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January 31, 2013

Mr. Gordon Box
NC Department of Transportation
GeoEnvironmental Section
1589 Mail Service Center
Raleigh, North Carolina, 27699-1589

Reference: Preliminary Site Assessment
Parcels 52, 53, 54, and 57
1310 West 14th Avenue, Greenville, NC 27834
State Project: U-3315
WBS Element 35781.1.2
ATC Project No. 45.19873.0007

Dear Mr. Box:

ATC Associates of North Carolina, P.C. (ATC) has prepared this report to document the results of a preliminary site assessment (PSA) conducted at the above referenced parcels. The assessment was conducted in accordance with the Technical and Cost Proposal submitted to the North Carolina Department of Transportation (NCDOT) on July 27, 2012, and a Notice to Proceed letter issued by the NCDOT on August 16, 2012. At the request of the NCDOT, the PSA for the above referenced parcels were combined in one report. This report describes field activities, laboratory results, estimated impacted soil quantities, and conclusions based on the collected data.

1.0 BACKGROUND INFORMATION

According to the request for technical and cost proposal (RFP) dated July 10, 2012, parcels 52, 53, 54, and 57 (site) are located at 1310 West 14th Avenue in Greenville, North Carolina. Beginning at the intersection of West 14th Avenue and Spruce Street, the four adjacent parcels follow Spruce Street northeast to its intersection with Pennsylvania Avenue. A site plan is included as *Figure 1*. Per the RFP, the site building (located on Parcel 52) functions as an industrial repair shop. During ATC's initial site visit, it was discovered that the site stores and repairs multifunction motors. The site is bound to the northwest by Spruce Street, the northeast by Pennsylvania Avenue, and the southwest by West 14th Avenue. Parcels 171 and 51 are located adjacently to the southeast and northwest, respectively, and their PSA's are documented in separate reports.

The site lies within the coastal plain of North Carolina and is underlain by the Yorktown formation, which generally consists of fossiliferous clays and sands. Specifically, the site lies in

the Tar-Pamlico river basin and groundwater flows generally to the northeast across the site. A groundwater gradient map for the surrounding parcels is included as **Figure 1**. Note that groundwater elevations gauged on-site were not included in the previously submitted **Figure 1**. Parcels 52, 53, 54, and 57 have been identified for total take status and therefore the NCDOT requested assessment activities be performed over the entirety of the site. A parcel identification map is included as **Figure 2**.

As per the Technical and Cost Proposal, ATC obtained a report provided by Environmental Data Resources, Inc. (EDR) of Milford, Connecticut. The report was reviewed for information regarding reported releases of hazardous substances and petroleum products on or near the site. ATC also reviewed the “unmappable” (also referred to as “orphan”) listings within the database report, cross-referencing available address information and facility names. Unmappable sites are listings that could not be plotted with confidence, but are potentially in the general area of the property in question based on the partial street address, city, or zip code. No unmappable sites were identified by ATC as being within the approximate minimum search distance from Parcels 52, 53, 54, and 57 (the Bowen parcels) based on the site reconnaissance and/or cross-referencing to mapped listings. In addition, the Bowen parcels were not listed on any federal/state/local databases reviewed for this part of the historical assessment. The adjacent property to the northwest across Spruce Street was listed as American Auto Body (Parcel 51) which was identified as a RCRA Non Generator and also listed on the FINDS database. The RCRA Non Generator list identifies sites that used to be on the RCRA generators database, but no longer generate wastes. The FINDS database is a “pointer” database that also indicates this site was a generator of hazardous wastes. The Sanborn Maps for the site depict the property as vacant from 1923 to 1946. The property buildings first appear in the 1958 Sanborn Maps. There are three concrete buildings, one each on Parcels 52, 53, and 54 while Parcel 57 is depicted as undeveloped. The building on Parcel 53 is labeled as dry cleaning. The building on Parcel 52 is labeled as a Tin Shop. The building on Parcel 54 is not labeled. The aerials photographs depict the site developed with the same three buildings back to 1957. The city directories do not list the site. The complete EDR report is included in **Appendix A**.

2.0 FIELD ACTIVITIES

2.1 Geophysical Survey

Prior to performing soil assessment activities, ATC contacted Stantec Consulting Services, Inc. (Stantec) to perform a geophysical survey of the site. The purpose of the survey was to locate USTs and/or other buried structures on the parcel. This was to be done in the area of the proposed NCDOT right of way and included proposed excavations for drainage lines, utilities, and slope stake cuts. The areas inside the buildings were excluded from the survey at the request of the property owner. The survey was conducted on November 29, 2012 and included electromagnetic (EM) induction-magnetic detection and ground penetrating radar (GPR) surveys. According to Stantec’s survey, no USTs and/or other buried structures were present on the parcel. Four target areas were identified where the subsurface conditions appeared altered. Three of these are likely buried trash and the fourth area is suggestive of a former UST pit. The complete geophysical report is provided in **Appendix B**. Based on the findings of the survey and the total take status of the site, ATC performed a drilling event to assess soil and groundwater conditions at the site. Details of the soil and groundwater assessment are included in **Sections 2.2** and **2.3**.

2.2 Soil Assessment

Based on the results of the geophysical survey and in anticipation of a total take by the NCDOT, a soil assessment was completed on-site but did not include the interior of the buildings. On December 11, 2012, ATC mobilized to the site with South Atlantic Environmental Drilling and Construction Company (SAEDACCO) to conduct sampling activities. Over the course of the event, 27 borings (SB52-1, SB52-2, SB53-1 through SB53-9, SB54-1 through SB54-4, SB57-1 through SB57-10, TW52-1, and TW54-1) were advanced using direct-push technology (DPT) drilling techniques. Prior to the drilling, Stantec was contracted to conduct utility clearance in conjunction with the geophysical survey investigation. The NCDOT and North Carolina's 811 service were also notified prior to field activities.

The locations of the borings are shown on the attached **Figure 3**. Each boring was advanced to a depth of five feet below ground surface (bgs) via hand auger prior to utilizing DPT drilling techniques to complete the sampling. Soil samples were collected every 1 to 3 feet and screened with a photo-ionization detector (PID). Soils encountered consisted primarily of gray, tan, and brown silty sands and clays. The highest PID reading collected during the soil assessment was 249 parts per million (ppm) in the 2.5-5 feet bgs interval of TW52-1. Boring logs are included in **Appendix C**.

One soil sample from each boring was submitted for laboratory analysis. This was determined by either submitting the interval with the highest PID reading, or, if not applicable, the deepest interval at which proposed construction would take place. Samples were submitted to SGS Analytical Perspectives (SGS) in Wilmington, North Carolina. Following proper chain-of-custody protocol, the samples were placed in laboratory supplied containers in an ice filled cooler for analysis of Total Petroleum Hydrocarbons – Gasoline Range Organics (TPH-GRO) and Diesel Range Organics (TPH-DRO) by EPA Method 8015 Modified. Due to their proximity to current and former industrial activities at the site, select samples (SB53-5 through SB53-9, SB57-6 through SB57-10, TW52-1, and TW54-1) were also analyzed for volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs) by EPA methods 8260B and 8270D, respectively. Additionally, due to a historic drycleaner in the structure on Parcel 53, samples SB53-1 through SB53-4 were submitted for EPA method 8260B only. A discussion of the laboratory results is provided in **Section 3.0**.

2.3 Groundwater Assessment

ATC supervised SAEDACCO during the installation of temporary wells TW52-1 and TW54-1 on December 12, 2012. The borings were advanced to a depth of five feet bgs via hand auger prior to utilizing DPT drilling techniques to complete the well installation activities. Temporary wells TW52-1 and TW54-1 were installed at a depth of 12 feet bgs using 10 feet of 0.010-inch machine slotted 1-inch poly vinyl chloride (PVC) well screen and five feet of solid PVC riser. The annular space of the boring was filled with washed silica sand to an approximate depth of 2 feet bgs. The location of the temporary wells is shown on the attached **Figure 3** and their boring logs are included in **Appendix C**.

Following the temporary well installations, ATC gauged approximate depths to water of 6.43 and 6.55 feet below the top of well casings in TW52-1 and TW54-1, respectively. A peristaltic pump and dedicated polyethylene tubing were used to purge approximately one gallon from each

well prior to collecting groundwater samples. The samples were submitted to SGS under chain-of-custody protocol for analysis of VOCs by EPA Method 8260B and SVOCs by EPA Method 8270D. Following surveying, the borings were filled with native soil and finished to approximately 6 inches below surface grade with bentonite. The remainder of the borings were then filled using material to match the surround surface.

3.0 LABORATORY RESULTS

The results of the laboratory analyses for soil samples collected on-site indicated detectable concentrations of TPH-GRO in SB53-2 and TW52-1 and detectable concentrations of TPH-DRO in SB53-1 through SB53-3, SB53-5 through SB53-7, SB54-2, SB54-4, SB57-5, TW52-1, and TW54-1.

Comparison of detected concentrations to the NCDENR action level of 10 milligrams per kilogram (mg/kg) indicated exceedences of TPH-GRO in SB53-2 and TW52-1 and TPH-DRO in SB53-1 through SB53-3, SB53-5 through SB53-7, SB54-2, SB57-5, TW52-1, and TW54-1. The results of the VOC and SVOC analyses indicated concentrations of benzene, naphthalene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and dibenzene(a,h)anthracene, above the NCDENR soil-to-groundwater maximum soil contaminant concentration levels (MSCCs). Note that the soil investigation did not detect tetrachloroethene (PCE), a common drycleaning chlorinated solvent compound, in any of the soil samples collected.

The results of laboratory analyses for groundwater sample TW52-1 indicated levels of naphthalene, 4-isopropyltoluene, and bis(2-ethylhexyl)phthalate [DEHP] at concentrations above NC Title 15A NCAC 2L .0202 Groundwater Standards (2L Standards). Additionally, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, indeno(1,2,3-cd)pyrene, and dibenz(a,h)anthracene were detected at concentrations higher than the NC Title 15A NCAC 2L .0202 Gross Contamination Levels for Groundwater (GCLs). The results of laboratory analyses for groundwater sample TW54-1 indicated levels of benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, and chrysene at concentrations above GCLs. The laboratory analytical report is included in *Appendix D* and a summary of the laboratory results for the soil and groundwater sampling are provided in *Tables I* and *2*, respectively.

4.0 IMPACTED SOIL ASSESSMENT

The results of the soil and groundwater assessment indicate that soil has been impacted above the NCDENR action level and/or soil-to-groundwater MSCCs. Therefore, ATC proceeded with estimating the quantity of impacted soil as directed in the RFP. Specifically, soil samples collected from borings TW52-1 (2.5-5' bgs), SB53-1 (0-2.5' bgs), SB53-2 (2.5-5' bgs), SB53-3 (0-2.5' bgs), SB53-5 (2.5-5' bgs), SB53-6 (0-2.5' bgs), SB53-7 (0-2.5' bgs), SB54-2 (0-2.5' bgs), TW54-1 (0-2.5' bgs), and SB57-5 (0-2.5' bgs) were used to calculate volumes in four locations. At the request of the NCDOT, volume calculations are separated into two categories. The first volume estimation represents the total quantity of impacted soil on-site. The second volume estimation represents the quantity of impacted soil that will need to be handled during the proposed construction. The volume to be handled during the proposed construction was estimated based on proposed drainage, utility, and cut/fill construction elevations provided by the

NCDOT. Quantities are estimated in cubic yards and converted to tons using an NCDOT provided multiplier of 1.5 tons per cubic yard.

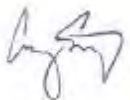
For the first volume estimation, ATC calculated a volume of approximately 844.8 cubic yards (1,267.2 tons) for the total volume of impacted soil on-site. For the second volume estimation, ATC calculated a volume of approximately 367.31 cubic yards (550.97 tons) for the volume of impacted soil that may need to be handled during proposed construction. It should be noted that the exact horizontal extent of impacted soil has not been fully delineated. This is in part due to restricted interior access of the multiple buildings on the parcels. As such, ATC's estimations should be considered approximations and actual quantities may vary. If the NCDOT requires a greater level of assurance regarding the extent, additional sampling could be performed for confirmation. In addition, a traffic signal pole is in close proximity to the "Estimated Extent of Impacted Soil" as denoted on *Figure 4*. Therefore, an additional 13.96 cubic yards (20.94 tons) of impacted soil may need to be handled during the proposed construction. Detailed calculations, references, and ATC's assumptions are included in *Appendix E*.

5.0 CONCLUSIONS

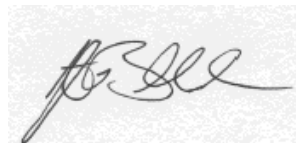
ATC has completed PSA activities at Parcels 52, 53, 54, and 57 in Greenville, North Carolina. The results of the assessment indicate that soil at the site has been impacted above NCDENR action levels and soil-to-groundwater MSCCs. Groundwater assessed on-site indicated constituents above 2L Standards and GCLs. Some of these constituents represent polycyclic aromatic hydrocabons (PAHs) found in petroleum distillates for fuel and motor oil. Based on a review of the site's historical data, geophysical investigation, and field assessment, ATC concludes that the impacted soil and groundwater may be associated with possible current and/or former commercial/industrial activities at the site. ATC recommends that the collected data be provided to the NCDENR Division of Waste Management. If impacted soil or groundwater is encountered during construction activities, appropriate measures should be taken to ensure worker safety. In addition, any impacted soil or groundwater disturbed during construction should be handled and disposed of in accordance with applicable regulations.

ATC appreciates the opportunity to assist the NCDOT with this project. If you have questions or require additional information, please do not hesitate to contact us at (919) 871-0999.

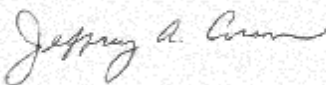
Sincerely,
ATC Associates of North Carolina, P.C.



Corey M. Scheip
Staff Scientist



Justin C. Ballard, P.G.
Project Geologist



Jeffrey A. Corson
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Attachments:

1. Table 1 – Soil Analytical Data
2. Table 2 – Groundwater Analytical Data
3. Figure 1 – Project Groundwater Gradient Map
4. Figure 2 – Parcel Identification Map
5. Figure 3 – Sample Location Map
6. Figure 4 – Soil Analytical Data Map
7. Figure 5 – Groundwater Analytical Data Map
8. Appendix A –EDR Report
9. Appendix B – Geophysical Investigation Report
10. Appendix C – Boring Logs
11. Appendix D – Laboratory Analytical Report
12. Appendix E – Volumetric Calculations

TABLES

TABLE 1
PSA
SOIL ANALYTICAL DATA
PARCELS 52,53,54, and 57
GREENVILLE, PITT COUNTY, NORTH CAROLINA
ATC PROJECT NO. 45.19873.0007
WBS ELEMENT NO. 35781.1.2

EPA Method:				5030/8015	3550/8015	EPA 8260B AND 8270D																
Boring LD.	Depth (feet)	Sampling Date	PID Reading (ppm)	TPH-GRO	TPH-DRO	Benzene	Ethylbenzene	MTBE	Toluene	Total Xylenes	Naphthalene	Tetrachloroethene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	2-Butanone	4-Isopropyltoluene	Acetone	n-Butylbenzene	Isopropylbenzene (Cumene)	n-Propylbenzene	sec-Butylbenzene	
SB52-1	0-2.5	12/13/2012	0	<3.13	<7.11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB52-2	0-2.5	12/13/2012	0	<3.79	<7.22	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB53-1	0-2.5	12/12/2012	0	<3.54	15.7	<0.00464	<0.00464	<0.00464	<0.00464	<0.00928	<0.00464	<0.00464	<0.00464	<0.00464	<0.0232	<0.00464	<0.0464	<0.00464	<0.00464	<0.00464	<0.00464	<0.00464
SB53-2	2.5-5	12/13/2012	28	22.4	308	<0.0987	<0.0987	<0.0987	<0.0987	<0.197	1.45	<0.0987	<0.0987	<0.0987	<2.47	<0.0987	<2.47	0.3	<0.0987	<0.0987	<0.0987	<0.0987
SB53-3	0-2.5	12/12/2012	0	<3.8	30.3	<0.00448	<0.00448	<0.00448	<0.00448	<0.00896	<0.00448	<0.00448	<0.00448	<0.00448	<0.0224	<0.00448	<0.0448	<0.00448	<0.00448	<0.00448	<0.00448	<0.00448
SB53-4	0-2.5	12/12/2012	0	<4.13	<7.33	<0.00538	<0.00538	<0.00538	<0.00538	<0.00108	<0.00538	<0.00538	<0.00538	<0.00538	<0.0269	<0.00538	<0.0538	<0.00538	<0.00538	<0.00538	<0.00538	<0.00538
SB53-5	2.5-5	12/13/2012	1.3	<3.42	26.7	<0.00467	<0.00467	<0.00467	<0.00467	<0.00934	<0.00467	<0.00467	<0.00467	<0.00467	<0.0234	<0.00467	<0.0467	<0.00467	<0.00467	<0.00467	<0.00467	<0.00467
SB53-6	0-2.5	12/13/2012	1.7	<4.4	26	<0.00597	<0.00597	<0.00597	<0.00597	<0.0119	<0.00597	<0.00597	<0.00597	<0.00597	<0.0299	<0.00597	0.0601	<0.00597	<0.00597	<0.00597	<0.00597	<0.00597
SB53-7	0-2.5	12/13/2012	1.1	<3.17	13.8	0.00694	<0.00417	<0.00417	<0.00417	<0.00834	<0.00417	<0.00417	<0.00417	<0.00417	<0.0209	<0.00417	<0.0417	<0.00417	<0.00417	<0.00417	<0.00417	<0.00417
SB53-8	6-8	12/13/2012	0.8	<3.53	<7.5	<0.00416	<0.00416	<0.00416	<0.00416	<0.00832	<0.00416	<0.00416	<0.00416	<0.00416	<0.0208	<0.00416	<0.0416	<0.00416	<0.00416	<0.00416	<0.00416	<0.00416
SB53-9	2.5-5	12/13/2012	0	<3.45	<7.65	<0.00442	<0.00442	<0.00442	<0.00442	<0.00883	<0.00442	<0.00442	<0.00442	<0.00442	<0.0221	<0.00442	<0.0442	<0.00442	<0.00442	<0.00442	<0.00442	<0.00442
SB54-1	2.5-5	12/12/2012	7.1	<3.82	<8.06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB54-2	0-2.5	12/12/2012	0	<3.99	51.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB54-3	0-2.5	12/12/2012	0	<3.51	<7.86	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB54-4	0-2.5	12/12/2012	0	<3.78	9.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB57-1	0-2.5	12/11/2012	0	<3.44	<7.45	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB57-2	0-2.5	12/11/2012	0	<3.76	<7.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB57-3	0-2.5	12/11/2012	0	<3.69	<8.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB57-4	0-2.5	12/11/2012	0	<3.93	<7.97	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB57-5	0-2.5	12/11/2012	0	<4.14	10.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB57-6	6-8	12/11/2012	0	<4.5	<7.38	<0.00501	<0.00501	<0.00501	<0.00501	<0.01	<0.00501	<0.00501	<0.00501	<0.00501	<0.025	<0.00501	<0.0501	<0.00501	<0.00501	<0.00501	<0.00501	<0.00501
SB57-7	6-8	12/12/2012	0	<4.18	<7.57	<0.00499	<0.00499	<0.00499	<0.00499	<0.00999	<0.00499	<0.00499	<0.00499	<0.00499	<0.025	<0.00499	<0.0499	<0.00499	<0.00499	<0.00499	<0.00499	<0.00499
SB57-8	6-8	12/12/2012	0	<4.05	<7.71	<0.00495	<0.00495	<0.00495	<0.00495	<0.00995	<0.00495	<0.00495	<0.00495	<0.00495	<0.0247	<0.00495	<0.0495	<0.00495	<0.00495	<0.00495	<0.00495	<0.00495
SB57-9	6-8	12/12/2012	0	<4.06	<7.66	<0.00475	<0.00475	<0.00475	<0.00475	<0.0095	<0.00475	<0.00475	<0.00475	<0.00475	<0.0238	<0.00475	<0.0475	<0.00475	<0.00475	<0.00475	<0.00475	<0.00475
SB57-10	5-6	12/12/2012	0	<3.86	<7.62	<0.00513	<0.00513	<0.00513	<0.00513	<0.0103	<0.00513	<0.00513	<0.00513	<0.00513	<0.0257	<0.00513	<0.0513	<0.00513	<0.00513	<0.00513	<0.00513	<0.00513
TW52-1	2.5-5	12/12/2012	249	339	35.2	<0.362	<0.362	<0.362	<0.362	<0.733	0.662	<0.362	6.49	2.27	<9.04	2.52	<9.04	<0.362	<0.362	0.68	<0.362	<0.362
TW54-1	0-2.5	12/12/2012	0	<3.63	160	<0.0422	<0.0422	<0.0422	<0.0422	<0.0845	0.178	<0.0422	<0.0422	<0.0422	<1.06	<0.0422	<1.06	<0.0422	<0.0422	<0.0422	<0.0422	<0.0422
NCDENR Action Level				10	10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Soil-to-Groundwater MSCC				--	--	0.0056	4.9	0.091	4.3	4.6	0.16	0.0074	8.5	8.3	16	0.12	24	4.3	1.7	1.7	1.7	3.3
Residential MSCC				--	--	18	1,560	350	1,200	3,129	313	1.1	782	782	9,385	100	14,000	626	1,564	626	626	626
Industrial/Commercial MSCC				--	--	164	40,000	3,100	32,000	81,760	8,176	10	20,440	20,440	245,280	4,000	360,000	16,350	40,880	16,350	16,350	16,350

- Notes:
1. TPH = Total petroleum hydrocarbons.
2. GRO = Gasoline range organics.
3. DRO = Diesel range organics.
4. Concentrations reported in milligrams per kilogram (mg/kg).
5. "<" = not detected at or above the laboratory detection limit.
6. MSCC = Maximum Soil Contaminant Concentration Levels.
7. NE = Not established.
8. NA = Not analyzed.
9. MTBE = Methyl tertiary butyl ether.
10. Values in **BOLD** indicate levels above Soil-to-Groundwater MSCCs and/or the NCDENR Action Level.
11. # = Health based level > 100%.

TABLE 1 (continued)
 PSA
 SOIL ANALYTICAL DATA
 PARCELS 52,53,54, and 57
 GREENVILLE, PITT COUNTY, NORTH CAROLINA
 ATC PROJECT NO. 45.19873.0007
 WBS ELEMENT NO. 35781.1.2

EPA Method:				EPA 8260B AND 8270D																
Boring I.D.	Depth (feet)	Sampling Date	PID Reading (ppm)	2-Methylnaphthalene	Acenaphthene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Dibenzofuran	Fluoranthene	Flourene	Ideno(1,2,3-cd)pyrene	Phenanthrene	Pyrene	
SB52-1	0-2.5	12/13/2012	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB52-2	0-2.5	12/13/2012	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB53-1	0-2.5	12/13/2012	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB53-2	2.5-5	12/13/2012	28	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB53-3	0-2.5	12/12/2012	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB53-4	0-2.5	12/12/2012	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB53-5	2.5-5	12/13/2012	1.3	<0.391	<0.391	<0.391	<0.391	<0.391	<0.391	<0.391	<0.391	<0.391	<0.391	<0.391	<0.391	<0.391	<0.391	<0.391	<0.391	<0.391
SB53-6	0-2.5	12/13/2012	1.7	<0.4	<0.4	<0.4	0.682	0.865	0.961	0.725	<0.4	1.01	<0.4	<0.4	1.27	<0.4	0.59	0.403	2.11	
SB53-7	0-2.5	12/13/2012	1.1	<0.367	<0.367	<0.367	<0.367	<0.367	<0.367	<0.367	<0.367	<0.367	<0.367	<0.367	<0.367	<0.367	<0.367	<0.367	<0.367	<0.367
SB53-8	6-8	12/13/2012	0.8	<0.382	<0.382	<0.382	<0.382	<0.382	<0.382	<0.382	<0.382	<0.382	<0.382	<0.382	<0.382	<0.382	<0.382	<0.382	<0.382	<0.382
SB53-9	2.5-5	12/13/2012	0	<0.387	<0.387	<0.387	<0.387	<0.387	<0.387	<0.387	<0.387	<0.387	<0.387	<0.387	<0.387	<0.387	<0.387	<0.387	<0.387	<0.387
SB54-1	2.5-5	12/12/2012	7.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB54-2	0-2.5	12/12/2012	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB54-3	0-2.5	12/12/2012	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB54-4	0-2.5	12/12/2012	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB57-1	0-2.5	12/11/2012	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB57-2	0-2.5	12/11/2012	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB57-3	0-2.5	12/11/2012	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB57-4	0-2.5	12/11/2012	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB57-5	0-2.5	12/11/2012	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB57-6	6-8	12/11/2012	0	<0.377	<0.377	<0.377	<0.377	<0.377	<0.377	<0.377	<0.377	<0.377	<0.377	<0.377	<0.377	<0.377	<0.377	<0.377	<0.377	<0.377
SB57-7	6-8	12/12/2012	0	<0.402	<0.402	<0.402	<0.402	<0.402	<0.402	<0.402	<0.402	<0.402	<0.402	<0.402	<0.402	<0.402	<0.402	<0.402	<0.402	<0.402
SB57-8	6-8	12/12/2012	0	<0.377	<0.377	<0.377	<0.377	<0.377	<0.377	<0.377	<0.377	<0.377	<0.377	<0.377	<0.377	<0.377	<0.377	<0.377	<0.377	<0.377
SB57-9	6-8	12/12/2012	0	<0.397	<0.397	<0.397	<0.397	<0.397	<0.397	<0.397	<0.397	<0.397	<0.397	<0.397	<0.397	<0.397	<0.397	<0.397	<0.397	<0.397
SB57-10	5-6	12/12/2012	0	<0.372	<0.372	<0.372	<0.372	<0.372	<0.372	<0.372	<0.372	<0.372	<0.372	<0.372	<0.372	<0.372	<0.372	<0.372	<0.372	<0.372
TW52-1	2.5-5	12/12/2012	249	<0.396	<0.396	<0.396	<0.396	<0.396	<0.396	<0.396	<0.396	<0.396	<0.396	<0.396	<0.396	<0.396	<0.396	<0.396	<0.396	<0.396
TW54-1	0-2.5	12/12/2012	0	0.374	1.13	2.26	4.94	3.82	4.85	2.28	1.83	4.45	0.736	0.751	9.68	0.823	2.21	7.99	7.75	
NCDENR Action Level				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Soil-to-Groundwater MSCC				3.6	8.2	940	0.35	0.096	1.2	6,400	12	39	0.17	4.7	290	47	3.4	56	270	
Residential MSCC				63	940	4,600	0.88	0.088	0.88	469	9.0	88	0.088	62	620	620	0.88	469	469	
Industrial/Commercial MSCC				1,635	24,000	122,000	8.0	0.78	8.0	12,264	78	780	0.78	1,635	16,400	16,400	8.0	12,264	12,264	

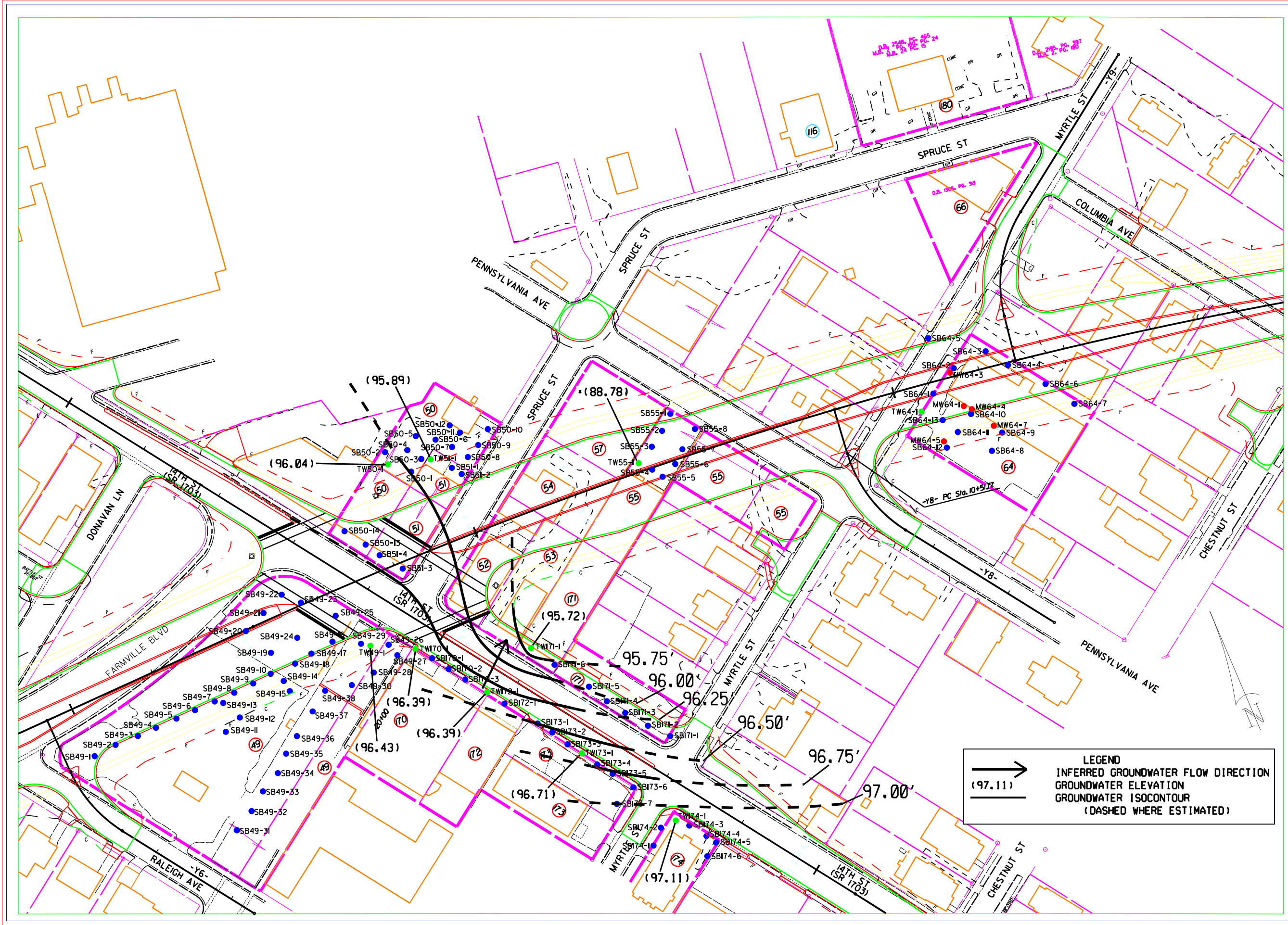
- Notes:
1. TPH = Total petroleum hydrocarbons.
 2. GRO = Gasoline range organics.
 3. DRO = Diesel range organics.
 4. Concentrations reported in milligrams per kilogram (mg/kg).
 5. "<" = not detected at or above the laboratory detection limit.
 6. MSCC = Maximum Soil Contaminant Concentration Levels.
 7. NE = Not established.
 8. NA = Not analyzed.
 9. MTBE = Methyl tertiary butyl ether.
 10. Values in **BOLD** indicate levels above Soil-to-Groundwater MSCCs and/or the NCDENR Action Level.
 11. # = Health based level > 100%.

TABLE 2
PSA
GROUNDWATER ANALYTICAL DATA
PARCELS 52, 53, 54, and 57
GREENVILLE, PITT COUNTY, NORTH CAROLINA
ATC PROJECT NO. 45.19873.0007
WBS ELEMENT NO. 35781.1.2

Analytical Method		EPA Method 8260B and 8270D																															
Contaminant of Concern		Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX	MTBE	Naphthalene	Tetrachloroethene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	4-Isopropyltoluene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Phenanthrene	Pyrene	Isopropylbenzene (Cumene)	n-Propylbenzene	sec-Butylbenzene	2-Methylnaphthalene	DEHP	Dibenz(a,h)anthracene	Dibenzofuran	Diethyl phthalate	
Well I.D.	Date Collected																																
TW52-1	12/12/2012	<5.0	<5.0	<5.0	<10	NE	<5.0	9.35	<5.0	132	31.2	25.6	15.4	49.6	43.8	54.9	24.4	24.2	47.5	89.4	7.69	24.3	69.4	77.3	15.5	12.2	15.2	8.76	16.3	8.55	8.12	32.1	
TW54-1	12/12/2012	<1.0	<1.0	<1.0	<2.0	NE	<1.0	2.22	<1.0	<1.0	<1.0	<1.0	7.13	22.8	23.5	30	16.3	11.8	23.5	46.5	<5.79	14.8	31.6	38.1	<1.0	<1.0	<1.0	<5.79	<5.79	<5.79	<5.79	<5.79	
2L Standard (mg/l)		1	600	600	500	NE	20	6	0.7	400	400	25	2,000	0.05	0.005	0.05	200	0.5	5.0	300	300	0.05	200	200	70	70	70	30	3.0	0.005	28	NE	
GCL (mg/l)		5,000	260,000	84,500	85,500	NE	20,000	6,000	700	28,500	25,000	11,700	2,000	4.7	0.81	0.75	200	0.5	5.0	300	990	0.05	410	200	25,000	30,000	8,500	12,500	170	1.2	28,000	NE	

- Notes:
1. "<" or ND = Not detected at or above the laboratory detection limit.
 2. Concentrations are reported in micrograms per liter (µg/l) = parts per billion.
 3. NCDENR = North Carolina Department of Environment and Natural Resources.
 4. GCL = Gross Contamination Level.
 5. Concentrations in **BOLD** print equal or exceed the NCDENR 2L Standard (2L).
 6. Concentrations in **BOLD** and **ITALIC** print equal or exceed the NCDENR GCL.
 7. NE = Not Established.
 8. MTBE = Methyl Tertiary Butyl Ether.
 9. Gross Contamination Levels for Groundwater are referenced in the Guidelines for Assessment and Corrective Action, November 2008, updated January 2010.
 10. BTEX = Benzene, Toluene, Ethylbenzene, Total Xylenes
 11. Temporary wells TW52-1 and TW54-1 were installed on 12/12/2012, sampled on 12/12/2012, and abandoned on 12/13/2012.
 12. DEHP = Bis(2-Ethylhexyl)phthalate.

FIGURES



ATC Associates of North Carolina, P.C.
 RALEIGH, NORTH CAROLINA (919) 871-0999 FAX (919) 871-0335

TITLE: **FIGURE 1**
 PROJECT: **GROUNDWATER GRADIENT MAP**
 STATIONS: **STANTONSBURG ROAD/TENTH STREET CONNECTOR FROM**
MEMORIAL DRIVE (US13) TO EVAN STREET
 GREENVILLE, NC
 NCDOT PROJECT U-3315

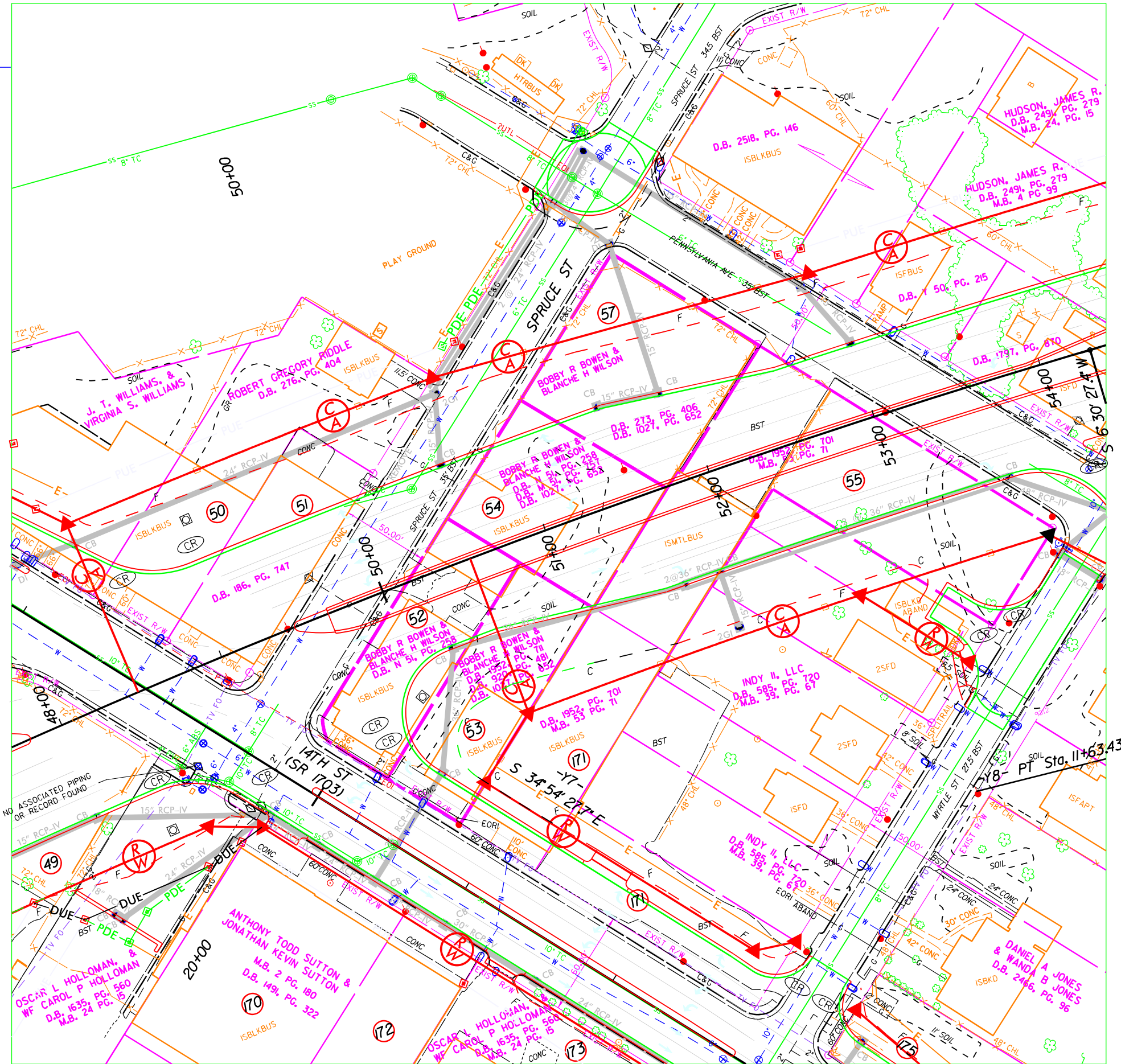
CAD FILE	WBS ELEMENT	PREP. BY	REV. BY	DATE	PROJECT NO.
	3578 I. 1.2	CS	JB	10-31-2012	45.19873.0007

NOTES:
 1) WELL TW55-1 NOT USED TO
 CONSTRUCT CONTOURS.

