.0	30.00
Methyl iodide	250	203	81	250	220	88	70.0-130	8.0	30.00
trans-1,3-Dichloropropene	250	217	87	250	224	90	70.0-130	3.2	30.00
Carbon disulfide	250	243	97	250	249	99	70.0-130	2.4	30.00
1,1,2-Trichloroethane	250	251	100	250	254	101	70.0-130	1.2	30.00

SGS ANALYTICAL PERSPECTIVES

Blank Spike Summary

Blank Spike ID: LCS-S for HBN 25982 [VXX/3689]
Blank Spike Lab ID: 81845
Date Analyzed: 07/23/2012 09:19

Spike Duplicate ID: LCSD-S for HBN 25982 [VXX/3689
Spike Duplicate Lab ID: 81846
Matrix: Soil-Solid as dry weight

QC for Samples: 31202266003, 31202266005, 31202266009

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	247	99	250	254	101	70.0-130	2.8	30.00
1,3-Dichloropropane	250	248	99	250	253	101	70.0-130	2.0	30.00
2-Hexanone	1250	1230	99	1250	1270	102	70.0-130	3.2	30.00
Dibromochloromethane	250	218	87	250	229	91	70.0-130	4.9	30.00
1,2-Dibromoethane	250	242	97	250	249	99	70.0-130	2.9	30.00
Chlorobenzene	250	253	101	250	255	102	70.0-130	0.79	30.00
1,1,1,2-Tetrachloroethane	250	210	84	250	216	86	70.0-130	2.8	30.00
Bromoform	250	219	87	250	221	88	70.0-130	0.91	30.00
Bromobenzene	250	245	98	250	251	100	70.0-130	2.4	30.00
1,1,2,2-Tetrachloroethane	250	254	101	250	260	104	70.0-130	2.3	30.00
1,2,3-Trichloropropane	250	250	100	250	252	101	70.0-130	0.80	30.00
Ethyl Benzene	250	242	97	250	245	98	70.0-130	1.2	30.00
m,p-Xylene	500	499	100	500	499	100	70.0-130	0.0	30.00
Styrene	250	247	99	250	247	99	70.0-130	0.0	30.00
o-Xylene	250	252	101	250	256	102	70.0-130	1.6	30.00
Isopropylbenzene (Cumene)	250	250	100	250	253	101	70.0-130	1.2	30.00
n-Propylbenzene	250	249	100	250	252	101	70.0-130	1.2	30.00
2-Chlorotoluene	250	254	102	250	252	101	70.0-130	0.79	30.00
4-Chlorotoluene	250	244	97	250	242	97	70.0-130	0.82	30.00
1,3,5-Trimethylbenzene	250	248	99	250	251	100	70.0-130	1.2	30.00
tert-Butylbenzene	250	243	97	250	255	102	70.0-130	4.8	30.00
1,2,4-Trimethylbenzene	250	251	100	250	256	102	70.0-130	2.0	30.00
sec-Butylbenzene	250	246	98	250	248	99	70.0-130	0.81	30.00
1,3-Dichlorobenzene	250	250	100	250	252	101	70.0-130	0.80	30.00
4-Isopropyltoluene	250	246	98	250	250	100	70.0-130	1.6	30.00
1,4-Dichlorobenzene	250	252	101	250	259	104	70.0-130	2.7	30.00
1,2-Dichlorobenzene	250	250	100	250	252	101	70.0-130	0.80	30.00
n-Butylbenzene	250	253	101	250	260	104	70.0-130	2.7	30.00
1,2-Dibromo-3-chloropropane	1500	1170	78	1500	1280	85	70.0-130	9.0	30.00
1,2,4-Trichlorobenzene	250	231	92	250	234	94	70.0-130	1.3	30.00
Hexachlorobutadiene	250	259	103	250	257	103	70.0-130	0.78	30.00
Naphthalene	250	248	99	250	250	100	70.0-130	0.80	30.00
trans-1,4-Dichloro-2-butene	1250	1130	90	1250	1180	95	70.0-130	4.3	30.00
1,2,3-Trichlorobenzene	250	245	98	250	246	98	70.0-130	0.41	30.00

Print Date: 07/26/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Blank Spike Summary

Blank Spike ID: LCS-S for HBN 25982 [VXX/3689]
Blank Spike Lab ID: 81845
Date Analyzed: 07/23/2012 09:19

Spike Duplicate ID: LCSD-S for HBN 25982 [VXX/3689
Spike Duplicate Lab ID: 81846
Matrix: Soil-Solid as dry weight

QC for Samples: 31202266003, 31202266005, 31202266009

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			97			97	55.0-173		
Toluene d8			100			101	57.0-134		
4-Bromofluorobenzene			101			101	23.0-141		

Batch Information

Analytical Batch: VMS2399
Analytical Method: SW-846 8260B
Instrument: MSD4
Analyst: DVO

Prep Batch: VXX3689
Prep Method: SW-846 5035 SM
Prep Date/Time: 07/23/2012 08:00
Spike Init Wt./Vol.: 5 g Extract Vol: 5 mL
Dupe Init Wt./Vol.: 5 g Extract Vol: 5 mL

SGS ANALYTICAL PERSPECTIVES

Matrix Spike Summary

Original Sample ID: 31202266009 (105 DPT-09 (4-5ft))
MS Sample ID: 81848
MSD Sample ID: 81849

Analysis Date: 07/23/2012 19:05
Analysis Date: 07/23/2012 19:30
Analysis Date: 07/23/2012 19:54
Matrix: Soil-Solid as dry weight

QC for Samples: 31202266003, 31202266005, 31202266009

Results by SW-846 8260B

		Matrix Spike (ug/Kg)			Spike Duplicate (ug/Kg)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
1,1,1,2-Tetrachloroethane	ND	826	471	57 *	826	555	67 *	69.0-120	17	30.00
1,1,1-Trichloroethane	ND	826	623	75 *	826	718	87	78.0-121	14	30.00
1,1,2,2-Tetrachloroethane	ND	826	760	92	826	870	105	76.0-136	14	30.00
1,1,2-Trichloroethane	ND	826	996	121	826	1130	137 *	65.0-128	13	30.00
1,1-Dichloroethane	ND	826	728	88	826	809	98	72.0-139	11	30.00
1,1-Dichloroethene	ND	826	747	90	826	859	104	72.0-135	14	30.00
1,1-Dichloropropene	ND	826	776	94	826	882	107	69.0-137	13	30.00
1,2,3-Trichlorobenzene	ND	826	851	103	826	998	121	61.0-126	16	30.00
1,2,3-Trichloropropane	ND	826	740	90	826	839	102	10.0-218	13	30.00
1,2,4-Trichlorobenzene	ND	826	819	99	826	991	120	61.0-125	19	30.00
1,2,4-Trimethylbenzene	3610	826	4680	129	826	5060	175 *	31.0-172	7.9	30.00
1,2-Dibromo-3-chloropropane	ND	4959	2750	55	4959	3210	65	43.0-229	16	30.00
1,2-Dibromoethane	ND	826	596	72 *	826	728	88	78.0-148	20	30.00
1,2-Dichlorobenzene	ND	826	781	95	826	877	106	58.0-148	11	30.00
1,2-Dichloroethane	ND	826	747	90	826	849	103	73.0-146	13	30.00
1,2-Dichloropropane	ND	826	763	92	826	887	107	76.0-136	15	30.00
1,3,5-Trimethylbenzene	1180	826	2110	113	826	2310	137 *	68.0-132	9.5	30.00
1,3-Dichlorobenzene	ND	826	823	100	826	936	113	55.0-145	13	30.00
1,3-Dichloropropane	ND	826	766	93	826	882	107	33.0-137	14	30.00
1,4-Dichlorobenzene	ND	826	824	100	826	941	114	53.0-146	13	30.00
2,2-Dichloropropane	ND	826	580	70	826	657	80	58.0-150	13	30.00
2-Butanone	ND	4135	3630	88	4135	4140	100	41.0-256	13	30.00
2-Chlorotoluene	ND	826	932	113	826	1040	126	60.0-144	11	30.00
2-Hexanone	ND	4135	6150	149 *	4135	6660	161 *	42.0-111	8.0	30.00
4-Chlorotoluene	ND	826	791	96	826	910	110	59.0-141	14	30.00
4-Isopropyltoluene	284	826	1130	103	826	1250	117	75.0-122	10	30.00
4-Methyl-2-pentanone	ND	4135	4450	108	4135	4980	121	6.90-166	11	30.00
Acetone	ND	4135	3560	86	4135	3910	95	6.80-355	9.3	30.00
Benzene	ND	826	788	95	826	900	109	75.0-133	13	30.00
Bromobenzene	ND	826	788	95	826	882	107	66.0-140	11	30.00
Bromochloromethane	ND	826	705	85	826	780	94	85.0-136	10	30.00
Bromodichloromethane	ND	826	611	74 *	826	728	88	77.0-140	18	30.00
Bromoform	ND	826	507	61 *	826	583	71 *	75.0-151	14	30.00
Bromomethane	ND	826	598	72	826	903	109	30.0-127	41*	30.00
n-Butylbenzene	ND	826	2470	299 *	826	2640	320 *	41.0-147	6.8	30.00
Carbon disulfide	34.7	826	666	81	826	742	90	64.0-145	11	30.00
Carbon tetrachloride	ND	826	525	64	826	613	74	64.0-142	16	30.00
Chlorobenzene	ND	826	775	94	826	894	108	66.0-135	14	30.00
Chloroethane	ND	826	517	63	826	748	91	21.0-182	37*	30.00

Print Date: 07/26/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Matrix Spike Summary

Original Sample ID: 31202266009 (105 DPT-09 (4-5ft))
MS Sample ID: 81848
MSD Sample ID: 81849

QC for Samples: 31202266003, 31202266005, 31202266009

Analysis Date: 07/23/2012 19:05
Analysis Date: 07/23/2012 19:30
Analysis Date: 07/23/2012 19:54
Matrix: Soil-Solid as dry weight

Results by SW-846 8260B

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

Batch Information

Analytical Batch: VMS2399
Analytical Method: SW-846 8260B
Instrument: MSD4
Analyst: DVO

Prep Batch: VXX3689
Prep Method: SW-846 5035 SM
Prep Date/Time: 07/19/2012 14:00
MS Init Wt./Vol.: 7.03 g Extract Vol.: 5 mL
MSD Init Wt./Vol.: 7.03 g Extract Vol.: 5 mL

N.C Certification #

SGS ANALYTICAL PERSPECTIVES

Batch Summary

Analytical Method: SW-846 8260B

Prep Method: SW-846 5035 SL
Prep Batch: VXX3699
Prep Date: 07/25/2012 08:16

Client Sample ID	Lab Sample ID	Analysis Date	Analytical Batch	Instrument	Analyst
LCS-S for HBN 26035 [VXX/3699]	82043	07/25/2012 09:22	VMS2408	MSD2	DVO
LCSD-S for HBN 26035 [VXX/3699	82044	07/25/2012 09:45	VMS2408	MSD2	DVO
MB-S for HBN 26035 [VXX/3699]	82045	07/25/2012 10:32	VMS2408	MSD2	DVO
105 DPT-10 (4-5ft)	31202266010	07/25/2012 14:04	VMS2408	MSD2	DVO
Onslow Beach S005-2(82022DUP)	82211	07/25/2012 17:59	VMS2408	MSD2	DVO
Onslow Beach S006-2(82023MS)	82212	07/25/2012 18:22	VMS2408	MSD2	DVO

N.C. Certification # 481

Print Date: 07/26/2012

SGS ANALYTICAL PERSPECTIVES

Method Blank

Blank ID: MB-S for HBN 26035 [VXX/3699]
Blank Lab ID: 82045
QC for Samples:
31202266010

Matrix: Soil-Solid as dry weight

Results by SW-846 8260B

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

Print Date: 07/26/2012

N.C. Certification # 481

Method Blank

Blank ID: MB-S for HBN 26035 [VXX/3699]
Blank Lab ID: 82045
QC for Samples:
31202266010

Matrix: Soil-Solid as dry weight

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF
Bromobenzene	ND	U	0.986	5.00	ug/Kg	1
1,1,2,2-Tetrachloroethane	ND	U	1.13	5.00	ug/Kg	1
1,2,3-Trichloropropane	ND	U	1.11	5.00	ug/Kg	1
Ethyl Benzene	ND	U	0.827	5.00	ug/Kg	1
m,p-Xylene	ND	U	1.77	10.0	ug/Kg	1
Styrene	ND	U	0.986	5.00	ug/Kg	1
o-Xylene	ND	U	1.01	5.00	ug/Kg	1
Xylene (total)	ND	U	1.77	10.0	ug/Kg	1
Isopropylbenzene (Cumene)	ND	U	0.963	5.00	ug/Kg	1
n-Propylbenzene	ND	U	0.975	5.00	ug/Kg	1
2-Chlorotoluene	ND	U	1.12	5.00	ug/Kg	1
4-Chlorotoluene	ND	U	1.11	5.00	ug/Kg	1
1,3,5-Trimethylbenzene	ND	U	0.984	5.00	ug/Kg	1
tert-Butylbenzene	ND	U	0.906	5.00	ug/Kg	1
1,2,4-Trimethylbenzene	ND	U	1.07	5.00	ug/Kg	1
sec-Butylbenzene	ND	U	1.04	5.00	ug/Kg	1
1,3-Dichlorobenzene	ND	U	1.16	5.00	ug/Kg	1
4-Isopropyltoluene	ND	U	1.04	5.00	ug/Kg	1
1,4-Dichlorobenzene	ND	U	1.10	5.00	ug/Kg	1
1,2-Dichlorobenzene	ND	U	1.29	5.00	ug/Kg	1
n-Butylbenzene	ND	U	1.08	5.00	ug/Kg	1
1,2-Dibromo-3-chloropropane	ND	U	5.81	30.0	ug/Kg	1
1,2,4-Trichlorobenzene	ND	U	1.19	5.00	ug/Kg	1
Hexachlorobutadiene	ND	U	1.37	5.00	ug/Kg	1
Naphthalene	ND	U	1.21	5.00	ug/Kg	1
trans-1,4-Dichloro-2-butene	ND	U	5.41	25.0	ug/Kg	1
1,2,3-Trichlorobenzene	ND	U	1.39	5.00	ug/Kg	1
Surrogates						
1,2-Dichloroethane-d4	109			55.0-173	%	1
Toluene d8	104			57.0-134	%	1
4-Bromofluorobenzene	98.0			23.0-141	%	1

Batch Information

Analytical Batch: VMS2408
Analytical Method: SW-846 8260B
Instrument: MSD2
Analyst: DVO
Analytical Date/Time: 7/25/2012 10:32:00AM

Prep Batch: VXX3699
Prep Method: SW-846 5035 SL
Prep Date/Time: 7/25/2012 8:16:42AM
Prep Initial Wt./Vol.: 5 g
Prep Extract Vol: 5 mL

Print Date: 07/26/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Blank Spike Summary

Blank Spike ID: LCS-S for HBN 26035 [VXX/3699]
Blank Spike Lab ID: 82043
Date Analyzed: 07/25/2012 09:22

Spike Duplicate ID: LCSD-S for HBN 26035 [VXX/3699
Spike Duplicate Lab ID: 82044
Matrix: Soil-Solid as dry weight