LEGEND
 INFERRED GROUNDWATER FLOW DIRECTION
 GROUNDWATER ELEVATION
 GROUNDWATER ISOCONTOUR
 (DASHED WHERE ESTIMATED)

LEGEND

- EXISTING RIGHT OF WAY
- PROPOSED RIGHT OF WAY
- PROPERTY LINE
- U/G CABLE TV
- U/G CABLE TELEPHONE
- U/G CABLE TELEPHONE FIBER OPTIC
- EXISTING HYDRO
- U/G CABLE TV FIBER OPTIC
- PERMANENT UTILITY EASEMENT
- FILL LINE
- CUT LINE
- CHL CHAIN LINK
- CB CATCH BASIN
- RCP REINFORCED CONCRETE PIPE
- EOT EDGE OF TRAVEL
- MH MANHOLE
- TC TERRA COTTA PIPE
- ☐ TRAFFIC SIGNAL POLE



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 PROJECT NO. 45.19873.0007
 DATE 01-24-2013
 SCALE 1"=60'-0"

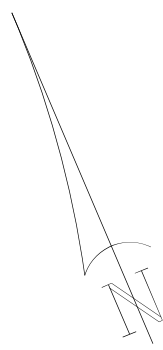
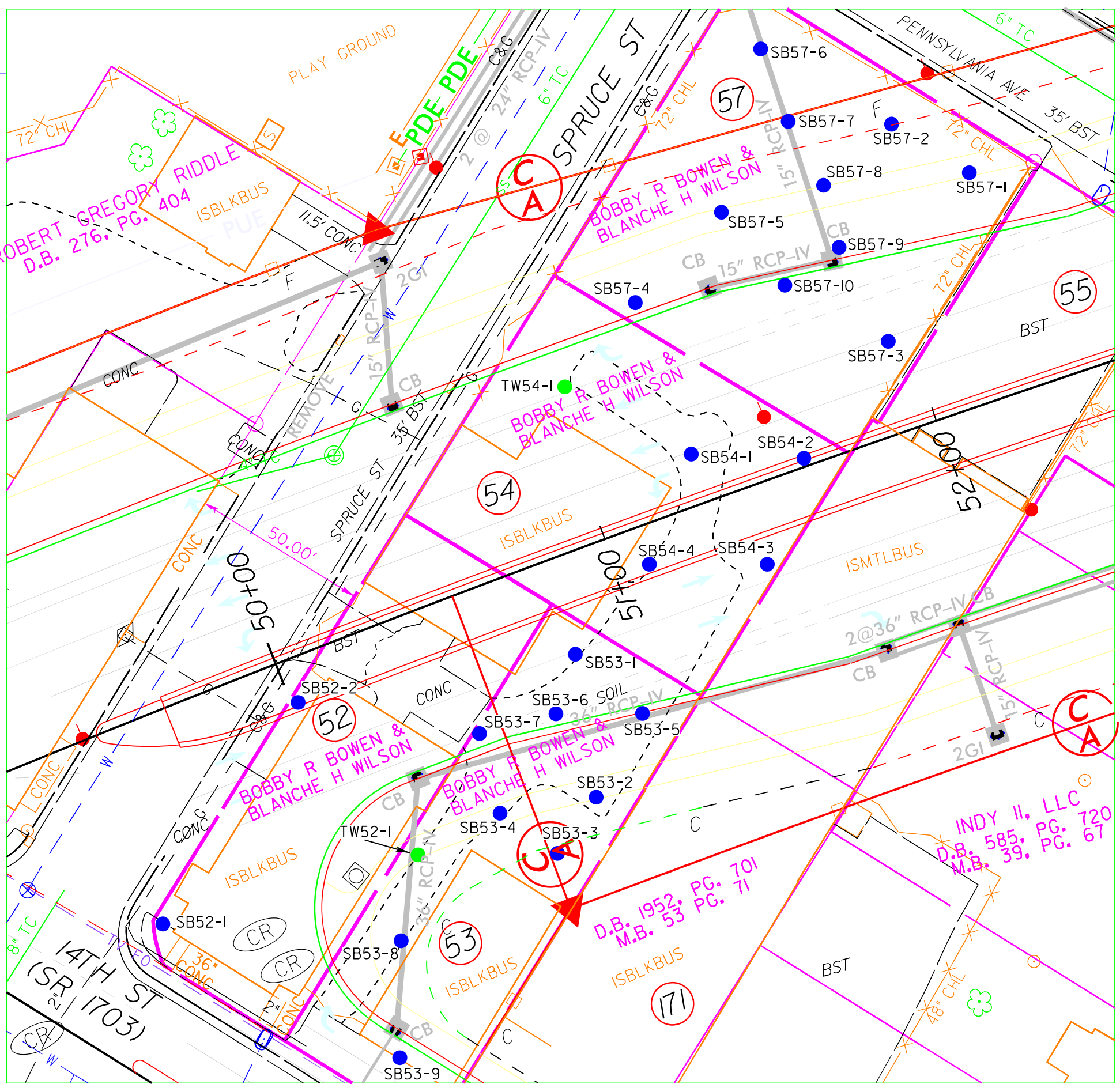
TITLE **FIGURE 2**
 PARCEL IDENTIFICATION MAP
 BOBBY R BOWEN & BLANCHE H WILSON PROPERTY -
 PARCELS 52, 53, 54 & 57
 1310 W 14TH AVE
 GREENVILLE NC 27858

WBS ELEMENT 35781.1.2
 PREP. BY JB
 REV. BY JC

NOTES:

LEGEND

- EXISTING RIGHT OF WAY
- PROPOSED RIGHT OF WAY
- PROPERTY LINE
- U/G CABLE TV
- U/G CABLE TELEPHONE
- U/G CABLE TELEPHONE FIBER OPTIC
- U/G ELECTRIC
- EXISTING HYDRO
- U/G CABLE TV FIBER OPTIC
- PERMANENT UTILITY EASEMENT
- FILL LINE
- CUT LINE
- CHL CHAIN LINK
- CB CATCH BASIN
- RCP REINFORCED CONCRETE PIPE
- EOT EDGE OF TRAVEL
- MH MANHOLE
- TC TERRA COTTA PIPE
- ☐ TRAFFIC SIGNAL POLE
- ⊙ UTILITY POLE
- ⊙ LIGHT POLE
- SOIL BORING LOCATION
- TEMPORARY WELL LOCATION



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 SCALE 1"=30'-0"
 DATE 01-24-2013
 PROJECT NO. 45.19873.0007

TITLE **FIGURE 3**
 SAMPLE LOCATION MAP
 BOBBY R BOWEN & BLANCHE H WILSON PROPERTY -
 PARCELS 52, 53, 54 & 57
 1310 W 14TH AVE
 GREENVILLE NC 27858

WBS ELEMENT	35781.1.2
PREP. BY	JB
REV. BY	JC

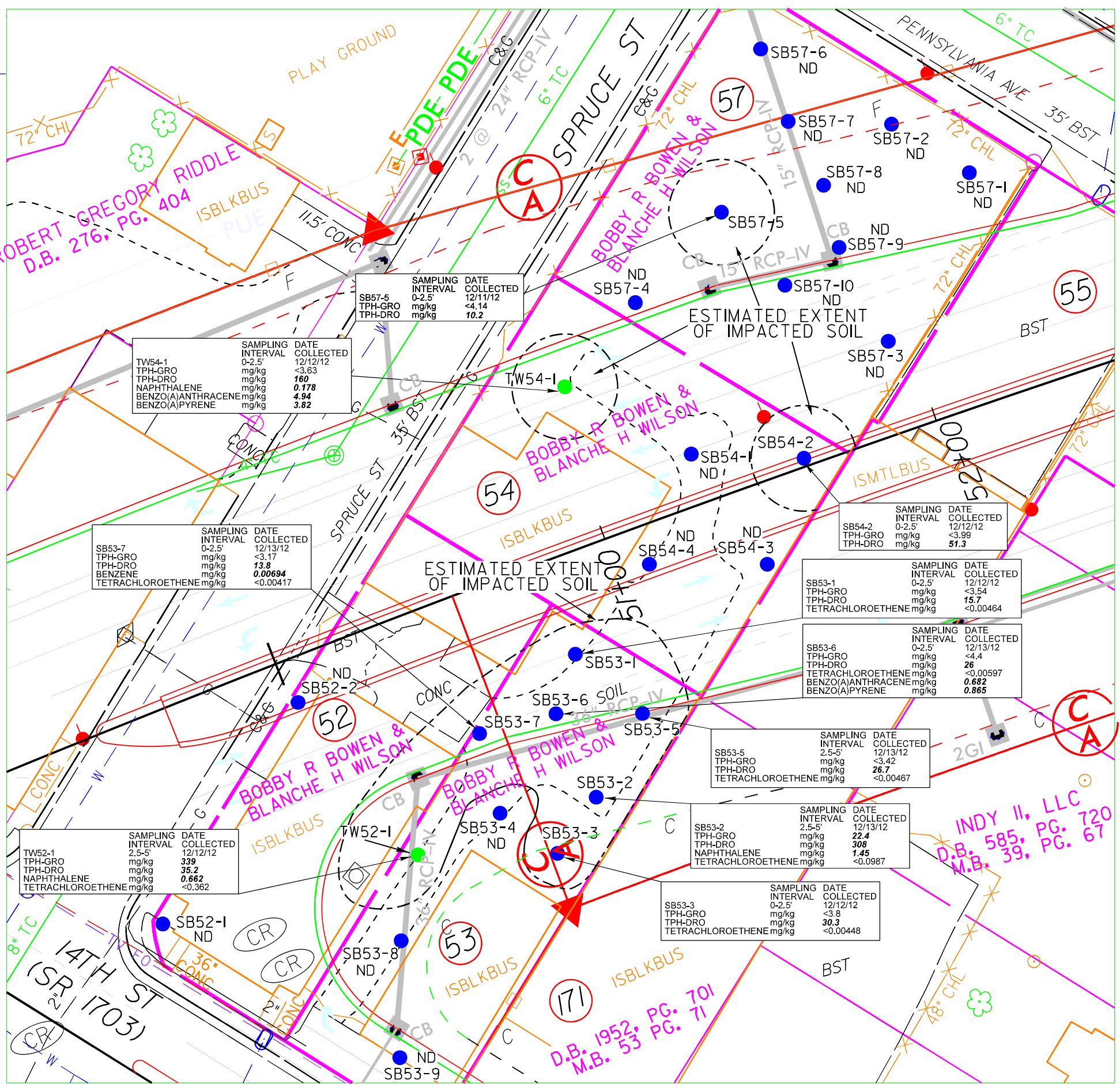
NOTES:

INDY II, LLC
 D.B. 585; PG. 720
 M.B. 39; PG. 67

D.B. 1952; PG. 701
 M.B. 53; PG. 71

LEGEND

- - - EXISTING RIGHT OF WAY
- PROPOSED RIGHT OF WAY
- PROPERTY LINE
- - - TV - - - U/G CABLE TV
- - - T - - - U/G CABLE TELEPHONE
- - - T FO - - - U/G CABLE TELEPHONE FIBER OPTIC
- - - P - - - U/G ELECTRIC
- - - EXISTING HYDRO
- - - TV FO - - - U/G CABLE TV FIBER OPTIC
- - - PUE - - - PERMANENT UTILITY EASEMENT
- - - F - - - FILL LINE
- - - C - - - CUT LINE
- CHL CHAIN LINK
- CB CATCH BASIN
- RCP REINFORCED CONCRETE PIPE
- EOT EDGE OF TRAVEL
- MH MANHOLE
- TC TERRA COTTA PIPE
- ☐ TRAFFIC SIGNAL POLE
- ⊙ UTILITY POLE
- ⊙ LIGHT POLE
- SOIL BORING LOCATION
- TEMPORARY WELL LOCATION
- ESTIMATED EXTENT OF IMPACTED SOIL (DASHED WHERE INFERRED)
- ND NO ANALYZED COMPOUNDS DETECTED AT OR ABOVE MSCCS AND/OR NCDENR ACTION LEVELS



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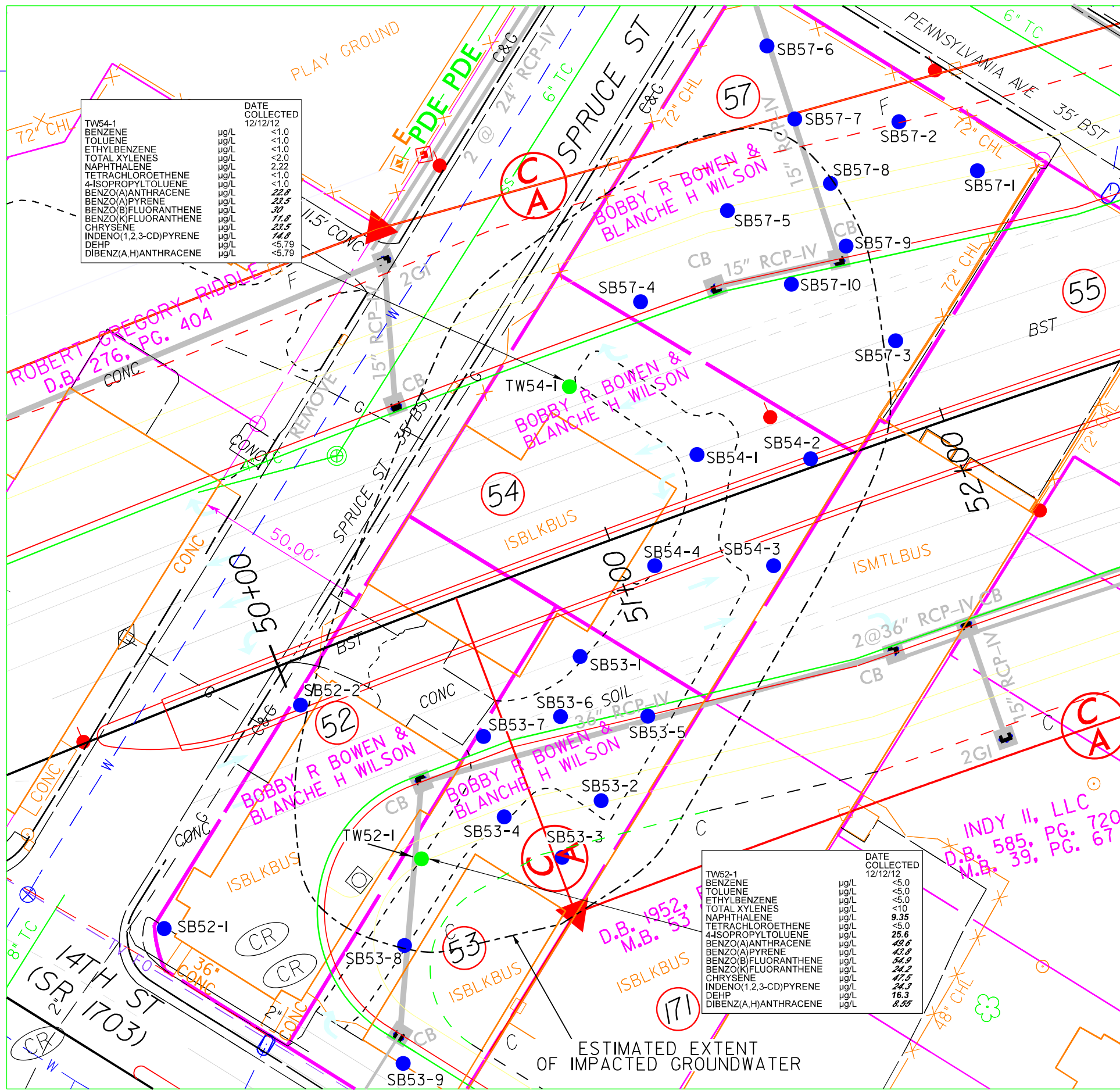
TITLE: **FIGURE 4**
 SOIL ANALYTICAL DATA
 BOBBY R BOWEN & BLANCHE H WILSON PROPERTY -
 PARCELS 52, 53, 54 & 57
 1310 W 14TH AVE
 GREENVILLE NC 27858

NOTES:
 1) VALUES IN BOLD INDICATE LEVELS ABOVE SOIL-TO-GROUNDWATER MAXIMUM SOIL CONTAMINANT CONCENTRATIONS (MSCC) AND/OR NCDENR ACTION LEVELS.

CAD FILE	WBS ELEMENT	PREP. BY	REV. BY	SCALE	DATE	PROJECT NO.
	35781.1.2	JB	JC	1"=30'-0"	01-24-2013	45.19873.0007

LEGEND

- EXISTING RIGHT OF WAY
- PROPOSED RIGHT OF WAY
- PROPERTY LINE
- U/G CABLE TV
- U/G CABLE TELEPHONE
- U/G CABLE TELEPHONE FIBER OPTIC
- U/G ELECTRIC
- EXISTING HYDRO
- U/G CABLE TV FIBER OPTIC
- PERMANENT UTILITY EASEMENT
- FILL LINE
- CUT LINE
- CHAIN LINK
- CATCH BASIN
- REINFORCED CONCRETE PIPE
- EDGE OF TRAVEL
- MANHOLE
- TERRA COTTA PIPE
- TRAFFIC SIGNAL POLE
- UTILITY POLE
- LIGHT POLE
- SOIL BORING LOCATION
- TEMPORARY WELL LOCATION
- ESTIMATED EXTENT OF IMPACTED GROUNDWATER (DASHED WHERE INFERRED)
- BIS(2-ETHYLHEXYL)PHTHALATE



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 SCALE 1"=30'-0"
 DATE 01-24-2013
 PROJECT NO. 45.19873.0007

TITLE **FIGURE 5**
 GROUNDWATER ANALYTICAL DATA MAP
 BOBBY R BOWEN & BLANCHE H WILSON PROPERTY -
 PARCELS 52, 53, 54 & 57
 1310 W 14TH AVE
 GREENVILLE NC 27858

NOTES:
 1) VALUES IN BOLD INDICATE LEVELS AT OR ABOVE NC 2L STANDARDS.
 2) VALUES IN BOLD AND ITALIC INDICATE LEVELS AT OR ABOVE NC 2L'S.
 3) TW52-1 AND TW54-1 SET AT 12' BELOW GROUND SURFACE (BGS) WITH A SCREENED INTERVAL OF 2-12' BGS.

WBS ELEMENT 35781.1.2
 PREP. BY JB
 REV. BY JC

CAD FILE

APPENDIX A

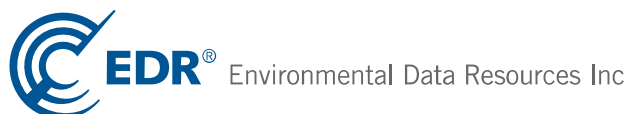
EDR REPORT

U-3315

West 14th Street
Greenville, NC 27834

Inquiry Number: 3363129.2s
July 09, 2012

The EDR Radius Map™ Report with GeoCheck®



440 Wheelers Farms Road
Milford, CT 06461
Toll Free: 800.352.0050
www.edrnet.com

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Thank you for your business.
 Please contact EDR at 1-800-352-0050
 with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-05) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

WEST 14TH STREET
GREENVILLE, NC 27834

COORDINATES

Latitude (North): 35.6079000 - 35° 36' 28.44"
Longitude (West): 77.3854000 - 77° 23' 7.44"
Universal Transverse Mercator: Zone 18
UTM X (Meters): 283925.0
UTM Y (Meters): 3942880.8
Elevation: 62 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 35077-E4 GREENVILLE SW, NC
Most Recent Revision: 2001

North Map: 35077-F4 GREENVILLE NW, NC
Most Recent Revision: 2001

East Map: 35077-E3 GREENVILLE SE, NC
Most Recent Revision: 2001

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 2009, 2010
Source: USDA

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

EXECUTIVE SUMMARY

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL..... National Priority List
Proposed NPL..... Proposed National Priority List Sites
NPL LIENS..... Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL..... National Priority List Deletions

Federal CERCLIS list

CERCLIS..... Comprehensive Environmental Response, Compensation, and Liability Information System
FEDERAL FACILITY..... Federal Facility Site Information listing

Federal CERCLIS NFRAP site List

CERC-NFRAP..... CERCLIS No Further Remedial Action Planned

Federal RCRA CORRACTS facilities list

CORRACTS..... Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG..... RCRA - Large Quantity Generators
RCRA-SQG..... RCRA - Small Quantity Generators
RCRA-CESQG..... RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

US ENG CONTROLS..... Engineering Controls Sites List
US INST CONTROL..... Sites with Institutional Controls

Federal ERNS list

ERNS..... Emergency Response Notification System

State and tribal landfill and/or solid waste disposal site lists

SWF/LF..... List of Solid Waste Facilities

EXECUTIVE SUMMARY

OLI..... Old Landfill Inventory

State and tribal leaking storage tank lists

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

AST..... AST Database

INDIAN UST..... Underground Storage Tanks on Indian Land

FEMA UST..... Underground Storage Tank Listing

State and tribal institutional control / engineering control registries

INST CONTROL..... No Further Action Sites With Land Use Restrictions Monitoring

State and tribal voluntary cleanup sites

VCP..... Responsible Party Voluntary Action Sites

INDIAN VCP..... Voluntary Cleanup Priority Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Landfill / Solid Waste Disposal Sites

ODI..... Open Dump Inventory

DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations

SWRCY..... Recycling Center Listing

HIST LF..... Solid Waste Facility Listing

INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands

Local Lists of Hazardous waste / Contaminated Sites

US CDL..... Clandestine Drug Labs

US HIST CDL..... National Clandestine Laboratory Register

Local Land Records

LIENS 2..... CERCLA Lien Information

LUCIS..... Land Use Control Information System

Records of Emergency Release Reports

HMIRS..... Hazardous Materials Information Reporting System

Other Ascertainable Records

DOT OPS..... Incident and Accident Data

DOD..... Department of Defense Sites

FUDS..... Formerly Used Defense Sites

CONSENT..... Superfund (CERCLA) Consent Decrees

ROD..... Records Of Decision

UMTRA..... Uranium Mill Tailings Sites

MINES..... Mines Master Index File

EXECUTIVE SUMMARY

TRIS.....	Toxic Chemical Release Inventory System
TSCA.....	Toxic Substances Control Act
FTTS.....	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
HIST FTTS.....	FIFRA/TSCA Tracking System Administrative Case Listing
SSTS.....	Section 7 Tracking Systems
ICIS.....	Integrated Compliance Information System
PADS.....	PCB Activity Database System
MLTS.....	Material Licensing Tracking System
RADINFO.....	Radiation Information Database
FINDS.....	Facility Index System/Facility Registry System
RAATS.....	RCRA Administrative Action Tracking System
UIC.....	Underground Injection Wells Listing
DRYCLEANERS.....	Drycleaning Sites
NPDES.....	NPDES Facility Location Listing
INDIAN RESERV.....	Indian Reservations
SCRD DRYCLEANERS.....	State Coalition for Remediation of Drycleaners Listing
FINANCIAL ASSURANCE.....	Financial Assurance Information Listing
COAL ASH.....	Coal Ash Disposal Sites
COAL ASH DOE.....	Sleam-Electric Plan Operation Data
2020 COR ACTION.....	2020 Corrective Action Program List
EPA WATCH LIST.....	EPA WATCH LIST
US FIN ASSUR.....	Financial Assurance Information
COAL ASH EPA.....	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER.....	PCB Transformer Registration Database

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

State- and tribal - equivalent NPL

NC HSDS: The Hazardous Substance Disposal Sites list contains locations of uncontrolled and unregulated hazardous waste sites. The file contains sites on the national priority list as well as the state priority list. The data source is the North Carolina Center for Geographic Information and Analysis.

A review of the NC HSDS list, as provided by EDR, and dated 08/09/2011 has revealed that there is 1 NC HSDS site within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
GREENVILLE COAL GAS PLANT		NE 1/2 - 1 (0.595 mi.)	0	7

EXECUTIVE SUMMARY

State- and tribal - equivalent CERCLIS

SHWS: The State Hazardous Waste Sites records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. The data come from the Department of Environment & Natural Resources' Inactive Hazardous Sites Program.

A review of the SHWS list, as provided by EDR, and dated 03/01/2012 has revealed that there is 1 SHWS site within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
SOUTHERN STATES (FORMER)	125 LINE AVE	W 1/8 - 1/4 (0.229 mi.)	H26	58

State and tribal leaking storage tank lists

LUST: The Leaking Underground Storage Tank Incidents Management Database contains an inventory of reported leaking underground storage tank incidents. The data come from the Department of Environment, & Natural Resources' Incidents by Address.

A review of the LUST list, as provided by EDR, and dated 05/04/2012 has revealed that there are 45 LUST sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
WILLIE SMALL PROPERTY *NRP* Incident Phase: Response	1402 SPRUCE STREET	WSW 0 - 1/8 (0.014 mi.)	6	15
EAST CAROLINA UNW-STEAM PLT. Incident Phase: Closed Out	14TH ST.	NNW 0 - 1/8 (0.119 mi.)	10	22
BUCK SUPPLY COMPANY Incident Phase: Closed Out	201 GRAND AVENUE	E 1/8 - 1/4 (0.134 mi.)	B12	26
FUSION SKATE PARK	504 WEST TENTH STREET	S 1/8 - 1/4 (0.147 mi.)	C14	31
AGNES FULLILOVE SCHOOL Incident Phase: Closed Out	1615 HALIFAX STREET	WSW 1/8 - 1/4 (0.150 mi.)	D15	34
OLD PONY EXPRESS Incident Phase: Closed Out	DICKINSON AVE	S 1/8 - 1/4 (0.165 mi.)	C18	41
NEW WAY/SHOP A LOT Incident Phase: Closed Out	1006 BANCROFT AVENUE	WNW 1/8 - 1/4 (0.216 mi.)	G24	55
SOUTHERN STATES (FORMER) Incident Phase: Closed Out	125 LINE AVE	W 1/8 - 1/4 (0.229 mi.)	H26	58
ANDERSON PROPERTY (DOROTHY) Incident Phase: Closed Out	801 BANCROFT AVENUE	WNW 1/4 - 1/2 (0.253 mi.)	31	66
STRINGFIELD PROPERTY (DELZORA)	703 MCDOWELL STREET	WNW 1/4 - 1/2 (0.277 mi.)	32	68
WILLIAMS RESIDENCE (JOCELYN) Incident Phase: Closed Out	1611 LINCOLN DRIVE	NW 1/4 - 1/2 (0.308 mi.)	33	70
SPUR STATION/FLORENCE BLOUNT E Incident Phase: Closed Out	1025 DICKINSON AVE.	SSW 1/4 - 1/2 (0.327 mi.)	J35	76
WOOTEN RESIDENCE (JOHNNY-FORME) Incident Phase: Closed Out	1818 BATTLE DRIVE	WNW 1/4 - 1/2 (0.336 mi.)	K37	80
TUCKER, NINA RESIDENCE Incident Phase: Response	1820 BATTLE DRIVE	WNW 1/4 - 1/2 (0.336 mi.)	K38	82

EXECUTIVE SUMMARY

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
STOKES, MARTHA PROPERTY Incident Phase: Closed Out	1812 BATTLE AVENUE	WNW 1/4 - 1/2 (0.337 mi.)	K39	85
ST. GABRIEL'S CATHOLIC CHURCH Incident Phase: Closed Out	1101 WARD ST	N 1/4 - 1/2 (0.345 mi.)	L40	88
ST GABRIELS WARD STREET SITE MARTIN PROPERTY (ANNIE) Incident Phase: Closed Out	1100 WARD STREET 1509 E. FIFTH STREET	N 1/4 - 1/2 (0.346 mi.) NNW 1/4 - 1/2 (0.360 mi.)	L41 42	90 93
W.L. ALLEN OIL-BULK PLANT UST Incident Phase: Closed Out	120 SKINNER STREET	SSW 1/4 - 1/2 (0.368 mi.)	J47	103
AARON PENNY RESIDENCE *NRP* Incident Phase: Closed Out	405 WEST VILLAGE DRIVE	W 1/4 - 1/2 (0.403 mi.)	50	110
MOORE PROPERTY (AMY & KYLE) Incident Phase: Closed Out	1712 WEST SIXTH STREET	WNW 1/4 - 1/2 (0.462 mi.)	60	140
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
FRANKLIN BAKING COMPANY, INC. Incident Phase: Closed Out	1107 MYRTLE DRIVE	ENE 0 - 1/8 (0.005 mi.)	A5	12
SADIE SAULTER SCHOOL Incident Phase: Closed Out	1019 FLEMING STREET	NNE 0 - 1/8 (0.086 mi.)	8	19
HERBERT COREY PROPERTY Incident Phase: Closed Out	DICKINSON AV. AND GRAND	E 1/8 - 1/4 (0.167 mi.)	F19	44
EATON'S SHELL Incident Phase: Closed Out	601 ALBEMARLE STREET	ENE 1/8 - 1/4 (0.187 mi.)	E21	48
CITY OF GREENVILLE PROPERTY Incident Phase: Closed Out	602 CONTENTNEA STREET	NE 1/8 - 1/4 (0.191 mi.)	22	51
THE GOODYEAR TIRE & RUBBER COM Incident Phase: Closed Out	729 DICKINSON AVE	E 1/8 - 1/4 (0.207 mi.)	F23	52
FAITH VENTURES, INC./ NO NAME Incident Phase: Response	907 MARTIN LUTHER KING	NNE 1/8 - 1/4 (0.236 mi.)	28	61
SAM POLLARD & SON, INC Incident Phase: Follow Up	400 W 10TH STREET	ESE 1/4 - 1/2 (0.317 mi.)	34	73
MAGNNLIA APARTMENTS Incident Phase: Closed Out	418 WEST FIFTH STREET	ENE 1/4 - 1/2 (0.361 mi.)	M43	96
NATHANIEL VILLAGE Incident Phase: Closed Out	411 WEST FIFTH STREET	ENE 1/4 - 1/2 (0.363 mi.)	M45	99
CAROLINA TELEPHONE Incident Phase: Closed Out	401 WEST 5TH ST.	ENE 1/4 - 1/2 (0.367 mi.)	M46	101
TAYLOR, OLA RESIDENCE Incident Phase: Closed Out	1011 WEST THIRD STREET	NNE 1/4 - 1/2 (0.416 mi.)	51	113
WILCAR EXECUTIVE CENTER Incident Phase: Response	223 WEST TENTH STREET	ESE 1/4 - 1/2 (0.423 mi.)	52	115
TYSON PROPERTY (BERVERLY) Incident Phase: Closed Out	420 CADILLAC STREET	NNW 1/4 - 1/2 (0.424 mi.)	53	118
SYCAMORE HILL BAPTIST CHURCH Incident Phase: Closed Out	226 W. 8TH STREET	E 1/4 - 1/2 (0.432 mi.)	54	121
CITY OF GREENVILLE TANS. GARAG Incident Phase: Closed Out Incident Phase: Closed Out	1500 BEATTY ST.	SSE 1/4 - 1/2 (0.438 mi.)	N55	124

EXECUTIVE SUMMARY

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
PUGH'S SHELL STATION Incident Phase: Closed Out	5TH & GREEN STREET	ENE 1/4 - 1/2 (0.448 mi.)	O57	134
THE PANTRY #832 Incident Phase: Response	501 SOUTH MEMORIAL DRIV	NW 1/4 - 1/2 (0.465 mi.)	P61	142
FORBES RESIDENCE (SELENA) Incident Phase: Closed Out	1407 WEST 4TH STREET	NNW 1/4 - 1/2 (0.465 mi.)	Q63	144
FASTFARE NC 680-CROWN CENTRAL Incident Phase: Closed Out	506 MEMORIAL DR.	NW 1/4 - 1/2 (0.469 mi.)	P64	147
SUTTON'S SERVICE CENTER, INC. Incident Phase: Closed Out	1105 DICKINSON AVE., PO	SSW 1/4 - 1/2 (0.470 mi.)	65	150
CITY OF GREENVILLE PROPERTY-TA Incident Phase: Closed Out	527 DICKINSON AVENUE	ENE 1/4 - 1/2 (0.480 mi.)	66	155
UNIVERSITY AMOCO Incident Phase: Closed Out	101 EAST 10TH STREET	ESE 1/4 - 1/2 (0.495 mi.)	R67	157
DAUGHTRIDGE OIL-EVANS 76 Incident Phase: Closed Out	10TH ST. & EVANS ST.	ESE 1/4 - 1/2 (0.497 mi.)	R68	160

LUST TRUST: This database contains information about claims against the State Trust Funds for reimbursements for expenses incurred while remediating Leaking USTs.

A review of the LUST TRUST list, as provided by EDR, and dated 04/11/2012 has revealed that there are 24 LUST TRUST sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
WILLIE SMALL PROPERTY *NRP*	1402 SPRUCE STREET	WSW 0 - 1/8 (0.014 mi.)	6	15
NIMMO PROPERTY	1113 WEST 14TH STREET	SE 0 - 1/8 (0.122 mi.)	11	25
BUCK SUPPLY COMPANY	201 GRAND AVENUE	E 1/8 - 1/4 (0.134 mi.)	B12	26
FUSION SKATE PARK	504 WEST TENTH STREET	S 1/8 - 1/4 (0.147 mi.)	C14	31
AGNES FULLILOVE SCHOOL	1615 HALIFAX STREET	WSW 1/8 - 1/4 (0.150 mi.)	D15	34
ANDERSON PROPERTY (DOROTHY)	801 BANCROFT AVENUE	WNW 1/4 - 1/2 (0.253 mi.)	31	66
WILLIAMS RESIDENCE (JOCELYN)	1611 LINCOLN DRIVE	NW 1/4 - 1/2 (0.308 mi.)	33	70
WOOTEN RESIDENCE (JOHNNY-FORME)	1818 BATTLE DRIVE	WNW 1/4 - 1/2 (0.336 mi.)	K37	80
TUCKER, NINA RESIDENCE	1820 BATTLE DRIVE	WNW 1/4 - 1/2 (0.336 mi.)	K38	82
STOKES, MARTHA PROPERTY	1812 BATTLE AVENUE	WNW 1/4 - 1/2 (0.337 mi.)	K39	85
ST. GABRIEL'S CATHOLIC CHURCH	1101 WARD ST	N 1/4 - 1/2 (0.345 mi.)	L40	88
ST GABRIELS WARD STREET SITE	1100 WARD STREET	N 1/4 - 1/2 (0.346 mi.)	L41	90
AARON PENNY RESIDENCE *NRP*	405 WEST VILLAGE DRIVE	W 1/4 - 1/2 (0.403 mi.)	50	110
MOORE PROPERTY (AMY & KYLE)	1712 WEST SIXTH STREET	WNW 1/4 - 1/2 (0.462 mi.)	60	140
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
FRANKLIN BAKING COMPANY, INC.	1107 MYRTLE DRIVE	ENE 0 - 1/8 (0.005 mi.)	A5	12
FAITH VENTURES, INC./ NO NAME	907 MARTIN LUTHER KING	NNE 1/8 - 1/4 (0.236 mi.)	28	61
MAGNOLIA APARTMENTS	418 W. FIFTH STREET	ENE 1/4 - 1/2 (0.361 mi.)	M44	98
NATHANIEL VILLAGE	411 WEST FIFTH STREET	ENE 1/4 - 1/2 (0.363 mi.)	M45	99
WILCAR EXECUTIVE CENTER	223 WEST TENTH STREET	ESE 1/4 - 1/2 (0.423 mi.)	52	115
SYCAMORE HILL BAPTIST CHURCH	226 W. 8TH STREET	E 1/4 - 1/2 (0.432 mi.)	54	121
PUGH'S SHELL SERVICE	5TH & GREENE STREETS	ENE 1/4 - 1/2 (0.448 mi.)	O58	138
THE PANTRY #832	501 SOUTH MEMORIAL DRIV	NW 1/4 - 1/2 (0.465 mi.)	P61	142
SELINA FORBES PROPERTY	1407 W FOURTH ST	NNW 1/4 - 1/2 (0.465 mi.)	Q62	144
A & B AUTO SERVICE	103 WEST 9TH STREET	E 1/4 - 1/2 (0.499 mi.)	70	166

EXECUTIVE SUMMARY

LAST: A listing of leaking aboveground storage tank site locations.

A review of the LAST list, as provided by EDR, and dated 05/10/2012 has revealed that there are 3 LAST sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
1401 5TH STREET AST SPILL	1401 WEST 5TH STREET	NNW 1/4 - 1/2 (0.334 mi.)	36	79
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
PITT COUNTY SCHOOLS MAINTENANC <i>ECU/HAYNIE LAND</i>	CONTENTNEA ST. & THIRD <i>10TH STREET</i>	NNE 1/4 - 1/2 (0.401 mi.) <i>ESE 1/4 - 1/2 (0.498 mi.)</i>	49 <i>R69</i>	108 <i>163</i>

State and tribal registered storage tank lists

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of Environment & Natural Resources' Petroleum Underground Storage Tank Database.

A review of the UST list, as provided by EDR, and dated 05/04/2012 has revealed that there are 11 UST sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
A B WHITLEY INC	1311 WEST 14TH STREET	0 - 1/8 (0.000 mi.)	1	7
WAINWRIGHT'S AMOCO	1201 W 14TH STREET	SE 0 - 1/8 (0.057 mi.)	7	18
STEWART SANDWICHES INC.	821 DICKENSON AVENUE.	ESE 0 - 1/8 (0.108 mi.)	9	22
PONY EXPRESS (FORMER TENANT)	1202 DICKERSON AVE	S 1/8 - 1/4 (0.165 mi.)	C17	39
AGNES FULLILOVE SCHOOL	WATAUGA AVE	WSW 1/8 - 1/4 (0.181 mi.)	D20	46
SHOP A LOT	1006 BANCROFT AVENUE	WNW 1/8 - 1/4 (0.216 mi.)	G25	57
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
MACHINE&WELDING(PREVIOUS RENTE	307 SPRUCE ST.	0 - 1/8 (0.000 mi.)	A2	9
FRANKLIN BAKING COMPANY, INC.	1107 MYRTLE DRIVE	ENE 0 - 1/8 (0.005 mi.)	A5	12
SADIE SAULTER SCHOOL	1019 FLEMING STREET	NNE 0 - 1/8 (0.086 mi.)	8	19
EATONS SHELL SERVICE	601 ALBEMARLE AVE	ENE 1/8 - 1/4 (0.164 mi.)	E16	37
THE GOODYEAR TIRE & RUBBER COM	729 DICKINSON AVE	E 1/8 - 1/4 (0.207 mi.)	F23	52

State and tribal Brownfields sites

BROWNFIELDS: A brownfield site is an abandoned, idled, or underused property where the threat of environmental contamination has hindered its redevelopment. All of the sites in the inventory are working toward a brownfield agreement for cleanup and liability control.

A review of the BROWNFIELDS list, as provided by EDR, and dated 09/30/2010 has revealed that there is 1 BROWNFIELDS site within approximately 0.5 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
IMPERIAL CAMPUS	701 ATLANTIC AVE.	ENE 1/8 - 1/4 (0.245 mi.)	I30	66

EXECUTIVE SUMMARY

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: The EPA's listing of Brownfields properties from the Cleanups in My Community program, which provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

A review of the US BROWNFIELDS list, as provided by EDR, and dated 06/27/2011 has revealed that there are 2 US BROWNFIELDS sites within approximately 0.5 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
FORMER GREENVILLE PRODUCE PROP	310 W. 9TH STREET	E 1/4 - 1/2 (0.388 mi.)	48	106
SOUTHWEST REDEVELOPMENT SITE	523 S. PITT STREET	ENE 1/4 - 1/2 (0.453 mi.)	59	138

Other Ascertainable Records

RCRA-NonGen: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA-NonGen list, as provided by EDR, and dated 03/15/2012 has revealed that there are 3 RCRA-NonGen sites within approximately 0.25 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
AMERICAN AUTO BODY	302 SPRUCE ST	ENE 0 - 1/8 (0.004 mi.)	A3	9
APPAREL IMPRESSIONS	715 ALBEMARLE AVE	E 1/8 - 1/4 (0.138 mi.)	B13	29
VAN WATERS & ROGERS INC	715 ATLANTIC AVE	ENE 1/8 - 1/4 (0.239 mi.)	I29	64

IMD: Incident Management Database.

A review of the IMD list, as provided by EDR, and dated 07/21/2006 has revealed that there are 35 IMD sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
WILLIE SMALL PROPERTY *NRP*	1402 SPRUCE STREET	WSW 0 - 1/8 (0.014 mi.)	6	15
EAST CAROLINA UNW-STEAM PLT.	14TH ST.	NNW 0 - 1/8 (0.119 mi.)	10	22
BUCK SUPPLY COMPANY	201 GRAND AVENUE	E 1/8 - 1/4 (0.134 mi.)	B12	26
FUSION SKATE PARK	504 WEST TENTH STREET	S 1/8 - 1/4 (0.147 mi.)	C14	31
AGNES FULLILOVE SCHOOL	1615 HALIFAX STREET	WSW 1/8 - 1/4 (0.150 mi.)	D15	34
OLD PONY EXPRESS	DICKINSON AVE	S 1/8 - 1/4 (0.165 mi.)	C18	41
NEW WAY/SHOP A LOT	1006 BANCROFT AVENUE	WNW 1/8 - 1/4 (0.216 mi.)	G24	55
SOUTHERN FARM AND HOME/SOUTHER	125 LINE AVENUE	W 1/8 - 1/4 (0.229 mi.)	H27	60
WILLIAMS RESIDENCE (JOCELYN)	1611 LINCOLN DRIVE	NW 1/4 - 1/2 (0.308 mi.)	33	70
SPUR STATION/FLORENCE BLOUNT E	1025 DICKINSON AVE.	SSW 1/4 - 1/2 (0.327 mi.)	J35	76
TUCKER, NINA RESIDENCE	1820 BATTLE DRIVE	WNW 1/4 - 1/2 (0.336 mi.)	K38	82
STOKES, MARTHA PROPERTY	1812 BATTLE AVENUE	WNW 1/4 - 1/2 (0.337 mi.)	K39	85
ST GABRIELS WARD STREET SITE	1100 WARD STREET	N 1/4 - 1/2 (0.346 mi.)	L41	90
MARTIN PROPERTY (ANNIE)	1509 E. FIFTH STREET	NNW 1/4 - 1/2 (0.360 mi.)	42	93

EXECUTIVE SUMMARY

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>W.L. ALLEN OIL-BULK PLANT UST</i>	<i>120 SKINNER STREET</i>	<i>SSW 1/4 - 1/2 (0.368 mi.)</i>	<i>J47</i>	<i>103</i>
<i>AARON PENNY RESIDENCE *NRP*</i>	<i>405 WEST VILLAGE DRIVE</i>	<i>W 1/4 - 1/2 (0.403 mi.)</i>	<i>50</i>	<i>110</i>
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>FRANKLIN BAKING CO. INC.</i>	<i>1107 MYRTLE AVENUE</i>	<i>ENE 0 - 1/8 (0.005 mi.)</i>	<i>A4</i>	<i>11</i>
<i>HERBERT COREY PROPERTY</i>	<i>DICKINSON AV. AND GRAND</i>	<i>E 1/8 - 1/4 (0.167 mi.)</i>	<i>F19</i>	<i>44</i>
<i>EATON'S SHELL</i>	<i>601 ALBEMARLE STREET</i>	<i>ENE 1/8 - 1/4 (0.187 mi.)</i>	<i>E21</i>	<i>48</i>
<i>FAITH VENTURES, INC./ NO NAME</i>	<i>907 MARTIN LUTHER KING</i>	<i>NNE 1/8 - 1/4 (0.236 mi.)</i>	<i>28</i>	<i>61</i>
<i>SAM POLLARD & SON, INC</i>	<i>400 W 10TH STREET</i>	<i>ESE 1/4 - 1/2 (0.317 mi.)</i>	<i>34</i>	<i>73</i>
<i>MAGNNLIA APARTMENTS</i>	<i>418 WEST FIFTH STREET</i>	<i>ENE 1/4 - 1/2 (0.361 mi.)</i>	<i>M43</i>	<i>96</i>
<i>CAROLINA TELEPHONE</i>	<i>401 WEST 5TH ST.</i>	<i>ENE 1/4 - 1/2 (0.367 mi.)</i>	<i>M46</i>	<i>101</i>
<i>TAYLOR, OLA RESIDENCE</i>	<i>1011 WEST THIRD STREET</i>	<i>NNE 1/4 - 1/2 (0.416 mi.)</i>	<i>51</i>	<i>113</i>
<i>WILCAR EXECUTIVE CENTER</i>	<i>223 WEST TENTH STREET</i>	<i>ESE 1/4 - 1/2 (0.423 mi.)</i>	<i>52</i>	<i>115</i>
<i>TYSON PROPERTY (BERVERLY)</i>	<i>420 CADILLAC STREET</i>	<i>NNW 1/4 - 1/2 (0.424 mi.)</i>	<i>53</i>	<i>118</i>
<i>SYCAMORE HILL BAPTIST CHURCH</i>	<i>226 W. 8TH STREET</i>	<i>E 1/4 - 1/2 (0.432 mi.)</i>	<i>54</i>	<i>121</i>
<i>GREENVILLE PUBLIC WKS GARAGE,</i>	<i>1500 BEATTY STREET</i>	<i>SSE 1/4 - 1/2 (0.438 mi.)</i>	<i>N56</i>	<i>132</i>
<i>PUGH'S SHELL STATION</i>	<i>5TH & GREEN STREET</i>	<i>ENE 1/4 - 1/2 (0.448 mi.)</i>	<i>O57</i>	<i>134</i>
<i>FORBES RESIDENCE (SELENA)</i>	<i>1407 WEST 4TH STREET</i>	<i>NNW 1/4 - 1/2 (0.465 mi.)</i>	<i>Q63</i>	<i>144</i>
<i>FASTFARE NC 680-CROWN CENTRAL</i>	<i>506 MEMORIAL DR.</i>	<i>NW 1/4 - 1/2 (0.469 mi.)</i>	<i>P64</i>	<i>147</i>
<i>SUTTON'S SERVICE CENTER, INC.</i>	<i>1105 DICKINSON AVE., PO</i>	<i>SSW 1/4 - 1/2 (0.470 mi.)</i>	<i>65</i>	<i>150</i>
<i>UNIVERSITY AMOCO</i>	<i>101 EAST 10TH STREET</i>	<i>ESE 1/4 - 1/2 (0.495 mi.)</i>	<i>R67</i>	<i>157</i>
<i>DAUGHTRIDGE OIL-EVANS 76</i>	<i>10TH ST. & EVANS ST.</i>	<i>ESE 1/4 - 1/2 (0.497 mi.)</i>	<i>R68</i>	<i>160</i>
<i>ECU/HAYNIE LAND</i>	<i>10TH STREET</i>	<i>ESE 1/4 - 1/2 (0.498 mi.)</i>	<i>R69</i>	<i>163</i>

EDR PROPRIETARY RECORDS

EDR Proprietary Records

Manufactured Gas Plants: The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

A review of the Manufactured Gas Plants list, as provided by EDR, has revealed that there is 1 Manufactured Gas Plants site within approximately 1 mile of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>GREENVILLE MGP</i>	<i>PLANT STREET</i>	<i>NNE 1/2 - 1 (0.609 mi.)</i>	<i>71</i>	<i>166</i>















EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 40 records.

<u>Site Name</u>	<u>Database(s)</u>
CHICOD CITGO	LAST
INFINGER TRANSPORT COMPANY	LAST
SMITHS FERTILIZER	UST,FINANCIAL ASSURANCE 1
TRADE-WILCO 1879	UST,FINANCIAL ASSURANCE 1
BELK GROUP OF GREENVILLE/CAROL	IMD,LUST
GOINS ESTATE (WILLIAM)	LUST TRUST,LUST,IMD
BRANCH'S STORE (HARDMAN'S GROC	IMD,LUST
JOYCE MCROY PROPERTY (QUICK FI	IMD,LUST
KASH & KARRY	LUST
SNYDER PROPERTY (KRISTINA)	LUST TRUST,LUST
BELVOIR HARDWARE	IMD,LUST
BARNHILL PROPERTY (NELL)	LUST TRUST,LUST
CONVENIENT WORLD #2	IMD,LUST
FORBES, DILLON RESIDENCE	IMD,LUST
ED WARREN ESTATE	LUST TRUST,LUST,IMD
HARDEE PROPERTY (ROY)	LUST TRUST,IMD,LUST
EIW EQUIPMENT, INC. HERTZ CORP	LUST
BELVOIR ELEMENTARY SCHOOL	LUST
MCNEILL RESIDENCE (JOHN)	LUST TRUST,LUST
FAST FARE NC 513	IMD,LUST
SAM'S CLUB GAS STATION	LUST
KASH-N-KARRY#9	LUST TRUST
FRANK D. DAIL	UST
LENNIE'S GROCERY	UST
CLARA E JONES SERVICE STATION	UST
MRS. FANNIE MAE HINES STORE	UST
NORTH PITT HIGH	UST
ROY'S MINI MART	UST
HARDMAN INC	UST
GREENVILLE PAVING & CONTRACTING	UST
FALKLAND SCHOOL	UST
WILBUR HARDEE	UST
MAYNARD SUMMERLIN	UST
TROPIGAS USA INC	UST
RED OAK CONVENIENT MART	UST
FORBES QUIK STEP	UST
D H CONLEY HIGH SCHOOL	UST
B & S COUNTRY STORE	UST
PITT COMMUNITY COLLEGE	IMD
PITT COMMUNITY COLLEGE (3000 G	IMD

OVERVIEW MAP - 3363129.2s

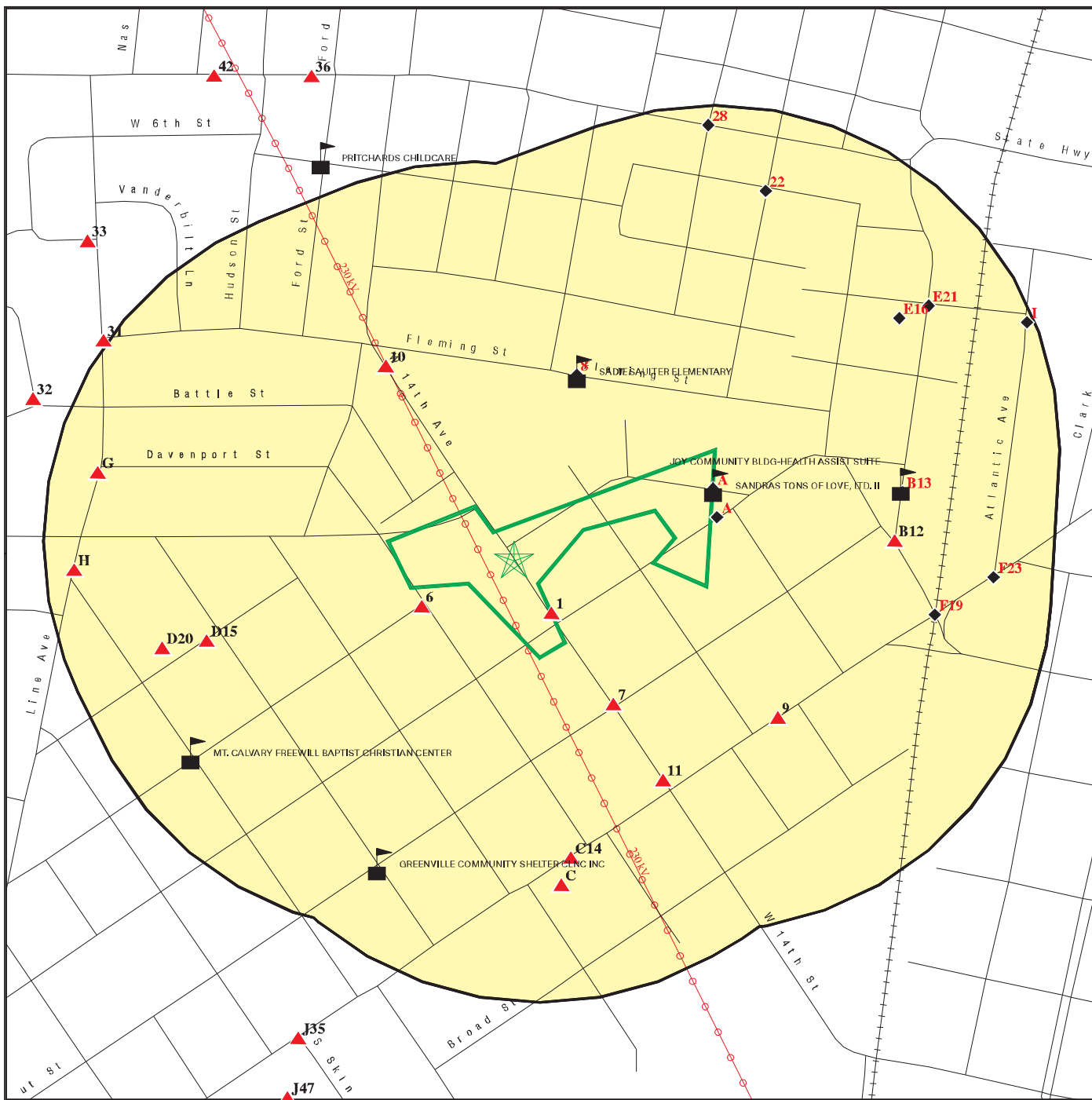


-  Target Property
-  Sites at elevations higher than or equal to the target property
-  Sites at elevations lower than the target property
-  Manufactured Gas Plants
-  National Priority List Sites
-  Dept. Defense Sites
-  Indian Reservations BIA
-  Power transmission lines
-  Oil & Gas pipelines from USGS
-  100-year flood zone
-  500-year flood zone
-  National Wetland Inventory
-  State Wetlands
-  Hazardous Substance Disposal Sites

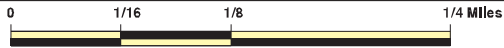
This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

<p>SITE NAME: U-3315 ADDRESS: West 14th Street Greenville NC 27834 LAT/LONG: 35.6079 / 77.3854</p>	<p>CLIENT: ATC Associates Inc. #45 CONTACT: Jeff Corson INQUIRY #: 3363129.2s DATE: July 09, 2012 6:13 pm</p>
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DETAIL MAP - 3363129.2s



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- Hazardous Substance Disposal Sites



This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

<p>SITE NAME: U-3315 ADDRESS: West 14th Street Greenville NC 27834 LAT/LONG: 35.6079 / 77.3854</p>	<p>CLIENT: ATC Associates Inc. #45 CONTACT: Jeff Corson INQUIRY #: 3363129.2s DATE: July 09, 2012 6:14 pm</p>
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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
<u>STANDARD ENVIRONMENTAL RECORDS</u>								
<i>Federal NPL site list</i>								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
<i>Federal Delisted NPL site list</i>								
Delisted NPL	1.000		0	0	0	0	NR	0
<i>Federal CERCLIS list</i>								
CERCLIS	0.500		0	0	0	NR	NR	0
FEDERAL FACILITY	1.000		0	0	0	0	NR	0
<i>Federal CERCLIS NFRAP site List</i>								
CERC-NFRAP	0.500		0	0	0	NR	NR	0
<i>Federal RCRA CORRACTS facilities list</i>								
CORRACTS	1.000		0	0	0	0	NR	0
<i>Federal RCRA non-CORRACTS TSD facilities list</i>								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
<i>Federal RCRA generators list</i>								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
<i>Federal institutional controls / engineering controls registries</i>								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
<i>Federal ERNS list</i>								
ERNS	TP		NR	NR	NR	NR	NR	0
<i>State- and tribal - equivalent NPL</i>								
NC HSDS	1.000		0	0	0	1	NR	1
<i>State- and tribal - equivalent CERCLIS</i>								
SHWS	1.000		0	1	0	0	NR	1
<i>State and tribal landfill and/or solid waste disposal site lists</i>								
SWF/LF	0.500		0	0	0	NR	NR	0
OLI	0.500		0	0	0	NR	NR	0
<i>State and tribal leaking storage tank lists</i>								
LUST	0.500		4	11	30	NR	NR	45

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LUST TRUST	0.500		3	4	17	NR	NR	24
LAST	0.500		0	0	3	NR	NR	3
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
UST	0.250		6	5	NR	NR	NR	11
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
INST CONTROL	0.500		0	0	0	NR	NR	0
State and tribal voluntary cleanup sites								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	1	0	NR	NR	1
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	2	NR	NR	2
Local Lists of Landfill / Solid Waste Disposal Sites								
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HIST LF	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA-NonGen	0.250		1	2	NR	NR	NR	3
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	0	0	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP	NR	NR	NR	NR	NR	NR	0
TSCA	TP	NR	NR	NR	NR	NR	NR	0
FTTS	TP	NR	NR	NR	NR	NR	NR	0
HIST FTTS	TP	NR	NR	NR	NR	NR	NR	0
SSTS	TP	NR	NR	NR	NR	NR	NR	0
ICIS	TP	NR	NR	NR	NR	NR	NR	0
PADS	TP	NR	NR	NR	NR	NR	NR	0
MLTS	TP	NR	NR	NR	NR	NR	NR	0
RADINFO	TP	NR	NR	NR	NR	NR	NR	0
FINDS	TP	NR	NR	NR	NR	NR	NR	0
RAATS	TP	NR	NR	NR	NR	NR	NR	0
IMD	0.500		3	9	23	NR	NR	35
UIC	TP	NR	NR	NR	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
NPDES	TP	NR	NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
FINANCIAL ASSURANCE	TP	NR	NR	NR	NR	NR	NR	0
COAL ASH	0.500		0	0	0	NR	NR	0
COAL ASH DOE	TP	NR	NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
EPA WATCH LIST	TP	NR	NR	NR	NR	NR	NR	0
US FIN ASSUR	TP	NR	NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP	NR	NR	NR	NR	NR	NR	0

EDR PROPRIETARY RECORDS

EDR Proprietary Records

Manufactured Gas Plants	1.000		0	0	0	1	NR	1
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NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

HSDS
Region
NE
1/2-1
3140 ft.

GREENVILLE COAL GAS PLANT
, NC

NC HSDS S102442530
N/A

HSDS:

Site Type: Federal
Superfund ID: 986 188 886
Lat/Long: 35 36 57.978380 77 22 32.694728
Total area in coverage units: 15827.6660156
Total perimeter in coverage units: 505.70578002
X-value coordinate in feet: 2482728.75
Y-value coordinate in feet: 683091.9375
Sites designated as superfund cleanup sites: 434
Length of feature in internal units: 505.705724829
Area of feature in internal units squared: 15827.6626249

1
< 1/8
1 ft.

A B WHITLEY INC
1311 WEST 14TH STREET
GREENVILLE, NC 27834

UST U003563226
N/A

UST:

Relative:
Higher
Actual:
63 ft.

Contact: A B WHITLEY INC
Contact Address1: 1311 WEST 14TH STREET
Contact Address2: Not reported
Contact City/State/Zip: GREENVILLE, NC 27834
Installed Date: 09/24/1979
Root Tank Id: Not reported
Main Tank: 0
Compartment Tank: 0
Manifold Tank: Not reported
Product Name: Gasoline, Gas Mix
Tank Status: Removed
Tank Capacity: 1000
Perm Close Date: 12/13/1990
Commercial: Yes
Regulated: Yes
Product Key: 3
Tank Construction: Steel
Piping Construction: FRP
Piping System Key: 1
Other CP Tank: Not reported
FIPS County Desc: Pitt
Latitude: 0
Longitude: 0

Installed Date: 09/24/1979
Root Tank Id: Not reported
Main Tank: 0
Compartment Tank: 0
Manifold Tank: Not reported
Product Name: Diesel
Tank Status: Removed
Tank Capacity: 550
Perm Close Date: 12/13/1990
Commercial: Yes
Regulated: Yes
Product Key: 1

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

A B WHITLEY INC (Continued)

U003563226

Tank Construction: Steel
Piping Construction: FRP
Piping System Key: 1
Other CP Tank: Not reported
FIPS County Desc: Pitt
Latitude: 0
Longitude: 0

Installed Date: 01/01/1964
Root Tank Id: Not reported
Main Tank: 0
Compartment Tank: 0
Manifold Tank: Not reported
Product Name: Unknown
Tank Status: Removed
Tank Capacity: 550
Perm Close Date: 07/19/1993
Commercial: No
Regulated: Yes
Product Key: 20
Tank Construction: Concrete
Piping Construction: Aluminum
Piping System Key: 1
Other CP Tank: Not reported
FIPS County Desc: Pitt
Latitude: 0
Longitude: 0

Installed Date: 09/24/1979
Root Tank Id: Not reported
Main Tank: 0
Compartment Tank: 0
Manifold Tank: Not reported
Product Name: Oil, New/Used/Mix
Tank Status: Removed
Tank Capacity: 550
Perm Close Date: 12/13/1990
Commercial: Yes
Regulated: Yes
Product Key: 14
Tank Construction: Steel
Piping Construction: FRP
Piping System Key: 1
Other CP Tank: Not reported
FIPS County Desc: Pitt
Latitude: 0
Longitude: 0

Installed Date: 09/27/1965
Root Tank Id: Not reported
Main Tank: 0
Compartment Tank: 0
Manifold Tank: Not reported
Product Name: Heating Oil/Fuel
Tank Status: Removed
Tank Capacity: 280
Perm Close Date: 05/24/1991

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

A B WHITLEY INC (Continued)

U003563226

Commercial: No
Regulated: No
Product Key: 6
Tank Construction: Concrete
Piping Construction: FRP
Piping System Key: 1
Other CP Tank: Not reported
FIPS County Desc: Pitt
Latitude: 0
Longitude: 0

A2 MACHINE&WELDING(PREVIOUS RENTER)
307 SPRUCE ST.
GREENVILLE, NC 27834

UST U001197869
N/A

< 1/8
0.000 mi.
2 ft.

Site 1 of 4 in cluster A

Relative:
Lower

UST:

Contact: UNKNOWN
Contact Address1: 307 SPRUCE STREET
Contact Address2: Not reported
Contact City/State/Zip: GREENVILLE, NC 27834
Installed Date: 05/04/1976
Root Tank Id: Not reported
Main Tank: 0
Compartment Tank: 0
Manifold Tank: Not reported
Product Name: Diesel
Tank Status: Removed
Tank Capacity: 1000
Perm Close Date: 12/31/1988
Commercial: Yes
Regulated: Yes
Product Key: 1
Tank Construction: Steel
Piping Construction: FRP
Piping System Key: 1
Other CP Tank: Not reported
FIPS County Desc: Pitt
Latitude: 0
Longitude: 0

A3 AMERICAN AUTO BODY
ENE 302 SPRUCE ST
< 1/8 GREENVILLE, NC 27834
0.004 mi.
20 ft.

RCRA-NonGen 1004745458
FINDS NCD982122657

Relative:
Lower

RCRA-NonGen:

Date form received by agency:06/27/1990
Facility name: AMERICAN AUTO BODY
Facility address: 302 SPRUCE ST
GREENVILLE, NC 27834
EPA ID: NCD982122657
Mailing address: SPRUCE ST
GREENVILLE, NC 27834

Actual:
59 ft.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

AMERICAN AUTO BODY (Continued)

1004745458

Contact: LANGEMANN KLAUS
Contact address: 302 SPRUCE ST
GREENVILLE, NC 27834
Contact country: US
Contact telephone: (919) 758-7540
Contact email: Not reported
EPA Region: 04
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: LANGEMANN KLAUS
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
Used oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:

Waste code: F003
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F005
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

AMERICAN AUTO BODY (Continued)

1004745458

ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Violation Status: No violations found

FINDS:

Registry ID: 110004033126

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

A4
ENE
< 1/8
0.005 mi.
24 ft.

FRANKLIN BAKING CO. INC.
1107 MYRTLE AVENUE
GREENVILLE, NC
Site 3 of 4 in cluster A

IMD S103130272
N/A

Relative:
Lower

IMD:

Actual:
60 ft.

Region: WAS
Facility ID: 12444
Date Occurred: 6/22/1994
Submit Date: 7/27/1994
GW Contam: Yes, Groundwater Contamination has been detected
Soil Contam: No
Incident Desc: UPON CLOSURE OF UST MAJOR SOIL CONTAM. WAS CONFIRMED.
Operator: JERRY HANCOCK
Contact Phone: 2292272283
Owner Company: FLOWERS BAKERY, INC.
Operator Address: 1925 FLOWERS CIRCLE
Operator City: THOMASVILLE
Oper City, St, Zip: THOMASVILLE, NC 31757-
Ownership: Private
Operation: Commercial
Material: GASOLINE
Qty Lost 1: Not reported
Qty Recovered 1: Not reported
Source: Leak-underground
Type: Gasoline/diesel
Location: Facility
Setting: Urban
Risk Site: L
Site Priority: 70/E
Priority Code: L
Priority Update: 5/30/1998
Dem Contact: JSB
Wells Affected: No
Num Affected: 0
Wells Contam: Not reported
Sampled By: Responsible Parties
Samples Include: Soil Samples



INQUIRY #: 3363129.5

YEAR: 2008

| = 500'





INQUIRY #: 3363129.5

YEAR: 2005

 = 500'





INQUIRY #: 3363129.5

YEAR: 2006

 = 500'





INQUIRY #: 3363129.5

YEAR: 1982

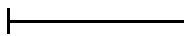
 = 1000'





INQUIRY #: 3363129.5

YEAR: 1993

 = 500'





INQUIRY #: 3363129.5

YEAR: 1999

 = 1000'



U-3315

West 14th Street

Greenville, NC 27834

Inquiry Number: 3363129.5

July 10, 2012

The EDR Aerial Photo Decade Package



440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

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Please contact EDR at 1-800-352-0050
with any questions or comments.

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Date EDR Searched Historical Sources:

Aerial Photography July 10, 2012

Target Property:

West 14th Street

Greenville, NC 27834

<u>Year</u>	<u>Scale</u>	<u>Details</u>	<u>Source</u>
1957	Aerial Photograph. Scale: 1"=500'	Panel #: 35077-E4, Greenville SW, NC; Flight Date: March 10, 1957	EDR
1961	Aerial Photograph. Scale: 1"=1000'	Panel #: 35077-E4, Greenville SW, NC; Flight Date: October 16, 1961	EDR
1974	Aerial Photograph. Scale: 1"=1000'	Panel #: 35077-E4, Greenville SW, NC; Flight Date: April 10, 1974	EDR
1977	Aerial Photograph. Scale: 1"=750'	Panel #: 35077-E4, Greenville SW, NC; Flight Date: January 30, 1977	EDR
1982	Aerial Photograph. Scale: 1"=1000'	Panel #: 35077-E4, Greenville SW, NC; Flight Date: March 29, 1982	EDR
1993	Aerial Photograph. Scale: 1"=500'	Panel #: 35077-E4, Greenville SW, NC; Composite DOQQ - acquisition dates: March 08, 1993	EDR
1999	Aerial Photograph. Scale: 1"=1000'	Panel #: 35077-E4, Greenville SW, NC; Flight Date: September 23, 1999	EDR
2005	Aerial Photograph. Scale: 1"=500'	Panel #: 35077-E4, Greenville SW, NC; Flight Year: 2005	EDR
2006	Aerial Photograph. Scale: 1"=500'	Panel #: 35077-E4, Greenville SW, NC; Flight Year: 2006	EDR
2008	Aerial Photograph. Scale: 1"=500'	Panel #: 35077-E4, Greenville SW, NC; Flight Year: 2008	EDR



INQUIRY #: 3363129.5

YEAR: 1957

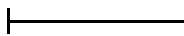
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INQUIRY #: 3363129.5

YEAR: 1961

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INQUIRY #: 3363129.5

YEAR: 1974

| = 1000'





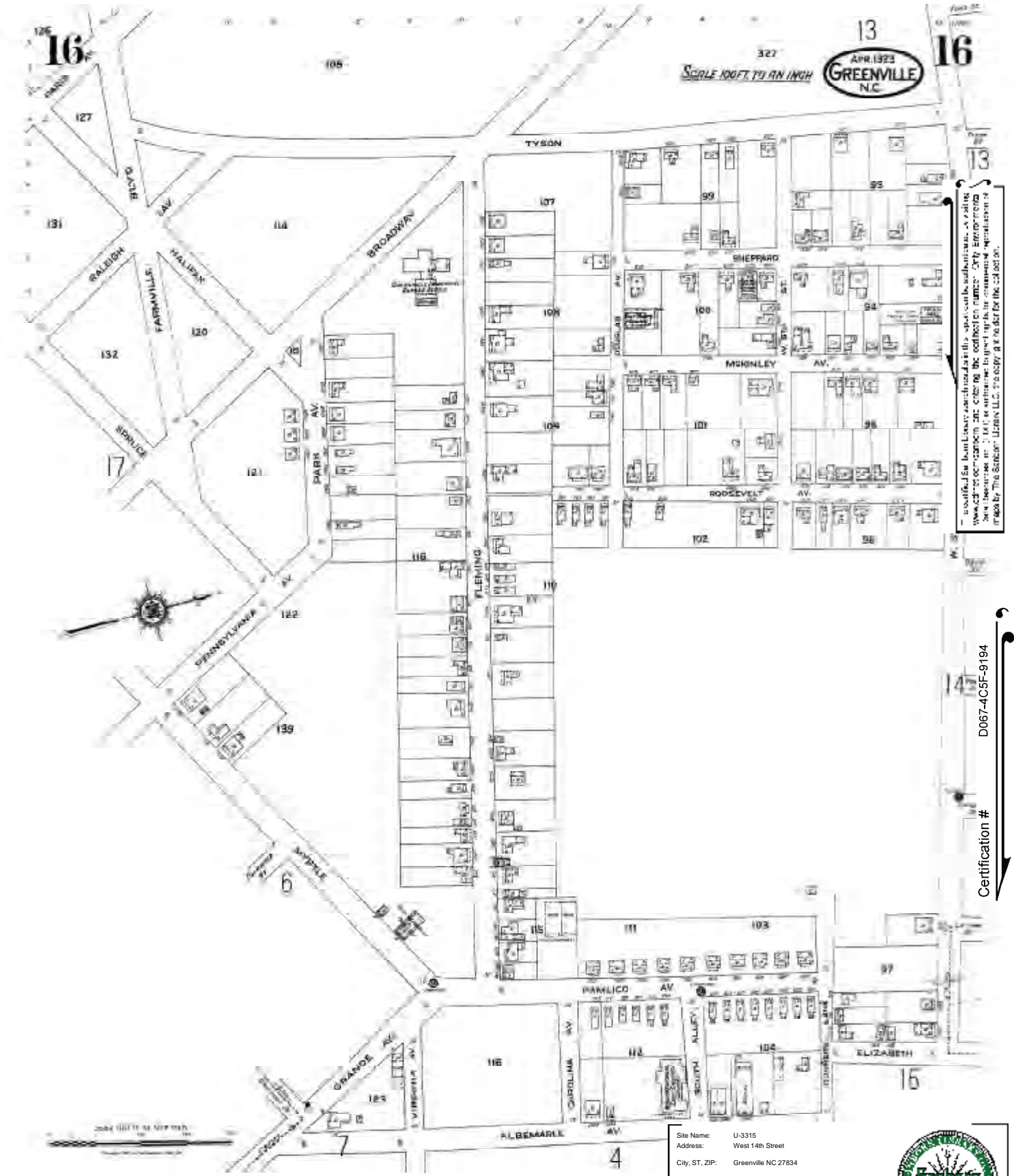
INQUIRY #: 3363129.5

YEAR: 1977

 = 750'



1923 Certified Sanborn Map



13
 APR. 1923
GREENVILLE
 N.C.

SCALE 100 FT TO AN INCH

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Certification # D067-4C5F-9194

Site Name: U-3315
 Address: West 14th Street
 City, ST, ZIP: Greenville NC 27834
 Client: ATC Associates Inc. #45
 EDR Inquiry: 3363129.3
 Order Date: 7/10/2012 9:52:03 AM
 Certification #: D067-4C5F-9194
 Copyright: 1923



1923 Certified Sanborn Map



APR 1923
GREENVILLE
 N.C.
 SCALE 100 FT TO AN INCH
 138

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1929 Certified Sanborn Map



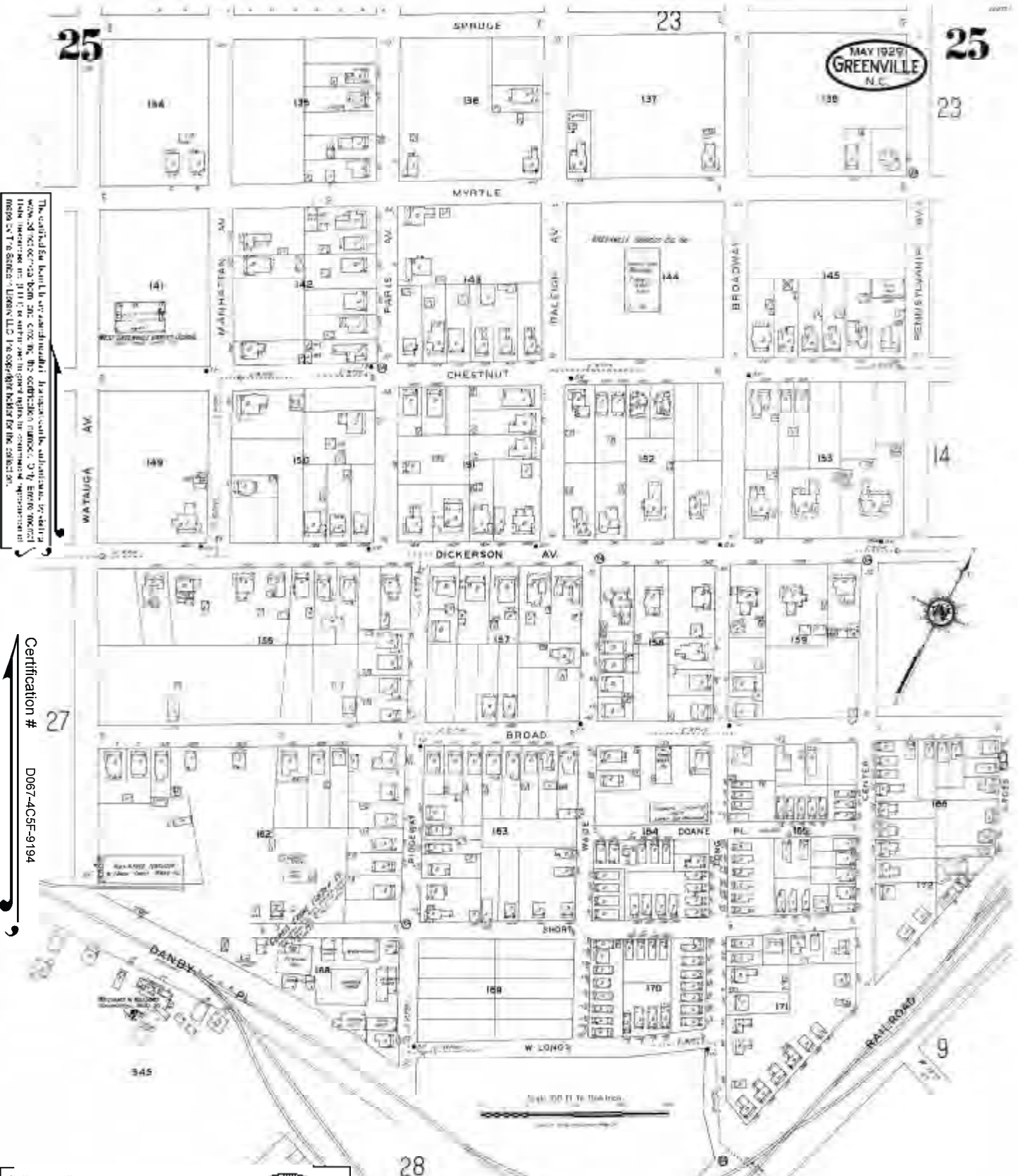
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1929 Certified Sanborn Map



MAY 1929
GREENVILLE
N.C.

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Copyright: 1929



U-3315

West 14th Street

Greenville, NC 27834

Inquiry Number: 3363129.3

July 10, 2012

Certified Sanborn® Map Report



440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

7/10/12

Site Name:

U-3315
West 14th Street
Greenville, NC 27834

Client Name:

ATC Associates Inc. #45
2725 East Millbrook Road
Raleigh, NC 27604

EDR Inquiry # 3363129.3

Contact: Jeff Corson



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Certified Sanborn Results:

Site Name: U-3315
Address: West 14th Street
City, State, Zip: Greenville, NC 27834
Cross Street:
P.O. # NA
Project: NA
Certification # D067-4C5F-9194



Sanborn® Library search results
Certification # D067-4C5F-9194

Maps Provided:

1958
1946
1929
1923

The Sanborn Library includes more than 1.2 million Sanborn fire insurance maps, which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- Library of Congress
- University Publications of America
- EDR Private Collection

The Sanborn Library LLC Since 1866™

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Sanborn Sheet Thumbnails

This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.



1958 Source Sheets



Volume 1, Sheet 23



Volume 1, Sheet 25

1946 Source Sheets



Volume 1, Sheet 23



Volume 1, Sheet 25

1929 Source Sheets



Volume 1, Sheet 23



Volume 1, Sheet 25

1923 Source Sheets



Volume 1, Sheet 16



Volume 1, Sheet 17

1958 Certified Sanborn Map



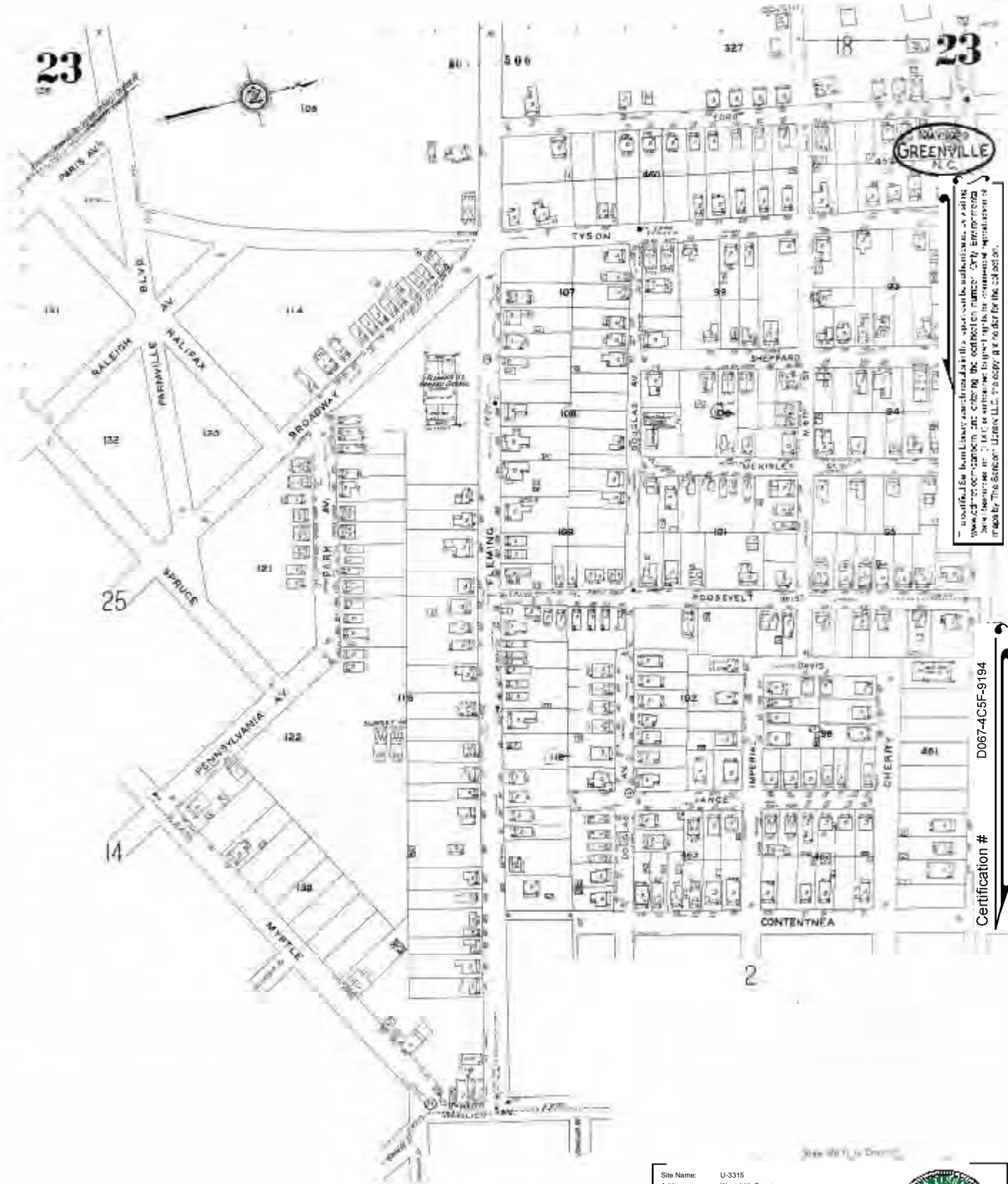
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Site Name: U-3315
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City, ST, ZIP: Greenville NC 27834
Client: ATC Associates Inc. #45
EDR Inquiry: 3363129.3
Order Date: 7/10/2012 9:52:03 AM
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Copyright: 1958



1946 Certified Sanborn Map



MADE IN
GREENVILLE
N.C.

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1946 Certified Sanborn Map

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Certification #
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APPENDIX B
GEOPHYSICAL REPORT

SUBSURFACE INVESTIGATION REPORT

Electromagnetic Induction, Magnetic Detection & *GPR Survey*

Bowen, Bobby R Property (Parcel 52, 53, 54 & 57)
1310 West 14th Street
Greenville, North Carolina

November 29, 2012

Report prepared for:
Justin C. Ballard, P.G.
ATC Associates of North Carolina
2725 Millbrook Road, Suite 121
Raleigh, North Carolina 27604

Investigative Team: Shane Haniford

Reviewed by: Bruce Beavers P.L.S. and Alex Baldwin L.S.S.

Stantec Consulting Services Inc.
801 Jones Franklin Road, Suite 300
Raleigh, NC 27606
(919) 851-6866

ATC Associates of North Carolina
Subsurface Investigation Report
Bowen, Bobby R Property (Parcel 52, 53, 54 & 57)
1310 West 14th Street
Greenville, North Carolina

1.0 PURPOSE

Stantec Consulting Services Inc. performed a subsurface investigation utilizing surface Ground Penetrating Radar (GPR), Magnetic Detection and Electromagnetic Induction (EM) to survey the subject site located at 1310 West 14th Street in the city of Greenville, North Carolina. This parcel is located at the east quadrant of the intersection of W 14th Ave and Spruce St.

This site is an existing industrial repair shop which occupies Parcels 52, 53, 54 and 57. The nature of the industry over time is unclear.

ATC Associates representative Mr. Justin C. Ballard, P.G. provided information and maps identifying the geophysical survey area to Stantec personnel prior to conducting the investigation.

Survey was conducted at the request of Justin C. Ballard, P.G. on July 18th to 19th 2012.

The purpose of this investigation was to:

- Survey for detectable structures (UST) and other subsurface anomalies.

The specified survey area was described as 1310 West 14th Street in the city of Greenville, North Carolina and is located at the east quadrant of the intersection of W 14th Ave and Spruce St.

A map depicting this area is included herein.

1.1 LIMITING CONDITIONS

In the event portions of the subject site were not accessible due to obstructions and/or stored items, those areas will be noted as inaccessible. An attempt was made to be as thorough as possible in the survey process. The surveyed area was defined, at the time of the investigation, by the Client. Client representative on site was Justin C. Ballard, P.G. with ATC Associates of North Carolina.

In order to accurately conduct a radar survey, linear scans were made across the target area. Confined, obstructed or non-level areas which restrict the scanning pattern can impede the data collected and reduce the accuracy of the desired results.

The assessment of this site is based on our professional evaluation of the data gathered, and our experience with the properties with surface ground penetrating radar within this setting and scope. The evaluation rendered in this report meets the standards of our profession and was conducted in accordance with generally accepted guidelines for EM, Magnetic Detection and GPR surveys. It is generally recognized that the results of the EM, Magnetic Detection and GPR are non-unique and may not represent actual subsurface conditions.

Note: A diligent effort has been made to obtain the highest quality data and make useful interpretations.

Analysis of data was accomplished by visual inspection in the field and then recording the data for post processing.

1.2 APPROACH

Multiple tools involving differing technologies were used in this investigation.

For the GPR analysis, the entire subject survey area was divided logistically into manageable/workable sections.

These isometric sections represent the arrangement of the survey scans. Within these sections, scans were made in an orthogonal pattern on two foot centers. This provided two separate data sets for each section.

For Magnetic Detection and Electromagnetic Induction the area was systematically scanned in such a pattern so to cover over 100% of the accessible portions of the site. This is possible due to the size and shape of the resulting fields produced from the sensors thus resulting in an "overlapping" of each transect covered.

2.0 METHODOLOGY

2.1 EQUIPMENT

Ground Penetrating Radar (GPR)

The GPR method transmits electromagnetic waves, which are pulsed at discrete distance/ time intervals.

The transmitted pulse radiates through the earth whereby a portion of the energy is reflected from interfaces of contrasting electrical properties (e.g. pavement and soil interface, soil stratigraphic changes and buried metallic objects) while the remaining energy continues until reaching additional reflectors where the process is repeated.