QC for Samples: 31202266010

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	28.1	94	30.0	28.7	96	52.0-133	2.1	30.00
Chloromethane	30.0	30.1	100	30.0	30.8	103	64.0-126	2.3	30.00
Vinyl chloride	30.0	32.1	107	30.0	32.9	110	69.0-120	2.5	30.00
Bromomethane	30.0	34.2	114	30.0	33.6	112	41.0-160	1.8	30.00
Chloroethane	30.0	33.1	110	30.0	32.7	109	69.0-126	1.2	30.00
Trichlorofluoromethane	30.0	31.9	106	30.0	31.8	106	72.0-123	0.31	30.00
1,1-Dichloroethene	30.0	30.9	103	30.0	31.9	106	78.0-113	3.2	30.00
Acetone	75.0	74.9	100	75.0	71.8	96	0.00-243	4.2	30.00
Methylene chloride	30.0	20.1	67	30.0	23.6	79	40.0-156	16	30.00
trans-1,2-Dichloroethene	30.0	27.4	91	30.0	27.2	91	78.0-111	0.73	30.00
tert-Butyl methyl ether (MTBE)	30.0	28.6	95	30.0	29.0	97	68.0-138	1.4	30.00
1,1-Dichloroethane	30.0	27.0	90	30.0	27.7	92	71.0-121	2.6	30.00
Diisopropyl Ether	30.0	26.6	89	30.0	27.0	90	60.0-141	1.5	30.00
2,2-Dichloropropane	30.0	28.7	96	30.0	29.8	99	79.0-127	3.8	30.00
cis-1,2-Dichloroethene	30.0	28.4	95	30.0	27.8	93	80.0-114	2.1	30.00
2-Butanone	75.0	75.1	100	75.0	74.6	100	31.0-189	0.67	30.00
Bromochloromethane	30.0	27.2	91	30.0	26.6	89	81.0-115	2.2	30.00
Chloroform	30.0	28.1	94	30.0	28.7	96	76.0-114	2.1	30.00
1,1,1-Trichloroethane	30.0	27.4	91	30.0	28.6	95	79.0-117	4.3	30.00
Carbon tetrachloride	30.0	28.0	93	30.0	28.3	94	82.0-119	1.1	30.00
1,1-Dichloropropene	30.0	26.5	88	30.0	27.3	91	82.0-114	3.0	30.00
Benzene	30.0	26.7	89	30.0	27.6	92	82.0-113	3.3	30.00
1,2-Dichloroethane	30.0	28.9	96	30.0	29.6	99	72.0-126	2.4	30.00
Trichloroethene	30.0	26.7	89	30.0	27.9	93	82.0-108	4.4	30.00
1,2-Dichloropropane	30.0	27.5	92	30.0	27.7	92	78.0-116	0.72	30.00
Dibromomethane	30.0	28.0	93	30.0	28.2	94	79.0-125	0.71	30.00
Bromodichloromethane	30.0	28.4	95	30.0	28.9	96	79.0-122	1.7	30.00
cis-1,3-Dichloropropene	30.0	29.9	100	30.0	30.1	100	75.0-127	0.67	30.00
4-Methyl-2-pentanone	75.0	72.6	97	75.0	75.4	100	57.0-159	3.8	30.00
Toluene	30.0	27.8	93	30.0	28.3	94	83.0-111	1.8	30.00
Methyl iodide	30.0	19.1	64	30.0	20.0	67	63.0-137	4.6	30.00
trans-1,3-Dichloropropene	30.0	27.6	92	30.0	29.0	97	75.0-134	4.9	30.00
Carbon disulfide	30.0	26.9	90	30.0	27.4	91	72.0-116	1.8	30.00
1,1,2-Trichloroethane	30.0	27.2	91	30.0	27.8	93	73.0-121	2.2	30.00

SGS ANALYTICAL PERSPECTIVES

Method Blank

Blank ID: MB-S for HBN 26057 [VXX/3704]
Blank Lab ID: 82111
QC for Samples:
31202266002

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	ND	U	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: 07/26/2012

N.C. Certification # 481

Method Blank

Blank ID: MB-S for HBN 26057 [VXX/3704]
Blank Lab ID: 82111
QC for Samples:
31202266002

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	103			55.0-173	%	50
Toluene d8	100			57.0-134	%	50
4-Bromofluorobenzene	99.0			23.0-141	%	50

Batch Information

Analytical Batch: VMS2410
Analytical Method: SW-846 8260B
Instrument: MSD3
Analyst: BWS
Analytical Date/Time: 7/25/2012 11:33:00AM

Prep Batch: VXX3704
Prep Method: SW-846 5035 SM
Prep Date/Time: 7/25/2012 8:44:46AM
Prep Initial Wt./Vol.: 5 g
Prep Extract Vol: 5 mL

Print Date: 07/26/2012

N.C. Certification # 481

Blank Spike Summary

Blank Spike ID: LCS-S for HBN 26057 [VXX/3704]
Blank Spike Lab ID: 82112
Date Analyzed: 07/25/2012 09:51

Spike Duplicate ID: LCSD-S for HBN 26057 [VXX/3704
Spike Duplicate Lab ID: 82113
Matrix: Soil-Solid as dry weight

QC for Samples: 31202266002

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	305	122	250	246	98	70.0-130	21	30.00
Chloromethane	250	281	112	250	220	88	70.0-130	24	30.00
Vinyl chloride	250	292	117	250	224	90	70.0-130	26	30.00
Bromomethane	250	259	103	250	231	92	70.0-130	11	30.00
Chloroethane	250	343	137*	250	260	104	70.0-130	28	30.00
Trichlorofluoromethane	250	283	113	250	217	87	70.0-130	26	30.00
1,1-Dichloroethene	250	297	119	250	238	95	70.0-130	22	30.00
Acetone	1250	1380	110	1250	1080	87	70.0-130	24	30.00
Methylene chloride	250	274	109	250	237	95	70.0-130	14	30.00
trans-1,2-Dichloroethene	250	301	120	250	252	101	70.0-130	18	30.00
tert-Butyl methyl ether (MTBE)	250	257	103	250	225	90	70.0-130	13	30.00
1,1-Dichloroethane	250	269	108	250	231	92	70.0-130	15	30.00
Diisopropyl Ether	250	254	102	250	218	87	70.0-130	15	30.00
2,2-Dichloropropane	250	290	116	250	259	104	70.0-130	11	30.00
cis-1,2-Dichloroethene	250	287	115	250	243	97	70.0-130	17	30.00
2-Butanone	1250	1160	93	1250	1010	81	70.0-130	14	30.00
Bromochloromethane	250	279	111	250	247	99	70.0-130	12	30.00
Chloroform	250	283	113	250	214	85	70.0-130	28	30.00
1,1,1-Trichloroethane	250	278	111	250	248	99	70.0-130	11	30.00
Carbon tetrachloride	250	286	114	250	240	96	70.0-130	17	30.00
1,1-Dichloropropene	250	265	106	250	239	95	70.0-130	10	30.00
Benzene	250	273	109	250	235	94	70.0-130	15	30.00
1,2-Dichloroethane	250	261	104	250	227	91	70.0-130	14	30.00
Trichloroethene	250	265	106	250	214	85	70.0-130	21	30.00
1,2-Dichloropropane	250	242	97	250	210	84	70.0-130	14	30.00
Dibromomethane	250	251	100	250	224	89	70.0-130	11	30.00
Bromodichloromethane	250	246	98	250	238	95	70.0-130	3.3	30.00
cis-1,3-Dichloropropene	250	257	103	250	233	93	70.0-130	9.8	30.00
4-Methyl-2-pentanone	1250	1130	90	1250	995	80	70.0-130	13	30.00
Toluene	250	269	107	250	238	95	70.0-130	12	30.00
Methyl iodide	250	210	84	250	199	80	70.0-130	5.4	30.00
trans-1,3-Dichloropropene	250	255	102	250	224	90	70.0-130	13	30.00
Carbon disulfide	250	282	113	250	252	101	70.0-130	11	30.00
1,1,2-Trichloroethane	250	246	98	250	245	98	70.0-130	0.41	30.00

SGS ANALYTICAL PERSPECTIVES

Blank Spike Summary

Blank Spike ID: LCS-S for HBN 26057 [VXX/3704]
Blank Spike Lab ID: 82112
Date Analyzed: 07/25/2012 09:51

Spike Duplicate ID: LCSD-S for HBN 26057 [VXX/3704
Spike Duplicate Lab ID: 82113
Matrix: Soil-Solid as dry weight

QC for Samples: 31202266002

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	278	111	250	245	98	70.0-130	13	30.00
1,3-Dichloropropane	250	243	97	250	211	84	70.0-130	14	30.00
2-Hexanone	1250	1080	86	1250	958	77	70.0-130	12	30.00
Dibromochloromethane	250	262	105	250	236	94	70.0-130	10	30.00
1,2-Dibromoethane	250	255	102	250	219	88	70.0-130	15	30.00
Chlorobenzene	250	251	100	250	229	92	70.0-130	9.2	30.00
1,1,1,2-Tetrachloroethane	250	250	100	250	243	97	70.0-130	2.8	30.00
Bromoform	250	257	103	250	241	96	70.0-130	6.4	30.00
Bromobenzene	250	261	104	250	228	91	70.0-130	13	30.00
1,1,2,2-Tetrachloroethane	250	233	93	250	213	85	70.0-130	9.0	30.00
1,2,3-Trichloropropane	250	247	99	250	221	88	70.0-130	11	30.00
Ethyl Benzene	250	246	98	250	219	88	70.0-130	12	30.00
m,p-Xylene	500	515	103	500	471	94	70.0-130	8.9	30.00
Styrene	250	246	98	250	219	88	70.0-130	12	30.00
o-Xylene	250	246	98	250	224	89	70.0-130	9.4	30.00
Isopropylbenzene (Cumene)	250	260	104	250	235	94	70.0-130	10	30.00
n-Propylbenzene	250	245	98	250	225	90	70.0-130	8.5	30.00
2-Chlorotoluene	250	247	99	250	218	87	70.0-130	12	30.00
4-Chlorotoluene	250	252	101	250	228	91	70.0-130	10	30.00
1,3,5-Trimethylbenzene	250	258	103	250	233	93	70.0-130	10	30.00
tert-Butylbenzene	250	254	102	250	225	90	70.0-130	12	30.00
1,2,4-Trimethylbenzene	250	254	101	250	232	93	70.0-130	9.1	30.00
sec-Butylbenzene	250	256	102	250	240	96	70.0-130	6.5	30.00
1,3-Dichlorobenzene	250	245	98	250	227	91	70.0-130	7.6	30.00
4-Isopropyltoluene	250	257	103	250	237	95	70.0-130	8.1	30.00
1,4-Dichlorobenzene	250	242	97	250	224	90	70.0-130	7.7	30.00
1,2-Dichlorobenzene	250	248	99	250	219	87	70.0-130	12	30.00
n-Butylbenzene	250	251	100	250	236	94	70.0-130	6.2	30.00
1,2-Dibromo-3-chloropropane	1500	1340	89	1500	1140	76	70.0-130	16	30.00
1,2,4-Trichlorobenzene	250	258	103	250	234	93	70.0-130	9.8	30.00
Hexachlorobutadiene	250	255	102	250	244	97	70.0-130	4.4	30.00
Naphthalene	250	246	98	250	229	92	70.0-130	7.2	30.00
trans-1,4-Dichloro-2-butene	1250	1160	93	1250	1100	88	70.0-130	5.3	30.00
1,2,3-Trichlorobenzene	250	257	103	250	232	93	70.0-130	10	30.00

Blank Spike Summary

Blank Spike ID: LCS-S for HBN 26057 [VXX/3704]
Blank Spike Lab ID: 82112
Date Analyzed: 07/25/2012 09:51

Spike Duplicate ID: LCSD-S for HBN 26057 [VXX/3704
Spike Duplicate Lab ID: 82113
Matrix: Soil-Solid as dry weight

QC for Samples: 31202266002

Results by SW-846 8260B

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

Batch Information

Analytical Batch: **VMS2410**
Analytical Method: **SW-846 8260B**
Instrument: **MSD3**
Analyst: **BWS**

Prep Batch: **VXX3704**
Prep Method: **SW-846 5035 SM**
Prep Date/Time: **07/25/2012 08:44**
Spike Init Wt./Vol.: **5 g** Extract Vol: **5 mL**
Dupe Init Wt./Vol.: **5 g** Extract Vol: **5 mL**

SGS ANALYTICAL PERSPECTIVES

Batch Summary

Analytical Method: SW-846 8270D

Prep Method: SW-846 3541
Prep Batch: XXX2835
Prep Date: 07/19/2012 10:33

Client Sample ID	Lab Sample ID	Analysis Date	Analytical Batch	Instrument	Analyst
MB for HBN 25823 [XXX/2835]	81256	07/20/2012 09:16	XMS1606	MSD10	CMP
LCS for HBN 25823 [XXX/2835]	81257	07/20/2012 09:39	XMS1606	MSD10	CMP
SW(81162MS)	81258	07/20/2012 13:52	XMS1606	MSD10	CMP
SW(81162MSD)	81259	07/20/2012 14:15	XMS1606	MSD10	CMP
105 DPT-01 (7-8ft)	31202266001	07/20/2012 16:33	XMS1606	MSD10	CMP
105 DPT-02 (5-6ft)	31202266002	07/20/2012 16:56	XMS1606	MSD10	CMP
105 DPT-03 (5-6ft)	31202266003	07/20/2012 17:19	XMS1606	MSD10	CMP
105 DPT-04 (7-8ft)	31202266004	07/20/2012 17:42	XMS1606	MSD10	CMP
105 DPT-05 (4-5ft)	31202266005	07/20/2012 18:05	XMS1606	MSD10	CMP

Print Date: 07/26/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Method Blank

Blank ID: MB for HBN 25823 [XXX/2835]
Blank Lab ID: 81256
Matrix: Soil-Solid as dry weight

QC for Samples:
31202266001, 31202266002, 31202266003, 31202266004, 31202266005

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: 07/26/2012
N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Method Blank

Blank ID: MB for HBN 25823 [XXX/2835]
Blank Lab ID: 81256
QC for Samples:
31202266001, 31202266002, 31202266003, 31202266004, 31202266005

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	81.0			42.0-123	%	1
Phenol-d6	97.0			48.0-125	%	1
Nitrobenzene-d5	94.0			46.0-117	%	1
2-Fluorobiphenyl	100			48.0-123	%	1
2,4,6-Tribromophenol	103			41.0-129	%	1
Terphenyl-d14	103			44.0-140	%	1

Batch Information

Analytical Batch: XMS1606
Analytical Method: SW-846 8270D
Instrument: MSD10
Analyst: CMP
Analytical Date/Time: 7/20/2012 9:16:00AM

Prep Batch: XXX2835
Prep Method: SW-846 3541
Prep Date/Time: 7/19/2012 10:33:05AM
Prep Initial Wt./Vol.: 32 g
Prep Extract Vol: 10 mL

Print Date: 07/26/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Blank Spike Summary

Blank Spike ID: LCS for HBN 25823 [XXX/2835]
Blank Spike Lab ID: 81257
Date Analyzed: 07/20/2012 09:39

Matrix: Soil-Solid as dry weight

QC for Samples: 31202266001, 31202266002, 31202266003, 31202266004, 31202266005

Results by SW-846 8270D

Blank Spike (ug/Kg)

Parameter	Spike	Result	Rec (%)	CL
Phenol	3130	2910	93	67.0-112
Bis(2-Chloroethyl)ether	3130	2860	92	63.0-116
2-Chlorophenol	3130	3000	96	67.0-109
1,3-Dichlorobenzene	3130	2910	93	66.0-109
1,4-Dichlorobenzene	3130	2970	95	65.0-112
1,2-Dichlorobenzene	3130	2980	95	67.0-110
2-Methylphenol	3130	2990	96	68.0-110
3 and/or 4-Methylphenol	6250	6490	104	66.0-113
Bis(2-Chloroisopropyl)ether	3130	2720	87	64.0-114
n-Nitrosodi-n-propylamine	3130	2910	93	66.0-111
Hexachloroethane	3130	2940	94	64.0-110
Nitrobenzene	3130	2860	92	69.0-112
Isophorone	3130	2980	95	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	2980	95	68.0-112
Benzoic acid	3130	2560	82	0.00-203
2,4-Dichlorophenol	3130	3110	100	67.0-118
1,2,4-Trichlorobenzene	3130	3120	100	65.0-114
Naphthalene	3130	3120	100	70.0-111
4-Chloroaniline	3130	2160	69	41.0-93.0
Hexachlorobutadiene	3130	2990	96	63.0-124
4-Chloro-3-methylphenol	3130	3100	99	70.0-114
2-Methylnaphthalene	3130	3110	99	69.0-110
Hexachlorocyclopentadiene	3130	3150	101	0.00-1080
2,4,5-Trichlorophenol	3130	3230	103	66.0-119
2,4,6-Trichlorophenol	3130	3090	99	67.0-119
2-Chloronaphthalene	3130	2860	92	57.0-96.0
2-Nitroaniline	3130	2580	83	61.0-100
3-Nitroaniline	3130	2550	81	48.0-103
Dimethyl phthalate	3130	3090	99	69.0-118
2,6-Dinitrotoluene	3130	3110	100	69.0-122
Acenaphthene	3130	3110	99	68.0-111
2,4-Dinitrophenol	3130	2760	88	12.0-125

Print Date: 07/26/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Blank Spike Summary

Blank Spike ID: LCS for HBN 25823 [XXX/2835]
Blank Spike Lab ID: 81257
Date Analyzed: 07/20/2012 09:39