Reflected energy is received by the antennae and recorded for later processing and interpretation. Factors such as soil moisture, clay content, and variations in the dielectric constants of materials control the effectiveness of the GPR method. Wet conductive soils severely attenuate GPR signals and thus the effective depth of exploration.

The presence of foreign products leached into the soil can eschew the data collected thereby affecting the images.

GPR energy cannot transmit through ferrous objects since metal acts as a pure reflector.

Stantec employed a MALA X3M/GPR digital radar unit with a 250 MHz center frequency, bistatic antenna to survey the site. The instrument was configured to detect moderately shallow reflectors within the geologic strata. The chosen instrument configuration facilitates the analysis. The GPR system unit was configured for data collection as follows:

- Trigger Source: Cart
- Range: 0-66 ns
- Samples per Scan: 250-512
- Sampling Frequency: 10852.27 and 7234.85 MHz
- Vertical High Pass Filter: 15 Samples
- Vertical Low Pass Filter: 5 Samples
- Point Interval: 0.669 and 0.706 in
- Pulses/Ft: 108.48

Software utilized for the collection and analysis of these data included:
RAMAC Ground Vision GPR Software version 3. 1. 19. (5).

2.2 EQUIPMENT

Electromagnetic (EM) and Magnetic Detection

The magnetic detection method is a LF (30 to 300 kHz) or VLF (below 30 kHz) receiver for detecting electromagnetic fields which radiate off of metallic objects. Magnetic locators operate on a simple principal.

An electronic transmitter and receiving antennae are mounted on a support structure. The two antennae are mounted a fixed distance apart aligned opposing so that the magnetic field measured by one sensor is negative of the magnetic field measured by the other. Each measures the average magnetic field component along their axis i.e. the magnetic field component along the longitudinal axis between the antennae.

This is calibrated in the field to a position (setting) which is neutral to the earth's natural magnetic field. When a metallic object is introduced within this field, it is detected as a differing field. This differing magnetic field is the field of interest.

Stantec employed this method of locating buried metallic objects as a compliment to GPR for the subject site.

Stantec selected the following instruments for this particular task:

- Subsurface Magnetic Locator ML-1M
- Schonstedt GA-52Cx. HeliFlux magnetic field sensors—drive frequency 7.5 KHz.
- RadioDetection 8000 T-10 model utilizing 512 hertz, 8 KHz, 33 KHz, 65 KHz, 50/60 hertz, long wave radio frequencies

3.0 DATA PROCESSING AND ANALYSIS-GPR

Stantec calculated the average radar propagation velocity for the subject sites. This procedure is necessary to provide reasonably accurate depth estimates for reflection events in the subsurface strata.

The average radar velocity for the site was estimated. It should be noted that the dielectric constants and hence the corresponding radar propagation velocities did vary by an order of degree(s) of magnitude across the surveyed area. Additionally, radar propagation velocity decreases with depth in most geologic sections.

Data processing of the GPR data prior to interpretation included band pass filtering, background removal, horizontal smoothing, trace editing, and time gain adjustments. After processing, the data profiles were reviewed for analysis. These processing techniques were applied to the GPR data to provide the highest quality data and therefore facilitate the overall interpretation process.

4.0 RESULTS & CONCLUSIONS

Stantec Consulting Services Inc. has completed a subsurface investigation of the subject site.

Multiple methods and technologies were used where permitted by the environment.

Survey scans were made throughout the targeted area.

The survey revealed anomalies within the subject site.

Target A: An area approximately ten (10) foot by thirteen (13) foot was noted. These discoveries were made using magnetics indicating metallic objects. Multiple hyperbolae were noted within the disturbed walls of earth strata. This may be indicative of trash dumped in a site and buried. A sketch of this area is included on page 13.

Target B: An area approximately eight (8) foot by fourteen (14) foot was noted. These discoveries were made using magnetics indicating metallic objects. Multiple hyperbolae were noted within the disturbed walls of earth strata. This may be indicative of trash dumped in a site and buried. A sketch of this area is included on page 13.

Target C: An area approximately four (4) foot by eight (8) foot was noted. These discoveries were made using magnetics indicating metallic objects. Multiple hyperbolae were noted within the disturbed walls of earth strata. This may be indicative of trash dumped in a site and buried. A sketch of this area is included on page 13.

Target D: An area approximately six (6) foot by eight (8) foot in size was noted. This discovery was made using Surface Ground Penetrating Radar. The radar data collected was not indicative as a solid object, but appeared to be more indicative as disturbed ground (subsurface). No magnetic objects were detected here. This is possibly an area which may have contained a storage tank which was later pulled. There is No Confidence of a UST in this Target. A sketch of this area is included on page 13.

1. Approximately eighteen (18) locations where magnetic detection noted metal objects of six (6) to eighteen (18) inches in diameter. Surface Ground Penetrating Radar was inconclusive. These locations may be buried garbage or auto parts. A sketch of this area is included on page 13.
2. Approximately eight (8) locations where magnetic detection noted metal objects of less than six (6) inches in diameter. Surface Ground Penetrating Radar was inconclusive. These locations may be buried garbage or auto parts. A sketch of this area is included on page 13.
3. Gas lines were discovered between the two buildings on this Parcel facing West 14th Ave and traveling behind the buildings then turning to connect with the Gas Main running along Spruce Street. The lines were detected using EM with frequencies of 50/60 Hz, long wave radio, 8 kHz and 33 kHz. A sketch of this area is included on page 13.
4. Water pipes were discovered at the buildings facing West 14th Ave running from the street through ground surface meters and into the buildings also from the main building in rear to storage building behind it. The pipes were detected using EM with frequencies of 33 kHz, 65 kHz and 200 kHz. A sketch of this area is included on page 13.
5. Power lines were discovered between the two buildings on this Parcel facing West 14th Ave and traveling behind the buildings to the storage building in the rear of main building. The lines were detected using EM with frequencies of 50/60 Hz, long wave radio, 8 kHz and 33 kHz. A sketch of this area is included on page 13.
6. Multiple automobiles, auto parts and surface metal were on the site inside the fenced in area. These vehicles and parts were non mobile and interfered with magnetic and GPR signals creating a large area where discoveries were impossible with these technologies.

As stated, this assessment is based on our professional evaluation of the data gathered and our experience with the properties with surface ground penetrating radar within this setting and scope.



Property shown from West 14th St. looking northeast



Property shown from West 14th St. looking southeast



Picture shows AST on side of building



Picture shows Gas and Electric lines marked in pink



Target A



Target B



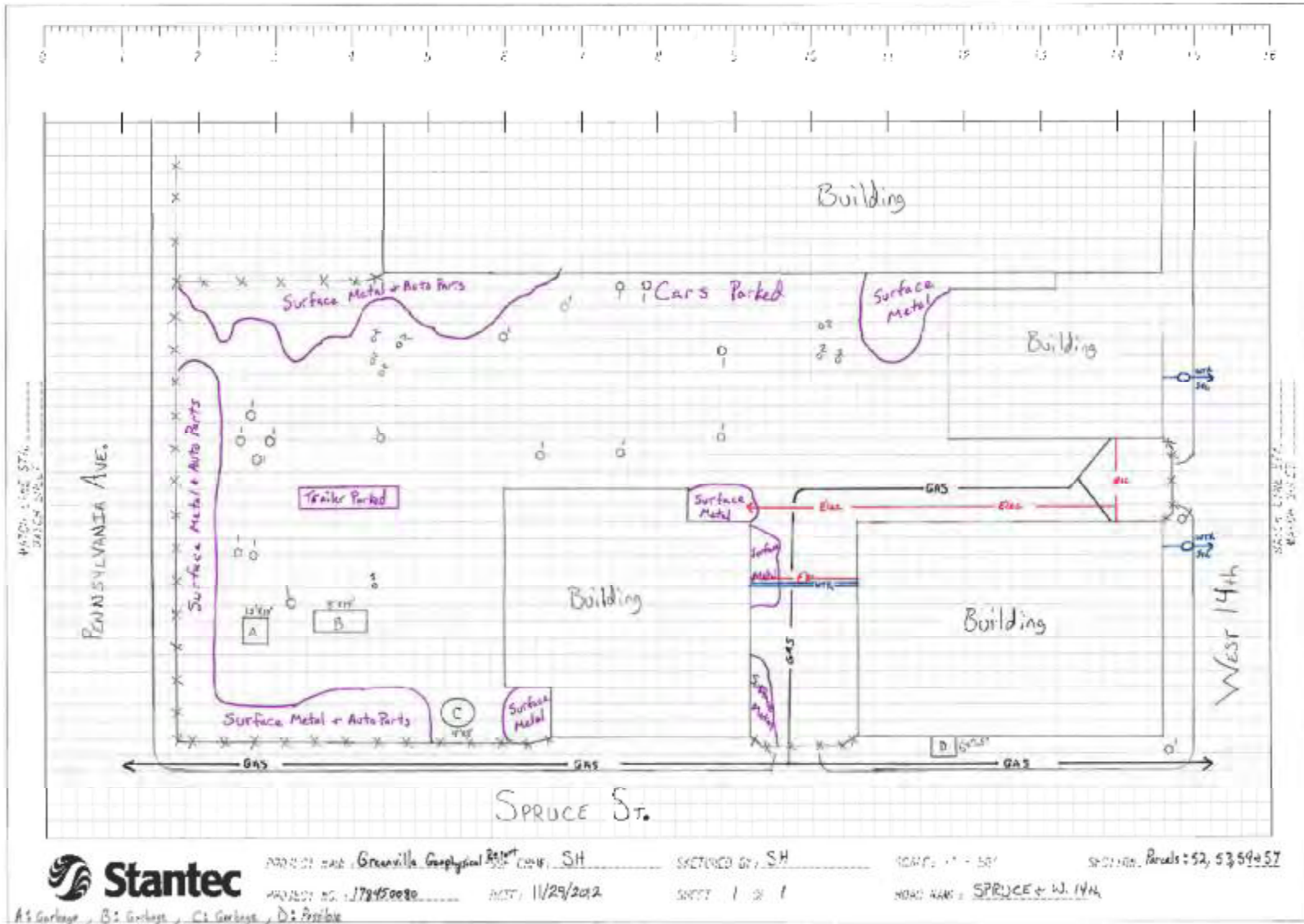
Target C



Picture shows Parcel 57 with surface metal and auto parts which interfered with investigation results

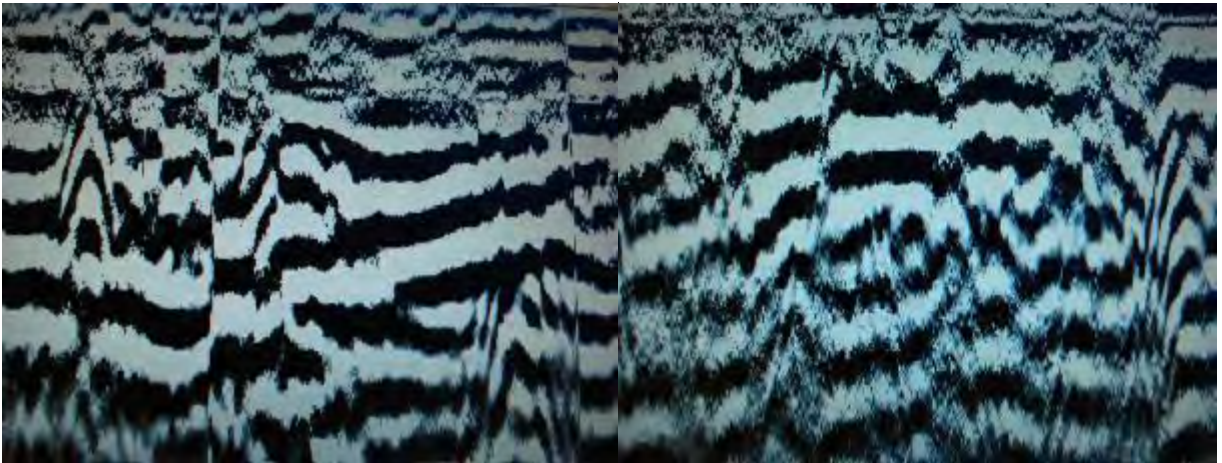


Target D



Field sketch delineating utilities and anomalies found at time of discoveries

Insert PDF of field map



GPR images obtained over targets A and B from transect passes



GPR images from transect passes over target C



GPR images over target D showing stratigraphic walls delineating altered and unaltered soils

APPENDIX C
BORING LOGS



BORING LOG: SB52-1

Client: NCDOT Project: U-3315 Parcel 52 Greenville, Pitt County, North Carolina WBS Element 35781.1.2	Date(s) Drilled : 12/13/2012 Driller : SAEDACCO Drilling Method : Direct Push	Boring Diameter : 2.25 Inches Sampling Method : Macrocore Sampling Interval : Continuous
ATC Project No. 45.19873.0007	Logged By : Aaron Leff	

Depth In Feet	USCS	GRAPHIC	DESCRIPTION	PID VOC (ppm)	Sample (ft. bgs)
0			Grass and topsoil		
1	ML		Brown SILT, moist	0.0	x
3	CL		Tan and gray silty CLAY, moist	0.0	
5			No recovery, wet sleeve	n/a	
6					
7					
8			End of borehole at 8' bgs		
9					

Soil sample was collected from 0-2.5' bgs interval.
 n/a - not applicable due to no recovery, wet.

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BORING LOG: SB52-2

Client: NCDOT Project: U-3315 Parcel 52 Greenville, Pitt County, North Carolina WBS Element 35781.1.2	Date(s) Drilled : 12/13/2012 Driller : SAEDACCO Drilling Method : Direct Push	Boring Diameter : 2.25 Inches Sampling Method : Macrocore Sampling Interval : Continuous
ATC Project No. 45.19873.0007	Logged By : Aaron Leff	

Depth In Feet	USCS	GRAPHIC	DESCRIPTION	PID VOC (ppm)	Sample (ft. bgs)
0			Grass and topsoil		
0.5			Brown SILT, moist		
1	ML			0.0	x
1.5			Gray SILT, moist		
2	ML				
2.5			Gray and tan mottled silty CLAY, dry		
3	CL			0.0	
3.5			Gray and tan mottled clayey SILT, moist		
4	ML				
4.5			Gray clayey sandy SILT, moist		
5	ML				
5.5			No recovery, wet sleeve	n/a	
6					
7				n/a	
8			End of borehole at 8' bgs		
9					

Soil sample was collected from 0-2.5' bgs interval.
 n/a - not applicable due to no recovery, wet sleeve.



BORING LOG: SB53-1

Client: NCDOT Project: U-3315 Parcel 53 Greenville, Pitt County, North Carolina WBS Element 35781.1.2	Date(s) Drilled : 12/12/2012 Driller : SAEDACCO Drilling Method : Direct Push	Boring Diameter : 2.25 Inches Sampling Method : Macrocore Sampling Interval : Continuous
ATC Project No. 45.19873.0007	Logged By : Aaron Leff	

Depth In Feet	USCS	GRAPHIC	DESCRIPTION	PID VOC (ppm)	Sample (ft. bgs)
0	GW		Sandy GRAVEL, dry		
0.5			Brown SILT, dry		
1	ML			0.0	x
1.5	ML		Brown and gray SILT, moist		
2	ML		Brown, gray, orange clayey SILT, moist		
3	ML				
4	ML		Gray clayey SILT, moist	0.0	
5	ML			0.0	
6	ML		Gray and tan sandy SILT, saturated		
7	ML			n/a	
8			End of borehole at 8' bgs		
9					

Soil sample was collected from 0-2.5' bgs interval.
 n/a - not applicable due to saturated soil.

01-30-2013 S:\Environ\NCDOT\Projects\U-3315\Boring Logs\SB53-1.bor



BORING LOG: SB53-2

Client: NCDOT Project: U-3315 Parcel 53 Greenville, Pitt County, North Carolina WBS Element 35781.1.2	Date(s) Drilled : 12/13/2012 Driller : SAEDACCO Drilling Method : Direct Push	Boring Diameter : 2.25 Inches Sampling Method : Macrocore Sampling Interval : Continuous
ATC Project No. 45.19873.0007	Logged By : Aaron Leff	

Depth In Feet	USCS	GRAPHIC	DESCRIPTION	PID VOC (ppm)	Sample (ft. bgs)
0	GW		Sandy GRAVEL, dry	6.4	
1	SW		Tan silty coarse grained SAND, moist		
2	ML		Gray clayey sandy SILT, moist		
3	ML		Dark gray SILT, moist Strong petroleum odor	28.0	x
4					
5	ML		Gray and tan sandy SILT, saturated	n/a	
6					
7					
8			End of borehole at 8' bgs	n/a	
9					

Soil sample was collected from 2.5'-5' bgs interval.
 n/a - not applicable due to saturated soil.



BORING LOG: SB53-3

Client: NCDOT Project: U-3315 Parcel 53 Greenville, Pitt County, North Carolina WBS Element 35781.1.2	Date(s) Drilled : 12/12/2012 Driller : SAEDACCO Drilling Method : Direct Push	Boring Diameter : 2.25 Inches Sampling Method : Macrocore Sampling Interval : Continuous
ATC Project No. 45.19873.0007	Logged By : Aaron Leff	

Depth In Feet	USCS	GRAPHIC	DESCRIPTION	PID VOC (ppm)	Sample (ft. bgs)
0	ML		Brown SILT, dry		
1	ML		Tan sandy SILT, dry		
2	ML		Gray clayey SILT, moist	0.0	x
3	CL		Brown and gray silty CLAY, moist		
4				0.0	
5				0.0	
6				0.0	
7	ML		Tan SILT, saturated	0.0	
8	End of borehole at 8' bgs				
9					

Soil sample was collected from 0-2.5' bgs interval.



BORING LOG: SB53-4

Client: NCDOT Project: U-3315 Parcel 53 Greenville, Pitt County, North Carolina WBS Element 35781.1.2	Date(s) Drilled : 12/12/2012 Driller : SAEDACCO Drilling Method : Direct Push	Boring Diameter : 2.25 Inches Sampling Method : Macrocore Sampling Interval : Continuous
ATC Project No. 45.19873.0007	Logged By : Aaron Leff	

Depth In Feet	USCS	GRAPHIC	DESCRIPTION	PID VOC (ppm)	Sample (ft. bgs)
0			Grass and topsoil		
0.5	ML		Brown SILT, dry		
1			Light brown silty SAND, moist	0.0	x
2	SM				
3			Brown silty SAND, saturated		
4				n/a	
5					
6	SM			n/a	
7					
8			End of borehole at 8' bgs	n/a	
9					

Soil sample was collected from 0-2.5' bgs interval.
 n/a - not applicable due to saturated soil.



BORING LOG: SB53-5

Client: NCDOT Project: U-3315 Parcel 53 Greenville, Pitt County, North Carolina WBS Element 35781.1.2	Date(s) Drilled : 12/13/2012 Driller : SAEDACCO Drilling Method : Direct Push	Boring Diameter : 2.25 Inches Sampling Method : Macrocore Sampling Interval : Continuous
ATC Project No. 45.19873.0007	Logged By : Aaron Leff	

Depth In Feet	USCS	GRAPHIC	DESCRIPTION	PID VOC (ppm)	Sample (ft. bgs)
0	GW		Brown sandy GRAVEL, dry		
0.5	SW		Light brown coarse grained SAND, moist		
1	ML		Dark brown SILT, moist	0.2	
2	SM		Tan and gray mottled SILT, moist		
3	CL		Tan and gray mottled silty CLAY, wet		
4			1.3	x	
5				0.8	
6	ML		Gray sandy SILT, saturated		
7	ML			n/a	
8	End of borehole at 8' bgs				
9					

Soil sample was collected from 2.5'-5' bgs interval.
 n/a - not applicable due to saturated soil.



BORING LOG: SB53-6

Client: NCDOT Project: U-3315 Parcel 53 Greenville, Pitt County, North Carolina WBS Element 35781.1.2	Date(s) Drilled : 12/13/2012 Driller : SAEDACCO Drilling Method : Direct Push	Boring Diameter : 2.25 Inches Sampling Method : Macrocore Sampling Interval : Continuous
ATC Project No. 45.19873.0007	Logged By : Aaron Leff	

Depth In Feet	USCS	GRAPHIC	DESCRIPTION	PID VOC (ppm)	Sample (ft. bgs)
0	GW		Sandy GRAVEL, dry		
1	SM		Tan silty SAND, moist		
2			Brown SILT, moist	1.7	x
3	ML				
4			Gray SILT, saturated	0.4	
5	ML				
6			End of borehole at 8' bgs	n/a	
7	ML				
8				n/a	
9					

Soil sample was collected from 0-2.5' bgs interval.
 n/a - not applicable due to saturated soil.

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BORING LOG: SB53-7

Client: NCDOT Project: U-3315 Parcel 53 Greenville, Pitt County, North Carolina WBS Element 35781.1.2	Date(s) Drilled : 12/13/2012 Driller : SAEDACCO Drilling Method : Direct Push	Boring Diameter : 2.25 Inches Sampling Method : Macrocore Sampling Interval : Continuous
ATC Project No. 45.19873.0007	Logged By : Aaron Leff	

Depth In Feet	USCS	GRAPHIC	DESCRIPTION	PID VOC (ppm)	Sample (ft. bgs)
0	GW		Sandy GRAVEL, dry		
1	ML		Dark gray SILT, moist	1.1	x
2	ML		Light gray and tan SILT, moist		
3	CL		Gray and tan mottled silty CLAY, moist	0.0	
4	ML		Gray and tan mottled SILT, moist	0.0	
5	ML				
6	ML		Gray and tan SILT, saturated		
7	ML			n/a	
8	End of borehole at 8' bgs				
9					

Soil sample was collected from 0-2.5' bgs interval.
 n/a - not applicable due to saturated soil.

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BORING LOG: SB53-8

Client: NCDOT
 Project: U-3315 Parcel 53
 Greenville, Pitt County, North Carolina
 WBS Element 35781.1.2

Date(s) Drilled : 12/13/2012
 Driller : SAEDACCO
 Drilling Method : Direct Push

Boring Diameter : 2.25 Inches
 Sampling Method : Macrocore
 Sampling Interval : Continuous

ATC Project No. 45.19873.0007

Logged By : Aaron Leff

Depth In Feet	USCS	GRAPHIC	DESCRIPTION	PID VOC (ppm)	Sample (ft. bgs)
0			Grass and topsoil		
1			Light brown SILT, wet	0.0	
2	ML				
3					
4			Light tan and gray clayey SILT, wet	0.0	
5	ML				
6			Gray and tan silty CLAY, moist	0.6	
7	CL				
8			End of borehole at 8' bgs	0.8	x
9					

Soil sample was collected from 6'-8' bgs interval.
 Bottom 2" full of tan sandy SILT, saturated.



BORING LOG: SB53-9

Client: NCDOT Project: U-3315 Parcel 53 Greenville, Pitt County, North Carolina WBS Element 35781.1.2	Date(s) Drilled : 12/13/2012 Driller : SAEDACCO Drilling Method : Direct Push	Boring Diameter : 2.25 Inches Sampling Method : Macrocore Sampling Interval : Continuous
ATC Project No. 45.19873.0007	Logged By : Aaron Leff	

Depth In Feet	USCS	GRAPHIC	DESCRIPTION	PID VOC (ppm)	Sample (ft. bgs)
0	AR		Concrete and sub-base		
1	ML		Brown SILT, dry	0.0	
2	ML		Gray SILT, dry		
3	ML		Gray SILT, moist		
4	SC		Gray and tan mottled clayey SILT, moist	0.0	x
5			Clay and tan SILT, saturated	n/a	
6	ML				
7					
8			End of borehole at 8' bgs		
9					

Soil sample was collected from 2.5'-5' bgs interval.
 n/a - not applicable due to saturated soil.



BORING LOG: SB54-1

Client: NCDOT
 Project: U-3315 Parcel 54
 Greenville, Pitt County, North Carolina
 WBS Element 35781.1.2

Date(s) Drilled : 12/12/2012
 Driller : SAEDACCO
 Drilling Method : Direct Push

Boring Diameter : 2.25 Inches
 Sampling Method : Macrocore
 Sampling Interval : Continuous

ATC Project No. 45.19873.0007

Logged By : Aaron Leff

Depth In Feet	USCS	GRAPHIC	DESCRIPTION	PID VOC (ppm)	Sample (ft. bgs)
0	GW		Dark gray sandy GRAVEL, dry	0.0	
1	ML		Brown SILT, dry		
2	ML		Tannish gray SILT, dry		
3	CL		Tan and gray mottled silty CLAY, moist	7.1	x
4	ML		Tan and gray mottled clayey SILT, moist		
5	ML			6.0	
6	ML		Gray and tan sandy SILT, saturated	n/a	
7	ML				
8	End of borehole at 8' bgs				
9					

Soil sample was collected from 2.5'-5' bgs interval.
 n/a - not applicable due to saturated soil.



BORING LOG: SB54-2

Client: NCDOT Project: U-3315 Parcel 54 Greenville, Pitt County, North Carolina WBS Element 35781.1.2	Date(s) Drilled : 12/12/2012 Driller : SAEDACCO Drilling Method : Direct Push	Boring Diameter : 2.25 Inches Sampling Method : Macrocore Sampling Interval : Continuous
ATC Project No. 45.19873.0007	Logged By : Aaron Leff	

Depth In Feet	USCS	GRAPHIC	DESCRIPTION	PID VOC (ppm)	Sample (ft. bgs)
0	GW		Dark gray sandy GRAVEL, dry		
1	ML		Brown SILT, moist	0.0	x
2	ML		Tannish gray SILT, moist		
3	ML				
4	CL		Tan and gray silty CLAY, moist	0.0	
5	ML		Gray sandy SILT, moist		
6	ML		Gray and tan sandy SILT, saturated	n/a	
7	ML			n/a	
8	End of borehole at 8' bgs				
9					

Soil sample was collected from 0'-2.5' bgs interval.
 n/a - not applicable due to saturated soil.



BORING LOG: SB54-3

Client: NCDOT Project: U-3315 Parcel 54 Greenville, Pitt County, North Carolina WBS Element 35781.1.2	Date(s) Drilled : 12/12/2012 Driller : SAEDACCO Drilling Method : Direct Push	Boring Diameter : 2.25 Inches Sampling Method : Macrocore Sampling Interval : Continuous
ATC Project No. 45.19873.0007	Logged By : Aaron Leff	

Depth In Feet	USCS	GRAPHIC	DESCRIPTION	PID VOC (ppm)	Sample (ft. bgs)
0	GW		Dark gray sandy GRAVEL, dry	0.0	x
	SP		Rusty SAND, moist		
			Brown SILT, moist		
1	ML				
2			Tan and gray silty CLAY, moist	0.0	
3	CL				
4					
5			Gray and tan sandy SILT, saturated	0.0	
6	ML				
7				n/a	
8			End of borehole at 8' bgs		
9					

Soil sample was collected from 0-2.5' bgs interval.
 n/a - not applicable due to saturated soil.



BORING LOG: SB54-4

Client: NCDOT Project: U-3315 Parcel 54 Greenville, Pitt County, North Carolina WBS Element 35781.1.2	Date(s) Drilled : 12/12/2012 Driller : SAEDACCO Drilling Method : Direct Push	Boring Diameter : 2.25 Inches Sampling Method : Macrocore Sampling Interval : Continuous
ATC Project No. 45.19873.0007	Logged By : Aaron Leff	

Depth In Feet	USCS	GRAPHIC	DESCRIPTION	PID VOC (ppm)	Sample (ft. bgs)
0	GW		Dark gray sandy GRAVEL, dry		
1	ML		Brown SILT, moist		
2	CL		Tan and gray mottled silty CLAY, dry	0.0	x
3	CL			0.0	
4	CL			0.0	
5	ML		Orangeish tan and gray SILT, moist	0.0	
6	ML		Orangeish tan and gray SILT, saturated	0.0	
7	ML			n/a	
8			End of borehole at 8' bgs		
9					

Soil sample was collected from 0-2.5' bgs interval.
 n/a - not applicable due to saturated soil.

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BORING LOG: SB57-1

Client: NCDOT
 Project: U-3315 Parcel 57
 Greenville, Pitt County, North Carolina
 WBS Element 35781.1.2

Date(s) Drilled : 12/11/2012
 Driller : SAEDACCO
 Drilling Method : Direct Push

Boring Diameter : 2.25 Inches
 Sampling Method : Macrocore
 Sampling Interval : Continuous

ATC Project No. 45.19873.0007

Logged By : Aaron Leff

Depth In Feet	USCS	GRAPHIC	DESCRIPTION	PID VOC (ppm)	Sample (ft. bgs)
0			Grass and Topsoil		
0-2.5	ML		Brown SILT, dry	0.0	x
2-2.5	CL		Gray silty CLAY, moist		
2.5-3.0	CL		Gray and orange mottled CLAY, dry		
3.0-4.0	CL		Gray and orange mottled clayey SAND, dry	0.0	
4.0-5.0	SC		Gray and orange mottled clayey SAND, dry	0.0	
5.0-6.0	SC		Gray and orange mottled clayey SAND, dry	0.0	
6.0-7.0	SM		Grayish to SILTY SAND, moist	0.0	
7.0-8.0	CL		Gray and tan mottled CLAY, moist		
8.0-8.5	SM		Grayish tan SAND, wet		
8.5-9.0	CL		Gray and tan mottled sandy CLAY, wet		
9.0-10.0	CL		Gray and tan mottled sandy CLAY, wet		
10.0-10.5	SM		Grayish tan SAND, wet		
10.5-11.0	CL		Gray and tan mottled silty CLAY, wet		
11.0-12.0	CL		Gray and tan mottled silty CLAY, wet		
12.0			End of borehole at 12' bgs		

Soil sample was collected from 0-2.5' bgs interval.



BORING LOG: SB57-2

Client: NCDOT Project: U-3315 Parcel 57 Greenville, Pitt County, North Carolina WBS Element 35781.1.2	Date(s) Drilled : 12/11/2012 Driller : SAEDACCO Drilling Method : Direct Push	Boring Diameter : 2.25 Inches Sampling Method : Macrocore Sampling Interval : Continuous
ATC Project No. 45.19873.0007	Logged By : Aaron Leff	

Depth In Feet	USCS	GRAPHIC	DESCRIPTION	PID VOC (ppm)	Sample (ft. bgs)
0			Grass and topsoil		
1	ML		Brown SILT, dry	0.0	x
2	CL		Tan and orange mottled CLAY, dry		
3			Grayish tan sandy CLAY, dry	0.0	
4					
5	CL			0.0	
6					
7				0.0	
8			Grayish tan sandy CLAY, wet		
9					
10	CL				
11					
12			End of borehole at 12' bgs		
13					

Soil sample was collected from 0-2.5' bgs interval.



BORING LOG: SB57-3

Client: NCDOT Project: U-3315 Parcel 57 Greenville, Pitt County, North Carolina WBS Element 35781.1.2	Date(s) Drilled : 12/11/2012 Driller : SAEDACCO Drilling Method : Direct Push	Boring Diameter : 2.25 Inches Sampling Method : Macrocore Sampling Interval : Continuous
ATC Project No. 45.19873.0007	Logged By : Aaron Leff	

Depth In Feet	USCS	GRAPHIC	DESCRIPTION	PID VOC (ppm)	Sample (ft. bgs)
0			Grass and topsoil		
0.5			Brown SILT		
1	ML			0.0	x
1.5			Grayish tan clayey silty SAND, moist		
2	SM				
2.5			Brown and orange mottled CLAY, dry		
3	CL				
3.5			Gray and orange mottled sandy CLAY, dry		
4	CL			0.0	
4.5			Grey and tan mottled clayey SAND, dry		
5	SC				
5.5			Tan and gray SAND, moist		
6	SP			0.0	
6.5			Tan and gray clayey SAND, moist		
7	SC			0.0	
7.5			Tan and gray SAND, wet		
8	SP				
End of borehole at 8' bgs					
9					

Soil sample was collected from 0-2.5' bgs interval.



BORING LOG: SB57-4

Client: NCDOT Project: U-3315 Parcel 57 Greenville, Pitt County, North Carolina WBS Element 35781.1.2	Date(s) Drilled : 12/11/2012 Driller : SAEDACCO Drilling Method : Direct Push	Boring Diameter : 2.25 Inches Sampling Method : Macrocore Sampling Interval : Continuous
ATC Project No. 45.19873.0007	Logged By : Aaron Leff	

Depth In Feet	USCS	GRAPHIC	DESCRIPTION	PID VOC (ppm)	Sample (ft. bgs)
0			Grass and Topsoil		
0.5			Brown SILT, dry		
1	ML			0.0	x
2					
3	CL		Hard gray and tan mottled CLAY, dry		
4	SC		Gray and tan mottled clayey SAND, dry	0.0	
5	SM		Gray and tan silty SAND, moist		
6				0.0	
7	SM		Gray and tan silty SAND, saturated		
8			End of borehole at 8' bgs		
9					

Soil sample was collected from 0-2.5' bgs interval.



BORING LOG: SB57-5

Client: NCDOT Project: U-3315 Parcel 57 Greenville, Pitt County, North Carolina WBS Element 35781.1.2	Date(s) Drilled : 12/11/2012 Driller : SAEDACCO Drilling Method : Direct Push	Boring Diameter : 2.25 Inches Sampling Method : Macrocore Sampling Interval : Continuous
ATC Project No. 45.19873.0007	Logged By : Aaron Leff	

Depth In Feet	USCS	GRAPHIC	DESCRIPTION	PID VOC (ppm)	Sample (ft. bgs)
0			Grass and Topsoil		
	ML		Dark brown SILT, dry		
	ML		Light brown SILT, dry		
1			Light brown silty CLAY, dry	0.0	x
	CL				
2					
	CL		Tan and brown silty CLAY, dry		
3					
	CL		Tan and brown silty sandy CLAY, dry	0.0	
4					
	CL				
5			Gray clayey silty SAND, moist	0.0	
	SM				
6			Brown and gray silty SAND, wet		
	SM				
7					
8			End of borehole at 8' bgs		
9					

Soil sample was collected from 0-2.5' bgs interval.



BORING LOG: SB57-6

Client: NCDOT Project: U-3315 Parcel 57 Greenville, Pitt County, North Carolina WBS Element 35781.1.2	Date(s) Drilled : 12/11/2012 Driller : SAEDACCO Drilling Method : Direct Push	Boring Diameter : 2.25 Inches Sampling Method : Macrocore Sampling Interval : Continuous
ATC Project No. 45.19873.0007	Logged By : Aaron Leff	

Depth In Feet	USCS	GRAPHIC	DESCRIPTION	PID VOC (ppm)	Sample (ft. bgs)
0	SW		Brown and tan SAND, dry		
1	CL		Light brown silty CLAY, dry	0.0	
2	CL		Light brown silty CLAY, moist		
3	SM		Tan silty SAND, moist	0.0	
4					
5	SM		Tan sandy SILT, moist	0.0	
6					
7	SM		Tannish gray silty SAND, wet	0.0	x
8					
9					
10	SP		Tan and gray SAND, wet Hardpacked		
11					
12	End of borehole at 12' bgs				
13					

Soil sample was collected from 6'-8' bgs interval.



BORING LOG: SB57-7

Client: NCDOT
 Project: U-3315 Parcel 57
 Greenville, Pitt County, North Carolina
 WBS Element 35781.1.2

Date(s) Drilled : 12/12/2012
 Driller : SAEDACCO
 Drilling Method : Direct Push

Boring Diameter : 2.25 Inches
 Sampling Method : Macrocore
 Sampling Interval : Continuous

ATC Project No. 45.19873.0007

Logged By : Aaron Leff

Depth In Feet	USCS	GRAPHIC	DESCRIPTION	PID VOC (ppm)	Sample (ft. bgs)
0			Brown SILT, dry		
1	ML			0.0	
2	CL		Brown and gray mottled silty CLAY, dry		
3			Light tan and gray mottled CLAY, dry		
4	CL			0.0	
5	SM		Tan clayey silty SAND, dry		
6	ML		Gray and tan clayey SILT, dry	0.0	
7			Soft gray and tan mottled SILT, moist	0.0	x
8	ML				
9			Gray and tan silty CLAY, moist		
10	CL				
11					
12			End of borehole at 12' bgs		
13					

Soil sample was collected from 6'-8' bgs interval.



BORING LOG: SB57-8

Client: NCDOT Project: U-3315 Parcel 57 Greenville, Pitt County, North Carolina WBS Element 35781.1.2	Date(s) Drilled : 12/12/2012 Driller : SAEDACCO Drilling Method : Direct Push	Boring Diameter : 2.25 Inches Sampling Method : Macrocore Sampling Interval : Continuous
ATC Project No. 45.19873.0007	Logged By : Aaron Leff	

Depth In Feet	USCS	GRAPHIC	DESCRIPTION	PID VOC (ppm)	Sample (ft. bgs)
0	ML		Brown SILT, dry		
1			Gray and light tan CLAY, dry	0.0	
2					
3	CL				
4				0.0	
5			Tan clayey silty SAND, dry		
6	SM			0.0	
7					
8	ML		Tan clayey sandy SILT, wet	0.0	x
9			End of borehole at 8' bgs		

Soil sample was collected from 6'-8' bgs interval.

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BORING LOG: SB57-9

Client: NCDOT Project: U-3315 Parcel 57 Greenville, Pitt County, North Carolina WBS Element 35781.1.2	Date(s) Drilled : 12/12/2012 Driller : SAEDACCO Drilling Method : Direct Push	Boring Diameter : 2.25 Inches Sampling Method : Macrocore Sampling Interval : Continuous
ATC Project No. 45.19873.0007	Logged By : Aaron Leff	

Depth In Feet	USCS	GRAPHIC	DESCRIPTION	PID VOC (ppm)	Sample (ft. bgs)
0	SM		Brown silty SAND, dry		
1	CL		Tan sandy silty CLAY, dry	0.0	
2	CL		Tan , gray, red mottled CLAY, dry		
3	CL				
4	ML		Tan and gray mottled sandy SILT, dry	0.0	
5	ML			0.0	
6	ML			0.0	
7	ML			0.0	x
8	ML		Tan and gray mottled sandy SILT, wet		
9			End of borehole at 8' bgs		

Soil sample was collected from 6'-8' bgs interval.



BORING LOG: SB57-10

Client: NCDOT Project: U-3315 Parcel 57 Greenville, Pitt County, North Carolina WBS Element 35781.1.2	Date(s) Drilled : 12/12/2012 Driller : SAEDACCO Drilling Method : Direct Push	Boring Diameter : 2.25 Inches Sampling Method : Macrocore Sampling Interval : Continuous
ATC Project No. 45.19873.0007	Logged By : Aaron Leff	

Depth In Feet	USCS	GRAPHIC	DESCRIPTION	PID VOC (ppm)	Sample (ft. bgs)
0	ML		Brown sandy SILT, dry	0.0	
1			Brown and gray silty CLAY, dry		
2	CL			0.0	x
3					
4					
5					
6				0.0	
7			Brown and gray silty CLAY, saturated	0.0	
8			End of borehole at 8' bgs		
9					

Soil sample was collected from 5'-6' bgs interval.



WELL LOG: TW52-1

Client: NCDOT
 Project: U-3315 Parcel 52
 Greenville, Pitt County, North Carolina

Date Drilled : 12/12/2012
 Drilling Company : SAEDACCO
 Drilling Method : Direct-Push

Boring Diameter : 2.25 inches
 Sampling Method : Macrocore
 Sampling Interval : Continuous

WBS Element 35784.1.1.2
 ATC Project No. 45.19873.0007

Logged By : Aaron Leff

DEPTH	USCS	GRAPHIC	DESCRIPTION	PID (ppm)	Well: TW52-1 Top of Casing: Not Surveyed
0	ML		Brown gravelly SILT, dry		
1	ML		Tan SILT, dry	0.0	
2	ML		Gray SILT, dry		
3	CL		Tan silty CLAY, dry	249	
4	CL		Gray silty CLAY, dry, strong odor		
5	CL			208	
6	CL				
7	ML		Gray clayey SILT, moist	34.9	
8	ML		Tan and gray sandy SILT, dry		
9	ML				
10	CL		Orange and gray mottled silty CLAY, moist		
11	CL				
12	Temporary well TW52-1 set at 12 bgs				
13					

Temporary well TW52-1 set at 12 feet bgs and screened from 2-12 feet bgs.
 Soil sample taken at 2.5-5 feet bgs.
 Depth to groundwater was measured from top of casing (TOC).
 TOC is approximately 1 foot above ground surface.



WELL LOG: TW54-1

Client: NCDOT Project: U-3315 Parcel 54 Greenville, Pitt County, North Carolina	Date Drilled : 12/11/2012 Drilling Company : SAEDACCO Drilling Method : Direct-Push	Boring Diameter : 2.25 inches Sampling Method : Macrocore Sampling Interval : Continuous Logged By : Aaron Leff
WBS Element 35784.1.1.2		
ATC Project No. 45.19873.0007		

DEPTH	USCS	GRAPHIC	DESCRIPTION	PID (ppm)	
0	ML		Brown sandy SILT, dry		Well: TW54-1 Top of Casing: Not Surveyed
1	ML		Tan sandy SILT, dry	0.0	
2			Brown, tan, and gray mottled silty CLAY, dry		
3	CL			0.0	
4					
5			Orangeish tan silty CLAY, wet	0.0	
6	CL			0.0	
7			Orangeish tan sandy SILT, wet	0.0	
8					
9	ML				
10					
11					
12			Temporary well TW54-1 set at 12' bgs		
13					

Temporary well TW54-1 set at 12 feet bgs and screened from 2-12 feet bgs.
 Soil sample taken at 0-2.5 feet bgs.
 Depth to groundwater was measured from top of casing (TOC).
 TOC is approximately 1 foot above ground surface.

03-01-2013 S:\Environ\NCDOT\Projects\U-3315\Boring_Logs\TW54-1.bor

APPENDIX D
LABORATORY ANALYTICAL REPORTS



Laboratory Report of Analysis

To: Justin Ballard
ATC Associates
2725 E. Millbrook Rd
Suite 121
Raleigh, NC 27604

Report Number: **31204011**

Client Project: **NCDOT U-3315**

Dear Justin Ballard,

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 Michael D. Page 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.

Digitally signed by: Michael Page
Date: 2013.01.09 09:57:04 -05'00'

Michael D. Page
Project Manager
michael.page@sgs.com

Date

Print Date: 01/04/2013

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

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

Sample Summary

<u>Client Sample ID</u>	<u>Lab Sample ID</u>	<u>Collected</u>	<u>Received</u>	<u>Matrix</u>
SB57-1 (0-2.5)	31204011001	12/11/2012 13:55	12/15/2012 09:15	Soil-Solid as dry weight
SB57-2 (0-2.5)	31204011002	12/11/2012 14:30	12/15/2012 09:15	Soil-Solid as dry weight
SB57-3 (0-2.5)	31204011003	12/11/2012 14:50	12/15/2012 09:15	Soil-Solid as dry weight
SB57-4 (0-2.5)	31204011004	12/11/2012 15:25	12/15/2012 09:15	Soil-Solid as dry weight
SB57-5 (0-2.5)	31204011005	12/11/2012 15:50	12/15/2012 09:15	Soil-Solid as dry weight
SB57-6 (6-8)	31204011006	12/11/2012 16:20	12/15/2012 09:15	Soil-Solid as dry weight
SB57-7 (6-8)	31204011007	12/12/2012 08:15	12/15/2012 09:15	Soil-Solid as dry weight
SB57-8 (6-8)	31204011008	12/12/2012 08:35	12/15/2012 09:15	Soil-Solid as dry weight
SB57-9 (6-8)	31204011009	12/12/2012 09:00	12/15/2012 09:15	Soil-Solid as dry weight
SB57-10 (5-6)	31204011010	12/12/2012 09:20	12/15/2012 09:15	Soil-Solid as dry weight
TW54-1 (0-2.5)	31204011011	12/12/2012 10:00	12/15/2012 09:15	Soil-Solid as dry weight
TW52-1 (2.5-5)	31204011012	12/12/2012 10:30	12/15/2012 09:15	Soil-Solid as dry weight
SB54-1 (2.5-5)	31204011013	12/12/2012 12:35	12/15/2012 09:15	Soil-Solid as dry weight
SB54-2 (0-2.5)	31204011014	12/12/2012 13:05	12/15/2012 09:15	Soil-Solid as dry weight
SB54-3 (0-2.5)	31204011015	12/12/2012 13:20	12/15/2012 09:15	Soil-Solid as dry weight
SB54-4 (0-2.5)	31204011016	12/12/2012 13:50	12/15/2012 09:15	Soil-Solid as dry weight
SB53-1 (0-2.5)	31204011017	12/12/2012 14:10	12/15/2012 09:15	Soil-Solid as dry weight
SB53-3 (0-2.5)	31204011018	12/12/2012 15:20	12/15/2012 09:15	Soil-Solid as dry weight
SB53-4 (0-2.5)	31204011019	12/12/2012 15:50	12/15/2012 09:15	Soil-Solid as dry weight
SB53-5 (2.5-5)	31204011020	12/13/2012 08:10	12/15/2012 09:15	Soil-Solid as dry weight
SB53-2 (2.5-5)	31204011021	12/13/2012 09:00	12/15/2012 09:15	Soil-Solid as dry weight
TW54-1	31204011022	12/12/2012 16:25	12/15/2012 09:15	Water
TW52-1	31204011023	12/12/2012 16:45	12/15/2012 09:15	Water
SB53-6 (0-2.5)	31204011024	12/13/2012 09:28	12/15/2012 09:15	Soil-Solid as dry weight
SB53-7 (0-2.5)	31204011025	12/13/2012 09:50	12/15/2012 09:15	Soil-Solid as dry weight
SB53-8 (6-8)	31204011026	12/13/2012 10:17	12/15/2012 09:15	Soil-Solid as dry weight
SB53-9 (2.5-5)	31204011027	12/13/2012 10:39	12/15/2012 09:15	Soil-Solid as dry weight
SB52-1 (0-2.5)	31204011028	12/13/2012 12:15	12/15/2012 09:15	Soil-Solid as dry weight
SB52-2 (0-2.5)	31204011029	12/13/2012 12:35	12/15/2012 09:15	Soil-Solid as dry weight
Trip Blank (not on COC)	31204011030	12/11/2012 00:00	12/15/2012 09:15	Water

Results of SB57-1 (0-2.5)

Client Sample ID: **SB57-1 (0-2.5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011001-A
 Lab Project ID: 31204011

Collection Date: 12/11/2012 13:55
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 84.30

Results by SW-846 8015C GRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Gasoline Range Organics (GRO)	ND		3.44	mg/kg	1	12/20/2012 17:50
Surrogates						
4-Bromofluorobenzene	107		70.0-130	%	1	12/20/2012 17:50

Batch Information

Analytical Batch: **VGC2289**
 Analytical Method: **SW-846 8015C GRO**
 Instrument: **GC7**
 Analyst: **MDY**

Prep Batch: **VXX4453**
 Prep Method: **SW-846 5035**
 Prep Date/Time: **12/17/2012 16:11**
 Prep Initial Wt./Vol.: **6.89 g**
 Prep Extract Vol: **5 mL**

Results of SB57-1 (0-2.5)

Client Sample ID: **SB57-1 (0-2.5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011001-C
 Lab Project ID: 31204011

Collection Date: 12/11/2012 13:55
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 84.30

Results by SW-846 8015C DRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Diesel Range Organics (DRO)	ND		7.45	mg/kg	1	12/20/2012 23:12
Surrogates						
o-Terphenyl	75.9		40.0-140	%	1	12/20/2012 23:12

Batch Information

Analytical Batch: **XGC2804**
 Analytical Method: **SW-846 8015C DRO**
 Instrument: **GC6**
 Analyst: **DTF**

Prep Batch: **XXX3424**
 Prep Method: **SW-846 3541**
 Prep Date/Time: **12/19/2012 08:32**
 Prep Initial Wt./Vol.: **31.85 g**
 Prep Extract Vol: **10 mL**

Results of SB57-2 (0-2.5)

Client Sample ID: **SB57-2 (0-2.5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011002-A
 Lab Project ID: 31204011

Collection Date: 12/11/2012 14:30
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 81.20

Results by SW-846 8015C GRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Gasoline Range Organics (GRO)	ND		3.76	mg/kg	1	12/20/2012 18:15
Surrogates						
4-Bromofluorobenzene	108		70.0-130	%	1	12/20/2012 18:15

Batch Information

Analytical Batch: **VGC2289**
 Analytical Method: **SW-846 8015C GRO**
 Instrument: **GC7**
 Analyst: **MDY**

Prep Batch: **VXX4453**
 Prep Method: **SW-846 5035**
 Prep Date/Time: **12/17/2012 16:12**
 Prep Initial Wt./Vol.: **6.55 g**
 Prep Extract Vol: **5 mL**

Results of SB57-2 (0-2.5)

Client Sample ID: **SB57-2 (0-2.5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011002-C
 Lab Project ID: 31204011

Collection Date: 12/11/2012 14:30
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 81.20

Results by SW-846 8015C DRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Diesel Range Organics (DRO)	ND		7.30	mg/kg	1	12/20/2012 23:39
Surrogates						
o-Terphenyl	83.0		40.0-140	%	1	12/20/2012 23:39

Batch Information

Analytical Batch: **XGC2804**
 Analytical Method: **SW-846 8015C DRO**
 Instrument: **GC6**
 Analyst: **DTF**

Prep Batch: **XXX3424**
 Prep Method: **SW-846 3541**
 Prep Date/Time: **12/19/2012 08:32**
 Prep Initial Wt./Vol.: **33.75 g**
 Prep Extract Vol: **10 mL**

Results of SB57-3 (0-2.5)

Client Sample ID: **SB57-3 (0-2.5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011003-A
 Lab Project ID: 31204011

Collection Date: 12/11/2012 14:50
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 77.70

Results by SW-846 8015C GRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Gasoline Range Organics (GRO)	ND		3.69	mg/kg	1	12/20/2012 18:41
Surrogates						
4-Bromofluorobenzene	106		70.0-130	%	1	12/20/2012 18:41

Batch Information

Analytical Batch: **VGC2289**
 Analytical Method: **SW-846 8015C GRO**
 Instrument: **GC7**
 Analyst: **MDY**

Prep Batch: **VXX4453**
 Prep Method: **SW-846 5035**
 Prep Date/Time: **12/17/2012 16:13**
 Prep Initial Wt./Vol.: **6.97 g**
 Prep Extract Vol: **5 mL**

Results of SB57-3 (0-2.5)

Client Sample ID: **SB57-3 (0-2.5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011003-C
 Lab Project ID: 31204011

Collection Date: 12/11/2012 14:50
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 77.70

Results by SW-846 8015C DRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Diesel Range Organics (DRO)	ND		8.10	mg/kg	1	12/21/2012 0:08
Surrogates						
o-Terphenyl	79.9		40.0-140	%	1	12/21/2012 0:08

Batch Information

Analytical Batch: **XGC2804**
 Analytical Method: **SW-846 8015C DRO**
 Instrument: **GC6**
 Analyst: **DTF**

Prep Batch: **XXX3424**
 Prep Method: **SW-846 3541**
 Prep Date/Time: **12/19/2012 08:32**
 Prep Initial Wt./Vol.: **31.75 g**
 Prep Extract Vol: **10 mL**

Results of SB57-4 (0-2.5)

Client Sample ID: **SB57-4 (0-2.5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011004-A
 Lab Project ID: 31204011

Collection Date: 12/11/2012 15:25
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 78.20

Results by SW-846 8015C GRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Gasoline Range Organics (GRO)	ND		3.93	mg/kg	1	12/20/2012 19:06
Surrogates						
4-Bromofluorobenzene	107		70.0-130	%	1	12/20/2012 19:06

Batch Information

Analytical Batch: **VGC2289**
 Analytical Method: **SW-846 8015C GRO**
 Instrument: **GC7**
 Analyst: **MDY**

Prep Batch: **VXX4453**
 Prep Method: **SW-846 5035**
 Prep Date/Time: **12/17/2012 16:14**
 Prep Initial Wt./Vol.: **6.51 g**
 Prep Extract Vol: **5 mL**

Results of SB57-4 (0-2.5)

Client Sample ID: **SB57-4 (0-2.5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011004-C
 Lab Project ID: 31204011

Collection Date: 12/11/2012 15:25
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 78.20

Results by SW-846 8015C DRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Diesel Range Organics (DRO)	ND		7.97	mg/kg	1	12/21/2012 0:36
Surrogates						
o-Terphenyl	73.0		40.0-140	%	1	12/21/2012 0:36

Batch Information

Analytical Batch: **XGC2804**
 Analytical Method: **SW-846 8015C DRO**
 Instrument: **GC6**
 Analyst: **DTF**

Prep Batch: **XXX3424**
 Prep Method: **SW-846 3541**
 Prep Date/Time: **12/19/2012 08:32**
 Prep Initial Wt./Vol.: **32.1 g**
 Prep Extract Vol: **10 mL**

Results of SB57-5 (0-2.5)

Client Sample ID: **SB57-5 (0-2.5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011005-A
 Lab Project ID: 31204011

Collection Date: 12/11/2012 15:50
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 81.60

Results by SW-846 8015C GRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Gasoline Range Organics (GRO)	ND		4.14	mg/kg	1	12/20/2012 19:32
Surrogates						
4-Bromofluorobenzene	107		70.0-130	%	1	12/20/2012 19:32

Batch Information

Analytical Batch: **VGC2289**
 Analytical Method: **SW-846 8015C GRO**
 Instrument: **GC7**
 Analyst: **MDY**

Prep Batch: **VXX4453**
 Prep Method: **SW-846 5035**
 Prep Date/Time: **12/17/2012 16:15**
 Prep Initial Wt./Vol.: **5.92 g**
 Prep Extract Vol: **5 mL**

Results of SB57-5 (0-2.5)

Client Sample ID: **SB57-5 (0-2.5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011005-C
 Lab Project ID: 31204011

Collection Date: 12/11/2012 15:50
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 81.60

Results by SW-846 8015C DRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Diesel Range Organics (DRO)	10.2		8.03	mg/kg	1	12/21/2012 1:04
Surrogates						
o-Terphenyl	81.2		40.0-140	%	1	12/21/2012 1:04

Batch Information

Analytical Batch: **XGC2804**
 Analytical Method: **SW-846 8015C DRO**
 Instrument: **GC6**
 Analyst: **DTF**

Prep Batch: **XXX3424**
 Prep Method: **SW-846 3541**
 Prep Date/Time: **12/19/2012 08:32**
 Prep Initial Wt./Vol.: **30.52 g**
 Prep Extract Vol: **10 mL**

Results of SB57-6 (6-8)

Client Sample ID: **SB57-6 (6-8)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011006-A
 Lab Project ID: 31204011

Collection Date: 12/11/2012 16:20
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 79.70

Results by SW-846 8260B

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
1,1,1,2-Tetrachloroethane	ND		5.01	ug/Kg	1	12/18/2012 15:18
1,1,1-Trichloroethane	ND		5.01	ug/Kg	1	12/18/2012 15:18
1,1,2,2-Tetrachloroethane	ND		5.01	ug/Kg	1	12/18/2012 15:18
1,1,2-Trichloroethane	ND		5.01	ug/Kg	1	12/18/2012 15:18
1,1-Dichloroethane	ND		5.01	ug/Kg	1	12/18/2012 15:18
1,1-Dichloroethene	ND		5.01	ug/Kg	1	12/18/2012 15:18
1,1-Dichloropropene	ND		5.01	ug/Kg	1	12/18/2012 15:18
1,2,3-Trichlorobenzene	ND		5.01	ug/Kg	1	12/18/2012 15:18
1,2,3-Trichloropropane	ND		5.01	ug/Kg	1	12/18/2012 15:18
1,2,4-Trichlorobenzene	ND		5.01	ug/Kg	1	12/18/2012 15:18
1,2,4-Trimethylbenzene	ND		5.01	ug/Kg	1	12/18/2012 15:18
1,2-Dibromo-3-chloropropane	ND		30.0	ug/Kg	1	12/18/2012 15:18
1,2-Dibromoethane	ND		5.01	ug/Kg	1	12/18/2012 15:18
1,2-Dichlorobenzene	ND		5.01	ug/Kg	1	12/18/2012 15:18
1,2-Dichloroethane	ND		5.01	ug/Kg	1	12/18/2012 15:18
1,2-Dichloropropane	ND		5.01	ug/Kg	1	12/18/2012 15:18
1,3,5-Trimethylbenzene	ND		5.01	ug/Kg	1	12/18/2012 15:18
1,3-Dichlorobenzene	ND		5.01	ug/Kg	1	12/18/2012 15:18
1,3-Dichloropropane	ND		5.01	ug/Kg	1	12/18/2012 15:18
1,4-Dichlorobenzene	ND		5.01	ug/Kg	1	12/18/2012 15:18
2,2-Dichloropropane	ND		5.01	ug/Kg	1	12/18/2012 15:18
2-Butanone	ND		25.0	ug/Kg	1	12/18/2012 15:18
2-Chlorotoluene	ND		5.01	ug/Kg	1	12/18/2012 15:18
2-Hexanone	ND		12.5	ug/Kg	1	12/18/2012 15:18
4-Chlorotoluene	ND		5.01	ug/Kg	1	12/18/2012 15:18
4-Isopropyltoluene	ND		5.01	ug/Kg	1	12/18/2012 15:18
4-Methyl-2-pentanone	ND		12.5	ug/Kg	1	12/18/2012 15:18
Acetone	ND		50.1	ug/Kg	1	12/18/2012 15:18
Benzene	ND		5.01	ug/Kg	1	12/18/2012 15:18
Bromobenzene	ND		5.01	ug/Kg	1	12/18/2012 15:18
Bromochloromethane	ND		5.01	ug/Kg	1	12/18/2012 15:18
Bromodichloromethane	ND		5.01	ug/Kg	1	12/18/2012 15:18
Bromoform	ND		5.01	ug/Kg	1	12/18/2012 15:18
Bromomethane	ND		5.01	ug/Kg	1	12/18/2012 15:18
n-Butylbenzene	ND		5.01	ug/Kg	1	12/18/2012 15:18
Carbon disulfide	ND		5.01	ug/Kg	1	12/18/2012 15:18
Carbon tetrachloride	ND		5.01	ug/Kg	1	12/18/2012 15:18
Chlorobenzene	ND		5.01	ug/Kg	1	12/18/2012 15:18
Chloroethane	ND		5.01	ug/Kg	1	12/18/2012 15:18
Chloroform	ND		5.01	ug/Kg	1	12/18/2012 15:18
Chloromethane	ND		5.01	ug/Kg	1	12/18/2012 15:18
Dibromochloromethane	ND		5.01	ug/Kg	1	12/18/2012 15:18
Dibromomethane	ND		5.01	ug/Kg	1	12/18/2012 15:18

Results of SB57-6 (6-8)

Client Sample ID: **SB57-6 (6-8)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011006-A
 Lab Project ID: 31204011

Collection Date: 12/11/2012 16:20
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 79.70

Results by SW-846 8260B

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Dichlorodifluoromethane	ND		5.01	ug/Kg	1	12/18/2012 15:18
cis-1,3-Dichloropropene	ND		5.01	ug/Kg	1	12/18/2012 15:18
trans-1,3-Dichloropropene	ND		5.01	ug/Kg	1	12/18/2012 15:18
Diisopropyl Ether	ND		5.01	ug/Kg	1	12/18/2012 15:18
Ethyl Benzene	ND		5.01	ug/Kg	1	12/18/2012 15:18
Hexachlorobutadiene	ND		5.01	ug/Kg	1	12/18/2012 15:18
Isopropylbenzene (Cumene)	ND		5.01	ug/Kg	1	12/18/2012 15:18
Methyl iodide	ND		5.01	ug/Kg	1	12/18/2012 15:18
Methylene chloride	ND		20.0	ug/Kg	1	12/18/2012 15:18
Naphthalene	ND		5.01	ug/Kg	1	12/18/2012 15:18
Styrene	ND		5.01	ug/Kg	1	12/18/2012 15:18
Tetrachloroethene	ND		5.01	ug/Kg	1	12/18/2012 15:18
Toluene	ND		5.01	ug/Kg	1	12/18/2012 15:18
Trichloroethene	ND		5.01	ug/Kg	1	12/18/2012 15:18
Trichlorofluoromethane	ND		5.01	ug/Kg	1	12/18/2012 15:18
Vinyl chloride	ND		5.01	ug/Kg	1	12/18/2012 15:18
Xylene (total)	ND		10.0	ug/Kg	1	12/18/2012 15:18
cis-1,2-Dichloroethene	ND		5.01	ug/Kg	1	12/18/2012 15:18
m,p-Xylene	ND		10.0	ug/Kg	1	12/18/2012 15:18
n-Propylbenzene	ND		5.01	ug/Kg	1	12/18/2012 15:18
o-Xylene	ND		5.01	ug/Kg	1	12/18/2012 15:18
sec-Butylbenzene	ND		5.01	ug/Kg	1	12/18/2012 15:18
tert-Butyl methyl ether (MTBE)	ND		5.01	ug/Kg	1	12/18/2012 15:18
tert-Butylbenzene	ND		5.01	ug/Kg	1	12/18/2012 15:18
trans-1,2-Dichloroethene	ND		5.01	ug/Kg	1	12/18/2012 15:18
trans-1,4-Dichloro-2-butene	ND		25.0	ug/Kg	1	12/18/2012 15:18

Surrogates

1,2-Dichloroethane-d4	109		55.0-173	%	1	12/18/2012 15:18
4-Bromofluorobenzene	104		23.0-141	%	1	12/18/2012 15:18
Toluene d8	105		57.0-134	%	1	12/18/2012 15:18

Batch Information

Analytical Batch: **VMS2786**
 Analytical Method: **SW-846 8260B**
 Instrument: **MSD9**
 Analyst: **BWS**

Prep Batch: **VXX4446**
 Prep Method: **SW-846 5035 SL**
 Prep Date/Time: **12/17/2012 16:17**
 Prep Initial Wt./Vol.: **6.27 g**
 Prep Extract Vol: **5 mL**

Results of SB57-6 (6-8)

Client Sample ID: **SB57-6 (6-8)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011006-G
 Lab Project ID: 31204011

Collection Date: 12/11/2012 16:20
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 79.70

Results by SW-846 8015C GRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Gasoline Range Organics (GRO)	ND		4.50	mg/kg	1	12/20/2012 19:57
Surrogates						
4-Bromofluorobenzene	106		70.0-130	%	1	12/20/2012 19:57

Batch Information

Analytical Batch: **VGC2289**
 Analytical Method: **SW-846 8015C GRO**
 Instrument: **GC7**
 Analyst: **MDY**

Prep Batch: **VXX4453**
 Prep Method: **SW-846 5035**
 Prep Date/Time: **12/17/2012 16:17**
 Prep Initial Wt./Vol.: **5.58 g**
 Prep Extract Vol: **5 mL**



Results of SB57-6 (6-8)

Client Sample ID: SB57-6 (6-8)
Client Project ID: NCDOT U-3315
Lab Sample ID: 31204011006-B
Lab Project ID: 31204011

Collection Date: 12/11/2012 16:20
Received Date: 12/15/2012 09:15
Matrix: Soil-Solid as dry weight
Solids (%): 79.70

Results by SW-846 8270D

Table with 7 columns: Parameter, Result, Qual, LOQ/CL, Units, DF, Date Analyzed. Lists various chemical compounds and their detection results.

Results of SB57-6 (6-8)

Client Sample ID: **SB57-6 (6-8)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011006-B
 Lab Project ID: 31204011

Collection Date: 12/11/2012 16:20
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 79.70

Results by SW-846 8270D

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Diethyl phthalate	ND		377	ug/Kg	1	01/2/2013 12:51
Dimethyl phthalate	ND		377	ug/Kg	1	01/2/2013 12:51
2,4-Dimethylphenol	ND		377	ug/Kg	1	01/2/2013 12:51
Diphenylamine	ND		377	ug/Kg	1	01/2/2013 12:51
Fluoranthene	ND		377	ug/Kg	1	01/2/2013 12:51
Fluorene	ND		377	ug/Kg	1	01/2/2013 12:51
Hexachlorobenzene	ND		1880	ug/Kg	1	01/2/2013 12:51
Hexachlorobutadiene	ND		377	ug/Kg	1	01/2/2013 12:51
Hexachlorocyclopentadiene	ND		753	ug/Kg	1	01/2/2013 12:51
Hexachloroethane	ND		377	ug/Kg	1	01/2/2013 12:51
Indeno(1,2,3-cd)pyrene	ND		377	ug/Kg	1	01/2/2013 12:51
Isophorone	ND		377	ug/Kg	1	01/2/2013 12:51
Naphthalene	ND		377	ug/Kg	1	01/2/2013 12:51
4-Nitroaniline	ND		1880	ug/Kg	1	01/2/2013 12:51
Nitrobenzene	ND		377	ug/Kg	1	01/2/2013 12:51
4-Nitrophenol	ND		1880	ug/Kg	1	01/2/2013 12:51
Pentachlorophenol	ND		1880	ug/Kg	1	01/2/2013 12:51
Phenanthrene	ND		377	ug/Kg	1	01/2/2013 12:51
Phenol	ND		377	ug/Kg	1	01/2/2013 12:51
Pyrene	ND		377	ug/Kg	1	01/2/2013 12:51
n-Nitrosodi-n-propylamine	ND		377	ug/Kg	1	01/2/2013 12:51

Surrogates

2,4,6-Tribromophenol	86.0		41.0-129	%	1	01/2/2013 12:51
2-Fluorobiphenyl	88.0		48.0-123	%	1	01/2/2013 12:51
2-Fluorophenol	95.0		42.0-123	%	1	01/2/2013 12:51
Nitrobenzene-d5	91.0		46.0-117	%	1	01/2/2013 12:51
Phenol-d6	102		48.0-125	%	1	01/2/2013 12:51
Terphenyl-d14	88.0		44.0-140	%	1	01/2/2013 12:51

Batch Information

Analytical Batch: **XMS1781**
 Analytical Method: **SW-846 8270D**
 Instrument: **MSD6**
 Analyst: **CMP**

Prep Batch: **XXX3429**
 Prep Method: **SW-846 3541**
 Prep Date/Time: **12/20/2012 08:43**
 Prep Initial Wt./Vol.: **33.39 g**
 Prep Extract Vol: **10 mL**

Results of SB57-6 (6-8)

Client Sample ID: **SB57-6 (6-8)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011006-B
 Lab Project ID: 31204011

Collection Date: 12/11/2012 16:20
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 79.70

Results by SW-846 8015C DRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Diesel Range Organics (DRO)	ND		7.38	mg/kg	1	12/21/2012 1:33
Surrogates						
o-Terphenyl	65.5		40.0-140	%	1	12/21/2012 1:33

Batch Information

Analytical Batch: **XGC2804**
 Analytical Method: **SW-846 8015C DRO**
 Instrument: **GC6**
 Analyst: **DTF**

Prep Batch: **XXX3424**
 Prep Method: **SW-846 3541**
 Prep Date/Time: **12/19/2012 08:32**
 Prep Initial Wt./Vol.: **34.01 g**
 Prep Extract Vol: **10 mL**

Results of SB57-7 (6-8)

Client Sample ID: **SB57-7 (6-8)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011007-A
 Lab Project ID: 31204011

Collection Date: 12/12/2012 08:15
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 78.00

Results by SW-846 8260B

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
1,1,1,2-Tetrachloroethane	ND		4.99	ug/Kg	1	12/18/2012 15:45
1,1,1-Trichloroethane	ND		4.99	ug/Kg	1	12/18/2012 15:45
1,1,2,2-Tetrachloroethane	ND		4.99	ug/Kg	1	12/18/2012 15:45
1,1,2-Trichloroethane	ND		4.99	ug/Kg	1	12/18/2012 15:45
1,1-Dichloroethane	ND		4.99	ug/Kg	1	12/18/2012 15:45
1,1-Dichloroethene	ND		4.99	ug/Kg	1	12/18/2012 15:45
1,1-Dichloropropene	ND		4.99	ug/Kg	1	12/18/2012 15:45
1,2,3-Trichlorobenzene	ND		4.99	ug/Kg	1	12/18/2012 15:45
1,2,3-Trichloropropane	ND		4.99	ug/Kg	1	12/18/2012 15:45
1,2,4-Trichlorobenzene	ND		4.99	ug/Kg	1	12/18/2012 15:45
1,2,4-Trimethylbenzene	ND		4.99	ug/Kg	1	12/18/2012 15:45
1,2-Dibromo-3-chloropropane	ND		30.0	ug/Kg	1	12/18/2012 15:45
1,2-Dibromoethane	ND		4.99	ug/Kg	1	12/18/2012 15:45
1,2-Dichlorobenzene	ND		4.99	ug/Kg	1	12/18/2012 15:45
1,2-Dichloroethane	ND		4.99	ug/Kg	1	12/18/2012 15:45
1,2-Dichloropropane	ND		4.99	ug/Kg	1	12/18/2012 15:45
1,3,5-Trimethylbenzene	ND		4.99	ug/Kg	1	12/18/2012 15:45
1,3-Dichlorobenzene	ND		4.99	ug/Kg	1	12/18/2012 15:45
1,3-Dichloropropane	ND		4.99	ug/Kg	1	12/18/2012 15:45
1,4-Dichlorobenzene	ND		4.99	ug/Kg	1	12/18/2012 15:45
2,2-Dichloropropane	ND		4.99	ug/Kg	1	12/18/2012 15:45
2-Butanone	ND		25.0	ug/Kg	1	12/18/2012 15:45
2-Chlorotoluene	ND		4.99	ug/Kg	1	12/18/2012 15:45
2-Hexanone	ND		12.5	ug/Kg	1	12/18/2012 15:45
4-Chlorotoluene	ND		4.99	ug/Kg	1	12/18/2012 15:45
4-Isopropyltoluene	ND		4.99	ug/Kg	1	12/18/2012 15:45
4-Methyl-2-pentanone	ND		12.5	ug/Kg	1	12/18/2012 15:45
Acetone	ND		49.9	ug/Kg	1	12/18/2012 15:45
Benzene	ND		4.99	ug/Kg	1	12/18/2012 15:45
Bromobenzene	ND		4.99	ug/Kg	1	12/18/2012 15:45
Bromochloromethane	ND		4.99	ug/Kg	1	12/18/2012 15:45
Bromodichloromethane	ND		4.99	ug/Kg	1	12/18/2012 15:45
Bromoform	ND		4.99	ug/Kg	1	12/18/2012 15:45
Bromomethane	ND		4.99	ug/Kg	1	12/18/2012 15:45
n-Butylbenzene	ND		4.99	ug/Kg	1	12/18/2012 15:45
Carbon disulfide	ND		4.99	ug/Kg	1	12/18/2012 15:45
Carbon tetrachloride	ND		4.99	ug/Kg	1	12/18/2012 15:45
Chlorobenzene	ND		4.99	ug/Kg	1	12/18/2012 15:45
Chloroethane	ND		4.99	ug/Kg	1	12/18/2012 15:45
Chloroform	ND		4.99	ug/Kg	1	12/18/2012 15:45
Chloromethane	ND		4.99	ug/Kg	1	12/18/2012 15:45
Dibromochloromethane	ND		4.99	ug/Kg	1	12/18/2012 15:45
Dibromomethane	ND		4.99	ug/Kg	1	12/18/2012 15:45

Results of SB57-7 (6-8)

Client Sample ID: **SB57-7 (6-8)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011007-A
 Lab Project ID: 31204011

Collection Date: 12/12/2012 08:15
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 78.00

Results by SW-846 8260B

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Dichlorodifluoromethane	ND		4.99	ug/Kg	1	12/18/2012 15:45
cis-1,3-Dichloropropene	ND		4.99	ug/Kg	1	12/18/2012 15:45
trans-1,3-Dichloropropene	ND		4.99	ug/Kg	1	12/18/2012 15:45
Diisopropyl Ether	ND		4.99	ug/Kg	1	12/18/2012 15:45
Ethyl Benzene	ND		4.99	ug/Kg	1	12/18/2012 15:45
Hexachlorobutadiene	ND		4.99	ug/Kg	1	12/18/2012 15:45
Isopropylbenzene (Cumene)	ND		4.99	ug/Kg	1	12/18/2012 15:45
Methyl iodide	ND		4.99	ug/Kg	1	12/18/2012 15:45
Methylene chloride	ND		20.0	ug/Kg	1	12/18/2012 15:45
Naphthalene	ND		4.99	ug/Kg	1	12/18/2012 15:45
Styrene	ND		4.99	ug/Kg	1	12/18/2012 15:45
Tetrachloroethene	ND		4.99	ug/Kg	1	12/18/2012 15:45
Toluene	ND		4.99	ug/Kg	1	12/18/2012 15:45
Trichloroethene	ND		4.99	ug/Kg	1	12/18/2012 15:45
Trichlorofluoromethane	ND		4.99	ug/Kg	1	12/18/2012 15:45
Vinyl chloride	ND		4.99	ug/Kg	1	12/18/2012 15:45
Xylene (total)	ND		9.99	ug/Kg	1	12/18/2012 15:45
cis-1,2-Dichloroethene	ND		4.99	ug/Kg	1	12/18/2012 15:45
m,p-Xylene	ND		9.99	ug/Kg	1	12/18/2012 15:45
n-Propylbenzene	ND		4.99	ug/Kg	1	12/18/2012 15:45
o-Xylene	ND		4.99	ug/Kg	1	12/18/2012 15:45
sec-Butylbenzene	ND		4.99	ug/Kg	1	12/18/2012 15:45
tert-Butyl methyl ether (MTBE)	ND		4.99	ug/Kg	1	12/18/2012 15:45
tert-Butylbenzene	ND		4.99	ug/Kg	1	12/18/2012 15:45
trans-1,2-Dichloroethene	ND		4.99	ug/Kg	1	12/18/2012 15:45
trans-1,4-Dichloro-2-butene	ND		25.0	ug/Kg	1	12/18/2012 15:45

Surrogates

1,2-Dichloroethane-d4	110		55.0-173	%	1	12/18/2012 15:45
4-Bromofluorobenzene	103		23.0-141	%	1	12/18/2012 15:45
Toluene d8	102		57.0-134	%	1	12/18/2012 15:45

Batch Information

Analytical Batch: **VMS2786**
 Analytical Method: **SW-846 8260B**
 Instrument: **MSD9**
 Analyst: **BWS**

Prep Batch: **VXX4446**
 Prep Method: **SW-846 5035 SL**
 Prep Date/Time: **12/17/2012 16:20**
 Prep Initial Wt./Vol.: **6.42 g**
 Prep Extract Vol: **5 mL**

Results of SB57-7 (6-8)

Client Sample ID: **SB57-7 (6-8)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011007-G
 Lab Project ID: 31204011

Collection Date: 12/12/2012 08:15
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 78.00

Results by SW-846 8015C GRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Gasoline Range Organics (GRO)	ND		4.18	mg/kg	1	12/20/2012 20:23
Surrogates						
4-Bromofluorobenzene	97.5		70.0-130	%	1	12/20/2012 20:23

Batch Information

Analytical Batch: **VGC2289**
 Analytical Method: **SW-846 8015C GRO**
 Instrument: **GC7**
 Analyst: **MDY**

Prep Batch: **VXX4453**
 Prep Method: **SW-846 5035**
 Prep Date/Time: **12/17/2012 16:20**
 Prep Initial Wt./Vol.: **6.13 g**
 Prep Extract Vol: **5 mL**



Results of **SB57-7 (6-8)**

Client Sample ID: **SB57-7 (6-8)**
Client Project ID: **NCDOT U-3315**
Lab Sample ID: 31204011007-B
Lab Project ID: 31204011

Collection Date: 12/12/2012 08:15
Received Date: 12/15/2012 09:15
Matrix: Soil-Solid as dry weight
Solids (%): 78.00

Results by **SW-846 8270D**

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
1,2,4-Trichlorobenzene	ND		402	ug/Kg	1	01/2/2013 14:03
1,2-Dichlorobenzene	ND		402	ug/Kg	1	01/2/2013 14:03
1,3-Dichlorobenzene	ND		402	ug/Kg	1	01/2/2013 14:03
1,4-Dichlorobenzene	ND		402	ug/Kg	1	01/2/2013 14:03
2,4,5-Trichlorophenol	ND		402	ug/Kg	1	01/2/2013 14:03
2,4,6-Trichlorophenol	ND		402	ug/Kg	1	01/2/2013 14:03
2,4-Dichlorophenol	ND		402	ug/Kg	1	01/2/2013 14:03
2,4-Dinitrophenol	ND		2010	ug/Kg	1	01/2/2013 14:03
2,4-Dinitrotoluene	ND		402	ug/Kg	1	01/2/2013 14:03
2,6-Dinitrotoluene	ND		402	ug/Kg	1	01/2/2013 14:03
2-Chloronaphthalene	ND		402	ug/Kg	1	01/2/2013 14:03
2-Chlorophenol	ND		402	ug/Kg	1	01/2/2013 14:03
2-Methylnaphthalene	ND		402	ug/Kg	1	01/2/2013 14:03
2-Methylphenol	ND		402	ug/Kg	1	01/2/2013 14:03
2-Nitroaniline	ND		402	ug/Kg	1	01/2/2013 14:03
2-Nitrophenol	ND		402	ug/Kg	1	01/2/2013 14:03
3 and/or 4-Methylphenol	ND		402	ug/Kg	1	01/2/2013 14:03
3,3'-Dichlorobenzidine	ND		803	ug/Kg	1	01/2/2013 14:03
3-Nitroaniline	ND		2010	ug/Kg	1	01/2/2013 14:03
4,6-Dinitro-2-methylphenol	ND		2010	ug/Kg	1	01/2/2013 14:03
4-Chloro-3-methylphenol	ND		402	ug/Kg	1	01/2/2013 14:03
4-Chloroaniline	ND		402	ug/Kg	1	01/2/2013 14:03
4-Chlorophenyl phenyl ether	ND		402	ug/Kg	1	01/2/2013 14:03
Acenaphthene	ND		402	ug/Kg	1	01/2/2013 14:03
Acenaphthylene	ND		402	ug/Kg	1	01/2/2013 14:03
Anthracene	ND		402	ug/Kg	1	01/2/2013 14:03
Benzo(a)anthracene	ND		402	ug/Kg	1	01/2/2013 14:03
Benzo(a)pyrene	ND		402	ug/Kg	1	01/2/2013 14:03
Benzo(b)fluoranthene	ND		402	ug/Kg	1	01/2/2013 14:03
Benzo(g,h,i)perylene	ND		402	ug/Kg	1	01/2/2013 14:03
Benzo(k)fluoranthene	ND		402	ug/Kg	1	01/2/2013 14:03
Benzoic acid	ND		2010	ug/Kg	1	01/2/2013 14:03
Bis(2-Chloroethoxy)methane	ND		402	ug/Kg	1	01/2/2013 14:03
Bis(2-Chloroethyl)ether	ND		402	ug/Kg	1	01/2/2013 14:03
Bis(2-Chloroisopropyl)ether	ND		402	ug/Kg	1	01/2/2013 14:03
Bis(2-Ethylhexyl)phthalate	ND		402	ug/Kg	1	01/2/2013 14:03
4-Bromophenyl phenyl ether	ND		402	ug/Kg	1	01/2/2013 14:03
Butyl benzyl phthalate	ND		402	ug/Kg	1	01/2/2013 14:03
Chrysene	ND		402	ug/Kg	1	01/2/2013 14:03
Di-n-butyl phthalate	ND		402	ug/Kg	1	01/2/2013 14:03
Di-n-octyl phthalate	ND		402	ug/Kg	1	01/2/2013 14:03
Dibenz(a,h)anthracene	ND		402	ug/Kg	1	01/2/2013 14:03
Dibenzofuran	ND		402	ug/Kg	1	01/2/2013 14:03

Print Date: 01/04/2013

N.C. Certification # 481

Results of SB57-7 (6-8)

Client Sample ID: **SB57-7 (6-8)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011007-B
 Lab Project ID: 31204011

Collection Date: 12/12/2012 08:15
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 78.00

Results by SW-846 8270D

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Diethyl phthalate	ND		402	ug/Kg	1	01/2/2013 14:03
Dimethyl phthalate	ND		402	ug/Kg	1	01/2/2013 14:03
2,4-Dimethylphenol	ND		402	ug/Kg	1	01/2/2013 14:03
Diphenylamine	ND		402	ug/Kg	1	01/2/2013 14:03
Fluoranthene	ND		402	ug/Kg	1	01/2/2013 14:03
Fluorene	ND		402	ug/Kg	1	01/2/2013 14:03
Hexachlorobenzene	ND		2010	ug/Kg	1	01/2/2013 14:03
Hexachlorobutadiene	ND		402	ug/Kg	1	01/2/2013 14:03
Hexachlorocyclopentadiene	ND		803	ug/Kg	1	01/2/2013 14:03
Hexachloroethane	ND		402	ug/Kg	1	01/2/2013 14:03
Indeno(1,2,3-cd)pyrene	ND		402	ug/Kg	1	01/2/2013 14:03
Isophorone	ND		402	ug/Kg	1	01/2/2013 14:03
Naphthalene	ND		402	ug/Kg	1	01/2/2013 14:03
4-Nitroaniline	ND		2010	ug/Kg	1	01/2/2013 14:03
Nitrobenzene	ND		402	ug/Kg	1	01/2/2013 14:03
4-Nitrophenol	ND		2010	ug/Kg	1	01/2/2013 14:03
Pentachlorophenol	ND		2010	ug/Kg	1	01/2/2013 14:03
Phenanthrene	ND		402	ug/Kg	1	01/2/2013 14:03
Phenol	ND		402	ug/Kg	1	01/2/2013 14:03
Pyrene	ND		402	ug/Kg	1	01/2/2013 14:03
n-Nitrosodi-n-propylamine	ND		402	ug/Kg	1	01/2/2013 14:03

Surrogates

2,4,6-Tribromophenol	87.0		41.0-129	%	1	01/2/2013 14:03
2-Fluorobiphenyl	86.0		48.0-123	%	1	01/2/2013 14:03
2-Fluorophenol	94.0		42.0-123	%	1	01/2/2013 14:03
Nitrobenzene-d5	89.0		46.0-117	%	1	01/2/2013 14:03
Phenol-d6	104		48.0-125	%	1	01/2/2013 14:03
Terphenyl-d14	90.0		44.0-140	%	1	01/2/2013 14:03

Batch Information

Analytical Batch: **XMS1781**
 Analytical Method: **SW-846 8270D**
 Instrument: **MSD6**
 Analyst: **CMP**

Prep Batch: **XXX3429**
 Prep Method: **SW-846 3541**
 Prep Date/Time: **12/20/2012 08:43**
 Prep Initial Wt./Vol.: **31.99 g**
 Prep Extract Vol: **10 mL**