Matrix: Soil-Solid as dry weight

QC for Samples: 31202266001, 31202266002, 31202266003, 31202266004, 31202266005

Results by SW-846 8270D

Blank Spike (ug/Kg)

Parameter	Spike	Result	Rec (%)	CL
4-Nitrophenol	3130	2990	96	45.0-120
Dibenzofuran	3130	3100	99	71.0-114
2,4-Dinitrotoluene	3130	3110	99	68.0-123
Fluorene	3130	3290	105	66.0-116
Diethyl phthalate	3130	3070	98	68.0-114
4-Chlorophenyl phenyl ether	3130	3240	104	66.0-120
4-Nitroaniline	3130	2850	91	66.0-114
4,6-Dinitro-2-methylphenol	3130	3320	106	24.0-123
Diphenylamine	3130	3160	101	60.0-118
4-Bromophenyl phenyl ether	3130	3160	101	63.0-118
Hexachlorobenzene	3130	2970	95	62.0-112
Pentachlorophenol	3130	2870	92	34.0-125
Phenanthrene	3130	3160	101	60.0-122
Anthracene	3130	3160	101	63.0-113
Di-n-butyl phthalate	3130	3250	104	64.0-121
Fluoranthene	3130	3200	102	64.0-118
Pyrene	3130	3110	99	67.0-116
Butyl benzyl phthalate	3130	3020	97	68.0-118
Benzo(a)anthracene	3130	3110	99	65.0-118
3,3'-Dichlorobenzidine	3130	3050	98	54.0-118
Chrysene	3130	3140	100	66.0-118
Bis(2-Ethylhexyl)phthalate	3130	3100	99	67.0-123
Di-n-octyl phthalate	3130	3070	98	62.0-131
Benzo(b)fluoranthene	3130	2810	90	63.0-119
Benzo(k)fluoranthene	3130	3140	100	69.0-118
Benzo(a)pyrene	3130	3100	99	69.0-113
Indeno(1,2,3-cd)pyrene	3130	3310	106	64.0-123
Dibenz(a,h)anthracene	3130	3260	104	64.0-123
Benzo(g,h,i)perylene	3130	3440	110	57.0-128
Acenaphthylene	3130	3200	102	72.0-115
Surrogates				
2-Fluorophenol			84	42.0-123
Phenol-d6			99	48.0-125
Nitrobenzene-d5			94	46.0-117

Print Date: 07/26/2012

N.C. Certification # 481

Blank Spike Summary

Blank Spike ID: LCS for HBN 25823 [XXX/2835]
Blank Spike Lab ID: 81257
Date Analyzed: 07/20/2012 09:39

Matrix: Soil-Solid as dry weight

QC for Samples: 31202266001, 31202266002, 31202266003, 31202266004, 31202266005

Results by SW-846 8270D

Blank Spike (%)

Parameter	Spike	Result	Rec (%)	CL
2-Fluorobiphenyl			101	48.0-123
2,4,6-Tribromophenol			110	41.0-129
Terphenyl-d14			99	44.0-140

Batch Information

Analytical Batch: **XMS1606**
Analytical Method: **SW-846 8270D**
Instrument: **MSD10**
Analyst: **CMP**

Prep Batch: **XXX2835**
Prep Method: **SW-846 3541**
Prep Date/Time: **07/19/2012 10:33**
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: XXX2841
Prep Date: 07/20/2012 11:30

Client Sample ID	Lab Sample ID	Analysis Date	Analytical Batch	Instrument	Analyst
MB for HBN 25874 [XXX/2841]	81549	07/23/2012 10:00	XMS1608	MSD10	CMP
LCS for HBN 25874 [XXX/2841]	81550	07/23/2012 10:45	XMS1608	MSD10	CMP
2013269 Pet Wipes(80855MS)	81551	07/23/2012 14:58	XMS1608	MSD10	CMP
2013269 Pet Wipes(80855MSD)	81552	07/23/2012 15:21	XMS1608	MSD10	CMP
105 DPT-06 (4-5ft)	31202266006	07/23/2012 15:44	XMS1608	MSD10	CMP
105 DPT-07 (2-4ft)	31202266007	07/23/2012 16:07	XMS1608	MSD10	CMP
105 DPT-08 (3-4ft)	31202266008	07/23/2012 16:29	XMS1608	MSD10	CMP
105 DPT-10 (4-5ft)	31202266010	07/23/2012 17:15	XMS1608	MSD10	CMP
105 DPT-09 (4-5ft)	31202266009	07/24/2012 20:03	XMS1609	MSD10	CMP

Print Date: 07/26/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Method Blank

Blank ID: MB for HBN 25874 [XXX/2841]
Blank Lab ID: 81549
QC for Samples:
31202266006, 31202266007, 31202266008, 31202266009, 31202266010

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: 07/26/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Method Blank

Blank ID: MB for HBN 25874 [XXX/2841]
Blank Lab ID: 81549
QC for Samples:
31202266006, 31202266007, 31202266008, 31202266009, 31202266010

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	91.0			48.0-125	%	1
Nitrobenzene-d5	90.0			46.0-117	%	1
2-Fluorobiphenyl	98.0			48.0-123	%	1
2,4,6-Tribromophenol	96.0			41.0-129	%	1
Terphenyl-d14	100			44.0-140	%	1

Batch Information

Analytical Batch: XMS1608
Analytical Method: SW-846 8270D
Instrument: MSD10
Analyst: CMP
Analytical Date/Time: 7/23/2012 10:00:00AM

Prep Batch: XXX2841
Prep Method: SW-846 3541
Prep Date/Time: 7/20/2012 11:30:23AM
Prep Initial Wt./Vol.: 32 g
Prep Extract Vol: 10 mL

Print Date: 07/26/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Blank Spike Summary

Blank Spike ID: LCS for HBN 25874 [XXX/2841]
Blank Spike Lab ID: 81550
Date Analyzed: 07/23/2012 10:45

Matrix: Soil-Solid as dry weight

QC for Samples: 31202266006, 31202266007, 31202266008, 31202266009, 31202266010

Results by SW-846 8270D

Blank Spike (ug/Kg)

Parameter	Spike	Result	Rec (%)	CL
Phenol	3130	2990	96	67.0-112
Bis(2-Chloroethyl)ether	3130	2940	94	63.0-116
2-Chlorophenol	3130	3110	100	67.0-109
1,3-Dichlorobenzene	3130	3070	98	66.0-109
1,4-Dichlorobenzene	3130	3100	99	65.0-112
1,2-Dichlorobenzene	3130	3100	99	67.0-110
2-Methylphenol	3130	3080	98	68.0-110
3 and/or 4-Methylphenol	6250	6580	105	66.0-113
Bis(2-Chloroisopropyl)ether	3130	2860	92	64.0-114
n-Nitrosodi-n-propylamine	3130	3000	96	66.0-111
Hexachloroethane	3130	3050	98	64.0-110
Nitrobenzene	3130	2950	94	69.0-112
Isophorone	3130	3030	97	69.0-108
2-Nitrophenol	3130	3160	101	65.0-117
2,4-Dimethylphenol	3130	3070	98	69.0-112
Bis(2-Chloroethoxy)methane	3130	3040	97	68.0-112
Benzoic acid	3130	2560	82	0.00-203
2,4-Dichlorophenol	3130	3170	101	67.0-118
1,2,4-Trichlorobenzene	3130	3310	106	65.0-114
Naphthalene	3130	3190	102	70.0-111
4-Chloroaniline	3130	2680	86	41.0-93.0
Hexachlorobutadiene	3130	3080	99	63.0-124
4-Chloro-3-methylphenol	3130	3100	99	70.0-114
2-Methylnaphthalene	3130	3170	101	69.0-110
Hexachlorocyclopentadiene	3130	3270	105	0.00-1080
2,4,5-Trichlorophenol	3130	3250	104	66.0-119
2,4,6-Trichlorophenol	3130	3060	98	67.0-119
2-Chloronaphthalene	3130	2950	94	57.0-96.0
2-Nitroaniline	3130	2630	84	61.0-100
3-Nitroaniline	3130	2790	89	48.0-103
Dimethyl phthalate	3130	3150	101	69.0-118
2,6-Dinitrotoluene	3130	3230	103	69.0-122
Acenaphthene	3130	3200	102	68.0-111
2,4-Dinitrophenol	3130	2510	80	12.0-125

Blank Spike Summary

Blank Spike ID: LCS for HBN 25874 [XXX/2841]
Blank Spike Lab ID: 81550
Date Analyzed: 07/23/2012 10:45

Matrix: Soil-Solid as dry weight

QC for Samples: 31202266006, 31202266007, 31202266008, 31202266009, 31202266010

Results by SW-846 8270D

Blank Spike (ug/Kg)

Parameter	Spike	Result	Rec (%)	CL
4-Nitrophenol	3130	2890	92	45.0-120
Dibenzofuran	3130	3160	101	71.0-114
2,4-Dinitrotoluene	3130	3180	102	68.0-123
Fluorene	3130	3330	107	66.0-116
Diethyl phthalate	3130	3130	100	68.0-114
4-Chlorophenyl phenyl ether	3130	3280	105	66.0-120
4-Nitroaniline	3130	3020	97	66.0-114
4,6-Dinitro-2-methylphenol	3130	3240	104	24.0-123
Diphenylamine	3130	3300	106	60.0-118
4-Bromophenyl phenyl ether	3130	3250	104	63.0-118
Hexachlorobenzene	3130	3070	98	62.0-112
Pentachlorophenol	3130	2940	94	34.0-125
Phenanthrene	3130	3240	104	60.0-122
Anthracene	3130	3250	104	63.0-113
Di-n-butyl phthalate	3130	3360	108	64.0-121
Fluoranthene	3130	3280	105	64.0-118
Pyrene	3130	3220	103	67.0-116
Butyl benzyl phthalate	3130	3110	100	68.0-118
Benzo(a)anthracene	3130	3170	102	65.0-118
3,3'-Dichlorobenzidine	3130	3210	103	54.0-118
Chrysene	3130	3200	102	66.0-118
Bis(2-Ethylhexyl)phthalate	3130	3200	102	67.0-123
Di-n-octyl phthalate	3130	3230	103	62.0-131
Benzo(b)fluoranthene	3130	2990	96	63.0-119
Benzo(k)fluoranthene	3130	3140	100	69.0-118
Benzo(a)pyrene	3130	3240	104	69.0-113
Indeno(1,2,3-cd)pyrene	3130	3410	109	64.0-123
Dibenz(a,h)anthracene	3130	3380	108	64.0-123
Benzo(g,h,i)perylene	3130	3490	112	57.0-128
Acenaphthylene	3130	3310	106	72.0-115
Surrogates				
2-Fluorophenol			87	42.0-123
Phenol-d6			101	48.0-125
Nitrobenzene-d5			95	46.0-117

Print Date: 07/26/2012

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SGS ANALYTICAL PERSPECTIVES

Blank Spike Summary

Blank Spike ID: LCS for HBN 25874 [XXX/2841]
Blank Spike Lab ID: 81550
Date Analyzed: 07/23/2012 10:45

Matrix: Soil-Solid as dry weight

QC for Samples: 31202266006, 31202266007, 31202266008, 31202266009, 31202266010

Results by SW-846 8270D

Blank Spike (%)

Parameter	Spike	Result	Rec (%)	CL
2-Fluorobiphenyl			104	48.0-123
2,4,6-Tribromophenol			108	41.0-129
Terphenyl-d14			98	44.0-140

Batch Information

Analytical Batch: **XMS1608**
Analytical Method: **SW-846 8270D**
Instrument: **MSD10**
Analyst: **CMP**

Prep Batch: **XXX2841**
Prep Method: **SW-846 3541**
Prep Date/Time: **07/20/2012 11:30**
Spike Init Wt./Vol.: **32 g** Extract Vol: **10 mL**
Dupe Init Wt./Vol.: Extract Vol:

SGS ANALYTICAL PERSPECTIVES

CHAIN OF CUSTODY

31202266

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

CLIENT: CATLIN / NCDOT

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

PROJECT: NCDOT Parcel 105 — SITE / PWSID / (WBS) #: 35781.1.2 — Pitt County U-3315

REPORTS TO: Ben@ CATLIN

EMAIL: ben.ashba@catlinusa.com

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

SGS Reference #:

PAGE 1 OF 1

Preservatives used: MeOH & Sod. Bi Sul

Analysis required: 8260 & 8270

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	# CONTAINERS	SAMPLE TYPE (C= COMP, G= GRAB)	8260 & 8270	REMARKS
	105 DPT-01 (7-8')	7.16.12	1915	SOIL	5	G	✓	
	105 DPT-02 (5-6')		1925					
	105 DPT-03 (5-6')		1940					
	105 DPT-04 (7-8')		2010					
	105 DPT-05 (4-5')	7.17.12	1845					
	105 DPT-06 (4-5')		1910					
	105 DPT-07 (2-4')		1920					
	105 DPT-08 (3-4')		1940					
	105 DPT-09 (4-5')		2010					HOT
	105 DPT-10 (4-5')	7.18.12	820					@ EB 1106

COLLECTED/RELINQUISHED BY: (1)	DATE	TIME	RECEIVED BY:
Ben Ashba	7.18.12	1630	Alex V[illegible]
Relinquished By: (2)	Date	Time	Received By:
Relinquished By: (3)	Date	Time	Received By:
Received For Laboratory By:	Date	Time	CoC Seal: INTACT BROKEN (ABSENT) — Sample Receipt Temp: C° 0.9

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

REQUESTED TURNAROUND TIME: ☐ Rush: ____ ☒ Standard

SPECIAL DELIVERABLES: State of Origin: NC ☐ Trust Fund

☐ DoD ☒ EDD: Summary Other: ____

SPECIAL INSTRUCTIONS:

Shipping Carrier:

Shipping Ticket No:

Notes:

SGS-00055 (06/12)

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White - Retained by Lab
Yellow - Retained by Client

105 DPT-10 was 3 vials/ [illegible] 7/18/12 1305

7/19/12

SGS North America Inc.

Sample Receipt Checklist (SRC)

Client: **NCDOT-Catlin** Work Order No.: **31202266**

1. ___ Shipped
   X Hand Delivered

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

3. ___ Custody Tape on Container
   X No Custody Tape

4. X Samples Intact
   ___ Samples Broken / Leaking

5. X Chilled on Receipt Actual Temp.(s) in °C: 0.9
   ___ Ambient on Receipt
   X 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: Received three HCL vials and 1 liter 105DPT-10 not on COC, collection date/time of 7/18/12 13:00.

Inspected and Logged in by: JJ

Date: Thu-7/19/12 00:00

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

SGS ANALYTICAL PERSPECTIVES

Laboratory Report of Analysis

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

Report Number: **31202490**

Client Project: **NCDOT Parcel 105**

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 14:14:51 -05'00'

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

Date

Print Date: 08/16/2012

N.C. Certification # 481

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Laboratory Qualifiers

Report Definitions

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

Qualifier Definitions

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

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

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

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

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

Sample Summary

Client Sample ID	Lab Sample ID	Collected	Received	Matrix
105DPT-12 (6-7ft)	31202490001	08/03/2012 10:50	08/03/2012 15:00	Soil-Solid as dry weight
105DPT-13 (6-7ft)	31202490002	08/03/2012 11:10	08/03/2012 15:00	Soil-Solid as dry weight
105DPT-14 (4.5-5ft)	31202490003	08/03/2012 11:30	08/03/2012 15:00	Soil-Solid as dry weight
Trip Blanks (Not on COC)	31202490004	08/03/2012 00:00	08/03/2012 15:00	Soil-Solid as dry weight

Print Date: 08/16/2012

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Case Narrative

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

105DPT-12 (6-7ft)
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)
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.

105DPT-14 (4.5-5ft)
8260 - The method blank associated with batch VMS2459 has a reported 'J' concentration for Methylene Chloride.

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

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

LCS-S for HBN 26881 [VXX/3787]
8260 - The method blank associated with batch VMS2459 has a reported 'J' concentration for Methylene Chloride.

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

MB-S for HBN 26881 [VXX/3787]
8260 - The method blank associated with batch VMS2459 has a reported 'J' concentration for Methylene Chloride.

Trip Blanks (Not on COC)
8260 - The method blank associated with batch VMS2454 has a reported 'J' concentration for Methylene Chloride.

Detectable Results Summary

Client Sample ID: **105DPT-12 (6-7ft)**
Lab Sample ID: 31202490001-A

	Parameter	Result	Units	
SW-846 8260B	Acetone	10.4	ug/Kg	J
	Methylene chloride	3.16	ug/Kg	J
	Tetrachloroethene	16.9	ug/Kg	
	Toluene	0.761	ug/Kg	J

Client Sample ID: **105DPT-14 (4.5-5ft)**
Lab Sample ID: 31202490003-A

	Parameter	Result	Units	
SW-846 8260B	Methylene chloride	1.91	ug/Kg	J

Client Sample ID: **Trip Blanks (Not on COC)**
Lab Sample ID: 31202490004-A

	Parameter	Result	Units	
SW-846 8260B	Methylene chloride	1.92	ug/Kg	J
	Toluene	1.51	ug/Kg	J

Quality Control Samples

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

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

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

SGS ANALYTICAL PERSPECTIVES

Results of 105DPT-12 (6-7ft)

Client Sample ID: **105DPT-12 (6-7ft)**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202490001-A
Lab Project ID: 31202490

Collection Date: 08/03/2012 10:50
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 74.80

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	U	0.701	4.94	ug/Kg	1	08/9/2012 12:56
1,1,1-Trichloroethane	ND	U	0.745	4.94	ug/Kg	1	08/9/2012 12:56
1,1,2,2-Tetrachloroethane	ND	U	1.16	4.94	ug/Kg	1	08/9/2012 12:56
1,1,2-Trichloroethane	ND	U	1.03	4.94	ug/Kg	1	08/9/2012 12:56
1,1-Dichloroethane	ND	U	0.532	4.94	ug/Kg	1	08/9/2012 12:56
1,1-Dichloroethene	ND	U	1.15	4.94	ug/Kg	1	08/9/2012 12:56
1,1-Dichloropropene	ND	U	0.668	4.94	ug/Kg	1	08/9/2012 12:56
1,2,3-Trichlorobenzene	ND	U	0.822	4.94	ug/Kg	1	08/9/2012 12:56
1,2,3-Trichloropropane	ND	U	1.02	4.94	ug/Kg	1	08/9/2012 12:56
1,2,4-Trichlorobenzene	ND	U	0.720	4.94	ug/Kg	1	08/9/2012 12:56
1,2,4-Trimethylbenzene	ND	U	0.629	4.94	ug/Kg	1	08/9/2012 12:56
1,2-Dibromo-3-chloropropane	ND	U	7.32	29.6	ug/Kg	1	08/9/2012 12:56
1,2-Dibromoethane	ND	U	1.29	4.94	ug/Kg	1	08/9/2012 12:56
1,2-Dichlorobenzene	ND	U	0.703	4.94	ug/Kg	1	08/9/2012 12:56
1,2-Dichloroethane	ND	U	0.902	4.94	ug/Kg	1	08/9/2012 12:56
1,2-Dichloropropane	ND	U	1.14	4.94	ug/Kg	1	08/9/2012 12:56
1,3,5-Trimethylbenzene	ND	U	0.601	4.94	ug/Kg	1	08/9/2012 12:56
1,3-Dichlorobenzene	ND	U	0.711	4.94	ug/Kg	1	08/9/2012 12:56
1,3-Dichloropropane	ND	U	0.869	4.94	ug/Kg	1	08/9/2012 12:56
1,4-Dichlorobenzene	ND	U	0.667	4.94	ug/Kg	1	08/9/2012 12:56
2,2-Dichloropropane	ND	U	0.729	4.94	ug/Kg	1	08/9/2012 12:56
2-Butanone	ND	U	3.34	24.7	ug/Kg	1	08/9/2012 12:56
2-Chlorotoluene	ND	U	0.926	4.94	ug/Kg	1	08/9/2012 12:56
2-Hexanone	ND	U	3.18	12.4	ug/Kg	1	08/9/2012 12:56
4-Chlorotoluene	ND	U	0.747	4.94	ug/Kg	1	08/9/2012 12:56
4-Isopropyltoluene	ND	U	0.637	4.94	ug/Kg	1	08/9/2012 12:56
4-Methyl-2-pentanone	ND	U	3.70	12.4	ug/Kg	1	08/9/2012 12:56
Acetone	10.4	J	3.96	49.4	ug/Kg	1	08/9/2012 12:56
Benzene	ND	U	0.703	4.94	ug/Kg	1	08/9/2012 12:56
Bromobenzene	ND	U	0.689	4.94	ug/Kg	1	08/9/2012 12:56
Bromochloromethane	ND	U	0.929	4.94	ug/Kg	1	08/9/2012 12:56
Bromodichloromethane	ND	U	0.696	4.94	ug/Kg	1	08/9/2012 12:56
Bromoform	ND	U	0.715	4.94	ug/Kg	1	08/9/2012 12:56
Bromomethane	ND	U	1.43	4.94	ug/Kg	1	08/9/2012 12:56
n-Butylbenzene	ND	U	0.649	4.94	ug/Kg	1	08/9/2012 12:56
Carbon disulfide	ND	U	0.517	4.94	ug/Kg	1	08/9/2012 12:56
Carbon tetrachloride	ND	U	0.562	4.94	ug/Kg	1	08/9/2012 12:56
Chlorobenzene	ND	U	0.690	4.94	ug/Kg	1	08/9/2012 12:56
Chloroethane	ND	U	0.988	4.94	ug/Kg	1	08/9/2012 12:56
Chloroform	ND	U	0.629	4.94	ug/Kg	1	08/9/2012 12:56
Chloromethane	ND	U	1.41	4.94	ug/Kg	1	08/9/2012 12:56
Dibromochloromethane	ND	U	1.10	4.94	ug/Kg	1	08/9/2012 12:56
Dibromomethane	ND	U	0.872	4.94	ug/Kg	1	08/9/2012 12:56
Dichlorodifluoromethane	ND	U	1.04	4.94	ug/Kg	1	08/9/2012 12:56

Print Date: 08/16/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 105DPT-12 (6-7ft)

Client Sample ID: **105DPT-12 (6-7ft)**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202490001-A
Lab Project ID: 31202490

Collection Date: 08/03/2012 10:50
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 74.80

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	U	1.02	4.94	ug/Kg	1	08/9/2012 12:56
trans-1,3-Dichloropropene	ND	U	0.933	4.94	ug/Kg	1	08/9/2012 12:56
Diisopropyl Ether	ND	U	0.811	4.94	ug/Kg	1	08/9/2012 12:56
Ethyl Benzene	ND	U	0.697	4.94	ug/Kg	1	08/9/2012 12:56
Hexachlorobutadiene	ND	U	0.679	4.94	ug/Kg	1	08/9/2012 12:56
Isopropylbenzene (Cumene)	ND	U	0.615	4.94	ug/Kg	1	08/9/2012 12:56
Methyl iodide	ND	U	0.757	4.94	ug/Kg	1	08/9/2012 12:56
Methylene chloride	**3.16**	J	1.04	19.8	ug/Kg	1	08/9/2012 12:56
Naphthalene	ND	U	0.898	4.94	ug/Kg	1	08/9/2012 12:56
Styrene	ND	U	0.569	4.94	ug/Kg	1	08/9/2012 12:56
Tetrachloroethene	**16.9**		0.742	4.94	ug/Kg	1	08/9/2012 12:56
Toluene	**0.761**	J	0.680	4.94	ug/Kg	1	08/9/2012 12:56
Trichloroethene	ND	U	0.832	4.94	ug/Kg	1	08/9/2012 12:56
Trichlorofluoromethane	ND	U	0.998	4.94	ug/Kg	1	08/9/2012 12:56
Vinyl chloride	ND	U	0.939	4.94	ug/Kg	1	08/9/2012 12:56
Xylene (total)	ND	U	1.75	9.88	ug/Kg	1	08/9/2012 12:56
cis-1,2-Dichloroethene	ND	U	0.604	4.94	ug/Kg	1	08/9/2012 12:56
m,p-Xylene	ND	U	1.67	9.88	ug/Kg	1	08/9/2012 12:56
n-Propylbenzene	ND	U	0.723	4.94	ug/Kg	1	08/9/2012 12:56
o-Xylene	ND	U	0.757	4.94	ug/Kg	1	08/9/2012 12:56
sec-Butylbenzene	ND	U	0.593	4.94	ug/Kg	1	08/9/2012 12:56
tert-Butyl methyl ether (MTBE)	ND	U	0.786	4.94	ug/Kg	1	08/9/2012 12:56
tert-Butylbenzene	ND	U	0.665	4.94	ug/Kg	1	08/9/2012 12:56
trans-1,2-Dichloroethene	ND	U	0.721	4.94	ug/Kg	1	08/9/2012 12:56
trans-1,4-Dichloro-2-butene	ND	U	4.15	24.7	ug/Kg	1	08/9/2012 12:56
Surrogates							
1,2-Dichloroethane-d4	109			55.0-173	%	1	08/9/2012 12:56
4-Bromofluorobenzene	95.0			23.0-141	%	1	08/9/2012 12:56
Toluene d8	104			57.0-134	%	1	08/9/2012 12:56

Batch Information

Analytical Batch: **VMS2459**
Analytical Method: **SW-846 8260B**
Instrument: **MSD9**
Analyst: **DVO**
Analytical Date/Time: **08/09/2012 12:56**

Prep Batch: **VXX3787**
Prep Method: **SW-846 5035 SL**
Prep Date/Time: **08/06/2012 16:30**
Prep Initial Wt./Vol.: **6.76 g**
Prep Extract Vol: **5 mL**

Print Date: 08/16/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 105DPT-12 (6-7ft)

Client Sample ID: **105DPT-12 (6-7ft)**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202490001-E
Lab Project ID: 31202490

Collection Date: 08/03/2012 10:50
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 74.80

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,2,4-Trichlorobenzene	ND	U	37.2	421	ug/Kg	1	08/8/2012 18:38
1,2-Dichlorobenzene	ND	U	21.0	421	ug/Kg	1	08/8/2012 18:38
1,3-Dichlorobenzene	ND	U	28.4	421	ug/Kg	1	08/8/2012 18:38
1,4-Dichlorobenzene	ND	U	29.8	421	ug/Kg	1	08/8/2012 18:38
2,4,5-Trichlorophenol	ND	U	28.1	421	ug/Kg	1	08/8/2012 18:38
2,4,6-Trichlorophenol	ND	U	28.5	421	ug/Kg	1	08/8/2012 18:38
2,4-Dichlorophenol	ND	U	24.4	421	ug/Kg	1	08/8/2012 18:38
2,4-Dinitrophenol	ND	U	39.1	842	ug/Kg	1	08/8/2012 18:38
2,4-Dinitrotoluene	ND	U	21.3	421	ug/Kg	1	08/8/2012 18:38
2,6-Dinitrotoluene	ND	U	30.2	421	ug/Kg	1	08/8/2012 18:38
2-Chloronaphthalene	ND	U	24.8	421	ug/Kg	1	08/8/2012 18:38
2-Chlorophenol	ND	U	22.4	421	ug/Kg	1	08/8/2012 18:38
2-Methylnaphthalene	ND	U	34.1	421	ug/Kg	1	08/8/2012 18:38
2-Methylphenol	ND	U	23.3	421	ug/Kg	1	08/8/2012 18:38
2-Nitroaniline	ND	U	27.7	421	ug/Kg	1	08/8/2012 18:38
2-Nitrophenol	ND	U	20.2	421	ug/Kg	1	08/8/2012 18:38
3 and/or 4-Methylphenol	ND	U	27.3	421	ug/Kg	1	08/8/2012 18:38
3,3'-Dichlorobenzidine	ND	U	20.2	421	ug/Kg	1	08/8/2012 18:38
3-Nitroaniline	ND	U	19.0	421	ug/Kg	1	08/8/2012 18:38
4,6-Dinitro-2-methylphenol	ND	U	19.8	421	ug/Kg	1	08/8/2012 18:38
4-Chloro-3-methylphenol	ND	U	21.0	421	ug/Kg	1	08/8/2012 18:38
4-Chloroaniline	ND	U	33.7	421	ug/Kg	1	08/8/2012 18:38
4-Chlorophenyl phenyl ether	ND	U	45.0	421	ug/Kg	1	08/8/2012 18:38
Acenaphthene	ND	U	19.1	421	ug/Kg	1	08/8/2012 18:38
Acenaphthylene	ND	U	17.8	421	ug/Kg	1	08/8/2012 18:38
Anthracene	ND	U	18.7	421	ug/Kg	1	08/8/2012 18:38
Benzo(a)anthracene	ND	U	23.2	421	ug/Kg	1	08/8/2012 18:38
Benzo(a)pyrene	ND	U	23.8	421	ug/Kg	1	08/8/2012 18:38
Benzo(b)fluoranthene	ND	U	24.2	421	ug/Kg	1	08/8/2012 18:38
Benzo(g,h,i)perylene	ND	U	67.1	421	ug/Kg	1	08/8/2012 18:38
Benzo(k)fluoranthene	ND	U	50.5	421	ug/Kg	1	08/8/2012 18:38
Benzoic acid	ND	U	9.35	421	ug/Kg	1	08/8/2012 18:38
Bis(2-Chloroethoxy)methane	ND	U	19.0	421	ug/Kg	1	08/8/2012 18:38
Bis(2-Chloroethyl)ether	ND	U	39.3	421	ug/Kg	1	08/8/2012 18:38
Bis(2-Chloroisopropyl)ether	ND	U	36.8	421	ug/Kg	1	08/8/2012 18:38
Bis(2-Ethylhexyl)phthalate	ND	U	20.2	421	ug/Kg	1	08/8/2012 18:38
4-Bromophenyl phenyl ether	ND	U	27.7	421	ug/Kg	1	08/8/2012 18:38
Butyl benzyl phthalate	ND	U	36.6	421	ug/Kg	1	08/8/2012 18:38
Chrysene	ND	U	49.0	421	ug/Kg	1	08/8/2012 18:38
Di-n-butyl phthalate	ND	U	19.9	421	ug/Kg	1	08/8/2012 18:38
Di-n-octyl phthalate	ND	U	23.3	421	ug/Kg	1	08/8/2012 18:38
Dibenz(a,h)anthracene	ND	U	19.0	421	ug/Kg	1	08/8/2012 18:38
Dibenzofuran	ND	U	33.0	421	ug/Kg	1	08/8/2012 18:38
Diethyl phthalate	ND	U	22.8	421	ug/Kg	1	08/8/2012 18:38

Print Date: 08/16/2012

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SGS ANALYTICAL PERSPECTIVES

Results of 105DPT-12 (6-7ft)

Client Sample ID: **105DPT-12 (6-7ft)**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202490001-E
Lab Project ID: 31202490

Collection Date: 08/03/2012 10:50
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 74.80

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
Dimethyl phthalate	ND	U	32.3	421	ug/Kg	1	08/8/2012 18:38
2,4-Dimethylphenol	ND	U	30.8	421	ug/Kg	1	08/8/2012 18:38
Diphenylamine	ND	U	19.0	421	ug/Kg	1	08/8/2012 18:38
Fluoranthene	ND	U	39.6	421	ug/Kg	1	08/8/2012 18:38
Fluorene	ND	U	22.4	421	ug/Kg	1	08/8/2012 18:38
Hexachlorobenzene	ND	U	39.9	421	ug/Kg	1	08/8/2012 18:38
Hexachlorobutadiene	ND	U	25.2	421	ug/Kg	1	08/8/2012 18:38
Hexachlorocyclopentadiene	ND	U	128	421	ug/Kg	1	08/8/2012 18:38
Hexachloroethane	ND	U	24.2	421	ug/Kg	1	08/8/2012 18:38
Indeno(1,2,3-cd)pyrene	ND	U	32.9	421	ug/Kg	1	08/8/2012 18:38
Isophorone	ND	U	19.1	421	ug/Kg	1	08/8/2012 18:38
Naphthalene	ND	U	36.4	421	ug/Kg	1	08/8/2012 18:38
4-Nitroaniline	ND	U	24.2	421	ug/Kg	1	08/8/2012 18:38
Nitrobenzene	ND	U	24.2	421	ug/Kg	1	08/8/2012 18:38
4-Nitrophenol	ND	U	41.5	421	ug/Kg	1	08/8/2012 18:38
Pentachlorophenol	ND	U	33.7	421	ug/Kg	1	08/8/2012 18:38
Phenanthrene	ND	U	27.7	421	ug/Kg	1	08/8/2012 18:38
Phenol	ND	U	39.3	421	ug/Kg	1	08/8/2012 18:38
Pyrene	ND	U	17.8	421	ug/Kg	1	08/8/2012 18:38
n-Nitrosodi-n-propylamine	ND	U	121	421	ug/Kg	1	08/8/2012 18:38
Surrogates							
2,4,6-Tribromophenol	80.0			41.0-129	%	1	08/8/2012 18:38
2-Fluorobiphenyl	78.0			48.0-123	%	1	08/8/2012 18:38
2-Fluorophenol	81.0			42.0-123	%	1	08/8/2012 18:38
Nitrobenzene-d5	85.0			46.0-117	%	1	08/8/2012 18:38
Phenol-d6	92.0			48.0-125	%	1	08/8/2012 18:38
Terphenyl-d14	87.0			44.0-140	%	1	08/8/2012 18:38