Results of SB57-7 (6-8)

Client Sample ID: **SB57-7 (6-8)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011007-B
 Lab Project ID: 31204011

Collection Date: 12/12/2012 08:15
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 78.00

Results by SW-846 8015C DRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Diesel Range Organics (DRO)	ND		7.57	mg/kg	1	12/21/2012 2:01
Surrogates						
o-Terphenyl	74.9		40.0-140	%	1	12/21/2012 2:01

Batch Information

Analytical Batch: **XGC2804**
 Analytical Method: **SW-846 8015C DRO**
 Instrument: **GC6**
 Analyst: **DTF**

Prep Batch: **XXX3424**
 Prep Method: **SW-846 3541**
 Prep Date/Time: **12/19/2012 08:32**
 Prep Initial Wt./Vol.: **33.87 g**
 Prep Extract Vol: **10 mL**



Results of **SB57-8 (6-8)**

Client Sample ID: **SB57-8 (6-8)**
Client Project ID: **NCDOT U-3315**
Lab Sample ID: 31204011008-A
Lab Project ID: 31204011

Collection Date: 12/12/2012 08:35
Received Date: 12/15/2012 09:15
Matrix: Soil-Solid as dry weight
Solids (%): 78.10

Results by **SW-846 8260B**

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
1,1,1,2-Tetrachloroethane	ND		4.95	ug/Kg	1	12/18/2012 16:11
1,1,1-Trichloroethane	ND		4.95	ug/Kg	1	12/18/2012 16:11
1,1,2,2-Tetrachloroethane	ND		4.95	ug/Kg	1	12/18/2012 16:11
1,1,2-Trichloroethane	ND		4.95	ug/Kg	1	12/18/2012 16:11
1,1-Dichloroethane	ND		4.95	ug/Kg	1	12/18/2012 16:11
1,1-Dichloroethene	ND		4.95	ug/Kg	1	12/18/2012 16:11
1,1-Dichloropropene	ND		4.95	ug/Kg	1	12/18/2012 16:11
1,2,3-Trichlorobenzene	ND		4.95	ug/Kg	1	12/18/2012 16:11
1,2,3-Trichloropropane	ND		4.95	ug/Kg	1	12/18/2012 16:11
1,2,4-Trichlorobenzene	ND		4.95	ug/Kg	1	12/18/2012 16:11
1,2,4-Trimethylbenzene	ND		4.95	ug/Kg	1	12/18/2012 16:11
1,2-Dibromo-3-chloropropane	ND		29.7	ug/Kg	1	12/18/2012 16:11
1,2-Dibromoethane	ND		4.95	ug/Kg	1	12/18/2012 16:11
1,2-Dichlorobenzene	ND		4.95	ug/Kg	1	12/18/2012 16:11
1,2-Dichloroethane	ND		4.95	ug/Kg	1	12/18/2012 16:11
1,2-Dichloropropane	ND		4.95	ug/Kg	1	12/18/2012 16:11
1,3,5-Trimethylbenzene	ND		4.95	ug/Kg	1	12/18/2012 16:11
1,3-Dichlorobenzene	ND		4.95	ug/Kg	1	12/18/2012 16:11
1,3-Dichloropropane	ND		4.95	ug/Kg	1	12/18/2012 16:11
1,4-Dichlorobenzene	ND		4.95	ug/Kg	1	12/18/2012 16:11
2,2-Dichloropropane	ND		4.95	ug/Kg	1	12/18/2012 16:11
2-Butanone	ND		24.7	ug/Kg	1	12/18/2012 16:11
2-Chlorotoluene	ND		4.95	ug/Kg	1	12/18/2012 16:11
2-Hexanone	ND		12.4	ug/Kg	1	12/18/2012 16:11
4-Chlorotoluene	ND		4.95	ug/Kg	1	12/18/2012 16:11
4-Isopropyltoluene	ND		4.95	ug/Kg	1	12/18/2012 16:11
4-Methyl-2-pentanone	ND		12.4	ug/Kg	1	12/18/2012 16:11
Acetone	ND		49.5	ug/Kg	1	12/18/2012 16:11
Benzene	ND		4.95	ug/Kg	1	12/18/2012 16:11
Bromobenzene	ND		4.95	ug/Kg	1	12/18/2012 16:11
Bromochloromethane	ND		4.95	ug/Kg	1	12/18/2012 16:11
Bromodichloromethane	ND		4.95	ug/Kg	1	12/18/2012 16:11
Bromoform	ND		4.95	ug/Kg	1	12/18/2012 16:11
Bromomethane	ND		4.95	ug/Kg	1	12/18/2012 16:11
n-Butylbenzene	ND		4.95	ug/Kg	1	12/18/2012 16:11
Carbon disulfide	ND		4.95	ug/Kg	1	12/18/2012 16:11
Carbon tetrachloride	ND		4.95	ug/Kg	1	12/18/2012 16:11
Chlorobenzene	ND		4.95	ug/Kg	1	12/18/2012 16:11
Chloroethane	ND		4.95	ug/Kg	1	12/18/2012 16:11
Chloroform	ND		4.95	ug/Kg	1	12/18/2012 16:11
Chloromethane	ND		4.95	ug/Kg	1	12/18/2012 16:11
Dibromochloromethane	ND		4.95	ug/Kg	1	12/18/2012 16:11
Dibromomethane	ND		4.95	ug/Kg	1	12/18/2012 16:11

Print Date: 01/04/2013

N.C. Certification # 481

Results of SB57-8 (6-8)

Client Sample ID: **SB57-8 (6-8)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011008-A
 Lab Project ID: 31204011

Collection Date: 12/12/2012 08:35
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 78.10

Results by SW-846 8260B

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Dichlorodifluoromethane	ND		4.95	ug/Kg	1	12/18/2012 16:11
cis-1,3-Dichloropropene	ND		4.95	ug/Kg	1	12/18/2012 16:11
trans-1,3-Dichloropropene	ND		4.95	ug/Kg	1	12/18/2012 16:11
Diisopropyl Ether	ND		4.95	ug/Kg	1	12/18/2012 16:11
Ethyl Benzene	ND		4.95	ug/Kg	1	12/18/2012 16:11
Hexachlorobutadiene	ND		4.95	ug/Kg	1	12/18/2012 16:11
Isopropylbenzene (Cumene)	ND		4.95	ug/Kg	1	12/18/2012 16:11
Methyl iodide	ND		4.95	ug/Kg	1	12/18/2012 16:11
Methylene chloride	ND		19.8	ug/Kg	1	12/18/2012 16:11
Naphthalene	ND		4.95	ug/Kg	1	12/18/2012 16:11
Styrene	ND		4.95	ug/Kg	1	12/18/2012 16:11
Tetrachloroethene	ND		4.95	ug/Kg	1	12/18/2012 16:11
Toluene	ND		4.95	ug/Kg	1	12/18/2012 16:11
Trichloroethene	ND		4.95	ug/Kg	1	12/18/2012 16:11
Trichlorofluoromethane	ND		4.95	ug/Kg	1	12/18/2012 16:11
Vinyl chloride	ND		4.95	ug/Kg	1	12/18/2012 16:11
Xylene (total)	ND		9.89	ug/Kg	1	12/18/2012 16:11
cis-1,2-Dichloroethene	ND		4.95	ug/Kg	1	12/18/2012 16:11
m,p-Xylene	ND		9.89	ug/Kg	1	12/18/2012 16:11
n-Propylbenzene	ND		4.95	ug/Kg	1	12/18/2012 16:11
o-Xylene	ND		4.95	ug/Kg	1	12/18/2012 16:11
sec-Butylbenzene	ND		4.95	ug/Kg	1	12/18/2012 16:11
tert-Butyl methyl ether (MTBE)	ND		4.95	ug/Kg	1	12/18/2012 16:11
tert-Butylbenzene	ND		4.95	ug/Kg	1	12/18/2012 16:11
trans-1,2-Dichloroethene	ND		4.95	ug/Kg	1	12/18/2012 16:11
trans-1,4-Dichloro-2-butene	ND		24.7	ug/Kg	1	12/18/2012 16:11

Surrogates

1,2-Dichloroethane-d4	116		55.0-173	%	1	12/18/2012 16:11
4-Bromofluorobenzene	102		23.0-141	%	1	12/18/2012 16:11
Toluene d8	105		57.0-134	%	1	12/18/2012 16:11

Batch Information

Analytical Batch: **VMS2786**
 Analytical Method: **SW-846 8260B**
 Instrument: **MSD9**
 Analyst: **BWS**

Prep Batch: **VXX4446**
 Prep Method: **SW-846 5035 SL**
 Prep Date/Time: **12/17/2012 16:22**
 Prep Initial Wt./Vol.: **6.47 g**
 Prep Extract Vol: **5 mL**

Results of SB57-8 (6-8)

Client Sample ID: **SB57-8 (6-8)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011008-G
 Lab Project ID: 31204011

Collection Date: 12/12/2012 08:35
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 78.10

Results by SW-846 8015C GRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Gasoline Range Organics (GRO)	ND		4.05	mg/kg	1	12/20/2012 20:48
Surrogates						
4-Bromofluorobenzene	108		70.0-130	%	1	12/20/2012 20:48

Batch Information

Analytical Batch: **VGC2289**
 Analytical Method: **SW-846 8015C GRO**
 Instrument: **GC7**
 Analyst: **MDY**

Prep Batch: **VXX4453**
 Prep Method: **SW-846 5035**
 Prep Date/Time: **12/17/2012 16:22**
 Prep Initial Wt./Vol.: **6.32 g**
 Prep Extract Vol: **5 mL**

Results of SB57-8 (6-8)

Client Sample ID: **SB57-8 (6-8)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011008-B
 Lab Project ID: 31204011

Collection Date: 12/12/2012 08:35
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 78.10

Results by SW-846 8270D

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
1,2,4-Trichlorobenzene	ND		377	ug/Kg	1	01/2/2013 14:26
1,2-Dichlorobenzene	ND		377	ug/Kg	1	01/2/2013 14:26
1,3-Dichlorobenzene	ND		377	ug/Kg	1	01/2/2013 14:26
1,4-Dichlorobenzene	ND		377	ug/Kg	1	01/2/2013 14:26
2,4,5-Trichlorophenol	ND		377	ug/Kg	1	01/2/2013 14:26
2,4,6-Trichlorophenol	ND		377	ug/Kg	1	01/2/2013 14:26
2,4-Dichlorophenol	ND		377	ug/Kg	1	01/2/2013 14:26
2,4-Dinitrophenol	ND		1890	ug/Kg	1	01/2/2013 14:26
2,4-Dinitrotoluene	ND		377	ug/Kg	1	01/2/2013 14:26
2,6-Dinitrotoluene	ND		377	ug/Kg	1	01/2/2013 14:26
2-Chloronaphthalene	ND		377	ug/Kg	1	01/2/2013 14:26
2-Chlorophenol	ND		377	ug/Kg	1	01/2/2013 14:26
2-Methylnaphthalene	ND		377	ug/Kg	1	01/2/2013 14:26
2-Methylphenol	ND		377	ug/Kg	1	01/2/2013 14:26
2-Nitroaniline	ND		377	ug/Kg	1	01/2/2013 14:26
2-Nitrophenol	ND		377	ug/Kg	1	01/2/2013 14:26
3 and/or 4-Methylphenol	ND		377	ug/Kg	1	01/2/2013 14:26
3,3'-Dichlorobenzidine	ND		755	ug/Kg	1	01/2/2013 14:26
3-Nitroaniline	ND		1890	ug/Kg	1	01/2/2013 14:26
4,6-Dinitro-2-methylphenol	ND		1890	ug/Kg	1	01/2/2013 14:26
4-Chloro-3-methylphenol	ND		377	ug/Kg	1	01/2/2013 14:26
4-Chloroaniline	ND		377	ug/Kg	1	01/2/2013 14:26
4-Chlorophenyl phenyl ether	ND		377	ug/Kg	1	01/2/2013 14:26
Acenaphthene	ND		377	ug/Kg	1	01/2/2013 14:26
Acenaphthylene	ND		377	ug/Kg	1	01/2/2013 14:26
Anthracene	ND		377	ug/Kg	1	01/2/2013 14:26
Benzo(a)anthracene	ND		377	ug/Kg	1	01/2/2013 14:26
Benzo(a)pyrene	ND		377	ug/Kg	1	01/2/2013 14:26
Benzo(b)fluoranthene	ND		377	ug/Kg	1	01/2/2013 14:26
Benzo(g,h,i)perylene	ND		377	ug/Kg	1	01/2/2013 14:26
Benzo(k)fluoranthene	ND		377	ug/Kg	1	01/2/2013 14:26
Benzoic acid	ND		1890	ug/Kg	1	01/2/2013 14:26
Bis(2-Chloroethoxy)methane	ND		377	ug/Kg	1	01/2/2013 14:26
Bis(2-Chloroethyl)ether	ND		377	ug/Kg	1	01/2/2013 14:26
Bis(2-Chloroisopropyl)ether	ND		377	ug/Kg	1	01/2/2013 14:26
Bis(2-Ethylhexyl)phthalate	ND		377	ug/Kg	1	01/2/2013 14:26
4-Bromophenyl phenyl ether	ND		377	ug/Kg	1	01/2/2013 14:26
Butyl benzyl phthalate	ND		377	ug/Kg	1	01/2/2013 14:26
Chrysene	ND		377	ug/Kg	1	01/2/2013 14:26
Di-n-butyl phthalate	ND		377	ug/Kg	1	01/2/2013 14:26
Di-n-octyl phthalate	ND		377	ug/Kg	1	01/2/2013 14:26
Dibenz(a,h)anthracene	ND		377	ug/Kg	1	01/2/2013 14:26
Dibenzofuran	ND		377	ug/Kg	1	01/2/2013 14:26

Results of SB57-8 (6-8)

Client Sample ID: **SB57-8 (6-8)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011008-B
 Lab Project ID: 31204011

Collection Date: 12/12/2012 08:35
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 78.10

Results by SW-846 8270D

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Diethyl phthalate	ND		377	ug/Kg	1	01/2/2013 14:26
Dimethyl phthalate	ND		377	ug/Kg	1	01/2/2013 14:26
2,4-Dimethylphenol	ND		377	ug/Kg	1	01/2/2013 14:26
Diphenylamine	ND		377	ug/Kg	1	01/2/2013 14:26
Fluoranthene	ND		377	ug/Kg	1	01/2/2013 14:26
Fluorene	ND		377	ug/Kg	1	01/2/2013 14:26
Hexachlorobenzene	ND		1890	ug/Kg	1	01/2/2013 14:26
Hexachlorobutadiene	ND		377	ug/Kg	1	01/2/2013 14:26
Hexachlorocyclopentadiene	ND		755	ug/Kg	1	01/2/2013 14:26
Hexachloroethane	ND		377	ug/Kg	1	01/2/2013 14:26
Indeno(1,2,3-cd)pyrene	ND		377	ug/Kg	1	01/2/2013 14:26
Isophorone	ND		377	ug/Kg	1	01/2/2013 14:26
Naphthalene	ND		377	ug/Kg	1	01/2/2013 14:26
4-Nitroaniline	ND		1890	ug/Kg	1	01/2/2013 14:26
Nitrobenzene	ND		377	ug/Kg	1	01/2/2013 14:26
4-Nitrophenol	ND		1890	ug/Kg	1	01/2/2013 14:26
Pentachlorophenol	ND		1890	ug/Kg	1	01/2/2013 14:26
Phenanthrene	ND		377	ug/Kg	1	01/2/2013 14:26
Phenol	ND		377	ug/Kg	1	01/2/2013 14:26
Pyrene	ND		377	ug/Kg	1	01/2/2013 14:26
n-Nitrosodi-n-propylamine	ND		377	ug/Kg	1	01/2/2013 14:26

Surrogates

2,4,6-Tribromophenol	92.0		41.0-129	%	1	01/2/2013 14:26
2-Fluorobiphenyl	91.0		48.0-123	%	1	01/2/2013 14:26
2-Fluorophenol	91.0		42.0-123	%	1	01/2/2013 14:26
Nitrobenzene-d5	91.0		46.0-117	%	1	01/2/2013 14:26
Phenol-d6	100		48.0-125	%	1	01/2/2013 14:26
Terphenyl-d14	88.0		44.0-140	%	1	01/2/2013 14:26

Batch Information

Analytical Batch: **XMS1781**
 Analytical Method: **SW-846 8270D**
 Instrument: **MSD6**
 Analyst: **CMP**

Prep Batch: **XXX3429**
 Prep Method: **SW-846 3541**
 Prep Date/Time: **12/20/2012 08:43**
 Prep Initial Wt./Vol.: **33.97 g**
 Prep Extract Vol: **10 mL**

Results of SB57-8 (6-8)

Client Sample ID: **SB57-8 (6-8)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011008-B
 Lab Project ID: 31204011

Collection Date: 12/12/2012 08:35
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 78.10

Results by SW-846 8015C DRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Diesel Range Organics (DRO)	ND		7.71	mg/kg	1	12/21/2012 2:28
Surrogates						
o-Terphenyl	71.3		40.0-140	%	1	12/21/2012 2:28

Batch Information

Analytical Batch: **XGC2804**
 Analytical Method: **SW-846 8015C DRO**
 Instrument: **GC6**
 Analyst: **DTF**

Prep Batch: **XXX3424**
 Prep Method: **SW-846 3541**
 Prep Date/Time: **12/19/2012 08:32**
 Prep Initial Wt./Vol.: **33.2 g**
 Prep Extract Vol: **10 mL**

Results of SB57-9 (6-8)

Client Sample ID: **SB57-9 (6-8)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011009-A
 Lab Project ID: 31204011

Collection Date: 12/12/2012 09:00
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 80.80

Results by SW-846 8260B

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
1,1,1,2-Tetrachloroethane	ND		4.75	ug/Kg	1	12/18/2012 16:38
1,1,1-Trichloroethane	ND		4.75	ug/Kg	1	12/18/2012 16:38
1,1,2,2-Tetrachloroethane	ND		4.75	ug/Kg	1	12/18/2012 16:38
1,1,2-Trichloroethane	ND		4.75	ug/Kg	1	12/18/2012 16:38
1,1-Dichloroethane	ND		4.75	ug/Kg	1	12/18/2012 16:38
1,1-Dichloroethene	ND		4.75	ug/Kg	1	12/18/2012 16:38
1,1-Dichloropropene	ND		4.75	ug/Kg	1	12/18/2012 16:38
1,2,3-Trichlorobenzene	ND		4.75	ug/Kg	1	12/18/2012 16:38
1,2,3-Trichloropropane	ND		4.75	ug/Kg	1	12/18/2012 16:38
1,2,4-Trichlorobenzene	ND		4.75	ug/Kg	1	12/18/2012 16:38
1,2,4-Trimethylbenzene	ND		4.75	ug/Kg	1	12/18/2012 16:38
1,2-Dibromo-3-chloropropane	ND		28.5	ug/Kg	1	12/18/2012 16:38
1,2-Dibromoethane	ND		4.75	ug/Kg	1	12/18/2012 16:38
1,2-Dichlorobenzene	ND		4.75	ug/Kg	1	12/18/2012 16:38
1,2-Dichloroethane	ND		4.75	ug/Kg	1	12/18/2012 16:38
1,2-Dichloropropane	ND		4.75	ug/Kg	1	12/18/2012 16:38
1,3,5-Trimethylbenzene	ND		4.75	ug/Kg	1	12/18/2012 16:38
1,3-Dichlorobenzene	ND		4.75	ug/Kg	1	12/18/2012 16:38
1,3-Dichloropropane	ND		4.75	ug/Kg	1	12/18/2012 16:38
1,4-Dichlorobenzene	ND		4.75	ug/Kg	1	12/18/2012 16:38
2,2-Dichloropropane	ND		4.75	ug/Kg	1	12/18/2012 16:38
2-Butanone	ND		23.8	ug/Kg	1	12/18/2012 16:38
2-Chlorotoluene	ND		4.75	ug/Kg	1	12/18/2012 16:38
2-Hexanone	ND		11.9	ug/Kg	1	12/18/2012 16:38
4-Chlorotoluene	ND		4.75	ug/Kg	1	12/18/2012 16:38
4-Isopropyltoluene	ND		4.75	ug/Kg	1	12/18/2012 16:38
4-Methyl-2-pentanone	ND		11.9	ug/Kg	1	12/18/2012 16:38
Acetone	ND		47.5	ug/Kg	1	12/18/2012 16:38
Benzene	ND		4.75	ug/Kg	1	12/18/2012 16:38
Bromobenzene	ND		4.75	ug/Kg	1	12/18/2012 16:38
Bromochloromethane	ND		4.75	ug/Kg	1	12/18/2012 16:38
Bromodichloromethane	ND		4.75	ug/Kg	1	12/18/2012 16:38
Bromoform	ND		4.75	ug/Kg	1	12/18/2012 16:38
Bromomethane	ND		4.75	ug/Kg	1	12/18/2012 16:38
n-Butylbenzene	ND		4.75	ug/Kg	1	12/18/2012 16:38
Carbon disulfide	ND		4.75	ug/Kg	1	12/18/2012 16:38
Carbon tetrachloride	ND		4.75	ug/Kg	1	12/18/2012 16:38
Chlorobenzene	ND		4.75	ug/Kg	1	12/18/2012 16:38
Chloroethane	ND		4.75	ug/Kg	1	12/18/2012 16:38
Chloroform	ND		4.75	ug/Kg	1	12/18/2012 16:38
Chloromethane	ND		4.75	ug/Kg	1	12/18/2012 16:38
Dibromochloromethane	ND		4.75	ug/Kg	1	12/18/2012 16:38
Dibromomethane	ND		4.75	ug/Kg	1	12/18/2012 16:38

Results of SB57-9 (6-8)

Client Sample ID: **SB57-9 (6-8)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011009-A
 Lab Project ID: 31204011

Collection Date: 12/12/2012 09:00
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 80.80

Results by SW-846 8260B

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Dichlorodifluoromethane	ND		4.75	ug/Kg	1	12/18/2012 16:38
cis-1,3-Dichloropropene	ND		4.75	ug/Kg	1	12/18/2012 16:38
trans-1,3-Dichloropropene	ND		4.75	ug/Kg	1	12/18/2012 16:38
Diisopropyl Ether	ND		4.75	ug/Kg	1	12/18/2012 16:38
Ethyl Benzene	ND		4.75	ug/Kg	1	12/18/2012 16:38
Hexachlorobutadiene	ND		4.75	ug/Kg	1	12/18/2012 16:38
Isopropylbenzene (Cumene)	ND		4.75	ug/Kg	1	12/18/2012 16:38
Methyl iodide	ND		4.75	ug/Kg	1	12/18/2012 16:38
Methylene chloride	ND		19.0	ug/Kg	1	12/18/2012 16:38
Naphthalene	ND		4.75	ug/Kg	1	12/18/2012 16:38
Styrene	ND		4.75	ug/Kg	1	12/18/2012 16:38
Tetrachloroethene	ND		4.75	ug/Kg	1	12/18/2012 16:38
Toluene	ND		4.75	ug/Kg	1	12/18/2012 16:38
Trichloroethene	ND		4.75	ug/Kg	1	12/18/2012 16:38
Trichlorofluoromethane	ND		4.75	ug/Kg	1	12/18/2012 16:38
Vinyl chloride	ND		4.75	ug/Kg	1	12/18/2012 16:38
Xylene (total)	ND		9.50	ug/Kg	1	12/18/2012 16:38
cis-1,2-Dichloroethene	ND		4.75	ug/Kg	1	12/18/2012 16:38
m,p-Xylene	ND		9.50	ug/Kg	1	12/18/2012 16:38
n-Propylbenzene	ND		4.75	ug/Kg	1	12/18/2012 16:38
o-Xylene	ND		4.75	ug/Kg	1	12/18/2012 16:38
sec-Butylbenzene	ND		4.75	ug/Kg	1	12/18/2012 16:38
tert-Butyl methyl ether (MTBE)	ND		4.75	ug/Kg	1	12/18/2012 16:38
tert-Butylbenzene	ND		4.75	ug/Kg	1	12/18/2012 16:38
trans-1,2-Dichloroethene	ND		4.75	ug/Kg	1	12/18/2012 16:38
trans-1,4-Dichloro-2-butene	ND		23.8	ug/Kg	1	12/18/2012 16:38

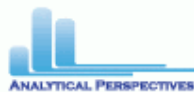
Surrogates

1,2-Dichloroethane-d4	112		55.0-173	%	1	12/18/2012 16:38
4-Bromofluorobenzene	102		23.0-141	%	1	12/18/2012 16:38
Toluene d8	104		57.0-134	%	1	12/18/2012 16:38

Batch Information

Analytical Batch: **VMS2786**
 Analytical Method: **SW-846 8260B**
 Instrument: **MSD9**
 Analyst: **BWS**

Prep Batch: **VXX4446**
 Prep Method: **SW-846 5035 SL**
 Prep Date/Time: **12/17/2012 16:24**
 Prep Initial Wt./Vol.: **6.51 g**
 Prep Extract Vol: **5 mL**



Results of SB57-9 (6-8)

Client Sample ID: **SB57-9 (6-8)**
Client Project ID: **NCDOT U-3315**
Lab Sample ID: 31204011009-G
Lab Project ID: 31204011

Collection Date: 12/12/2012 09:00
Received Date: 12/15/2012 09:15
Matrix: Soil-Solid as dry weight
Solids (%): 80.80

Results by SW-846 8015C GRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Gasoline Range Organics (GRO)	ND		4.06	mg/kg	1	12/20/2012 21:14

Surrogates

4-Bromofluorobenzene	106		70.0-130	%	1	12/20/2012 21:14
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Batch Information

Analytical Batch: **VGC2289**
Analytical Method: **SW-846 8015C GRO**
Instrument: **GC7**
Analyst: **MDY**

Prep Batch: **VXX4453**
Prep Method: **SW-846 5035**
Prep Date/Time: **12/17/2012 16:24**
Prep Initial Wt./Vol.: **6.09 g**
Prep Extract Vol: **5 mL**

Results of SB57-9 (6-8)

Client Sample ID: **SB57-9 (6-8)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011009-B
 Lab Project ID: 31204011

Collection Date: 12/12/2012 09:00
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 80.80

Results by SW-846 8270D

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
1,2,4-Trichlorobenzene	ND		397	ug/Kg	1	01/2/2013 14:50
1,2-Dichlorobenzene	ND		397	ug/Kg	1	01/2/2013 14:50
1,3-Dichlorobenzene	ND		397	ug/Kg	1	01/2/2013 14:50
1,4-Dichlorobenzene	ND		397	ug/Kg	1	01/2/2013 14:50
2,4,5-Trichlorophenol	ND		397	ug/Kg	1	01/2/2013 14:50
2,4,6-Trichlorophenol	ND		397	ug/Kg	1	01/2/2013 14:50
2,4-Dichlorophenol	ND		397	ug/Kg	1	01/2/2013 14:50
2,4-Dinitrophenol	ND		1990	ug/Kg	1	01/2/2013 14:50
2,4-Dinitrotoluene	ND		397	ug/Kg	1	01/2/2013 14:50
2,6-Dinitrotoluene	ND		397	ug/Kg	1	01/2/2013 14:50
2-Chloronaphthalene	ND		397	ug/Kg	1	01/2/2013 14:50
2-Chlorophenol	ND		397	ug/Kg	1	01/2/2013 14:50
2-Methylnaphthalene	ND		397	ug/Kg	1	01/2/2013 14:50
2-Methylphenol	ND		397	ug/Kg	1	01/2/2013 14:50
2-Nitroaniline	ND		397	ug/Kg	1	01/2/2013 14:50
2-Nitrophenol	ND		397	ug/Kg	1	01/2/2013 14:50
3 and/or 4-Methylphenol	ND		397	ug/Kg	1	01/2/2013 14:50
3,3'-Dichlorobenzidine	ND		795	ug/Kg	1	01/2/2013 14:50
3-Nitroaniline	ND		1990	ug/Kg	1	01/2/2013 14:50
4,6-Dinitro-2-methylphenol	ND		1990	ug/Kg	1	01/2/2013 14:50
4-Chloro-3-methylphenol	ND		397	ug/Kg	1	01/2/2013 14:50
4-Chloroaniline	ND		397	ug/Kg	1	01/2/2013 14:50
4-Chlorophenyl phenyl ether	ND		397	ug/Kg	1	01/2/2013 14:50
Acenaphthene	ND		397	ug/Kg	1	01/2/2013 14:50
Acenaphthylene	ND		397	ug/Kg	1	01/2/2013 14:50
Anthracene	ND		397	ug/Kg	1	01/2/2013 14:50
Benzo(a)anthracene	ND		397	ug/Kg	1	01/2/2013 14:50
Benzo(a)pyrene	ND		397	ug/Kg	1	01/2/2013 14:50
Benzo(b)fluoranthene	ND		397	ug/Kg	1	01/2/2013 14:50
Benzo(g,h,i)perylene	ND		397	ug/Kg	1	01/2/2013 14:50
Benzo(k)fluoranthene	ND		397	ug/Kg	1	01/2/2013 14:50
Benzoic acid	ND		1990	ug/Kg	1	01/2/2013 14:50
Bis(2-Chloroethoxy)methane	ND		397	ug/Kg	1	01/2/2013 14:50
Bis(2-Chloroethyl)ether	ND		397	ug/Kg	1	01/2/2013 14:50
Bis(2-Chloroisopropyl)ether	ND		397	ug/Kg	1	01/2/2013 14:50
Bis(2-Ethylhexyl)phthalate	ND		397	ug/Kg	1	01/2/2013 14:50
4-Bromophenyl phenyl ether	ND		397	ug/Kg	1	01/2/2013 14:50
Butyl benzyl phthalate	ND		397	ug/Kg	1	01/2/2013 14:50
Chrysene	ND		397	ug/Kg	1	01/2/2013 14:50
Di-n-butyl phthalate	ND		397	ug/Kg	1	01/2/2013 14:50
Di-n-octyl phthalate	ND		397	ug/Kg	1	01/2/2013 14:50
Dibenz(a,h)anthracene	ND		397	ug/Kg	1	01/2/2013 14:50
Dibenzofuran	ND		397	ug/Kg	1	01/2/2013 14:50

Results of SB57-9 (6-8)

Client Sample ID: **SB57-9 (6-8)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011009-B
 Lab Project ID: 31204011

Collection Date: 12/12/2012 09:00
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 80.80

Results by SW-846 8270D

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Diethyl phthalate	ND		397	ug/Kg	1	01/2/2013 14:50
Dimethyl phthalate	ND		397	ug/Kg	1	01/2/2013 14:50
2,4-Dimethylphenol	ND		397	ug/Kg	1	01/2/2013 14:50
Diphenylamine	ND		397	ug/Kg	1	01/2/2013 14:50
Fluoranthene	ND		397	ug/Kg	1	01/2/2013 14:50
Fluorene	ND		397	ug/Kg	1	01/2/2013 14:50
Hexachlorobenzene	ND		1990	ug/Kg	1	01/2/2013 14:50
Hexachlorobutadiene	ND		397	ug/Kg	1	01/2/2013 14:50
Hexachlorocyclopentadiene	ND		795	ug/Kg	1	01/2/2013 14:50
Hexachloroethane	ND		397	ug/Kg	1	01/2/2013 14:50
Indeno(1,2,3-cd)pyrene	ND		397	ug/Kg	1	01/2/2013 14:50
Isophorone	ND		397	ug/Kg	1	01/2/2013 14:50
Naphthalene	ND		397	ug/Kg	1	01/2/2013 14:50
4-Nitroaniline	ND		1990	ug/Kg	1	01/2/2013 14:50
Nitrobenzene	ND		397	ug/Kg	1	01/2/2013 14:50
4-Nitrophenol	ND		1990	ug/Kg	1	01/2/2013 14:50
Pentachlorophenol	ND		1990	ug/Kg	1	01/2/2013 14:50
Phenanthrene	ND		397	ug/Kg	1	01/2/2013 14:50
Phenol	ND		397	ug/Kg	1	01/2/2013 14:50
Pyrene	ND		397	ug/Kg	1	01/2/2013 14:50
n-Nitrosodi-n-propylamine	ND		397	ug/Kg	1	01/2/2013 14:50

Surrogates

2,4,6-Tribromophenol	78.0		41.0-129	%	1	01/2/2013 14:50
2-Fluorobiphenyl	79.0		48.0-123	%	1	01/2/2013 14:50
2-Fluorophenol	88.0		42.0-123	%	1	01/2/2013 14:50
Nitrobenzene-d5	82.0		46.0-117	%	1	01/2/2013 14:50
Phenol-d6	96.0		48.0-125	%	1	01/2/2013 14:50
Terphenyl-d14	81.0		44.0-140	%	1	01/2/2013 14:50

Batch Information

Analytical Batch: **XMS1781**
 Analytical Method: **SW-846 8270D**
 Instrument: **MSD6**
 Analyst: **CMP**

Prep Batch: **XXX3429**
 Prep Method: **SW-846 3541**
 Prep Date/Time: **12/20/2012 08:43**
 Prep Initial Wt./Vol.: **31.18 g**
 Prep Extract Vol: **10 mL**

Results of SB57-9 (6-8)

Client Sample ID: **SB57-9 (6-8)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011009-B
 Lab Project ID: 31204011

Collection Date: 12/12/2012 09:00
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 80.80

Results by SW-846 8015C DRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Diesel Range Organics (DRO)	ND		7.66	mg/kg	1	12/21/2012 2:56
Surrogates						
o-Terphenyl	79.9		40.0-140	%	1	12/21/2012 2:56

Batch Information

Analytical Batch: **XGC2804**
 Analytical Method: **SW-846 8015C DRO**
 Instrument: **GC6**
 Analyst: **DTF**

Prep Batch: **XXX3424**
 Prep Method: **SW-846 3541**
 Prep Date/Time: **12/19/2012 08:32**
 Prep Initial Wt./Vol.: **32.29 g**
 Prep Extract Vol: **10 mL**

Results of SB57-10 (5-6)

Client Sample ID: **SB57-10 (5-6)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011010-A
 Lab Project ID: 31204011

Collection Date: 12/12/2012 09:20
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 82.00

Results by SW-846 8260B

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
1,1,1,2-Tetrachloroethane	ND		5.13	ug/Kg	1	12/18/2012 17:05
1,1,1-Trichloroethane	ND		5.13	ug/Kg	1	12/18/2012 17:05
1,1,2,2-Tetrachloroethane	ND		5.13	ug/Kg	1	12/18/2012 17:05
1,1,2-Trichloroethane	ND		5.13	ug/Kg	1	12/18/2012 17:05
1,1-Dichloroethane	ND		5.13	ug/Kg	1	12/18/2012 17:05
1,1-Dichloroethene	ND		5.13	ug/Kg	1	12/18/2012 17:05
1,1-Dichloropropene	ND		5.13	ug/Kg	1	12/18/2012 17:05
1,2,3-Trichlorobenzene	ND		5.13	ug/Kg	1	12/18/2012 17:05
1,2,3-Trichloropropane	ND		5.13	ug/Kg	1	12/18/2012 17:05
1,2,4-Trichlorobenzene	ND		5.13	ug/Kg	1	12/18/2012 17:05
1,2,4-Trimethylbenzene	ND		5.13	ug/Kg	1	12/18/2012 17:05
1,2-Dibromo-3-chloropropane	ND		30.8	ug/Kg	1	12/18/2012 17:05
1,2-Dibromoethane	ND		5.13	ug/Kg	1	12/18/2012 17:05
1,2-Dichlorobenzene	ND		5.13	ug/Kg	1	12/18/2012 17:05
1,2-Dichloroethane	ND		5.13	ug/Kg	1	12/18/2012 17:05
1,2-Dichloropropane	ND		5.13	ug/Kg	1	12/18/2012 17:05
1,3,5-Trimethylbenzene	ND		5.13	ug/Kg	1	12/18/2012 17:05
1,3-Dichlorobenzene	ND		5.13	ug/Kg	1	12/18/2012 17:05
1,3-Dichloropropane	ND		5.13	ug/Kg	1	12/18/2012 17:05
1,4-Dichlorobenzene	ND		5.13	ug/Kg	1	12/18/2012 17:05
2,2-Dichloropropane	ND		5.13	ug/Kg	1	12/18/2012 17:05
2-Butanone	ND		25.7	ug/Kg	1	12/18/2012 17:05
2-Chlorotoluene	ND		5.13	ug/Kg	1	12/18/2012 17:05
2-Hexanone	ND		12.8	ug/Kg	1	12/18/2012 17:05
4-Chlorotoluene	ND		5.13	ug/Kg	1	12/18/2012 17:05
4-Isopropyltoluene	ND		5.13	ug/Kg	1	12/18/2012 17:05
4-Methyl-2-pentanone	ND		12.8	ug/Kg	1	12/18/2012 17:05
Acetone	ND		51.3	ug/Kg	1	12/18/2012 17:05
Benzene	ND		5.13	ug/Kg	1	12/18/2012 17:05
Bromobenzene	ND		5.13	ug/Kg	1	12/18/2012 17:05
Bromochloromethane	ND		5.13	ug/Kg	1	12/18/2012 17:05
Bromodichloromethane	ND		5.13	ug/Kg	1	12/18/2012 17:05
Bromoform	ND		5.13	ug/Kg	1	12/18/2012 17:05
Bromomethane	ND		5.13	ug/Kg	1	12/18/2012 17:05
n-Butylbenzene	ND		5.13	ug/Kg	1	12/18/2012 17:05
Carbon disulfide	ND		5.13	ug/Kg	1	12/18/2012 17:05
Carbon tetrachloride	ND		5.13	ug/Kg	1	12/18/2012 17:05
Chlorobenzene	ND		5.13	ug/Kg	1	12/18/2012 17:05
Chloroethane	ND		5.13	ug/Kg	1	12/18/2012 17:05
Chloroform	ND		5.13	ug/Kg	1	12/18/2012 17:05
Chloromethane	ND		5.13	ug/Kg	1	12/18/2012 17:05
Dibromochloromethane	ND		5.13	ug/Kg	1	12/18/2012 17:05
Dibromomethane	ND		5.13	ug/Kg	1	12/18/2012 17:05

Results of SB57-10 (5-6)

Client Sample ID: **SB57-10 (5-6)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011010-A
 Lab Project ID: 31204011

Collection Date: 12/12/2012 09:20
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 82.00

Results by SW-846 8260B

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Dichlorodifluoromethane	ND		5.13	ug/Kg	1	12/18/2012 17:05
cis-1,3-Dichloropropene	ND		5.13	ug/Kg	1	12/18/2012 17:05
trans-1,3-Dichloropropene	ND		5.13	ug/Kg	1	12/18/2012 17:05
Diisopropyl Ether	ND		5.13	ug/Kg	1	12/18/2012 17:05
Ethyl Benzene	ND		5.13	ug/Kg	1	12/18/2012 17:05
Hexachlorobutadiene	ND		5.13	ug/Kg	1	12/18/2012 17:05
Isopropylbenzene (Cumene)	ND		5.13	ug/Kg	1	12/18/2012 17:05
Methyl iodide	ND		5.13	ug/Kg	1	12/18/2012 17:05
Methylene chloride	ND		20.5	ug/Kg	1	12/18/2012 17:05
Naphthalene	ND		5.13	ug/Kg	1	12/18/2012 17:05
Styrene	ND		5.13	ug/Kg	1	12/18/2012 17:05
Tetrachloroethene	ND		5.13	ug/Kg	1	12/18/2012 17:05
Toluene	ND		5.13	ug/Kg	1	12/18/2012 17:05
Trichloroethene	ND		5.13	ug/Kg	1	12/18/2012 17:05
Trichlorofluoromethane	ND		5.13	ug/Kg	1	12/18/2012 17:05
Vinyl chloride	ND		5.13	ug/Kg	1	12/18/2012 17:05
Xylene (total)	ND		10.3	ug/Kg	1	12/18/2012 17:05
cis-1,2-Dichloroethene	ND		5.13	ug/Kg	1	12/18/2012 17:05
m,p-Xylene	ND		10.3	ug/Kg	1	12/18/2012 17:05
n-Propylbenzene	ND		5.13	ug/Kg	1	12/18/2012 17:05
o-Xylene	ND		5.13	ug/Kg	1	12/18/2012 17:05
sec-Butylbenzene	ND		5.13	ug/Kg	1	12/18/2012 17:05
tert-Butyl methyl ether (MTBE)	ND		5.13	ug/Kg	1	12/18/2012 17:05
tert-Butylbenzene	ND		5.13	ug/Kg	1	12/18/2012 17:05
trans-1,2-Dichloroethene	ND		5.13	ug/Kg	1	12/18/2012 17:05
trans-1,4-Dichloro-2-butene	ND		25.7	ug/Kg	1	12/18/2012 17:05

Surrogates

1,2-Dichloroethane-d4	111		55.0-173	%	1	12/18/2012 17:05
4-Bromofluorobenzene	100		23.0-141	%	1	12/18/2012 17:05
Toluene d8	103		57.0-134	%	1	12/18/2012 17:05

Batch Information

Analytical Batch: **VMS2786**
 Analytical Method: **SW-846 8260B**
 Instrument: **MSD9**
 Analyst: **BWS**

Prep Batch: **VXX4446**
 Prep Method: **SW-846 5035 SL**
 Prep Date/Time: **12/17/2012 16:28**
 Prep Initial Wt./Vol.: **5.94 g**
 Prep Extract Vol: **5 mL**