Batch Information

Analytical Batch: **XMS1628**
Analytical Method: **SW-846 8270D**
Instrument: **MSD10**
Analyst: **CMP**
Analytical Date/Time: **08/08/2012 18:38**

Prep Batch: **XXX2895**
Prep Method: **SW-846 3541**
Prep Date/Time: **08/07/2012 15:37**
Prep Initial Wt./Vol.: **31.75 g**
Prep Extract Vol: **10 mL**

Print Date: 08/16/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 105DPT-13 (6-7ft)

Client Sample ID: **105DPT-13 (6-7ft)**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202490002-A
Lab Project ID: 31202490

Collection Date: 08/03/2012 11:10
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 73.10

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	U	0.763	5.38	ug/Kg	1	08/9/2012 13:23
1,1,1-Trichloroethane	ND	U	0.811	5.38	ug/Kg	1	08/9/2012 13:23
1,1,2,2-Tetrachloroethane	ND	U	1.26	5.38	ug/Kg	1	08/9/2012 13:23
1,1,2-Trichloroethane	ND	U	1.12	5.38	ug/Kg	1	08/9/2012 13:23
1,1-Dichloroethane	ND	U	0.579	5.38	ug/Kg	1	08/9/2012 13:23
1,1-Dichloroethene	ND	U	1.25	5.38	ug/Kg	1	08/9/2012 13:23
1,1-Dichloropropene	ND	U	0.727	5.38	ug/Kg	1	08/9/2012 13:23
1,2,3-Trichlorobenzene	ND	U	0.895	5.38	ug/Kg	1	08/9/2012 13:23
1,2,3-Trichloropropane	ND	U	1.11	5.38	ug/Kg	1	08/9/2012 13:23
1,2,4-Trichlorobenzene	ND	U	0.784	5.38	ug/Kg	1	08/9/2012 13:23
1,2,4-Trimethylbenzene	ND	U	0.685	5.38	ug/Kg	1	08/9/2012 13:23
1,2-Dibromo-3-chloropropane	ND	U	7.97	32.3	ug/Kg	1	08/9/2012 13:23
1,2-Dibromoethane	ND	U	1.41	5.38	ug/Kg	1	08/9/2012 13:23
1,2-Dichlorobenzene	ND	U	0.765	5.38	ug/Kg	1	08/9/2012 13:23
1,2-Dichloroethane	ND	U	0.982	5.38	ug/Kg	1	08/9/2012 13:23
1,2-Dichloropropane	ND	U	1.24	5.38	ug/Kg	1	08/9/2012 13:23
1,3,5-Trimethylbenzene	ND	U	0.654	5.38	ug/Kg	1	08/9/2012 13:23
1,3-Dichlorobenzene	ND	U	0.773	5.38	ug/Kg	1	08/9/2012 13:23
1,3-Dichloropropane	ND	U	0.946	5.38	ug/Kg	1	08/9/2012 13:23
1,4-Dichlorobenzene	ND	U	0.726	5.38	ug/Kg	1	08/9/2012 13:23
2,2-Dichloropropane	ND	U	0.794	5.38	ug/Kg	1	08/9/2012 13:23
2-Butanone	ND	U	3.64	26.9	ug/Kg	1	08/9/2012 13:23
2-Chlorotoluene	ND	U	1.01	5.38	ug/Kg	1	08/9/2012 13:23
2-Hexanone	ND	U	3.46	13.4	ug/Kg	1	08/9/2012 13:23
4-Chlorotoluene	ND	U	0.813	5.38	ug/Kg	1	08/9/2012 13:23
4-Isopropyltoluene	ND	U	0.694	5.38	ug/Kg	1	08/9/2012 13:23
4-Methyl-2-pentanone	ND	U	4.02	13.4	ug/Kg	1	08/9/2012 13:23
Acetone	ND	U	4.31	53.8	ug/Kg	1	08/9/2012 13:23
Benzene	ND	U	0.765	5.38	ug/Kg	1	08/9/2012 13:23
Bromobenzene	ND	U	0.750	5.38	ug/Kg	1	08/9/2012 13:23
Bromochloromethane	ND	U	1.01	5.38	ug/Kg	1	08/9/2012 13:23
Bromodichloromethane	ND	U	0.757	5.38	ug/Kg	1	08/9/2012 13:23
Bromoform	ND	U	0.779	5.38	ug/Kg	1	08/9/2012 13:23
Bromomethane	ND	U	1.56	5.38	ug/Kg	1	08/9/2012 13:23
n-Butylbenzene	ND	U	0.707	5.38	ug/Kg	1	08/9/2012 13:23
Carbon disulfide	ND	U	0.563	5.38	ug/Kg	1	08/9/2012 13:23
Carbon tetrachloride	ND	U	0.612	5.38	ug/Kg	1	08/9/2012 13:23
Chlorobenzene	ND	U	0.751	5.38	ug/Kg	1	08/9/2012 13:23
Chloroethane	ND	U	1.08	5.38	ug/Kg	1	08/9/2012 13:23
Chloroform	ND	U	0.685	5.38	ug/Kg	1	08/9/2012 13:23
Chloromethane	ND	U	1.54	5.38	ug/Kg	1	08/9/2012 13:23
Dibromochloromethane	ND	U	1.19	5.38	ug/Kg	1	08/9/2012 13:23
Dibromomethane	ND	U	0.949	5.38	ug/Kg	1	08/9/2012 13:23
Dichlorodifluoromethane	ND	U	1.13	5.38	ug/Kg	1	08/9/2012 13:23

Print Date: 08/16/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of 105DPT-13 (6-7ft)

Client Sample ID: **105DPT-13 (6-7ft)**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202490002-A
Lab Project ID: 31202490

Collection Date: 08/03/2012 11:10
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 73.10

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	U	1.11	5.38	ug/Kg	1	08/9/2012 13:23
trans-1,3-Dichloropropene	ND	U	1.02	5.38	ug/Kg	1	08/9/2012 13:23
Diisopropyl Ether	ND	U	0.883	5.38	ug/Kg	1	08/9/2012 13:23
Ethyl Benzene	ND	U	0.758	5.38	ug/Kg	1	08/9/2012 13:23
Hexachlorobutadiene	ND	U	0.739	5.38	ug/Kg	1	08/9/2012 13:23
Isopropylbenzene (Cumene)	ND	U	0.669	5.38	ug/Kg	1	08/9/2012 13:23
Methyl iodide	ND	U	0.824	5.38	ug/Kg	1	08/9/2012 13:23
Methylene chloride	ND	U	1.13	21.5	ug/Kg	1	08/9/2012 13:23
Naphthalene	ND	U	0.978	5.38	ug/Kg	1	08/9/2012 13:23
Styrene	ND	U	0.620	5.38	ug/Kg	1	08/9/2012 13:23
Tetrachloroethene	ND	U	0.808	5.38	ug/Kg	1	08/9/2012 13:23
Toluene	ND	U	0.740	5.38	ug/Kg	1	08/9/2012 13:23
Trichloroethene	ND	U	0.906	5.38	ug/Kg	1	08/9/2012 13:23
Trichlorofluoromethane	ND	U	1.09	5.38	ug/Kg	1	08/9/2012 13:23
Vinyl chloride	ND	U	1.02	5.38	ug/Kg	1	08/9/2012 13:23
Xylene (total)	ND	U	1.90	10.8	ug/Kg	1	08/9/2012 13:23
cis-1,2-Dichloroethene	ND	U	0.657	5.38	ug/Kg	1	08/9/2012 13:23
m,p-Xylene	ND	U	1.82	10.8	ug/Kg	1	08/9/2012 13:23
n-Propylbenzene	ND	U	0.787	5.38	ug/Kg	1	08/9/2012 13:23
o-Xylene	ND	U	0.824	5.38	ug/Kg	1	08/9/2012 13:23
sec-Butylbenzene	ND	U	0.645	5.38	ug/Kg	1	08/9/2012 13:23
tert-Butyl methyl ether (MTBE)	ND	U	0.855	5.38	ug/Kg	1	08/9/2012 13:23
tert-Butylbenzene	ND	U	0.724	5.38	ug/Kg	1	08/9/2012 13:23
trans-1,2-Dichloroethene	ND	U	0.785	5.38	ug/Kg	1	08/9/2012 13:23
trans-1,4-Dichloro-2-butene	ND	U	4.52	26.9	ug/Kg	1	08/9/2012 13:23
Surrogates							
1,2-Dichloroethane-d4	119			55.0-173	%	1	08/9/2012 13:23
4-Bromofluorobenzene	99.0			23.0-141	%	1	08/9/2012 13:23
Toluene d8	102			57.0-134	%	1	08/9/2012 13:23

Batch Information

Analytical Batch: **VMS2459**
Analytical Method: **SW-846 8260B**
Instrument: **MSD9**
Analyst: **DVO**
Analytical Date/Time: **08/09/2012 13:23**

Prep Batch: **VXX3787**
Prep Method: **SW-846 5035 SL**
Prep Date/Time: **08/06/2012 16:32**
Prep Initial Wt./Vol.: **6.36 g**
Prep Extract Vol: **5 mL**

Print Date: 08/16/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of **105DPT-13 (6-7ft)**

Client Sample ID: **105DPT-13 (6-7ft)**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202490002-E
Lab Project ID: 31202490

Collection Date: 08/03/2012 11:10
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 73.10

Results by **SW-846 8270D**

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,2,4-Trichlorobenzene	ND	U	38.7	438	ug/Kg	1	08/8/2012 19:01
1,2-Dichlorobenzene	ND	U	21.8	438	ug/Kg	1	08/8/2012 19:01
1,3-Dichlorobenzene	ND	U	29.6	438	ug/Kg	1	08/8/2012 19:01
1,4-Dichlorobenzene	ND	U	31.0	438	ug/Kg	1	08/8/2012 19:01
2,4,5-Trichlorophenol	ND	U	29.3	438	ug/Kg	1	08/8/2012 19:01
2,4,6-Trichlorophenol	ND	U	29.7	438	ug/Kg	1	08/8/2012 19:01
2,4-Dichlorophenol	ND	U	25.4	438	ug/Kg	1	08/8/2012 19:01
2,4-Dinitrophenol	ND	U	40.6	875	ug/Kg	1	08/8/2012 19:01
2,4-Dinitrotoluene	ND	U	22.1	438	ug/Kg	1	08/8/2012 19:01
2,6-Dinitrotoluene	ND	U	31.4	438	ug/Kg	1	08/8/2012 19:01
2-Chloronaphthalene	ND	U	25.8	438	ug/Kg	1	08/8/2012 19:01
2-Chlorophenol	ND	U	23.3	438	ug/Kg	1	08/8/2012 19:01
2-Methylnaphthalene	ND	U	35.4	438	ug/Kg	1	08/8/2012 19:01
2-Methylphenol	ND	U	24.2	438	ug/Kg	1	08/8/2012 19:01
2-Nitroaniline	ND	U	28.9	438	ug/Kg	1	08/8/2012 19:01
2-Nitrophenol	ND	U	21.0	438	ug/Kg	1	08/8/2012 19:01
3 and/or 4-Methylphenol	ND	U	28.4	438	ug/Kg	1	08/8/2012 19:01
3,3'-Dichlorobenzidine	ND	U	21.0	438	ug/Kg	1	08/8/2012 19:01
3-Nitroaniline	ND	U	19.7	438	ug/Kg	1	08/8/2012 19:01
4,6-Dinitro-2-methylphenol	ND	U	20.6	438	ug/Kg	1	08/8/2012 19:01
4-Chloro-3-methylphenol	ND	U	21.8	438	ug/Kg	1	08/8/2012 19:01
4-Chloroaniline	ND	U	35.0	438	ug/Kg	1	08/8/2012 19:01
4-Chlorophenyl phenyl ether	ND	U	46.8	438	ug/Kg	1	08/8/2012 19:01
Acenaphthene	ND	U	19.9	438	ug/Kg	1	08/8/2012 19:01
Acenaphthylene	ND	U	18.5	438	ug/Kg	1	08/8/2012 19:01
Anthracene	ND	U	19.5	438	ug/Kg	1	08/8/2012 19:01
Benzo(a)anthracene	ND	U	24.1	438	ug/Kg	1	08/8/2012 19:01
Benzo(a)pyrene	ND	U	24.8	438	ug/Kg	1	08/8/2012 19:01
Benzo(b)fluoranthene	ND	U	25.2	438	ug/Kg	1	08/8/2012 19:01
Benzo(g,h,i)perylene	ND	U	69.8	438	ug/Kg	1	08/8/2012 19:01
Benzo(k)fluoranthene	ND	U	52.5	438	ug/Kg	1	08/8/2012 19:01
Benzoic acid	ND	U	9.72	438	ug/Kg	1	08/8/2012 19:01
Bis(2-Chloroethoxy)methane	ND	U	19.7	438	ug/Kg	1	08/8/2012 19:01
Bis(2-Chloroethyl)ether	ND	U	40.9	438	ug/Kg	1	08/8/2012 19:01
Bis(2-Chloroisopropyl)ether	ND	U	38.2	438	ug/Kg	1	08/8/2012 19:01
Bis(2-Ethylhexyl)phthalate	ND	U	21.0	438	ug/Kg	1	08/8/2012 19:01
4-Bromophenyl phenyl ether	ND	U	28.9	438	ug/Kg	1	08/8/2012 19:01
Butyl benzyl phthalate	ND	U	38.1	438	ug/Kg	1	08/8/2012 19:01
Chrysene	ND	U	51.0	438	ug/Kg	1	08/8/2012 19:01
Di-n-butyl phthalate	ND	U	20.7	438	ug/Kg	1	08/8/2012 19:01
Di-n-octyl phthalate	ND	U	24.2	438	ug/Kg	1	08/8/2012 19:01
Dibenz(a,h)anthracene	ND	U	19.7	438	ug/Kg	1	08/8/2012 19:01
Dibenzofuran	ND	U	34.3	438	ug/Kg	1	08/8/2012 19:01
Diethyl phthalate	ND	U	23.7	438	ug/Kg	1	08/8/2012 19:01

Print Date: 08/16/2012

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SGS ANALYTICAL PERSPECTIVES

Results of 105DPT-13 (6-7ft)

Client Sample ID: **105DPT-13 (6-7ft)**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202490002-E
Lab Project ID: 31202490

Collection Date: 08/03/2012 11:10
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 73.10