Results of SB57-10 (5-6)

Client Sample ID: **SB57-10 (5-6)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011010-G
 Lab Project ID: 31204011

Collection Date: 12/12/2012 09:20
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 82.00

Results by SW-846 8015C GRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Gasoline Range Organics (GRO)	ND		3.86	mg/kg	1	12/20/2012 21:39
Surrogates						
4-Bromofluorobenzene	106		70.0-130	%	1	12/20/2012 21:39

Batch Information

Analytical Batch: **VGC2289**
 Analytical Method: **SW-846 8015C GRO**
 Instrument: **GC7**
 Analyst: **MDY**

Prep Batch: **VXX4453**
 Prep Method: **SW-846 5035**
 Prep Date/Time: **12/17/2012 16:28**
 Prep Initial Wt./Vol.: **6.31 g**
 Prep Extract Vol: **5 mL**

Results of SB57-10 (5-6)

Client Sample ID: **SB57-10 (5-6)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011010-B
 Lab Project ID: 31204011

Collection Date: 12/12/2012 09:20
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 82.00

Results by SW-846 8270D

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
1,2,4-Trichlorobenzene	ND		372	ug/Kg	1	01/2/2013 15:13
1,2-Dichlorobenzene	ND		372	ug/Kg	1	01/2/2013 15:13
1,3-Dichlorobenzene	ND		372	ug/Kg	1	01/2/2013 15:13
1,4-Dichlorobenzene	ND		372	ug/Kg	1	01/2/2013 15:13
2,4,5-Trichlorophenol	ND		372	ug/Kg	1	01/2/2013 15:13
2,4,6-Trichlorophenol	ND		372	ug/Kg	1	01/2/2013 15:13
2,4-Dichlorophenol	ND		372	ug/Kg	1	01/2/2013 15:13
2,4-Dinitrophenol	ND		1860	ug/Kg	1	01/2/2013 15:13
2,4-Dinitrotoluene	ND		372	ug/Kg	1	01/2/2013 15:13
2,6-Dinitrotoluene	ND		372	ug/Kg	1	01/2/2013 15:13
2-Chloronaphthalene	ND		372	ug/Kg	1	01/2/2013 15:13
2-Chlorophenol	ND		372	ug/Kg	1	01/2/2013 15:13
2-Methylnaphthalene	ND		372	ug/Kg	1	01/2/2013 15:13
2-Methylphenol	ND		372	ug/Kg	1	01/2/2013 15:13
2-Nitroaniline	ND		372	ug/Kg	1	01/2/2013 15:13
2-Nitrophenol	ND		372	ug/Kg	1	01/2/2013 15:13
3 and/or 4-Methylphenol	ND		372	ug/Kg	1	01/2/2013 15:13
3,3'-Dichlorobenzidine	ND		743	ug/Kg	1	01/2/2013 15:13
3-Nitroaniline	ND		1860	ug/Kg	1	01/2/2013 15:13
4,6-Dinitro-2-methylphenol	ND		1860	ug/Kg	1	01/2/2013 15:13
4-Chloro-3-methylphenol	ND		372	ug/Kg	1	01/2/2013 15:13
4-Chloroaniline	ND		372	ug/Kg	1	01/2/2013 15:13
4-Chlorophenyl phenyl ether	ND		372	ug/Kg	1	01/2/2013 15:13
Acenaphthene	ND		372	ug/Kg	1	01/2/2013 15:13
Acenaphthylene	ND		372	ug/Kg	1	01/2/2013 15:13
Anthracene	ND		372	ug/Kg	1	01/2/2013 15:13
Benzo(a)anthracene	ND		372	ug/Kg	1	01/2/2013 15:13
Benzo(a)pyrene	ND		372	ug/Kg	1	01/2/2013 15:13
Benzo(b)fluoranthene	ND		372	ug/Kg	1	01/2/2013 15:13
Benzo(g,h,i)perylene	ND		372	ug/Kg	1	01/2/2013 15:13
Benzo(k)fluoranthene	ND		372	ug/Kg	1	01/2/2013 15:13
Benzoic acid	ND		1860	ug/Kg	1	01/2/2013 15:13
Bis(2-Chloroethoxy)methane	ND		372	ug/Kg	1	01/2/2013 15:13
Bis(2-Chloroethyl)ether	ND		372	ug/Kg	1	01/2/2013 15:13
Bis(2-Chloroisopropyl)ether	ND		372	ug/Kg	1	01/2/2013 15:13
Bis(2-Ethylhexyl)phthalate	ND		372	ug/Kg	1	01/2/2013 15:13
4-Bromophenyl phenyl ether	ND		372	ug/Kg	1	01/2/2013 15:13
Butyl benzyl phthalate	ND		372	ug/Kg	1	01/2/2013 15:13
Chrysene	ND		372	ug/Kg	1	01/2/2013 15:13
Di-n-butyl phthalate	ND		372	ug/Kg	1	01/2/2013 15:13
Di-n-octyl phthalate	ND		372	ug/Kg	1	01/2/2013 15:13
Dibenz(a,h)anthracene	ND		372	ug/Kg	1	01/2/2013 15:13
Dibenzofuran	ND		372	ug/Kg	1	01/2/2013 15:13

Results of SB57-10 (5-6)

Client Sample ID: **SB57-10 (5-6)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011010-B
 Lab Project ID: 31204011

Collection Date: 12/12/2012 09:20
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 82.00

Results by SW-846 8270D

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Diethyl phthalate	ND		372	ug/Kg	1	01/2/2013 15:13
Dimethyl phthalate	ND		372	ug/Kg	1	01/2/2013 15:13
2,4-Dimethylphenol	ND		372	ug/Kg	1	01/2/2013 15:13
Diphenylamine	ND		372	ug/Kg	1	01/2/2013 15:13
Fluoranthene	ND		372	ug/Kg	1	01/2/2013 15:13
Fluorene	ND		372	ug/Kg	1	01/2/2013 15:13
Hexachlorobenzene	ND		1860	ug/Kg	1	01/2/2013 15:13
Hexachlorobutadiene	ND		372	ug/Kg	1	01/2/2013 15:13
Hexachlorocyclopentadiene	ND		743	ug/Kg	1	01/2/2013 15:13
Hexachloroethane	ND		372	ug/Kg	1	01/2/2013 15:13
Indeno(1,2,3-cd)pyrene	ND		372	ug/Kg	1	01/2/2013 15:13
Isophorone	ND		372	ug/Kg	1	01/2/2013 15:13
Naphthalene	ND		372	ug/Kg	1	01/2/2013 15:13
4-Nitroaniline	ND		1860	ug/Kg	1	01/2/2013 15:13
Nitrobenzene	ND		372	ug/Kg	1	01/2/2013 15:13
4-Nitrophenol	ND		1860	ug/Kg	1	01/2/2013 15:13
Pentachlorophenol	ND		1860	ug/Kg	1	01/2/2013 15:13
Phenanthrene	ND		372	ug/Kg	1	01/2/2013 15:13
Phenol	ND		372	ug/Kg	1	01/2/2013 15:13
Pyrene	ND		372	ug/Kg	1	01/2/2013 15:13
n-Nitrosodi-n-propylamine	ND		372	ug/Kg	1	01/2/2013 15:13

Surrogates

2,4,6-Tribromophenol	87.0		41.0-129	%	1	01/2/2013 15:13
2-Fluorobiphenyl	89.0		48.0-123	%	1	01/2/2013 15:13
2-Fluorophenol	93.0		42.0-123	%	1	01/2/2013 15:13
Nitrobenzene-d5	91.0		46.0-117	%	1	01/2/2013 15:13
Phenol-d6	100		48.0-125	%	1	01/2/2013 15:13
Terphenyl-d14	88.0		44.0-140	%	1	01/2/2013 15:13

Batch Information

Analytical Batch: **XMS1781**
 Analytical Method: **SW-846 8270D**
 Instrument: **MSD6**
 Analyst: **CMP**

Prep Batch: **XXX3429**
 Prep Method: **SW-846 3541**
 Prep Date/Time: **12/20/2012 08:43**
 Prep Initial Wt./Vol.: **32.86 g**
 Prep Extract Vol: **10 mL**

Results of SB57-10 (5-6)

Client Sample ID: **SB57-10 (5-6)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011010-B
 Lab Project ID: 31204011

Collection Date: 12/12/2012 09:20
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 82.00

Results by SW-846 8015C DRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Diesel Range Organics (DRO)	ND		7.62	mg/kg	1	12/21/2012 4:20
Surrogates						
o-Terphenyl	81.0		40.0-140	%	1	12/21/2012 4:20

Batch Information

Analytical Batch: **XGC2804**
 Analytical Method: **SW-846 8015C DRO**
 Instrument: **GC6**
 Analyst: **DTF**

Prep Batch: **XXX3424**
 Prep Method: **SW-846 3541**
 Prep Date/Time: **12/19/2012 08:32**
 Prep Initial Wt./Vol.: **31.99 g**
 Prep Extract Vol: **10 mL**

Results of TW54-1 (0-2.5)

Client Sample ID: **TW54-1 (0-2.5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011011-F
 Lab Project ID: 31204011

Collection Date: 12/12/2012 10:00
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 85.70

Results by SW-846 8260B

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
1,1,1,2-Tetrachloroethane	ND		42.2	ug/Kg	50	12/18/2012 23:08
1,1,1-Trichloroethane	ND		42.2	ug/Kg	50	12/18/2012 23:08
1,1,2,2-Tetrachloroethane	ND		42.2	ug/Kg	50	12/18/2012 23:08
1,1,2-Trichloroethane	ND		42.2	ug/Kg	50	12/18/2012 23:08
1,1-Dichloroethane	ND		42.2	ug/Kg	50	12/18/2012 23:08
1,1-Dichloroethene	ND		42.2	ug/Kg	50	12/18/2012 23:08
1,1-Dichloropropene	ND		42.2	ug/Kg	50	12/18/2012 23:08
1,2,3-Trichlorobenzene	ND		42.2	ug/Kg	50	12/18/2012 23:08
1,2,3-Trichloropropane	ND		42.2	ug/Kg	50	12/18/2012 23:08
1,2,4-Trichlorobenzene	ND		42.2	ug/Kg	50	12/18/2012 23:08
1,2,4-Trimethylbenzene	ND		42.2	ug/Kg	50	12/18/2012 23:08
1,2-Dibromo-3-chloropropane	ND		211	ug/Kg	50	12/18/2012 23:08
1,2-Dibromoethane	ND		42.2	ug/Kg	50	12/18/2012 23:08
1,2-Dichlorobenzene	ND		42.2	ug/Kg	50	12/18/2012 23:08
1,2-Dichloroethane	ND		42.2	ug/Kg	50	12/18/2012 23:08
1,2-Dichloropropane	ND		42.2	ug/Kg	50	12/18/2012 23:08
1,3,5-Trimethylbenzene	ND		42.2	ug/Kg	50	12/18/2012 23:08
1,3-Dichlorobenzene	ND		42.2	ug/Kg	50	12/18/2012 23:08
1,3-Dichloropropane	ND		42.2	ug/Kg	50	12/18/2012 23:08
1,4-Dichlorobenzene	ND		42.2	ug/Kg	50	12/18/2012 23:08
2,2-Dichloropropane	ND		42.2	ug/Kg	50	12/18/2012 23:08
2-Butanone	ND		1060	ug/Kg	50	12/18/2012 23:08
2-Chlorotoluene	ND		42.2	ug/Kg	50	12/18/2012 23:08
2-Hexanone	ND		211	ug/Kg	50	12/18/2012 23:08
4-Chlorotoluene	ND		42.2	ug/Kg	50	12/18/2012 23:08
4-Isopropyltoluene	ND		42.2	ug/Kg	50	12/18/2012 23:08
4-Methyl-2-pentanone	ND		211	ug/Kg	50	12/18/2012 23:08
Acetone	ND		1060	ug/Kg	50	12/18/2012 23:08
Benzene	ND		42.2	ug/Kg	50	12/18/2012 23:08
Bromobenzene	ND		42.2	ug/Kg	50	12/18/2012 23:08
Bromochloromethane	ND		42.2	ug/Kg	50	12/18/2012 23:08
Bromodichloromethane	ND		42.2	ug/Kg	50	12/18/2012 23:08
Bromoform	ND		42.2	ug/Kg	50	12/18/2012 23:08
Bromomethane	ND		42.2	ug/Kg	50	12/18/2012 23:08
n-Butylbenzene	ND		42.2	ug/Kg	50	12/18/2012 23:08
Carbon disulfide	ND		42.2	ug/Kg	50	12/18/2012 23:08
Carbon tetrachloride	ND		42.2	ug/Kg	50	12/18/2012 23:08
Chlorobenzene	ND		42.2	ug/Kg	50	12/18/2012 23:08
Chloroethane	ND		42.2	ug/Kg	50	12/18/2012 23:08
Chloroform	ND		42.2	ug/Kg	50	12/18/2012 23:08
Chloromethane	ND		42.2	ug/Kg	50	12/18/2012 23:08
Dibromochloromethane	ND		42.2	ug/Kg	50	12/18/2012 23:08
Dibromomethane	ND		42.2	ug/Kg	50	12/18/2012 23:08

Results of TW54-1 (0-2.5)

Client Sample ID: **TW54-1 (0-2.5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011011-F
 Lab Project ID: 31204011

Collection Date: 12/12/2012 10:00
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 85.70

Results by SW-846 8260B

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Dichlorodifluoromethane	ND		211	ug/Kg	50	12/18/2012 23:08
cis-1,3-Dichloropropene	ND		42.2	ug/Kg	50	12/18/2012 23:08
trans-1,3-Dichloropropene	ND		42.2	ug/Kg	50	12/18/2012 23:08
Diisopropyl Ether	ND		42.2	ug/Kg	50	12/18/2012 23:08
Ethyl Benzene	ND		42.2	ug/Kg	50	12/18/2012 23:08
Hexachlorobutadiene	ND		42.2	ug/Kg	50	12/18/2012 23:08
Isopropylbenzene (Cumene)	ND		42.2	ug/Kg	50	12/18/2012 23:08
Methyl iodide	ND		42.2	ug/Kg	50	12/18/2012 23:08
Methylene chloride	ND		211	ug/Kg	50	12/18/2012 23:08
Naphthalene	178		42.2	ug/Kg	50	12/18/2012 23:08
Styrene	ND		42.2	ug/Kg	50	12/18/2012 23:08
Tetrachloroethene	ND		42.2	ug/Kg	50	12/18/2012 23:08
Toluene	ND		42.2	ug/Kg	50	12/18/2012 23:08
Trichloroethene	ND		42.2	ug/Kg	50	12/18/2012 23:08
Trichlorofluoromethane	ND		42.2	ug/Kg	50	12/18/2012 23:08
Vinyl chloride	ND		42.2	ug/Kg	50	12/18/2012 23:08
Xylene (total)	ND		84.5	ug/Kg	50	12/18/2012 23:08
cis-1,2-Dichloroethene	ND		42.2	ug/Kg	50	12/18/2012 23:08
m,p-Xylene	ND		84.5	ug/Kg	50	12/18/2012 23:08
n-Propylbenzene	ND		42.2	ug/Kg	50	12/18/2012 23:08
o-Xylene	ND		42.2	ug/Kg	50	12/18/2012 23:08
sec-Butylbenzene	ND		42.2	ug/Kg	50	12/18/2012 23:08
tert-Butyl methyl ether (MTBE)	ND		42.2	ug/Kg	50	12/18/2012 23:08
tert-Butylbenzene	ND		42.2	ug/Kg	50	12/18/2012 23:08
trans-1,2-Dichloroethene	ND		42.2	ug/Kg	50	12/18/2012 23:08
trans-1,4-Dichloro-2-butene	ND		211	ug/Kg	50	12/18/2012 23:08
Surrogates						
1,2-Dichloroethane-d4	105		55.0-173	%	50	12/18/2012 23:08
4-Bromofluorobenzene	98.0		23.0-141	%	50	12/18/2012 23:08
Toluene d8	106		57.0-134	%	50	12/18/2012 23:08

Batch Information

Analytical Batch: **VMS2785**
 Analytical Method: **SW-846 8260B**
 Instrument: **MSD8**
 Analyst: **BWS**

Prep Batch: **VXX4448**
 Prep Method: **SW-846 5035 SM**
 Prep Date/Time: **12/17/2012 16:30**
 Prep Initial Wt./Vol.: **6.91 g**
 Prep Extract Vol: **5 mL**

Results of TW54-1 (0-2.5)

Client Sample ID: **TW54-1 (0-2.5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011011-G
 Lab Project ID: 31204011

Collection Date: 12/12/2012 10:00
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 85.70

Results by SW-846 8015C GRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Gasoline Range Organics (GRO)	ND		3.63	mg/kg	1	12/20/2012 22:04
Surrogates						
4-Bromofluorobenzene	108		70.0-130	%	1	12/20/2012 22:04

Batch Information

Analytical Batch: **VGC2289**
 Analytical Method: **SW-846 8015C GRO**
 Instrument: **GC7**
 Analyst: **MDY**

Prep Batch: **VXX4453**
 Prep Method: **SW-846 5035**
 Prep Date/Time: **12/17/2012 16:30**
 Prep Initial Wt./Vol.: **6.43 g**
 Prep Extract Vol: **5 mL**

**Results of TW54-1 (0-2.5)**

Client Sample ID: **TW54-1 (0-2.5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011011-B
 Lab Project ID: 31204011

Collection Date: 12/12/2012 10:00
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 85.70

Results by SW-846 8270D

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
1,2,4-Trichlorobenzene	ND		360	ug/Kg	1	01/2/2013 15:37
1,2-Dichlorobenzene	ND		360	ug/Kg	1	01/2/2013 15:37
1,3-Dichlorobenzene	ND		360	ug/Kg	1	01/2/2013 15:37
1,4-Dichlorobenzene	ND		360	ug/Kg	1	01/2/2013 15:37
2,4,5-Trichlorophenol	ND		360	ug/Kg	1	01/2/2013 15:37
2,4,6-Trichlorophenol	ND		360	ug/Kg	1	01/2/2013 15:37
2,4-Dichlorophenol	ND		360	ug/Kg	1	01/2/2013 15:37
2,4-Dinitrophenol	ND		1800	ug/Kg	1	01/2/2013 15:37
2,4-Dinitrotoluene	ND		360	ug/Kg	1	01/2/2013 15:37
2,6-Dinitrotoluene	ND		360	ug/Kg	1	01/2/2013 15:37
2-Chloronaphthalene	ND		360	ug/Kg	1	01/2/2013 15:37
2-Chlorophenol	ND		360	ug/Kg	1	01/2/2013 15:37
2-Methylnaphthalene	374		360	ug/Kg	1	01/2/2013 15:37
2-Methylphenol	ND		360	ug/Kg	1	01/2/2013 15:37
2-Nitroaniline	ND		360	ug/Kg	1	01/2/2013 15:37
2-Nitrophenol	ND		360	ug/Kg	1	01/2/2013 15:37
3 and/or 4-Methylphenol	ND		360	ug/Kg	1	01/2/2013 15:37
3,3'-Dichlorobenzidine	ND		721	ug/Kg	1	01/2/2013 15:37
3-Nitroaniline	ND		1800	ug/Kg	1	01/2/2013 15:37
4,6-Dinitro-2-methylphenol	ND		1800	ug/Kg	1	01/2/2013 15:37
4-Chloro-3-methylphenol	ND		360	ug/Kg	1	01/2/2013 15:37
4-Chloroaniline	ND		360	ug/Kg	1	01/2/2013 15:37
4-Chlorophenyl phenyl ether	ND		360	ug/Kg	1	01/2/2013 15:37
Acenaphthene	1130		360	ug/Kg	1	01/2/2013 15:37
Acenaphthylene	ND		360	ug/Kg	1	01/2/2013 15:37
Anthracene	2260		360	ug/Kg	1	01/2/2013 15:37
Benzo(a)anthracene	4940		360	ug/Kg	1	01/2/2013 15:37
Benzo(a)pyrene	3820		360	ug/Kg	1	01/2/2013 15:37
Benzo(b)fluoranthene	4850		360	ug/Kg	1	01/2/2013 15:37
Benzo(g,h,i)perylene	2280		360	ug/Kg	1	01/2/2013 15:37
Benzo(k)fluoranthene	1830		360	ug/Kg	1	01/2/2013 15:37
Benzoic acid	ND		1800	ug/Kg	1	01/2/2013 15:37
Bis(2-Chloroethoxy)methane	ND		360	ug/Kg	1	01/2/2013 15:37
Bis(2-Chloroethyl)ether	ND		360	ug/Kg	1	01/2/2013 15:37
Bis(2-Chloroisopropyl)ether	ND		360	ug/Kg	1	01/2/2013 15:37
Bis(2-Ethylhexyl)phthalate	ND		360	ug/Kg	1	01/2/2013 15:37
4-Bromophenyl phenyl ether	ND		360	ug/Kg	1	01/2/2013 15:37
Butyl benzyl phthalate	ND		360	ug/Kg	1	01/2/2013 15:37
Chrysene	4450		360	ug/Kg	1	01/2/2013 15:37
Di-n-butyl phthalate	ND		360	ug/Kg	1	01/2/2013 15:37
Di-n-octyl phthalate	ND		360	ug/Kg	1	01/2/2013 15:37
Dibenz(a,h)anthracene	736		360	ug/Kg	1	01/2/2013 15:37
Dibenzofuran	751		360	ug/Kg	1	01/2/2013 15:37

Print Date: 01/04/2013

N.C. Certification # 481

Results of TW54-1 (0-2.5)

Client Sample ID: **TW54-1 (0-2.5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011011-B
 Lab Project ID: 31204011

Collection Date: 12/12/2012 10:00
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 85.70

Results by SW-846 8270D

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Diethyl phthalate	ND		360	ug/Kg	1	01/2/2013 15:37
Dimethyl phthalate	ND		360	ug/Kg	1	01/2/2013 15:37
2,4-Dimethylphenol	ND		360	ug/Kg	1	01/2/2013 15:37
Diphenylamine	ND		360	ug/Kg	1	01/2/2013 15:37
Fluoranthene	9680		721	ug/Kg	2	01/3/2013 12:31
Fluorene	823		360	ug/Kg	1	01/2/2013 15:37
Hexachlorobenzene	ND		1800	ug/Kg	1	01/2/2013 15:37
Hexachlorobutadiene	ND		360	ug/Kg	1	01/2/2013 15:37
Hexachlorocyclopentadiene	ND		721	ug/Kg	1	01/2/2013 15:37
Hexachloroethane	ND		360	ug/Kg	1	01/2/2013 15:37
Indeno(1,2,3-cd)pyrene	2210		360	ug/Kg	1	01/2/2013 15:37
Isophorone	ND		360	ug/Kg	1	01/2/2013 15:37
Naphthalene	ND		360	ug/Kg	1	01/2/2013 15:37
4-Nitroaniline	ND		1800	ug/Kg	1	01/2/2013 15:37
Nitrobenzene	ND		360	ug/Kg	1	01/2/2013 15:37
4-Nitrophenol	ND		1800	ug/Kg	1	01/2/2013 15:37
Pentachlorophenol	ND		1800	ug/Kg	1	01/2/2013 15:37
Phenanthrene	7990		360	ug/Kg	1	01/2/2013 15:37
Phenol	ND		360	ug/Kg	1	01/2/2013 15:37
Pyrene	7750		360	ug/Kg	1	01/2/2013 15:37
n-Nitrosodi-n-propylamine	ND		360	ug/Kg	1	01/2/2013 15:37

Surrogates

2,4,6-Tribromophenol	92.0		41.0-129	%	1	01/2/2013 15:37
2-Fluorobiphenyl	89.0		48.0-123	%	1	01/2/2013 15:37
2-Fluorophenol	94.0		42.0-123	%	1	01/2/2013 15:37
Nitrobenzene-d5	88.0		46.0-117	%	1	01/2/2013 15:37
Phenol-d6	102		48.0-125	%	1	01/2/2013 15:37
Terphenyl-d14	83.0		44.0-140	%	1	01/2/2013 15:37

Batch Information

Analytical Batch: **XMS1781**
 Analytical Method: **SW-846 8270D**
 Instrument: **MSD6**
 Analyst: **CMP**

Prep Batch: **XXX3429**
 Prep Method: **SW-846 3541**
 Prep Date/Time: **12/20/2012 08:43**
 Prep Initial Wt./Vol.: **32.46 g**
 Prep Extract Vol: **10 mL**

Analytical Batch: **XMS1783**
 Analytical Method: **SW-846 8270D**
 Instrument: **MSD6**
 Analyst: **CMP**

Prep Batch: **XXX3429**
 Prep Method: **SW-846 3541**
 Prep Date/Time: **12/20/2012 08:43**
 Prep Initial Wt./Vol.: **32.46 g**
 Prep Extract Vol: **10 mL**

Results of TW54-1 (0-2.5)

Client Sample ID: **TW54-1 (0-2.5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011011-B
 Lab Project ID: 31204011

Collection Date: 12/12/2012 10:00
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 85.70

Results by SW-846 8015C DRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Diesel Range Organics (DRO)	160		7.05	mg/kg	1	12/21/2012 4:48
Surrogates						
o-Terphenyl	83.0		40.0-140	%	1	12/21/2012 4:48

Batch Information

Analytical Batch: **XGC2804**
 Analytical Method: **SW-846 8015C DRO**
 Instrument: **GC6**
 Analyst: **DTF**

Prep Batch: **XXX3424**
 Prep Method: **SW-846 3541**
 Prep Date/Time: **12/19/2012 08:32**
 Prep Initial Wt./Vol.: **33.1 g**
 Prep Extract Vol: **10 mL**

Results of TW52-1 (2.5-5)

Client Sample ID: **TW52-1 (2.5-5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011012-F
 Lab Project ID: 31204011

Collection Date: 12/12/2012 10:30
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 78.50

Results by SW-846 8260B

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
1,1,1,2-Tetrachloroethane	ND		362	ug/Kg	400	12/18/2012 23:57
1,1,1-Trichloroethane	ND		362	ug/Kg	400	12/18/2012 23:57
1,1,2,2-Tetrachloroethane	ND		362	ug/Kg	400	12/18/2012 23:57
1,1,2-Trichloroethane	ND		362	ug/Kg	400	12/18/2012 23:57
1,1-Dichloroethane	ND		362	ug/Kg	400	12/18/2012 23:57
1,1-Dichloroethene	ND		362	ug/Kg	400	12/18/2012 23:57
1,1-Dichloropropene	ND		362	ug/Kg	400	12/18/2012 23:57
1,2,3-Trichlorobenzene	ND		362	ug/Kg	400	12/18/2012 23:57
1,2,3-Trichloropropane	ND		362	ug/Kg	400	12/18/2012 23:57
1,2,4-Trichlorobenzene	ND		362	ug/Kg	400	12/18/2012 23:57
1,2,4-Trimethylbenzene	6490		362	ug/Kg	400	12/18/2012 23:57
1,2-Dibromo-3-chloropropane	ND		1810	ug/Kg	400	12/18/2012 23:57
1,2-Dibromoethane	ND		362	ug/Kg	400	12/18/2012 23:57
1,2-Dichlorobenzene	ND		362	ug/Kg	400	12/18/2012 23:57
1,2-Dichloroethane	ND		362	ug/Kg	400	12/18/2012 23:57
1,2-Dichloropropane	ND		362	ug/Kg	400	12/18/2012 23:57
1,3,5-Trimethylbenzene	2270		362	ug/Kg	400	12/18/2012 23:57
1,3-Dichlorobenzene	ND		362	ug/Kg	400	12/18/2012 23:57
1,3-Dichloropropane	ND		362	ug/Kg	400	12/18/2012 23:57
1,4-Dichlorobenzene	ND		362	ug/Kg	400	12/18/2012 23:57
2,2-Dichloropropane	ND		362	ug/Kg	400	12/18/2012 23:57
2-Butanone	ND		9040	ug/Kg	400	12/18/2012 23:57
2-Chlorotoluene	ND		362	ug/Kg	400	12/18/2012 23:57
2-Hexanone	ND		1810	ug/Kg	400	12/18/2012 23:57
4-Chlorotoluene	ND		362	ug/Kg	400	12/18/2012 23:57
4-Isopropyltoluene	2520		362	ug/Kg	400	12/18/2012 23:57
4-Methyl-2-pentanone	ND		1810	ug/Kg	400	12/18/2012 23:57
Acetone	ND		9040	ug/Kg	400	12/18/2012 23:57
Benzene	ND		362	ug/Kg	400	12/18/2012 23:57
Bromobenzene	ND		362	ug/Kg	400	12/18/2012 23:57
Bromochloromethane	ND		362	ug/Kg	400	12/18/2012 23:57
Bromodichloromethane	ND		362	ug/Kg	400	12/18/2012 23:57
Bromoform	ND		362	ug/Kg	400	12/18/2012 23:57
Bromomethane	ND		362	ug/Kg	400	12/18/2012 23:57
n-Butylbenzene	ND		362	ug/Kg	400	12/18/2012 23:57
Carbon disulfide	ND		362	ug/Kg	400	12/18/2012 23:57
Carbon tetrachloride	ND		362	ug/Kg	400	12/18/2012 23:57
Chlorobenzene	ND		362	ug/Kg	400	12/18/2012 23:57
Chloroethane	ND		362	ug/Kg	400	12/18/2012 23:57
Chloroform	ND		362	ug/Kg	400	12/18/2012 23:57
Chloromethane	ND		362	ug/Kg	400	12/18/2012 23:57
Dibromochloromethane	ND		362	ug/Kg	400	12/18/2012 23:57
Dibromomethane	ND		362	ug/Kg	400	12/18/2012 23:57

Results of TW52-1 (2.5-5)

Client Sample ID: **TW52-1 (2.5-5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011012-F
 Lab Project ID: 31204011

Collection Date: 12/12/2012 10:30
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 78.50

Results by SW-846 8260B

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Dichlorodifluoromethane	ND		1810	ug/Kg	400	12/18/2012 23:57
cis-1,3-Dichloropropene	ND		362	ug/Kg	400	12/18/2012 23:57
trans-1,3-Dichloropropene	ND		362	ug/Kg	400	12/18/2012 23:57
Diisopropyl Ether	ND		362	ug/Kg	400	12/18/2012 23:57
Ethyl Benzene	ND		362	ug/Kg	400	12/18/2012 23:57
Hexachlorobutadiene	ND		362	ug/Kg	400	12/18/2012 23:57
Isopropylbenzene (Cumene)	ND		362	ug/Kg	400	12/18/2012 23:57
Methyl iodide	ND		362	ug/Kg	400	12/18/2012 23:57
Methylene chloride	ND		1810	ug/Kg	400	12/18/2012 23:57
Naphthalene	662		362	ug/Kg	400	12/18/2012 23:57
Styrene	ND		362	ug/Kg	400	12/18/2012 23:57
Tetrachloroethene	ND		362	ug/Kg	400	12/18/2012 23:57
Toluene	ND		362	ug/Kg	400	12/18/2012 23:57
Trichloroethene	ND		362	ug/Kg	400	12/18/2012 23:57
Trichlorofluoromethane	ND		362	ug/Kg	400	12/18/2012 23:57
Vinyl chloride	ND		362	ug/Kg	400	12/18/2012 23:57
Xylene (total)	ND		723	ug/Kg	400	12/18/2012 23:57
cis-1,2-Dichloroethene	ND		362	ug/Kg	400	12/18/2012 23:57
m,p-Xylene	ND		723	ug/Kg	400	12/18/2012 23:57
n-Propylbenzene	680		362	ug/Kg	400	12/18/2012 23:57
o-Xylene	ND		362	ug/Kg	400	12/18/2012 23:57
sec-Butylbenzene	ND		362	ug/Kg	400	12/18/2012 23:57
tert-Butyl methyl ether (MTBE)	ND		362	ug/Kg	400	12/18/2012 23:57
tert-Butylbenzene	ND		362	ug/Kg	400	12/18/2012 23:57
trans-1,2-Dichloroethene	ND		362	ug/Kg	400	12/18/2012 23:57
trans-1,4-Dichloro-2-butene	ND		1810	ug/Kg	400	12/18/2012 23:57

Surrogates

1,2-Dichloroethane-d4	101		55.0-173	%	400	12/18/2012 23:57
4-Bromofluorobenzene	122		23.0-141	%	400	12/18/2012 23:57
Toluene d8	106		57.0-134	%	400	12/18/2012 23:57

Batch Information

Analytical Batch: **VMS2785**
 Analytical Method: **SW-846 8260B**
 Instrument: **MSD8**
 Analyst: **BWS**

Prep Batch: **VXX4448**
 Prep Method: **SW-846 5035 SM**
 Prep Date/Time: **12/17/2012 16:32**
 Prep Initial Wt./Vol.: **7.05 g**
 Prep Extract Vol: **5 mL**

Results of TW52-1 (2.5-5)

Client Sample ID: **TW52-1 (2.5-5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011012-G
 Lab Project ID: 31204011

Collection Date: 12/12/2012 10:30
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 78.50

Results by SW-846 8015C GRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Gasoline Range Organics (GRO)	339		85.7	mg/kg	20	12/26/2012 16:12
Surrogates						
4-Bromofluorobenzene	108		70.0-130	%	20	12/26/2012 16:12

Batch Information

Analytical Batch: **VGC2296**
 Analytical Method: **SW-846 8015C GRO**
 Instrument: **GC7**
 Analyst: **MDY**

Prep Batch: **VXX4467**
 Prep Method: **SW-846 5035**
 Prep Date/Time: **12/17/2012 16:32**
 Prep Initial Wt./Vol.: **5.95 g**
 Prep Extract Vol: **5 mL**

Results of TW52-1 (2.5-5)

Client Sample ID: **TW52-1 (2.5-5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011012-B
 Lab Project ID: 31204011

Collection Date: 12/12/2012 10:30
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 78.50

Results by SW-846 8270D

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
1,2,4-Trichlorobenzene	ND		396	ug/Kg	1	01/2/2013 16:01
1,2-Dichlorobenzene	ND		396	ug/Kg	1	01/2/2013 16:01
1,3-Dichlorobenzene	ND		396	ug/Kg	1	01/2/2013 16:01
1,4-Dichlorobenzene	ND		396	ug/Kg	1	01/2/2013 16:01
2,4,5-Trichlorophenol	ND		396	ug/Kg	1	01/2/2013 16:01
2,4,6-Trichlorophenol	ND		396	ug/Kg	1	01/2/2013 16:01
2,4-Dichlorophenol	ND		396	ug/Kg	1	01/2/2013 16:01
2,4-Dinitrophenol	ND		1980	ug/Kg	1	01/2/2013 16:01
2,4-Dinitrotoluene	ND		396	ug/Kg	1	01/2/2013 16:01
2,6-Dinitrotoluene	ND		396	ug/Kg	1	01/2/2013 16:01
2-Chloronaphthalene	ND		396	ug/Kg	1	01/2/2013 16:01
2-Chlorophenol	ND		396	ug/Kg	1	01/2/2013 16:01
2-Methylnaphthalene	ND		396	ug/Kg	1	01/2/2013 16:01
2-Methylphenol	ND		396	ug/Kg	1	01/2/2013 16:01
2-Nitroaniline	ND		396	ug/Kg	1	01/2/2013 16:01
2-Nitrophenol	ND		396	ug/Kg	1	01/2/2013 16:01
3 and/or 4-Methylphenol	ND		396	ug/Kg	1	01/2/2013 16:01
3,3'-Dichlorobenzidine	ND		792	ug/Kg	1	01/2/2013 16:01
3-Nitroaniline	ND		1980	ug/Kg	1	01/2/2013 16:01
4,6-Dinitro-2-methylphenol	ND		1980	ug/Kg	1	01/2/2013 16:01
4-Chloro-3-methylphenol	ND		396	ug/Kg	1	01/2/2013 16:01
4-Chloroaniline	ND		396	ug/Kg	1	01/2/2013 16:01
4-Chlorophenyl phenyl ether	ND		396	ug/Kg	1	01/2/2013 16:01
Acenaphthene	ND		396	ug/Kg	1	01/2/2013 16:01
Acenaphthylene	ND		396	ug/Kg	1	01/2/2013 16:01
Anthracene	ND		396	ug/Kg	1	01/2/2013 16:01
Benzo(a)anthracene	ND		396	ug/Kg	1	01/2/2013 16:01
Benzo(a)pyrene	ND		396	ug/Kg	1	01/2/2013 16:01
Benzo(b)fluoranthene	ND		396	ug/Kg	1	01/2/2013 16:01
Benzo(g,h,i)perylene	ND		396	ug/Kg	1	01/2/2013 16:01
Benzo(k)fluoranthene	ND		396	ug/Kg	1	01/2/2013 16:01
Benzoic acid	ND		1980	ug/Kg	1	01/2/2013 16:01
Bis(2-Chloroethoxy)methane	ND		396	ug/Kg	1	01/2/2013 16:01
Bis(2-Chloroethyl)ether	ND		396	ug/Kg	1	01/2/2013 16:01
Bis(2-Chloroisopropyl)ether	ND		396	ug/Kg	1	01/2/2013 16:01
Bis(2-Ethylhexyl)phthalate	ND		396	ug/Kg	1	01/2/2013 16:01
4-Bromophenyl phenyl ether	ND		396	ug/Kg	1	01/2/2013 16:01
Butyl benzyl phthalate	ND		396	ug/Kg	1	01/2/2013 16:01
Chrysene	ND		396	ug/Kg	1	01/2/2013 16:01
Di-n-butyl phthalate	ND		396	ug/Kg	1	01/2/2013 16:01
Di-n-octyl phthalate	ND		396	ug/Kg	1	01/2/2013 16:01
Dibenz(a,h)anthracene	ND		396	ug/Kg	1	01/2/2013 16:01
Dibenzofuran	ND		396	ug/Kg	1	01/2/2013 16:01

Results of TW52-1 (2.5-5)

Client Sample ID: **TW52-1 (2.5-5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011012-B
 Lab Project ID: 31204011

Collection Date: 12/12/2012 10:30
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 78.50

Results by SW-846 8270D

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Diethyl phthalate	ND		396	ug/Kg	1	01/2/2013 16:01
Dimethyl phthalate	ND		396	ug/Kg	1	01/2/2013 16:01
2,4-Dimethylphenol	ND		396	ug/Kg	1	01/2/2013 16:01
Diphenylamine	ND		396	ug/Kg	1	01/2/2013 16:01
Fluoranthene	ND		396	ug/Kg	1	01/2/2013 16:01
Fluorene	ND		396	ug/Kg	1	01/2/2013 16:01
Hexachlorobenzene	ND		1980	ug/Kg	1	01/2/2013 16:01
Hexachlorobutadiene	ND		396	ug/Kg	1	01/2/2013 16:01
Hexachlorocyclopentadiene	ND		792	ug/Kg	1	01/2/2013 16:01
Hexachloroethane	ND		396	ug/Kg	1	01/2/2013 16:01
Indeno(1,2,3-cd)pyrene	ND		396	ug/Kg	1	01/2/2013 16:01
Isophorone	ND		396	ug/Kg	1	01/2/2013 16:01
Naphthalene	ND		396	ug/Kg	1	01/2/2013 16:01
4-Nitroaniline	ND		1980	ug/Kg	1	01/2/2013 16:01
Nitrobenzene	ND		396	ug/Kg	1	01/2/2013 16:01
4-Nitrophenol	ND		1980	ug/Kg	1	01/2/2013 16:01
Pentachlorophenol	ND		1980	ug/Kg	1	01/2/2013 16:01
Phenanthrene	ND		396	ug/Kg	1	01/2/2013 16:01
Phenol	ND		396	ug/Kg	1	01/2/2013 16:01
Pyrene	ND		396	ug/Kg	1	01/2/2013 16:01
n-Nitrosodi-n-propylamine	ND		396	ug/Kg	1	01/2/2013 16:01

Surrogates

2,4,6-Tribromophenol	80.0		41.0-129	%	1	01/2/2013 16:01
2-Fluorobiphenyl	75.0		48.0-123	%	1	01/2/2013 16:01
2-Fluorophenol	89.0		42.0-123	%	1	01/2/2013 16:01
Nitrobenzene-d5	79.0		46.0-117	%	1	01/2/2013 16:01
Phenol-d6	99.0		48.0-125	%	1	01/2/2013 16:01
Terphenyl-d14	78.0		44.0-140	%	1	01/2/2013 16:01

Batch Information

Analytical Batch: **XMS1781**
 Analytical Method: **SW-846 8270D**
 Instrument: **MSD6**
 Analyst: **CMP**

Prep Batch: **XXX3429**
 Prep Method: **SW-846 3541**
 Prep Date/Time: **12/20/2012 08:43**
 Prep Initial Wt./Vol.: **32.22 g**
 Prep Extract Vol: **10 mL**

Results of TW52-1 (2.5-5)

Client Sample ID: **TW52-1 (2.5-5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011012-B
 Lab Project ID: 31204011

Collection Date: 12/12/2012 10:30
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 78.50

Results by SW-846 8015C DRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Diesel Range Organics (DRO)	35.2		7.93	mg/kg	1	12/21/2012 5:16
Surrogates						
o-Terphenyl	76.1		40.0-140	%	1	12/21/2012 5:16

Batch Information

Analytical Batch: **XGC2804**
 Analytical Method: **SW-846 8015C DRO**
 Instrument: **GC6**
 Analyst: **DTF**