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
Dimethyl phthalate	ND	U	33.6	438	ug/Kg	1	08/8/2012 19:01
2,4-Dimethylphenol	ND	U	32.1	438	ug/Kg	1	08/8/2012 19:01
Diphenylamine	ND	U	19.7	438	ug/Kg	1	08/8/2012 19:01
Fluoranthene	ND	U	41.2	438	ug/Kg	1	08/8/2012 19:01
Fluorene	ND	U	23.3	438	ug/Kg	1	08/8/2012 19:01
Hexachlorobenzene	ND	U	41.5	438	ug/Kg	1	08/8/2012 19:01
Hexachlorobutadiene	ND	U	26.2	438	ug/Kg	1	08/8/2012 19:01
Hexachlorocyclopentadiene	ND	U	133	438	ug/Kg	1	08/8/2012 19:01
Hexachloroethane	ND	U	25.2	438	ug/Kg	1	08/8/2012 19:01
Indeno(1,2,3-cd)pyrene	ND	U	34.2	438	ug/Kg	1	08/8/2012 19:01
Isophorone	ND	U	19.9	438	ug/Kg	1	08/8/2012 19:01
Naphthalene	ND	U	37.8	438	ug/Kg	1	08/8/2012 19:01
4-Nitroanillne	ND	U	25.2	438	ug/Kg	1	08/8/2012 19:01
Nitrobenzene	ND	U	25.2	438	ug/Kg	1	08/8/2012 19:01
4-Nitrophenol	ND	U	43.1	438	ug/Kg	1	08/8/2012 19:01
Pentachlorophenol	ND	U	35.0	438	ug/Kg	1	08/8/2012 19:01
Phenanthrene	ND	U	28.9	438	ug/Kg	1	08/8/2012 19:01
Phenol	ND	U	40.9	438	ug/Kg	1	08/8/2012 19:01
Pyrene	ND	U	18.5	438	ug/Kg	1	08/8/2012 19:01
n-Nitrosodi-n-propylamine	ND	U	125	438	ug/Kg	1	08/8/2012 19:01
Surrogates							
2,4,6-Tribromophenol	88.0			41.0-129	%	1	08/8/2012 19:01
2-Fluorobiphenyl	86.0			48.0-123	%	1	08/8/2012 19:01
2-Fluorophenol	81.0			42.0-123	%	1	08/8/2012 19:01
Nitrobenzene-d5	89.0			46.0-117	%	1	08/8/2012 19:01
Phenol-d6	93.0			48.0-125	%	1	08/8/2012 19:01
Terphenyl-d14	92.0			44.0-140	%	1	08/8/2012 19:01

Batch Information

Analytical Batch: **XMS1628**
Analytical Method: **SW-846 8270D**
Instrument: **MSD10**
Analyst: **CMP**
Analytical Date/Time: **08/08/2012 19:01**

Prep Batch: **XXX2895**
Prep Method: **SW-846 3541**
Prep Date/Time: **08/07/2012 15:37**
Prep Initial Wt./Vol.: **31.26 g**
Prep Extract Vol: **10 mL**

Print Date: 08/16/2012

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SGS ANALYTICAL PERSPECTIVES

Results of **105DPT-14 (4.5-5ft)**

Client Sample ID: **105DPT-14 (4.5-5ft)**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202490003-A
Lab Project ID: 31202490

Collection Date: 08/03/2012 11:30
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 87.10

Results by **SW-846 8260B**

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	U	0.595	4.20	ug/Kg	1	08/9/2012 13:50
1,1,1-Trichloroethane	ND	U	0.633	4.20	ug/Kg	1	08/9/2012 13:50
1,1,2,2-Tetrachloroethane	ND	U	0.982	4.20	ug/Kg	1	08/9/2012 13:50
1,1,2-Trichloroethane	ND	U	0.873	4.20	ug/Kg	1	08/9/2012 13:50
1,1-Dichloroethane	ND	U	0.451	4.20	ug/Kg	1	08/9/2012 13:50
1,1-Dichloroethene	ND	U	0.973	4.20	ug/Kg	1	08/9/2012 13:50
1,1-Dichloropropene	ND	U	0.567	4.20	ug/Kg	1	08/9/2012 13:50
1,2,3-Trichlorobenzene	ND	U	0.698	4.20	ug/Kg	1	08/9/2012 13:50
1,2,3-Trichloropropane	ND	U	0.864	4.20	ug/Kg	1	08/9/2012 13:50
1,2,4-Trichlorobenzene	ND	U	0.612	4.20	ug/Kg	1	08/9/2012 13:50
1,2,4-Trimethylbenzene	ND	U	0.534	4.20	ug/Kg	1	08/9/2012 13:50
1,2-Dibromo-3-chloropropane	ND	U	6.22	25.2	ug/Kg	1	08/9/2012 13:50
1,2-Dibromoethane	ND	U	1.10	4.20	ug/Kg	1	08/9/2012 13:50
1,2-Dichlorobenzene	ND	U	0.597	4.20	ug/Kg	1	08/9/2012 13:50
1,2-Dichloroethane	ND	U	0.766	4.20	ug/Kg	1	08/9/2012 13:50
1,2-Dichloropropane	ND	U	0.965	4.20	ug/Kg	1	08/9/2012 13:50
1,3,5-Trimethylbenzene	ND	U	0.510	4.20	ug/Kg	1	08/9/2012 13:50
1,3-Dichlorobenzene	ND	U	0.603	4.20	ug/Kg	1	08/9/2012 13:50
1,3-Dichloropropane	ND	U	0.738	4.20	ug/Kg	1	08/9/2012 13:50
1,4-Dichlorobenzene	ND	U	0.566	4.20	ug/Kg	1	08/9/2012 13:50
2,2-Dichloropropane	ND	U	0.619	4.20	ug/Kg	1	08/9/2012 13:50
2-Butanone	ND	U	2.84	21.0	ug/Kg	1	08/9/2012 13:50
2-Chlorotoluene	ND	U	0.786	4.20	ug/Kg	1	08/9/2012 13:50
2-Hexanone	ND	U	2.70	10.5	ug/Kg	1	08/9/2012 13:50
4-Chlorotoluene	ND	U	0.634	4.20	ug/Kg	1	08/9/2012 13:50
4-Isopropyltoluene	ND	U	0.541	4.20	ug/Kg	1	08/9/2012 13:50
4-Methyl-2-pentanone	ND	U	3.14	10.5	ug/Kg	1	08/9/2012 13:50
Acetone	ND	U	3.36	42.0	ug/Kg	1	08/9/2012 13:50
Benzene	ND	U	0.597	4.20	ug/Kg	1	08/9/2012 13:50
Bromobenzene	ND	U	0.585	4.20	ug/Kg	1	08/9/2012 13:50
Bromochloromethane	ND	U	0.789	4.20	ug/Kg	1	08/9/2012 13:50
Bromodichloromethane	ND	U	0.591	4.20	ug/Kg	1	08/9/2012 13:50
Bromoform	ND	U	0.607	4.20	ug/Kg	1	08/9/2012 13:50
Bromomethane	ND	U	1.22	4.20	ug/Kg	1	08/9/2012 13:50
n-Butylbenzene	ND	U	0.551	4.20	ug/Kg	1	08/9/2012 13:50
Carbon disulfide	ND	U	0.439	4.20	ug/Kg	1	08/9/2012 13:50
Carbon tetrachloride	ND	U	0.477	4.20	ug/Kg	1	08/9/2012 13:50
Chlorobenzene	ND	U	0.586	4.20	ug/Kg	1	08/9/2012 13:50
Chloroethane	ND	U	0.839	4.20	ug/Kg	1	08/9/2012 13:50
Chloroform	ND	U	0.534	4.20	ug/Kg	1	08/9/2012 13:50
Chloromethane	ND	U	1.20	4.20	ug/Kg	1	08/9/2012 13:50
Dibromochloromethane	ND	U	0.931	4.20	ug/Kg	1	08/9/2012 13:50
Dibromomethane	ND	U	0.740	4.20	ug/Kg	1	08/9/2012 13:50
Dichlorodifluoromethane	ND	U	0.881	4.20	ug/Kg	1	08/9/2012 13:50

Print Date: 08/16/2012

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SGS ANALYTICAL PERSPECTIVES

Results of 105DPT-14 (4.5-5ft)

Client Sample ID: **105DPT-14 (4.5-5ft)**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202490003-A
Lab Project ID: 31202490

Collection Date: 08/03/2012 11:30
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 87.10

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	U	0.864	4.20	ug/Kg	1	08/9/2012 13:50
trans-1,3-Dichloropropene	ND	U	0.792	4.20	ug/Kg	1	08/9/2012 13:50
Diisopropyl Ether	ND	U	0.689	4.20	ug/Kg	1	08/9/2012 13:50
Ethyl Benzene	ND	U	0.592	4.20	ug/Kg	1	08/9/2012 13:50
Hexachlorobutadiene	ND	U	0.576	4.20	ug/Kg	1	08/9/2012 13:50
Isopropylbenzene (Cumene)	ND	U	0.522	4.20	ug/Kg	1	08/9/2012 13:50
Methyl iodide	ND	U	0.643	4.20	ug/Kg	1	08/9/2012 13:50
Methylene chloride	**1.91**	J	0.881	16.8	ug/Kg	1	08/9/2012 13:50
Naphthalene	ND	U	0.763	4.20	ug/Kg	1	08/9/2012 13:50
Styrene	ND	U	0.483	4.20	ug/Kg	1	08/9/2012 13:50
Tetrachloroethene	ND	U	0.630	4.20	ug/Kg	1	08/9/2012 13:50
Toluene	ND	U	0.577	4.20	ug/Kg	1	08/9/2012 13:50
Trichloroethene	ND	U	0.707	4.20	ug/Kg	1	08/9/2012 13:50
Trichlorofluoromethane	ND	U	0.847	4.20	ug/Kg	1	08/9/2012 13:50
Vinyl chloride	ND	U	0.797	4.20	ug/Kg	1	08/9/2012 13:50
Xylene (total)	ND	U	1.49	8.39	ug/Kg	1	08/9/2012 13:50
cis-1,2-Dichloroethene	ND	U	0.513	4.20	ug/Kg	1	08/9/2012 13:50
m,p-Xylene	ND	U	1.42	8.39	ug/Kg	1	08/9/2012 13:50
n-Propylbenzene	ND	U	0.614	4.20	ug/Kg	1	08/9/2012 13:50
o-Xylene	ND	U	0.643	4.20	ug/Kg	1	08/9/2012 13:50
sec-Butylbenzene	ND	U	0.503	4.20	ug/Kg	1	08/9/2012 13:50
tert-Butyl methyl ether (MTBE)	ND	U	0.667	4.20	ug/Kg	1	08/9/2012 13:50
tert-Butylbenzene	ND	U	0.565	4.20	ug/Kg	1	08/9/2012 13:50
trans-1,2-Dichloroethene	ND	U	0.613	4.20	ug/Kg	1	08/9/2012 13:50
trans-1,4-Dichloro-2-butene	ND	U	3.52	21.0	ug/Kg	1	08/9/2012 13:50
Surrogates							
1,2-Dichloroethane-d4	111			55.0-173	%	1	08/9/2012 13:50
4-Bromofluorobenzene	97.0			23.0-141	%	1	08/9/2012 13:50
Toluene d8	103			57.0-134	%	1	08/9/2012 13:50

Batch Information

Analytical Batch: **VMS2459**
Analytical Method: **SW-846 8260B**
Instrument: **MSD9**
Analyst: **DVO**
Analytical Date/Time: **08/09/2012 13:50**

Prep Batch: **VXX3787**
Prep Method: **SW-846 5035 SL**
Prep Date/Time: **08/06/2012 16:33**
Prep Initial Wt./Vol.: **6.84 g**
Prep Extract Vol: **5 mL**

Print Date: 08/16/2012

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SGS ANALYTICAL PERSPECTIVES

Results of 105DPT-14 (4.5-5ft)

Client Sample ID: **105DPT-14 (4.5-5ft)**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202490003-E
Lab Project ID: 31202490

Collection Date: 08/03/2012 11:30
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 87.10

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,2,4-Trichlorobenzene	ND	U	33.6	381	ug/Kg	1	08/8/2012 19:24
1,2-Dichlorobenzene	ND	U	19.0	381	ug/Kg	1	08/8/2012 19:24
1,3-Dichlorobenzene	ND	U	25.7	381	ug/Kg	1	08/8/2012 19:24
1,4-Dichlorobenzene	ND	U	26.9	381	ug/Kg	1	08/8/2012 19:24
2,4,5-Trichlorophenol	ND	U	25.5	381	ug/Kg	1	08/8/2012 19:24
2,4,6-Trichlorophenol	ND	U	25.8	381	ug/Kg	1	08/8/2012 19:24
2,4-Dichlorophenol	ND	U	22.1	381	ug/Kg	1	08/8/2012 19:24
2,4-Dinitrophenol	ND	U	35.3	761	ug/Kg	1	08/8/2012 19:24
2,4-Dinitrotoluene	ND	U	19.2	381	ug/Kg	1	08/8/2012 19:24
2,6-Dinitrotoluene	ND	U	27.3	381	ug/Kg	1	08/8/2012 19:24
2-Chloronaphthalene	ND	U	22.4	381	ug/Kg	1	08/8/2012 19:24
2-Chlorophenol	ND	U	20.2	381	ug/Kg	1	08/8/2012 19:24
2-Methylnaphthalene	ND	U	30.8	381	ug/Kg	1	08/8/2012 19:24
2-Methylphenol	ND	U	21.1	381	ug/Kg	1	08/8/2012 19:24
2-Nitroanlline	ND	U	25.1	381	ug/Kg	1	08/8/2012 19:24
2-Nitrophenol	ND	U	18.3	381	ug/Kg	1	08/8/2012 19:24
3 and/or 4-Methylphenol	ND	U	24.7	381	ug/Kg	1	08/8/2012 19:24
3,3'-Dichlorobenzidine	ND	U	18.3	381	ug/Kg	1	08/8/2012 19:24
3-Nitroanlline	ND	U	17.2	381	ug/Kg	1	08/8/2012 19:24
4,6-Dinitro-2-methylphenol	ND	U	17.9	381	ug/Kg	1	08/8/2012 19:24
4-Chloro-3-methylphenol	ND	U	19.0	381	ug/Kg	1	08/8/2012 19:24
4-Chloroanlline	ND	U	30.5	381	ug/Kg	1	08/8/2012 19:24
4-Chlorophenyl phenyl ether	ND	U	40.7	381	ug/Kg	1	08/8/2012 19:24
Acenaphthene	ND	U	17.3	381	ug/Kg	1	08/8/2012 19:24
Acenaphthylene	ND	U	16.1	381	ug/Kg	1	08/8/2012 19:24
Anthracene	ND	U	16.9	381	ug/Kg	1	08/8/2012 19:24
Benzo(a)anthracene	ND	U	21.0	381	ug/Kg	1	08/8/2012 19:24
Benzo(a)pyrene	ND	U	21.6	381	ug/Kg	1	08/8/2012 19:24
Benzo(b)fluoranthene	ND	U	21.9	381	ug/Kg	1	08/8/2012 19:24
Benzo(g,h,i)perylene	ND	U	60.7	381	ug/Kg	1	08/8/2012 19:24
Benzo(k)fluoranthene	ND	U	45.7	381	ug/Kg	1	08/8/2012 19:24
Benzoic acid	ND	U	8.45	381	ug/Kg	1	08/8/2012 19:24
Bis(2-Chloroethoxy)methane	ND	U	17.2	381	ug/Kg	1	08/8/2012 19:24
Bis(2-Chloroethyl)ether	ND	U	35.6	381	ug/Kg	1	08/8/2012 19:24
Bis(2-Chloroisopropyl)ether	ND	U	33.3	381	ug/Kg	1	08/8/2012 19:24
Bis(2-Ethylhexyl)phthalate	ND	U	18.3	381	ug/Kg	1	08/8/2012 19:24
4-Bromophenyl phenyl ether	ND	U	25.1	381	ug/Kg	1	08/8/2012 19:24
Butyl benzyl phthalate	ND	U	33.1	381	ug/Kg	1	08/8/2012 19:24
Chrysene	ND	U	44.3	381	ug/Kg	1	08/8/2012 19:24
Di-n-butyl phthalate	ND	U	18.0	381	ug/Kg	1	08/8/2012 19:24
Di-n-octyl phthalate	ND	U	21.1	381	ug/Kg	1	08/8/2012 19:24
Dibenz(a,h)anthracene	ND	U	17.2	381	ug/Kg	1	08/8/2012 19:24
Dibenzofuran	ND	U	29.8	381	ug/Kg	1	08/8/2012 19:24
Diethyl phthalate	ND	U	20.6	381	ug/Kg	1	08/8/2012 19:24

Print Date: 08/16/2012

N.C. Certification # 481

Results of 105DPT-14 (4.5-5ft)

Client Sample ID: **105DPT-14 (4.5-5ft)**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202490003-E
Lab Project ID: 31202490

Collection Date: 08/03/2012 11:30
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 87.10

Results by SW-846 8270D

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
Dimethyl phthalate	ND	U	29.2	381	ug/Kg	1	08/8/2012 19:24
2,4-Dimethylphenol	ND	U	27.9	381	ug/Kg	1	08/8/2012 19:24
Diphenylamine	ND	U	17.2	381	ug/Kg	1	08/8/2012 19:24
Fluoranthene	ND	U	35.8	381	ug/Kg	1	08/8/2012 19:24
Fluorene	ND	U	20.2	381	ug/Kg	1	08/8/2012 19:24
Hexachlorobenzene	ND	U	36.1	381	ug/Kg	1	08/8/2012 19:24
Hexachlorobutadiene	ND	U	22.8	381	ug/Kg	1	08/8/2012 19:24
Hexachlorocyclopentadiene	ND	U	115	381	ug/Kg	1	08/8/2012 19:24
Hexachloroethane	ND	U	21.9	381	ug/Kg	1	08/8/2012 19:24
Indeno(1,2,3-cd)pyrene	ND	U	29.7	381	ug/Kg	1	08/8/2012 19:24
Isophorone	ND	U	17.3	381	ug/Kg	1	08/8/2012 19:24
Naphthalene	ND	U	32.9	381	ug/Kg	1	08/8/2012 19:24
4-Nitroaniline	ND	U	21.9	381	ug/Kg	1	08/8/2012 19:24
Nitrobenzene	ND	U	21.9	381	ug/Kg	1	08/8/2012 19:24
4-Nitrophenol	ND	U	37.5	381	ug/Kg	1	08/8/2012 19:24
Pentachlorophenol	ND	U	30.5	381	ug/Kg	1	08/8/2012 19:24
Phenanthrene	ND	U	25.1	381	ug/Kg	1	08/8/2012 19:24
Phenol	ND	U	35.6	381	ug/Kg	1	08/8/2012 19:24
Pyrene	ND	U	16.1	381	ug/Kg	1	08/8/2012 19:24
n-Nitrosodi-n-propylamine	ND	U	109	381	ug/Kg	1	08/8/2012 19:24
Surrogates							
2,4,6-Tribromophenol	87.0			41.0-129	%	1	08/8/2012 19:24
2-Fluorobiphenyl	90.0			48.0-123	%	1	08/8/2012 19:24
2-Fluorophenol	82.0			42.0-123	%	1	08/8/2012 19:24
Nitrobenzene-d5	88.0			46.0-117	%	1	08/8/2012 19:24
Phenol-d6	94.0			48.0-125	%	1	08/8/2012 19:24
Terphenyl-d14	93.0			44.0-140	%	1	08/8/2012 19:24

Batch Information

Analytical Batch: **XMS1628**
Analytical Method: **SW-846 8270D**
Instrument: **MSD10**
Analyst: **CMP**
Analytical Date/Time: **08/08/2012 19:24**

Prep Batch: **XXX2895**
Prep Method: **SW-846 3541**
Prep Date/Time: **08/07/2012 15:37**
Prep Initial Wt./Vol.: **30.15 g**
Prep Extract Vol: **10 mL**

Print Date: 08/16/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Results of Trip Blanks (Not on COC)

Client Sample ID: **Trip Blanks (Not on COC)**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202490004-A
Lab Project ID: 31202490

Collection Date: 08/03/2012 00:00
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 100.00

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	U	0.709	5.00	ug/Kg	1	08/8/2012 15:52
1,1,1-Trichloroethane	ND	U	0.754	5.00	ug/Kg	1	08/8/2012 15:52
1,1,2,2-Tetrachloroethane	ND	U	1.17	5.00	ug/Kg	1	08/8/2012 15:52
1,1,2-Trichloroethane	ND	U	1.04	5.00	ug/Kg	1	08/8/2012 15:52
1,1-Dichloroethane	ND	U	0.538	5.00	ug/Kg	1	08/8/2012 15:52
1,1-Dichloroethene	ND	U	1.16	5.00	ug/Kg	1	08/8/2012 15:52
1,1-Dichloropropene	ND	U	0.676	5.00	ug/Kg	1	08/8/2012 15:52
1,2,3-Trichlorobenzene	ND	U	0.832	5.00	ug/Kg	1	08/8/2012 15:52
1,2,3-Trichloropropane	ND	U	1.03	5.00	ug/Kg	1	08/8/2012 15:52
1,2,4-Trichlorobenzene	ND	U	0.729	5.00	ug/Kg	1	08/8/2012 15:52
1,2,4-Trimethylbenzene	ND	U	0.637	5.00	ug/Kg	1	08/8/2012 15:52
1,2-Dibromo-3-chloropropane	ND	U	7.41	30.0	ug/Kg	1	08/8/2012 15:52
1,2-Dibromoethane	ND	U	1.31	5.00	ug/Kg	1	08/8/2012 15:52
1,2-Dichlorobenzene	ND	U	0.711	5.00	ug/Kg	1	08/8/2012 15:52
1,2-Dichloroethane	ND	U	0.913	5.00	ug/Kg	1	08/8/2012 15:52
1,2-Dichloropropane	ND	U	1.15	5.00	ug/Kg	1	08/8/2012 15:52
1,3,5-Trimethylbenzene	ND	U	0.608	5.00	ug/Kg	1	08/8/2012 15:52
1,3-Dichlorobenzene	ND	U	0.719	5.00	ug/Kg	1	08/8/2012 15:52
1,3-Dichloropropane	ND	U	0.879	5.00	ug/Kg	1	08/8/2012 15:52
1,4-Dichlorobenzene	ND	U	0.675	5.00	ug/Kg	1	08/8/2012 15:52
2,2-Dichloropropane	ND	U	0.738	5.00	ug/Kg	1	08/8/2012 15:52
2-Butanone	ND	U	3.38	25.0	ug/Kg	1	08/8/2012 15:52
2-Chlorotoluene	ND	U	0.937	5.00	ug/Kg	1	08/8/2012 15:52
2-Hexanone	ND	U	3.22	12.5	ug/Kg	1	08/8/2012 15:52
4-Chlorotoluene	ND	U	0.756	5.00	ug/Kg	1	08/8/2012 15:52
4-Isopropyltoluene	ND	U	0.645	5.00	ug/Kg	1	08/8/2012 15:52
4-Methyl-2-pentanone	ND	U	3.74	12.5	ug/Kg	1	08/8/2012 15:52
Acetone	ND	U	4.01	50.0	ug/Kg	1	08/8/2012 15:52
Benzene	ND	U	0.711	5.00	ug/Kg	1	08/8/2012 15:52
Bromobenzene	ND	U	0.697	5.00	ug/Kg	1	08/8/2012 15:52
Bromochloromethane	ND	U	0.940	5.00	ug/Kg	1	08/8/2012 15:52
Bromodichloromethane	ND	U	0.704	5.00	ug/Kg	1	08/8/2012 15:52
Bromoform	ND	U	0.724	5.00	ug/Kg	1	08/8/2012 15:52
Bromomethane	ND	U	1.45	5.00	ug/Kg	1	08/8/2012 15:52
n-Butylbenzene	ND	U	0.657	5.00	ug/Kg	1	08/8/2012 15:52
Carbon disulfide	ND	U	0.523	5.00	ug/Kg	1	08/8/2012 15:52
Carbon tetrachloride	ND	U	0.569	5.00	ug/Kg	1	08/8/2012 15:52
Chlorobenzene	ND	U	0.698	5.00	ug/Kg	1	08/8/2012 15:52
Chloroethane	ND	U	1.00	5.00	ug/Kg	1	08/8/2012 15:52
Chloroform	ND	U	0.637	5.00	ug/Kg	1	08/8/2012 15:52
Chloromethane	ND	U	1.43	5.00	ug/Kg	1	08/8/2012 15:52
Dibromochloromethane	ND	U	1.11	5.00	ug/Kg	1	08/8/2012 15:52
Dibromomethane	ND	U	0.882	5.00	ug/Kg	1	08/8/2012 15:52
Dichlorodifluoromethane	ND	U	1.05	5.00	ug/Kg	1	08/8/2012 15:52

Print Date: 08/16/2012

N.C. Certification # 481

Results of Trip Blanks (Not on COC)

Client Sample ID: **Trip Blanks (Not on COC)**
Client Project ID: **NCDOT Parcel 105**
Lab Sample ID: 31202490004-A
Lab Project ID: 31202490

Collection Date: 08/03/2012 00:00
Received Date: 08/03/2012 15:00
Matrix: Soil-Solid as dry weight
Solids (%): 100.00

Results by SW-846 8260B

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	U	1.03	5.00	ug/Kg	1	08/8/2012 15:52
trans-1,3-Dichloropropene	ND	U	0.944	5.00	ug/Kg	1	08/8/2012 15:52
Diisopropyl Ether	ND	U	0.821	5.00	ug/Kg	1	08/8/2012 15:52
Ethyl Benzene	ND	U	0.705	5.00	ug/Kg	1	08/8/2012 15:52
Hexachlorobutadiene	ND	U	0.687	5.00	ug/Kg	1	08/8/2012 15:52
Isopropylbenzene (Cumene)	ND	U	0.622	5.00	ug/Kg	1	08/8/2012 15:52
Methyl iodide	ND	U	0.766	5.00	ug/Kg	1	08/8/2012 15:52
Methylene chloride	**1.92**	J	1.05	20.0	ug/Kg	1	08/8/2012 15:52
Naphthalene	ND	U	0.909	5.00	ug/Kg	1	08/8/2012 15:52
Styrene	ND	U	0.576	5.00	ug/Kg	1	08/8/2012 15:52
Tetrachloroethene	ND	U	0.751	5.00	ug/Kg	1	08/8/2012 15:52
Toluene	**1.51**	J	0.688	5.00	ug/Kg	1	08/8/2012 15:52
Trichloroethene	ND	U	0.842	5.00	ug/Kg	1	08/8/2012 15:52
Trichlorofluoromethane	ND	U	1.01	5.00	ug/Kg	1	08/8/2012 15:52
Vinyl chloride	ND	U	0.950	5.00	ug/Kg	1	08/8/2012 15:52
Xylene (total)	ND	U	1.77	10.0	ug/Kg	1	08/8/2012 15:52
cis-1,2-Dichloroethene	ND	U	0.611	5.00	ug/Kg	1	08/8/2012 15:52
m,p-Xylene	ND	U	1.69	10.0	ug/Kg	1	08/8/2012 15:52
n-Propylbenzene	ND	U	0.732	5.00	ug/Kg	1	08/8/2012 15:52
o-Xylene	ND	U	0.766	5.00	ug/Kg	1	08/8/2012 15:52
sec-Butylbenzene	ND	U	0.600	5.00	ug/Kg	1	08/8/2012 15:52
tert-Butyl methyl ether (MTBE)	ND	U	0.795	5.00	ug/Kg	1	08/8/2012 15:52
tert-Butylbenzene	ND	U	0.673	5.00	ug/Kg	1	08/8/2012 15:52
trans-1,2-Dichloroethene	ND	U	0.730	5.00	ug/Kg	1	08/8/2012 15:52
trans-1,4-Dichloro-2-butene	ND	U	4.20	25.0	ug/Kg	1	08/8/2012 15:52
Surrogates							
1,2-Dichloroethane-d4	121			55.0-173	%	1	08/8/2012 15:52
4-Bromofluorobenzene	97.0			23.0-141	%	1	08/8/2012 15:52
Toluene d8	103			57.0-134	%	1	08/8/2012 15:52

Batch Information

Analytical Batch: **VMS2454**
Analytical Method: **SW-846 8260B**
Instrument: **MSD9**
Analyst: **DVO**
Analytical Date/Time: **08/08/2012 15:52**

Prep Batch: **VXX3778**
Prep Method: **SW-846 5035 SL**
Prep Date/Time: **08/06/2012 16:34**
Prep Initial Wt./Vol.: **5 g**
Prep Extract Vol: **5 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: VXX3778
Prep Date: 08/08/2012 08:22

Client Sample ID	Lab Sample ID	Analysis Date	Analytical Batch	Instrument	Analyst
LCS-S for HBN 26841 [VXX/3778]	84241	08/08/2012 09:28	VMS2454	MSD9	DVO
LCSD-S for HBN 26841 [VXX/3778	84242	08/08/2012 09:55	VMS2454	MSD9	DVO
MB-S for HBN 26841 [VXX/3778]	84243	08/08/2012 10:48	VMS2454	MSD9	DVO
Trip Blanks (Not on COC)	31202490004	08/08/2012 15:52	VMS2454	MSD9	DVO
104DPT-02 (6-6.5ft)(83859MS)	84615	08/08/2012 17:35	VMS2454	MSD9	DVO

Method Blank

Blank ID: MB-S for HBN 26841 [VXX/3778]
Blank Lab ID: 84243
QC for Samples:
31202490004

Matrix: Soil-Solid as dry weight

Results by **SW-846 8260B**

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

Print Date: 08/16/2012

N.C. Certification # 481

Method Blank

Blank ID: MB-S for HBN 26841 [VXX/3778]
Blank Lab ID: 84243
QC for Samples:
31202490004

Matrix: Soil-Solid as dry weight

Results by SW-846 8260B

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

Batch Information

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

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

Print Date: 08/16/2012

N.C. Certification # 481

Blank Spike Summary

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

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

QC for Samples: 31202490004

Results by SW-846 8260B

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

Blank Spike Summary

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

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

QC for Samples: 31202490004

Results by SW-846 8260B

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

Print Date: 08/16/2012

N.C. Certification # 481

Blank Spike Summary

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

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

QC for Samples: 31202490004

Results by SW-846 8260B

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

Batch Information

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

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

Batch Summary

Analytical Method: SW-846 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)	31202490001	08/09/2012 12:56	VMS2459	MSD9	DVO
105DPT-13 (6-7ft)	31202490002	08/09/2012 13:23	VMS2459	MSD9	DVO
105DPT-14 (4.5-5ft)	31202490003	08/09/2012 13:50	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

Method Blank

Blank ID: MB-S for HBN 26881 [VXX/3787]
Blank Lab ID: 84437
QC for Samples:
31202490001, 31202490002, 31202490003

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:
31202490001, 31202490002, 31202490003

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

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: 31202490001, 31202490002, 31202490003

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: 31202490001, 31202490002, 31202490003

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: 31202490001, 31202490002, 31202490003

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

Matrix Spike Summary

Original Sample ID: 31202490002 (105DPT-13 (6-7ft))
MS Sample ID: 84700
MSD Sample ID:

Analysis Date: 08/09/2012 13:23
Analysis Date: 08/09/2012 16:46
Analysis Date:
Matrix: Soil-Solid as dry weight

QC for Samples: 31202490001, 31202490002, 31202490003

Results by **SW-846 8260B**

		Matrix Spike (ug/Kg)			Spike Duplicate (ug/Kg)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
1,1,1,2-Tetrachloroethane	ND	34.5	28.1	82				69.0-120		
1,1,1-Trichloroethane	ND	34.5	31.1	90				78.0-121		
1,1,2,2-Tetrachloroethane	ND	34.5	39.9	116				76.0-136		
1,1,2-Trichloroethane	ND	34.5	36.1	105				65.0-128		
1,1-Dichloroethane	ND	34.5	33.0	96				72.0-139		
1,1-Dichloroethene	ND	34.5	34.7	101				72.0-135		
1,1-Dichloropropene	ND	34.5	32.5	94				69.0-137		
1,2,3-Trichlorobenzene	ND	34.5	26.3	76				61.0-126		
1,2,3-Trichloropropane	ND	34.5	41.6	121				10.0-218		
1,2,4-Trichlorobenzene	ND	34.5	26.6	77				61.0-125		
1,2,4-Trimethylbenzene	ND	34.5	30.4	88				31.0-172		
1,2-Dibromo-3-chloropropane	ND	207	259	125				43.0-229		
1,2-Dibromoethane	ND	34.5	35.9	104				78.0-148		
1,2-Dichlorobenzene	ND	34.5	31.3	91				58.0-148		
1,2-Dichloroethane	ND	34.5	34.8	101				73.0-146		
1,2-Dichloropropane	ND	34.5	31.8	92				76.0-136		
1,3,5-Trimethylbenzene	ND	34.5	30.5	88				68.0-132		
1,3-Dichlorobenzene	ND	34.5	30.4	88				55.0-145		
1,3-Dichloropropane	ND	34.5	34.2	99				33.0-137		
1,4-Dichlorobenzene	ND	34.5	31.0	90				53.0-146		
2,2-Dichloropropane	ND	34.5	28.6	83				58.0-150		
2-Butanone	ND	86.2	116	134				41.0-256		
2-Chlorotoluene	ND	34.5	30.9	90				60.0-144		
2-Hexanone	ND	86.2	100	116 *				42.0-111		
4-Chlorotoluene	ND	34.5	30.3	88				59.0-141		
4-Isopropyltoluene	ND	34.5	29.3	85				75.0-122		
4-Methyl-2-pentanone	ND	86.2	106	123				6.90-166		
Acetone	ND	86.2	112	130				6.80-355		
Benzene	ND	34.5	32.9	95				75.0-133		
Bromobenzene	ND	34.5	30.4	88				66.0-140		
Bromochloromethane	ND	34.5	35.3	102				85.0-136		
Bromodichloromethane	ND	34.5	29.4	85				77.0-140		
Bromoform	ND	34.5	29.4	85				75.0-151		
Bromomethane	ND	34.5	11.7	34				30.0-127		
n-Butylbenzene	ND	34.5	29.5	86				41.0-147		
Carbon disulfide	ND	34.5	28.4	82				64.0-145		
Carbon tetrachloride	ND	34.5	28.8	84				64.0-142		
Chlorobenzene	ND	34.5	31.2	90				66.0-135		
Chloroethane	ND	34.5	30.2	88				21.0-182		

Print Date: 08/16/2012

N.C. Certification # 481

Matrix Spike Summary

Original Sample ID: 31202490002 (105DPT-13 (6-7ft))
MS Sample ID: 84700
MSD Sample ID:

Analysis Date: 08/09/2012 13:23
Analysis Date: 08/09/2012 16:46
Analysis Date:
Matrix: Soil-Solid as dry weight

QC for Samples: 31202490001, 31202490002, 31202490003

Results by SW-846 8260B

		Matrix Spike (ug/Kg)			Spike Duplicate (ug/Kg)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Chloroform	ND	34.5	33.9	98				71.0-143		
Chloromethane	ND	34.5	29.4	85				69.0-138		
Dibromochloromethane	ND	34.5	29.6	86				78.0-141		
Dibromomethane	ND	34.5	34.8	101				80.0-150		
Dichlorodifluoromethane	ND	34.5	34.3	99				82.0-130		
cis-1,3-Dichloropropene	ND	34.5	27.1	78				72.0-146		
trans-1,3-Dichloropropene	ND	34.5	27.4	79				45.0-144		
Diisopropyl Ether	ND	34.5	31.8	92				79.0-122		
Ethyl Benzene	ND	34.5	31.0	90				74.0-126		
Hexachlorobutadiene	ND	34.5	26.0	75				52.0-134		
Isopropylbenzene (Cumene)	ND	34.5	30.9	90				74.0-123		
Methyl iodide	ND	34.5	29.5	86				41.0-126		
Methylene chloride	ND	34.5	35.1	102				49.0-155		
Naphthalene	ND	34.5	33.5	97				55.0-140		
Styrene	ND	34.5	30.7	89				73.0-123		
Tetrachloroethene	ND	34.5	33.3	97				46.0-153		
Toluene	ND	34.5	33.2	96				66.0-128		
Trichloroethene	ND	34.5	31.4	91				35.0-136		
Trichlorofluoromethane	ND	34.5	37.6	109				77.0-132		
Vinyl chloride	ND	34.5	32.3	94				68.0-137		
cis-1,2-Dichloroethene	ND	34.5	33.8	98				77.0-134		
m,p-Xylene	ND	68.9	64.2	93				80.0-118		
n-Propylbenzene	ND	34.5	31.4	91				72.0-128		
o-Xylene	ND	34.5	31.6	92				80.0-121		
sec-Butylbenzene	ND	34.5	29.1	84				57.0-138		
tert-Butyl methyl ether (MTBE)	ND	34.5	34.5	100				67.0-135		
tert-Butylbenzene	ND	34.5	29.8	86				61.0-142		
trans-1,2-Dichloroethene	ND	34.5	33.0	96				72.0-135		
trans-1,4-Dichloro-2-butene	ND	172	200	116				49.0-211		
Surrogates										
1,2-Dichloroethane-d4				112				55.0-173		
4-Bromofluorobenzene				99				23.0-141		
Toluene d8				100				57.0-134		

Print Date: 08/16/2012

N.C. Certification # 481

Matrix Spike Summary

Original Sample ID: 31202490002 (105DPT-13 (6-7ft))
MS Sample ID: 84700
MSD Sample ID:

Analysis Date: 08/09/2012 13:23
Analysis Date: 08/09/2012 16:46
Analysis Date:
Matrix: Soil-Solid as dry weight

QC for Samples: 31202490001, 31202490002, 31202490003

Results by SW-846 8260B

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

Batch Information

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

Prep Batch: VXX3787
Prep Method: SW-846 5035 SL
Prep Date/Time: 08/06/2012 16:32
MS Init Wt./Vol.: 5.95 g Extract Vol.: 5 mL
MSD Init Wt./Vol.: Extract Vol.:

Print Date: 08/16/2012

N.C. Certification # 481

SGS ANALYTICAL PERSPECTIVES

Duplicate Sample Summary

Original Sample ID: 31202490001-A
Duplicate Sample ID: 84698

Analysis Date: 08/09/2012 12:56
Analysis Date: 08/09/2012 16:04
Matrix: Soil-Solid as dry weight

QC for Samples: 31202490001, 31202490002, 31202490003

Results by SW-846 8260B

PARAMETER	Original (ug/Kg)	Qual	Duplicate (ug/Kg)	Qual	RPD (%)	RPD CL
1,1,1,2-Tetrachloroethane	ND	U	ND	U		30.00
1,1,1-Trichloroethane	ND	U	ND	U		30.00
1,1,2,2-Tetrachloroethane	ND	U	ND	U		30.00
1,1,2-Trichloroethane	ND	U	ND	U		30.00
1,1-Dichloroethane	ND	U	ND	U		30.00
1,1-Dichloroethene	ND	U	ND	U		30.00
1,1-Dichloropropene	ND	U	ND	U		30.00
1,2,3-Trichlorobenzene	ND	U	ND	U		30.00
1,2,3-Trichloropropane	ND	U	ND	U		30.00
1,2,4-Trichlorobenzene	ND	U	ND	U		30.00
1,2,4-Trimethylbenzene	ND	U	ND	U		30.00
1,2-Dibromo-3-chloropropane	ND	U	ND	U		30.00
1,2-Dibromoethane	ND	U	ND	U		30.00
1,2-Dichlorobenzene	ND	U	ND	U		30.00
1,2-Dichloroethane	ND	U	ND	U		30.00
1,2-Dichloropropane	ND	U	ND	U		30.00
1,3,5-Trimethylbenzene	ND	U	ND	U		30.00
1,3-Dichlorobenzene	ND	U	ND	U		30.00
1,3-Dichloropropane	ND	U	ND	U		30.00
1,4-Dichlorobenzene	ND	U	ND	U		30.00
2,2-Dichloropropane	ND	U	ND	U		30.00
2-Butanone	ND	U	ND	U		30.00
2-Chlorotoluene	ND	U	ND	U		30.00
2-Hexanone	ND	U	ND	U		30.00
4-Chlorotoluene	ND	U	ND	U		30.00
4-Isopropyltoluene	ND	U	ND	U		30.00
4-Methyl-2-pentanone	ND	U	ND	U		30.00
Acetone	10.4	J	ND	U		30.00

Print Date: 08/16/2012

N.C. Certification # 481

Duplicate Sample Summary

Original Sample ID: 31202490001-A
Duplicate Sample ID: 84698

Analysis Date: 08/09/2012 12:56
Analysis Date: 08/09/2012 16:04
Matrix: Soil-Solid as dry weight

QC for Samples: 31202490001, 31202490002, 31202490003

Results by **SW-846 8260B**

PARAMETER	Original (ug/Kg)	Qual	Duplicate (ug/Kg)	Qual	RPD (%)	RPD CL
Benzene	ND	U	ND	U		30.00
Bromobenzene	ND	U	ND	U		30.00
Bromochloromethane	ND	U	ND	U		30.00
Bromodichloromethane	ND	U	ND	U		30.00
Bromoform	ND	U	ND	U		30.00
Bromomethane	ND	U	ND	U		30.00
Carbon disulfide	ND	U	ND	U		30.00
Carbon tetrachloride	ND	U	ND	U		30.00
Chlorobenzene	ND	U	ND	U		30.00
Chloroethane	ND	U	ND	U		30.00
Chloroform	ND	U	ND	U		30.00
Chloromethane	ND	U	ND	U		30.00
cis-1,2-Dichloroethene	ND	U	ND	U		30.00
cis-1,3-Dichloropropene	ND	U	ND	U		30.00
Dibromochloromethane	ND	U	ND	U		30.00
Dibromomethane	ND	U	ND	U		30.00
Dichlorodifluoromethane	ND	U	ND	U		30.00
Diisopropyl Ether	ND	U	ND	U		30.00
Ethyl Benzene	ND	U	ND	U		30.00
Hexachlorobutadiene	ND	U	ND	U		30.00
Isopropylbenzene (Cumene)	ND	U	ND	U		30.00
m,p-Xylene	ND	U	ND	U		30.00
Methyl iodide	ND	U	ND	U		30.00
Methylene chloride	3.16	J	3.48	J	9.6	30.00
n-Butylbenzene	ND	U	ND	U		30.00
n-Propylbenzene	ND	U	ND	U		30.00
Naphthalene	ND	U	ND	U		30.00
o-Xylene	ND	U	ND	U		30.00

Print Date: 08/16/2012

N.C. Certification # 481

Duplicate Sample Summary

Original Sample ID: 31202490001-A
Duplicate Sample ID: 84698

Analysis Date: 08/09/2012 12:56
Analysis Date: 08/09/2012 16:04
Matrix: Soil-Solid as dry weight

QC for Samples: 31202490001, 31202490002, 31202490003

Results by SW-846 8260B

PARAMETER	Original (ug/Kg)	Qual	Duplicate (ug/Kg)	Qual	RPD (%)	RPD CL
sec-Butylbenzene	ND	U	ND	U		30.00
Styrene	ND	U	ND	U		30.00
tert-Butyl methyl ether (MTBE)	ND	U	ND	U		30.00
tert-Butylbenzene	ND	U	ND	U		30.00
Tetrachloroethene	16.9		14.7		14	30.00
Toluene	0.761	J	0.848	J	11	30.00
trans-1,2-Dichloroethene	ND	U	ND	U		30.00
trans-1,3-Dichloropropene	ND	U	ND	U		30.00
trans-1,4-Dichloro-2-butene	ND	U	ND	U		30.00
Trichloroethene	ND	U	ND	U		30.00
Trichlorofluoromethane	ND	U	ND	U		30.00
Vinyl chloride	ND	U	ND	U		30.00
Xylene (total)	ND	U	ND	U		
Surrogates						
1,2-Dichloroethane-d4	109		111		4.8	
4-Bromofluorobenzene	95.0		96.0		4.7	
Toluene d8	104		104		3.4	

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: 08/06/2012 16:30

Print Date: 08/16/2012

N.C. Certification # 481

Batch Summary

Analytical Method: SW-846 8270D

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

Client Sample ID	Lab Sample ID	Analysis Date	Analytical Batch	Instrument	Analyst
MB for HBN 26827 [XXX/2895]	84201	08/08/2012 11:24	XMS1628	MSD10	CMP
LCS for HBN 26827 [XXX/2895]	84202	08/08/2012 11:47	XMS1628	MSD10	CMP
103DPT-04 (5-5.5ft)(83842MS)	84203	08/08/2012 12:33	XMS1628	MSD10	CMP
103DPT-04 (5-5.5ft)(83842MSD)	84204	08/08/2012 12:56	XMS1628	MSD10	CMP
105DPT-12 (6-7ft)	31202490001	08/08/2012 18:38	XMS1628	MSD10	CMP
105DPT-13 (6-7ft)	31202490002	08/08/2012 19:01	XMS1628	MSD10	CMP
105DPT-14 (4.5-5ft)	31202490003	08/08/2012 19:24	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:
31202490001, 31202490002, 31202490003

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:
31202490001, 31202490002, 31202490003

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: 31202490001, 31202490002, 31202490003

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: 31202490001, 31202490002, 31202490003

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: 31202490001, 31202490002, 31202490003

Results by SW-846 8270D

Parameter	Spike	Blank 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:

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 Ashbe CATLIN PHONE NO: (910) 452-5861
PROJECT: NCDOT Parcel 105 SITE / PWSID / WBS #: 35781.1.2
REPORTS TO: U-3315
EMAIL: ben-ashbe@catlinusa.com Pitt County
INVOICE TO: NCDOT QUOTE #
P.O. NUMBER: NCDOT

SGS Reference #: 31202490

PAGE 1 OF 1

PRESERVATIVES USED: MeOH / Sod. Bisul

ANALYSIS REQUIRED: 8260, 8270 BN

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	# CONTAINERS	SAMPLE TYPE (C= COMP, G= GRAB)	8260	8270 BN								REMARKS
	105 DPT-12 (6-7')	8.3.12	1050	Soil	5	G	✓	✓								
	105 DPT-13 (6-7')	↓	1110	↓	↓	↓	↓	↓								
	105 DPT-14 (4.5-5')	↓	1130	↓	↓	↓	↓	↓								

COLLECTED/RELINQUISHED BY: (1)	DATE	TIME	RECEIVED BY:
[signature]	8-3-12	1500	[signature]
Relinquished By: (2)	Date	Time	Received By:
Relinquished By: (3)	Date	Time	Received By:
Received For Laboratory By:	Date	Time	CoC Seal: INTACT BROKEN ABSENT (circled) Sample Receipt Temp: C. 8.2°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)

White - Retained by Lab
Yellow - Retained by Client

SGS North America Inc.

Sample Receipt Checklist (SRC)

Client: **NCDOT-Catlin** Work Order No.: **31202490**

1. ___ Shipped
   _X_ Hand Delivered

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

3. ___ Custody Tape on Container
   _X_ No Custody Tape

4. _X_ Samples Intact
   ___ Samples Broken / Leaking

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

6. _X_ Sufficient Sample Submitted
   ___ Insufficient Sample Submitted

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

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

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

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

Notes:

Comments:

Inspected and Logged in by: JJ

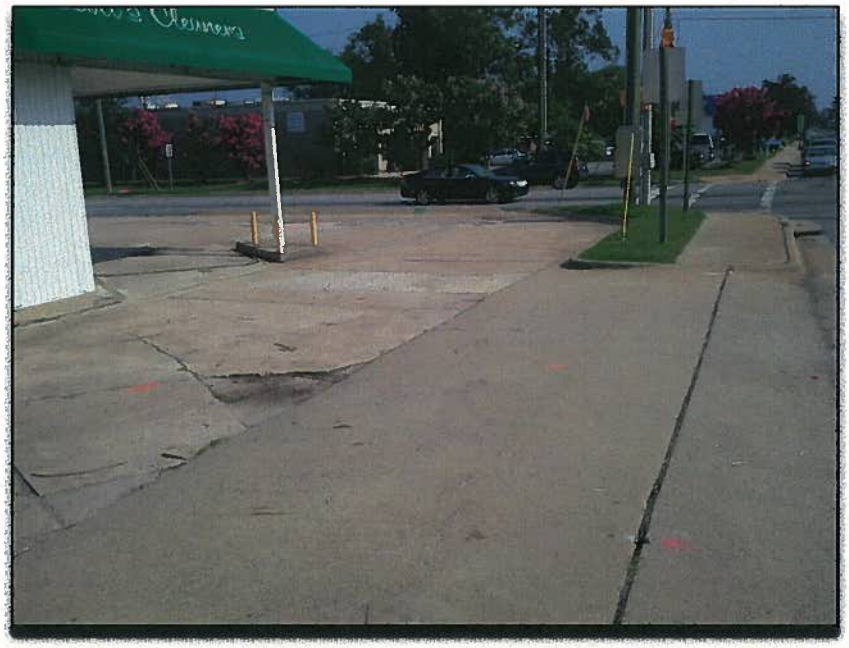
Date: Mon-8/6/12 00:00

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

APPENDIX D
PHOTOGRAPHS

PARCEL 105, VINCENT PEELE PROPERTY, LLC
111 WEST 10TH STREET

From Northeast property corner looking west-southwest across front of Scott's Cleaners and Former Amoco. Note obvious former dispenser locations in center of picture and former bay doors (3) on front of building converted to windows.



From near Southeast property corner looking North along Evans Street.

PARCEL 105, VINCENT PEELE PROPERTY, LLC
111 WEST 10TH STREET

Pipes at East-Southeast corner of Scott's Cleaners.

From Eastern property line along Evans St. looking West.

PARCEL 105, VINCENT PEELE PROPERTY, LLC
111 WEST 10TH STREET

From Southern property line behind Greenville Awning looking East along Southern property line.

From W. 10th St. looking Southeast towards Greenville Awning.