Prep Batch: **XXX3424**
 Prep Method: **SW-846 3541**
 Prep Date/Time: **12/19/2012 08:32**
 Prep Initial Wt./Vol.: **32.16 g**
 Prep Extract Vol: **10 mL**

Results of SB54-1 (2.5-5)

Client Sample ID: **SB54-1 (2.5-5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011013-A
 Lab Project ID: 31204011

Collection Date: 12/12/2012 12:35
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 80.40

Results by SW-846 8015C GRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Gasoline Range Organics (GRO)	ND		3.82	mg/kg	1	12/20/2012 22:55
Surrogates						
4-Bromofluorobenzene	107		70.0-130	%	1	12/20/2012 22:55

Batch Information

Analytical Batch: **VGC2289**
 Analytical Method: **SW-846 8015C GRO**
 Instrument: **GC7**
 Analyst: **MDY**

Prep Batch: **VXX4453**
 Prep Method: **SW-846 5035**
 Prep Date/Time: **12/17/2012 16:33**
 Prep Initial Wt./Vol.: **6.5 g**
 Prep Extract Vol: **5 mL**

Results of SB54-1 (2.5-5)

Client Sample ID: **SB54-1 (2.5-5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011013-C
 Lab Project ID: 31204011

Collection Date: 12/12/2012 12:35
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 80.40

Results by SW-846 8015C DRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Diesel Range Organics (DRO)	ND		8.06	mg/kg	1	12/21/2012 5:45
Surrogates						
o-Terphenyl	77.3		40.0-140	%	1	12/21/2012 5:45

Batch Information

Analytical Batch: **XGC2804**
 Analytical Method: **SW-846 8015C DRO**
 Instrument: **GC6**
 Analyst: **DTF**

Prep Batch: **XXX3424**
 Prep Method: **SW-846 3541**
 Prep Date/Time: **12/19/2012 08:32**
 Prep Initial Wt./Vol.: **30.85 g**
 Prep Extract Vol: **10 mL**

Results of SB54-2 (0-2.5)

Client Sample ID: **SB54-2 (0-2.5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011014-A
 Lab Project ID: 31204011

Collection Date: 12/12/2012 13:05
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 83.80

Results by SW-846 8015C GRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Gasoline Range Organics (GRO)	ND		3.99	mg/kg	1	12/20/2012 23:20

Surrogates

4-Bromofluorobenzene	108		70.0-130	%	1	12/20/2012 23:20
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Batch Information

Analytical Batch: **VGC2289**
 Analytical Method: **SW-846 8015C GRO**
 Instrument: **GC7**
 Analyst: **MDY**

Prep Batch: **VXX4453**
 Prep Method: **SW-846 5035**
 Prep Date/Time: **12/17/2012 16:34**
 Prep Initial Wt./Vol.: **5.98 g**
 Prep Extract Vol: **5 mL**

Results of SB54-2 (0-2.5)

Client Sample ID: **SB54-2 (0-2.5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011014-C
 Lab Project ID: 31204011

Collection Date: 12/12/2012 13:05
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 83.80

Results by SW-846 8015C DRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Diesel Range Organics (DRO)	51.3		7.09	mg/kg	1	12/21/2012 6:12
Surrogates						
o-Terphenyl	79.2		40.0-140	%	1	12/21/2012 6:12

Batch Information

Analytical Batch: **XGC2804**
 Analytical Method: **SW-846 8015C DRO**
 Instrument: **GC6**
 Analyst: **DTF**

Prep Batch: **XXX3424**
 Prep Method: **SW-846 3541**
 Prep Date/Time: **12/19/2012 08:32**
 Prep Initial Wt./Vol.: **33.69 g**
 Prep Extract Vol: **10 mL**

Results of SB54-3 (0-2.5)

Client Sample ID: **SB54-3 (0-2.5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011015-A
 Lab Project ID: 31204011

Collection Date: 12/12/2012 13:20
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 83.20

Results by SW-846 8015C GRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Gasoline Range Organics (GRO)	ND		3.51	mg/kg	1	12/20/2012 23:45
Surrogates						
4-Bromofluorobenzene	108		70.0-130	%	1	12/20/2012 23:45

Batch Information

Analytical Batch: **VGC2289**
 Analytical Method: **SW-846 8015C GRO**
 Instrument: **GC7**
 Analyst: **MDY**

Prep Batch: **VXX4453**
 Prep Method: **SW-846 5035**
 Prep Date/Time: **12/17/2012 16:35**
 Prep Initial Wt./Vol.: **6.85 g**
 Prep Extract Vol: **5 mL**

Results of SB54-3 (0-2.5)

Client Sample ID: **SB54-3 (0-2.5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011015-C
 Lab Project ID: 31204011

Collection Date: 12/12/2012 13:20
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 83.20

Results by SW-846 8015C DRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Diesel Range Organics (DRO)	ND		7.86	mg/kg	1	12/21/2012 6:41
Surrogates						
o-Terphenyl	88.0		40.0-140	%	1	12/21/2012 6:41

Batch Information

Analytical Batch: **XGC2804**
 Analytical Method: **SW-846 8015C DRO**
 Instrument: **GC6**
 Analyst: **DTF**

Prep Batch: **XXX3424**
 Prep Method: **SW-846 3541**
 Prep Date/Time: **12/19/2012 08:32**
 Prep Initial Wt./Vol.: **30.59 g**
 Prep Extract Vol: **10 mL**

Results of SB54-4 (0-2.5)

Client Sample ID: **SB54-4 (0-2.5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011016-A
 Lab Project ID: 31204011

Collection Date: 12/12/2012 13:50
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 80.90

Results by SW-846 8015C GRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Gasoline Range Organics (GRO)	ND		3.78	mg/kg	1	12/21/2012 0:10
Surrogates						
4-Bromofluorobenzene	107		70.0-130	%	1	12/21/2012 0:10

Batch Information

Analytical Batch: **VGC2289**
 Analytical Method: **SW-846 8015C GRO**
 Instrument: **GC7**
 Analyst: **MDY**

Prep Batch: **VXX4453**
 Prep Method: **SW-846 5035**
 Prep Date/Time: **12/17/2012 16:36**
 Prep Initial Wt./Vol.: **6.54 g**
 Prep Extract Vol: **5 mL**

Results of SB54-4 (0-2.5)

Client Sample ID: **SB54-4 (0-2.5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011016-C
 Lab Project ID: 31204011

Collection Date: 12/12/2012 13:50
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 80.90

Results by SW-846 8015C DRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Diesel Range Organics (DRO)	9.00		7.58	mg/kg	1	12/21/2012 7:08
Surrogates						
o-Terphenyl	87.3		40.0-140	%	1	12/21/2012 7:08

Batch Information

Analytical Batch: **XGC2804**
 Analytical Method: **SW-846 8015C DRO**
 Instrument: **GC6**
 Analyst: **DTF**

Prep Batch: **XXX3424**
 Prep Method: **SW-846 3541**
 Prep Date/Time: **12/19/2012 08:32**
 Prep Initial Wt./Vol.: **32.62 g**
 Prep Extract Vol: **10 mL**

Results of SB53-1 (0-2.5)

Client Sample ID: **SB53-1 (0-2.5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011017-A
 Lab Project ID: 31204011

Collection Date: 12/12/2012 14:10
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 81.90

Results by SW-846 8260B

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
1,1,1,2-Tetrachloroethane	ND		4.64	ug/Kg	1	12/18/2012 17:32
1,1,1-Trichloroethane	ND		4.64	ug/Kg	1	12/18/2012 17:32
1,1,2,2-Tetrachloroethane	ND		4.64	ug/Kg	1	12/18/2012 17:32
1,1,2-Trichloroethane	ND		4.64	ug/Kg	1	12/18/2012 17:32
1,1-Dichloroethane	ND		4.64	ug/Kg	1	12/18/2012 17:32
1,1-Dichloroethene	ND		4.64	ug/Kg	1	12/18/2012 17:32
1,1-Dichloropropene	ND		4.64	ug/Kg	1	12/18/2012 17:32
1,2,3-Trichlorobenzene	ND		4.64	ug/Kg	1	12/18/2012 17:32
1,2,3-Trichloropropane	ND		4.64	ug/Kg	1	12/18/2012 17:32
1,2,4-Trichlorobenzene	ND		4.64	ug/Kg	1	12/18/2012 17:32
1,2,4-Trimethylbenzene	ND		4.64	ug/Kg	1	12/18/2012 17:32
1,2-Dibromo-3-chloropropane	ND		27.8	ug/Kg	1	12/18/2012 17:32
1,2-Dibromoethane	ND		4.64	ug/Kg	1	12/18/2012 17:32
1,2-Dichlorobenzene	ND		4.64	ug/Kg	1	12/18/2012 17:32
1,2-Dichloroethane	ND		4.64	ug/Kg	1	12/18/2012 17:32
1,2-Dichloropropane	ND		4.64	ug/Kg	1	12/18/2012 17:32
1,3,5-Trimethylbenzene	ND		4.64	ug/Kg	1	12/18/2012 17:32
1,3-Dichlorobenzene	ND		4.64	ug/Kg	1	12/18/2012 17:32
1,3-Dichloropropane	ND		4.64	ug/Kg	1	12/18/2012 17:32
1,4-Dichlorobenzene	ND		4.64	ug/Kg	1	12/18/2012 17:32
2,2-Dichloropropane	ND		4.64	ug/Kg	1	12/18/2012 17:32
2-Butanone	ND		23.2	ug/Kg	1	12/18/2012 17:32
2-Chlorotoluene	ND		4.64	ug/Kg	1	12/18/2012 17:32
2-Hexanone	ND		11.6	ug/Kg	1	12/18/2012 17:32
4-Chlorotoluene	ND		4.64	ug/Kg	1	12/18/2012 17:32
4-Isopropyltoluene	ND		4.64	ug/Kg	1	12/18/2012 17:32
4-Methyl-2-pentanone	ND		11.6	ug/Kg	1	12/18/2012 17:32
Acetone	ND		46.4	ug/Kg	1	12/18/2012 17:32
Benzene	ND		4.64	ug/Kg	1	12/18/2012 17:32
Bromobenzene	ND		4.64	ug/Kg	1	12/18/2012 17:32
Bromochloromethane	ND		4.64	ug/Kg	1	12/18/2012 17:32
Bromodichloromethane	ND		4.64	ug/Kg	1	12/18/2012 17:32
Bromoform	ND		4.64	ug/Kg	1	12/18/2012 17:32
Bromomethane	ND		4.64	ug/Kg	1	12/18/2012 17:32
n-Butylbenzene	ND		4.64	ug/Kg	1	12/18/2012 17:32
Carbon disulfide	ND		4.64	ug/Kg	1	12/18/2012 17:32
Carbon tetrachloride	ND		4.64	ug/Kg	1	12/18/2012 17:32
Chlorobenzene	ND		4.64	ug/Kg	1	12/18/2012 17:32
Chloroethane	ND		4.64	ug/Kg	1	12/18/2012 17:32
Chloroform	ND		4.64	ug/Kg	1	12/18/2012 17:32
Chloromethane	ND		4.64	ug/Kg	1	12/18/2012 17:32
Dibromochloromethane	ND		4.64	ug/Kg	1	12/18/2012 17:32
Dibromomethane	ND		4.64	ug/Kg	1	12/18/2012 17:32

Results of SB53-1 (0-2.5)

Client Sample ID: **SB53-1 (0-2.5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011017-A
 Lab Project ID: 31204011

Collection Date: 12/12/2012 14:10
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 81.90

Results by SW-846 8260B

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Dichlorodifluoromethane	ND		4.64	ug/Kg	1	12/18/2012 17:32
cis-1,3-Dichloropropene	ND		4.64	ug/Kg	1	12/18/2012 17:32
trans-1,3-Dichloropropene	ND		4.64	ug/Kg	1	12/18/2012 17:32
Diisopropyl Ether	ND		4.64	ug/Kg	1	12/18/2012 17:32
Ethyl Benzene	ND		4.64	ug/Kg	1	12/18/2012 17:32
Hexachlorobutadiene	ND		4.64	ug/Kg	1	12/18/2012 17:32
Isopropylbenzene (Cumene)	ND		4.64	ug/Kg	1	12/18/2012 17:32
Methyl iodide	ND		4.64	ug/Kg	1	12/18/2012 17:32
Methylene chloride	ND		18.6	ug/Kg	1	12/18/2012 17:32
Naphthalene	ND		4.64	ug/Kg	1	12/18/2012 17:32
Styrene	ND		4.64	ug/Kg	1	12/18/2012 17:32
Tetrachloroethene	ND		4.64	ug/Kg	1	12/18/2012 17:32
Toluene	ND		4.64	ug/Kg	1	12/18/2012 17:32
Trichloroethene	ND		4.64	ug/Kg	1	12/18/2012 17:32
Trichlorofluoromethane	ND		4.64	ug/Kg	1	12/18/2012 17:32
Vinyl chloride	ND		4.64	ug/Kg	1	12/18/2012 17:32
Xylene (total)	ND		9.28	ug/Kg	1	12/18/2012 17:32
cis-1,2-Dichloroethene	ND		4.64	ug/Kg	1	12/18/2012 17:32
m,p-Xylene	ND		9.28	ug/Kg	1	12/18/2012 17:32
n-Propylbenzene	ND		4.64	ug/Kg	1	12/18/2012 17:32
o-Xylene	ND		4.64	ug/Kg	1	12/18/2012 17:32
sec-Butylbenzene	ND		4.64	ug/Kg	1	12/18/2012 17:32
tert-Butyl methyl ether (MTBE)	ND		4.64	ug/Kg	1	12/18/2012 17:32
tert-Butylbenzene	ND		4.64	ug/Kg	1	12/18/2012 17:32
trans-1,2-Dichloroethene	ND		4.64	ug/Kg	1	12/18/2012 17:32
trans-1,4-Dichloro-2-butene	ND		23.2	ug/Kg	1	12/18/2012 17:32
Surrogates						
1,2-Dichloroethane-d4	114		55.0-173	%	1	12/18/2012 17:32
4-Bromofluorobenzene	100		23.0-141	%	1	12/18/2012 17:32
Toluene d8	104		57.0-134	%	1	12/18/2012 17:32

Batch Information

Analytical Batch: **VMS2786**
 Analytical Method: **SW-846 8260B**
 Instrument: **MSD9**
 Analyst: **BWS**

Prep Batch: **VXX4446**
 Prep Method: **SW-846 5035 SL**
 Prep Date/Time: **12/17/2012 16:38**
 Prep Initial Wt./Vol.: **6.58 g**
 Prep Extract Vol: **5 mL**

Results of SB53-1 (0-2.5)

Client Sample ID: **SB53-1 (0-2.5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011017-F
 Lab Project ID: 31204011

Collection Date: 12/12/2012 14:10
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 81.90

Results by SW-846 8015C GRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Gasoline Range Organics (GRO)	ND		3.54	mg/kg	1	12/21/2012 0:36
Surrogates						
4-Bromofluorobenzene	108		70.0-130	%	1	12/21/2012 0:36

Batch Information

Analytical Batch: **VGC2289**
 Analytical Method: **SW-846 8015C GRO**
 Instrument: **GC7**
 Analyst: **MDY**

Prep Batch: **VXX4453**
 Prep Method: **SW-846 5035**
 Prep Date/Time: **12/17/2012 16:38**
 Prep Initial Wt./Vol.: **6.9 g**
 Prep Extract Vol: **5 mL**

Results of SB53-1 (0-2.5)

Client Sample ID: **SB53-1 (0-2.5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011017-B
 Lab Project ID: 31204011

Collection Date: 12/12/2012 14:10
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 81.90

Results by SW-846 8015C DRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Diesel Range Organics (DRO)	15.7		7.44	mg/kg	1	12/21/2012 7:36
Surrogates						
o-Terphenyl	86.7		40.0-140	%	1	12/21/2012 7:36

Batch Information

Analytical Batch: **XGC2804**
 Analytical Method: **SW-846 8015C DRO**
 Instrument: **GC6**
 Analyst: **DTF**

Prep Batch: **XXX3424**
 Prep Method: **SW-846 3541**
 Prep Date/Time: **12/19/2012 08:32**
 Prep Initial Wt./Vol.: **32.83 g**
 Prep Extract Vol: **10 mL**

Results of SB53-3 (0-2.5)

Client Sample ID: **SB53-3 (0-2.5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011018-A
 Lab Project ID: 31204011

Collection Date: 12/12/2012 15:20
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 83.80

Results by SW-846 8260B

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
1,1,1,2-Tetrachloroethane	ND		4.48	ug/Kg	1	12/18/2012 17:59
1,1,1-Trichloroethane	ND		4.48	ug/Kg	1	12/18/2012 17:59
1,1,2,2-Tetrachloroethane	ND		4.48	ug/Kg	1	12/18/2012 17:59
1,1,2-Trichloroethane	ND		4.48	ug/Kg	1	12/18/2012 17:59
1,1-Dichloroethane	ND		4.48	ug/Kg	1	12/18/2012 17:59
1,1-Dichloroethene	ND		4.48	ug/Kg	1	12/18/2012 17:59
1,1-Dichloropropene	ND		4.48	ug/Kg	1	12/18/2012 17:59
1,2,3-Trichlorobenzene	ND		4.48	ug/Kg	1	12/18/2012 17:59
1,2,3-Trichloropropane	ND		4.48	ug/Kg	1	12/18/2012 17:59
1,2,4-Trichlorobenzene	ND		4.48	ug/Kg	1	12/18/2012 17:59
1,2,4-Trimethylbenzene	ND		4.48	ug/Kg	1	12/18/2012 17:59
1,2-Dibromo-3-chloropropane	ND		26.9	ug/Kg	1	12/18/2012 17:59
1,2-Dibromoethane	ND		4.48	ug/Kg	1	12/18/2012 17:59
1,2-Dichlorobenzene	ND		4.48	ug/Kg	1	12/18/2012 17:59
1,2-Dichloroethane	ND		4.48	ug/Kg	1	12/18/2012 17:59
1,2-Dichloropropane	ND		4.48	ug/Kg	1	12/18/2012 17:59
1,3,5-Trimethylbenzene	ND		4.48	ug/Kg	1	12/18/2012 17:59
1,3-Dichlorobenzene	ND		4.48	ug/Kg	1	12/18/2012 17:59
1,3-Dichloropropane	ND		4.48	ug/Kg	1	12/18/2012 17:59
1,4-Dichlorobenzene	ND		4.48	ug/Kg	1	12/18/2012 17:59
2,2-Dichloropropane	ND		4.48	ug/Kg	1	12/18/2012 17:59
2-Butanone	ND		22.4	ug/Kg	1	12/18/2012 17:59
2-Chlorotoluene	ND		4.48	ug/Kg	1	12/18/2012 17:59
2-Hexanone	ND		11.2	ug/Kg	1	12/18/2012 17:59
4-Chlorotoluene	ND		4.48	ug/Kg	1	12/18/2012 17:59
4-Isopropyltoluene	ND		4.48	ug/Kg	1	12/18/2012 17:59
4-Methyl-2-pentanone	ND		11.2	ug/Kg	1	12/18/2012 17:59
Acetone	ND		44.8	ug/Kg	1	12/18/2012 17:59
Benzene	ND		4.48	ug/Kg	1	12/18/2012 17:59
Bromobenzene	ND		4.48	ug/Kg	1	12/18/2012 17:59
Bromochloromethane	ND		4.48	ug/Kg	1	12/18/2012 17:59
Bromodichloromethane	ND		4.48	ug/Kg	1	12/18/2012 17:59
Bromoform	ND		4.48	ug/Kg	1	12/18/2012 17:59
Bromomethane	ND		4.48	ug/Kg	1	12/18/2012 17:59
n-Butylbenzene	ND		4.48	ug/Kg	1	12/18/2012 17:59
Carbon disulfide	ND		4.48	ug/Kg	1	12/18/2012 17:59
Carbon tetrachloride	ND		4.48	ug/Kg	1	12/18/2012 17:59
Chlorobenzene	ND		4.48	ug/Kg	1	12/18/2012 17:59
Chloroethane	ND		4.48	ug/Kg	1	12/18/2012 17:59
Chloroform	ND		4.48	ug/Kg	1	12/18/2012 17:59
Chloromethane	ND		4.48	ug/Kg	1	12/18/2012 17:59
Dibromochloromethane	ND		4.48	ug/Kg	1	12/18/2012 17:59
Dibromomethane	ND		4.48	ug/Kg	1	12/18/2012 17:59

Results of SB53-3 (0-2.5)

Client Sample ID: **SB53-3 (0-2.5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011018-A
 Lab Project ID: 31204011

Collection Date: 12/12/2012 15:20
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 83.80

Results by SW-846 8260B

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Dichlorodifluoromethane	ND		4.48	ug/Kg	1	12/18/2012 17:59
cis-1,3-Dichloropropene	ND		4.48	ug/Kg	1	12/18/2012 17:59
trans-1,3-Dichloropropene	ND		4.48	ug/Kg	1	12/18/2012 17:59
Diisopropyl Ether	ND		4.48	ug/Kg	1	12/18/2012 17:59
Ethyl Benzene	ND		4.48	ug/Kg	1	12/18/2012 17:59
Hexachlorobutadiene	ND		4.48	ug/Kg	1	12/18/2012 17:59
Isopropylbenzene (Cumene)	ND		4.48	ug/Kg	1	12/18/2012 17:59
Methyl iodide	ND		4.48	ug/Kg	1	12/18/2012 17:59
Methylene chloride	ND		17.9	ug/Kg	1	12/18/2012 17:59
Naphthalene	ND		4.48	ug/Kg	1	12/18/2012 17:59
Styrene	ND		4.48	ug/Kg	1	12/18/2012 17:59
Tetrachloroethene	ND		4.48	ug/Kg	1	12/18/2012 17:59
Toluene	ND		4.48	ug/Kg	1	12/18/2012 17:59
Trichloroethene	ND		4.48	ug/Kg	1	12/18/2012 17:59
Trichlorofluoromethane	ND		4.48	ug/Kg	1	12/18/2012 17:59
Vinyl chloride	ND		4.48	ug/Kg	1	12/18/2012 17:59
Xylene (total)	ND		8.96	ug/Kg	1	12/18/2012 17:59
cis-1,2-Dichloroethene	ND		4.48	ug/Kg	1	12/18/2012 17:59
m,p-Xylene	ND		8.96	ug/Kg	1	12/18/2012 17:59
n-Propylbenzene	ND		4.48	ug/Kg	1	12/18/2012 17:59
o-Xylene	ND		4.48	ug/Kg	1	12/18/2012 17:59
sec-Butylbenzene	ND		4.48	ug/Kg	1	12/18/2012 17:59
tert-Butyl methyl ether (MTBE)	ND		4.48	ug/Kg	1	12/18/2012 17:59
tert-Butylbenzene	ND		4.48	ug/Kg	1	12/18/2012 17:59
trans-1,2-Dichloroethene	ND		4.48	ug/Kg	1	12/18/2012 17:59
trans-1,4-Dichloro-2-butene	ND		22.4	ug/Kg	1	12/18/2012 17:59

Surrogates

1,2-Dichloroethane-d4	111		55.0-173	%	1	12/18/2012 17:59
4-Bromofluorobenzene	101		23.0-141	%	1	12/18/2012 17:59
Toluene d8	104		57.0-134	%	1	12/18/2012 17:59

Batch Information

Analytical Batch: **VMS2786**
 Analytical Method: **SW-846 8260B**
 Instrument: **MSD9**
 Analyst: **BWS**

Prep Batch: **VXX4446**
 Prep Method: **SW-846 5035 SL**
 Prep Date/Time: **12/17/2012 16:41**
 Prep Initial Wt./Vol.: **6.66 g**
 Prep Extract Vol: **5 mL**

Results of SB53-3 (0-2.5)

Client Sample ID: **SB53-3 (0-2.5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011018-F
 Lab Project ID: 31204011

Collection Date: 12/12/2012 15:20
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 83.80

Results by SW-846 8015C GRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Gasoline Range Organics (GRO)	ND		3.80	mg/kg	1	12/26/2012 14:32
Surrogates						
4-Bromofluorobenzene	107		70.0-130	%	1	12/26/2012 14:32

Batch Information

Analytical Batch: **VGC2296**
 Analytical Method: **SW-846 8015C GRO**
 Instrument: **GC7**
 Analyst: **MDY**

Prep Batch: **VXX4467**
 Prep Method: **SW-846 5035**
 Prep Date/Time: **12/17/2012 16:41**
 Prep Initial Wt./Vol.: **6.28 g**
 Prep Extract Vol: **5 mL**

Results of SB53-3 (0-2.5)

Client Sample ID: **SB53-3 (0-2.5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011018-B
 Lab Project ID: 31204011

Collection Date: 12/12/2012 15:20
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 83.80

Results by SW-846 8015C DRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Diesel Range Organics (DRO)	30.3		7.04	mg/kg	1	12/21/2012 8:05
Surrogates						
o-Terphenyl	76.6		40.0-140	%	1	12/21/2012 8:05

Batch Information

Analytical Batch: **XGC2804**
 Analytical Method: **SW-846 8015C DRO**
 Instrument: **GC6**
 Analyst: **DTF**

Prep Batch: **XXX3424**
 Prep Method: **SW-846 3541**
 Prep Date/Time: **12/19/2012 08:32**
 Prep Initial Wt./Vol.: **33.93 g**
 Prep Extract Vol: **10 mL**

Results of SB53-4 (0-2.5)

Client Sample ID: **SB53-4 (0-2.5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011019-A
 Lab Project ID: 31204011

Collection Date: 12/12/2012 15:50
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 84.40

Results by SW-846 8260B

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
1,1,1,2-Tetrachloroethane	ND		5.38	ug/Kg	1	12/18/2012 18:25
1,1,1-Trichloroethane	ND		5.38	ug/Kg	1	12/18/2012 18:25
1,1,2,2-Tetrachloroethane	ND		5.38	ug/Kg	1	12/18/2012 18:25
1,1,2-Trichloroethane	ND		5.38	ug/Kg	1	12/18/2012 18:25
1,1-Dichloroethane	ND		5.38	ug/Kg	1	12/18/2012 18:25
1,1-Dichloroethene	ND		5.38	ug/Kg	1	12/18/2012 18:25
1,1-Dichloropropene	ND		5.38	ug/Kg	1	12/18/2012 18:25
1,2,3-Trichlorobenzene	ND		5.38	ug/Kg	1	12/18/2012 18:25
1,2,3-Trichloropropane	ND		5.38	ug/Kg	1	12/18/2012 18:25
1,2,4-Trichlorobenzene	ND		5.38	ug/Kg	1	12/18/2012 18:25
1,2,4-Trimethylbenzene	ND		5.38	ug/Kg	1	12/18/2012 18:25
1,2-Dibromo-3-chloropropane	ND		32.3	ug/Kg	1	12/18/2012 18:25
1,2-Dibromoethane	ND		5.38	ug/Kg	1	12/18/2012 18:25
1,2-Dichlorobenzene	ND		5.38	ug/Kg	1	12/18/2012 18:25
1,2-Dichloroethane	ND		5.38	ug/Kg	1	12/18/2012 18:25
1,2-Dichloropropane	ND		5.38	ug/Kg	1	12/18/2012 18:25
1,3,5-Trimethylbenzene	ND		5.38	ug/Kg	1	12/18/2012 18:25
1,3-Dichlorobenzene	ND		5.38	ug/Kg	1	12/18/2012 18:25
1,3-Dichloropropane	ND		5.38	ug/Kg	1	12/18/2012 18:25
1,4-Dichlorobenzene	ND		5.38	ug/Kg	1	12/18/2012 18:25
2,2-Dichloropropane	ND		5.38	ug/Kg	1	12/18/2012 18:25
2-Butanone	ND		26.9	ug/Kg	1	12/18/2012 18:25
2-Chlorotoluene	ND		5.38	ug/Kg	1	12/18/2012 18:25
2-Hexanone	ND		13.5	ug/Kg	1	12/18/2012 18:25
4-Chlorotoluene	ND		5.38	ug/Kg	1	12/18/2012 18:25
4-Isopropyltoluene	ND		5.38	ug/Kg	1	12/18/2012 18:25
4-Methyl-2-pentanone	ND		13.5	ug/Kg	1	12/18/2012 18:25
Acetone	ND		53.8	ug/Kg	1	12/18/2012 18:25
Benzene	ND		5.38	ug/Kg	1	12/18/2012 18:25
Bromobenzene	ND		5.38	ug/Kg	1	12/18/2012 18:25
Bromochloromethane	ND		5.38	ug/Kg	1	12/18/2012 18:25
Bromodichloromethane	ND		5.38	ug/Kg	1	12/18/2012 18:25
Bromoform	ND		5.38	ug/Kg	1	12/18/2012 18:25
Bromomethane	ND		5.38	ug/Kg	1	12/18/2012 18:25
n-Butylbenzene	ND		5.38	ug/Kg	1	12/18/2012 18:25
Carbon disulfide	ND		5.38	ug/Kg	1	12/18/2012 18:25
Carbon tetrachloride	ND		5.38	ug/Kg	1	12/18/2012 18:25
Chlorobenzene	ND		5.38	ug/Kg	1	12/18/2012 18:25
Chloroethane	ND		5.38	ug/Kg	1	12/18/2012 18:25
Chloroform	ND		5.38	ug/Kg	1	12/18/2012 18:25
Chloromethane	ND		5.38	ug/Kg	1	12/18/2012 18:25
Dibromochloromethane	ND		5.38	ug/Kg	1	12/18/2012 18:25
Dibromomethane	ND		5.38	ug/Kg	1	12/18/2012 18:25

Results of SB53-4 (0-2.5)

Client Sample ID: **SB53-4 (0-2.5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011019-A
 Lab Project ID: 31204011

Collection Date: 12/12/2012 15:50
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 84.40

Results by SW-846 8260B

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Dichlorodifluoromethane	ND		5.38	ug/Kg	1	12/18/2012 18:25
cis-1,3-Dichloropropene	ND		5.38	ug/Kg	1	12/18/2012 18:25
trans-1,3-Dichloropropene	ND		5.38	ug/Kg	1	12/18/2012 18:25
Diisopropyl Ether	ND		5.38	ug/Kg	1	12/18/2012 18:25
Ethyl Benzene	ND		5.38	ug/Kg	1	12/18/2012 18:25
Hexachlorobutadiene	ND		5.38	ug/Kg	1	12/18/2012 18:25
Isopropylbenzene (Cumene)	ND		5.38	ug/Kg	1	12/18/2012 18:25
Methyl iodide	ND		5.38	ug/Kg	1	12/18/2012 18:25
Methylene chloride	ND		21.5	ug/Kg	1	12/18/2012 18:25
Naphthalene	ND		5.38	ug/Kg	1	12/18/2012 18:25
Styrene	ND		5.38	ug/Kg	1	12/18/2012 18:25
Tetrachloroethene	ND		5.38	ug/Kg	1	12/18/2012 18:25
Toluene	ND		5.38	ug/Kg	1	12/18/2012 18:25
Trichloroethene	ND		5.38	ug/Kg	1	12/18/2012 18:25
Trichlorofluoromethane	ND		5.38	ug/Kg	1	12/18/2012 18:25
Vinyl chloride	ND		5.38	ug/Kg	1	12/18/2012 18:25
Xylene (total)	ND		10.8	ug/Kg	1	12/18/2012 18:25
cis-1,2-Dichloroethene	ND		5.38	ug/Kg	1	12/18/2012 18:25
m,p-Xylene	ND		10.8	ug/Kg	1	12/18/2012 18:25
n-Propylbenzene	ND		5.38	ug/Kg	1	12/18/2012 18:25
o-Xylene	ND		5.38	ug/Kg	1	12/18/2012 18:25
sec-Butylbenzene	ND		5.38	ug/Kg	1	12/18/2012 18:25
tert-Butyl methyl ether (MTBE)	ND		5.38	ug/Kg	1	12/18/2012 18:25
tert-Butylbenzene	ND		5.38	ug/Kg	1	12/18/2012 18:25
trans-1,2-Dichloroethene	ND		5.38	ug/Kg	1	12/18/2012 18:25
trans-1,4-Dichloro-2-butene	ND		26.9	ug/Kg	1	12/18/2012 18:25

Surrogates

1,2-Dichloroethane-d4	114		55.0-173	%	1	12/18/2012 18:25
4-Bromofluorobenzene	101		23.0-141	%	1	12/18/2012 18:25
Toluene d8	104		57.0-134	%	1	12/18/2012 18:25

Batch Information

Analytical Batch: **VMS2786**
 Analytical Method: **SW-846 8260B**
 Instrument: **MSD9**
 Analyst: **BWS**

Prep Batch: **VXX4446**
 Prep Method: **SW-846 5035 SL**
 Prep Date/Time: **12/17/2012 16:43**
 Prep Initial Wt./Vol.: **5.5 g**
 Prep Extract Vol: **5 mL**

Results of SB53-4 (0-2.5)

Client Sample ID: **SB53-4 (0-2.5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011019-F
 Lab Project ID: 31204011

Collection Date: 12/12/2012 15:50
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 84.40

Results by SW-846 8015C GRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Gasoline Range Organics (GRO)	ND		4.13	mg/kg	1	12/21/2012 18:51
Surrogates						
4-Bromofluorobenzene	108		70.0-130	%	1	12/21/2012 18:51

Batch Information

Analytical Batch: **VGC2293**
 Analytical Method: **SW-846 8015C GRO**
 Instrument: **GC7**
 Analyst: **MDY**

Prep Batch: **VXX4461**
 Prep Method: **SW-846 5035**
 Prep Date/Time: **12/17/2012 16:43**
 Prep Initial Wt./Vol.: **5.73 g**
 Prep Extract Vol: **5 mL**

Results of SB53-4 (0-2.5)

Client Sample ID: **SB53-4 (0-2.5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011019-B
 Lab Project ID: 31204011

Collection Date: 12/12/2012 15:50
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 84.40

Results by SW-846 8015C DRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Diesel Range Organics (DRO)	ND		7.33	mg/kg	1	12/21/2012 8:33
Surrogates						
o-Terphenyl	75.4		40.0-140	%	1	12/21/2012 8:33

Batch Information

Analytical Batch: **XGC2804**
 Analytical Method: **SW-846 8015C DRO**
 Instrument: **GC6**
 Analyst: **DTF**

Prep Batch: **XXX3424**
 Prep Method: **SW-846 3541**
 Prep Date/Time: **12/19/2012 08:32**
 Prep Initial Wt./Vol.: **32.3 g**
 Prep Extract Vol: **10 mL**

Results of SB53-5 (2.5-5)

Client Sample ID: **SB53-5 (2.5-5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011020-A
 Lab Project ID: 31204011

Collection Date: 12/13/2012 08:10
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 82.20

Results by SW-846 8260B

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
1,1,1,2-Tetrachloroethane	ND		4.67	ug/Kg	1	12/18/2012 18:52
1,1,1-Trichloroethane	ND		4.67	ug/Kg	1	12/18/2012 18:52
1,1,2,2-Tetrachloroethane	ND		4.67	ug/Kg	1	12/18/2012 18:52
1,1,2-Trichloroethane	ND		4.67	ug/Kg	1	12/18/2012 18:52
1,1-Dichloroethane	ND		4.67	ug/Kg	1	12/18/2012 18:52
1,1-Dichloroethene	ND		4.67	ug/Kg	1	12/18/2012 18:52
1,1-Dichloropropene	ND		4.67	ug/Kg	1	12/18/2012 18:52
1,2,3-Trichlorobenzene	ND		4.67	ug/Kg	1	12/18/2012 18:52
1,2,3-Trichloropropane	ND		4.67	ug/Kg	1	12/18/2012 18:52
1,2,4-Trichlorobenzene	ND		4.67	ug/Kg	1	12/18/2012 18:52
1,2,4-Trimethylbenzene	ND		4.67	ug/Kg	1	12/18/2012 18:52
1,2-Dibromo-3-chloropropane	ND		28.0	ug/Kg	1	12/18/2012 18:52
1,2-Dibromoethane	ND		4.67	ug/Kg	1	12/18/2012 18:52
1,2-Dichlorobenzene	ND		4.67	ug/Kg	1	12/18/2012 18:52
1,2-Dichloroethane	ND		4.67	ug/Kg	1	12/18/2012 18:52
1,2-Dichloropropane	ND		4.67	ug/Kg	1	12/18/2012 18:52
1,3,5-Trimethylbenzene	ND		4.67	ug/Kg	1	12/18/2012 18:52
1,3-Dichlorobenzene	ND		4.67	ug/Kg	1	12/18/2012 18:52
1,3-Dichloropropane	ND		4.67	ug/Kg	1	12/18/2012 18:52
1,4-Dichlorobenzene	ND		4.67	ug/Kg	1	12/18/2012 18:52
2,2-Dichloropropane	ND		4.67	ug/Kg	1	12/18/2012 18:52
2-Butanone	ND		23.4	ug/Kg	1	12/18/2012 18:52
2-Chlorotoluene	ND		4.67	ug/Kg	1	12/18/2012 18:52
2-Hexanone	ND		11.7	ug/Kg	1	12/18/2012 18:52
4-Chlorotoluene	ND		4.67	ug/Kg	1	12/18/2012 18:52
4-Isopropyltoluene	ND		4.67	ug/Kg	1	12/18/2012 18:52
4-Methyl-2-pentanone	ND		11.7	ug/Kg	1	12/18/2012 18:52
Acetone	ND		46.7	ug/Kg	1	12/18/2012 18:52
Benzene	ND		4.67	ug/Kg	1	12/18/2012 18:52
Bromobenzene	ND		4.67	ug/Kg	1	12/18/2012 18:52
Bromochloromethane	ND		4.67	ug/Kg	1	12/18/2012 18:52
Bromodichloromethane	ND		4.67	ug/Kg	1	12/18/2012 18:52
Bromoform	ND		4.67	ug/Kg	1	12/18/2012 18:52
Bromomethane	ND		4.67	ug/Kg	1	12/18/2012 18:52
n-Butylbenzene	ND		4.67	ug/Kg	1	12/18/2012 18:52
Carbon disulfide	ND		4.67	ug/Kg	1	12/18/2012 18:52
Carbon tetrachloride	ND		4.67	ug/Kg	1	12/18/2012 18:52
Chlorobenzene	ND		4.67	ug/Kg	1	12/18/2012 18:52
Chloroethane	ND		4.67	ug/Kg	1	12/18/2012 18:52
Chloroform	ND		4.67	ug/Kg	1	12/18/2012 18:52
Chloromethane	ND		4.67	ug/Kg	1	12/18/2012 18:52
Dibromochloromethane	ND		4.67	ug/Kg	1	12/18/2012 18:52
Dibromomethane	ND		4.67	ug/Kg	1	12/18/2012 18:52

Results of SB53-5 (2.5-5)

Client Sample ID: **SB53-5 (2.5-5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011020-A
 Lab Project ID: 31204011

Collection Date: 12/13/2012 08:10
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 82.20

Results by SW-846 8260B

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Dichlorodifluoromethane	ND		4.67	ug/Kg	1	12/18/2012 18:52
cis-1,3-Dichloropropene	ND		4.67	ug/Kg	1	12/18/2012 18:52
trans-1,3-Dichloropropene	ND		4.67	ug/Kg	1	12/18/2012 18:52
Diisopropyl Ether	ND		4.67	ug/Kg	1	12/18/2012 18:52
Ethyl Benzene	ND		4.67	ug/Kg	1	12/18/2012 18:52
Hexachlorobutadiene	ND		4.67	ug/Kg	1	12/18/2012 18:52
Isopropylbenzene (Cumene)	ND		4.67	ug/Kg	1	12/18/2012 18:52
Methyl iodide	ND		4.67	ug/Kg	1	12/18/2012 18:52
Methylene chloride	ND		18.7	ug/Kg	1	12/18/2012 18:52
Naphthalene	ND		4.67	ug/Kg	1	12/18/2012 18:52
Styrene	ND		4.67	ug/Kg	1	12/18/2012 18:52
Tetrachloroethene	ND		4.67	ug/Kg	1	12/18/2012 18:52
Toluene	ND		4.67	ug/Kg	1	12/18/2012 18:52
Trichloroethene	ND		4.67	ug/Kg	1	12/18/2012 18:52
Trichlorofluoromethane	ND		4.67	ug/Kg	1	12/18/2012 18:52
Vinyl chloride	ND		4.67	ug/Kg	1	12/18/2012 18:52
Xylene (total)	ND		9.34	ug/Kg	1	12/18/2012 18:52
cis-1,2-Dichloroethene	ND		4.67	ug/Kg	1	12/18/2012 18:52
m,p-Xylene	ND		9.34	ug/Kg	1	12/18/2012 18:52
n-Propylbenzene	ND		4.67	ug/Kg	1	12/18/2012 18:52
o-Xylene	ND		4.67	ug/Kg	1	12/18/2012 18:52
sec-Butylbenzene	ND		4.67	ug/Kg	1	12/18/2012 18:52
tert-Butyl methyl ether (MTBE)	ND		4.67	ug/Kg	1	12/18/2012 18:52
tert-Butylbenzene	ND		4.67	ug/Kg	1	12/18/2012 18:52
trans-1,2-Dichloroethene	ND		4.67	ug/Kg	1	12/18/2012 18:52
trans-1,4-Dichloro-2-butene	ND		23.4	ug/Kg	1	12/18/2012 18:52

Surrogates

1,2-Dichloroethane-d4	111		55.0-173	%	1	12/18/2012 18:52
4-Bromofluorobenzene	99.0		23.0-141	%	1	12/18/2012 18:52
Toluene d8	105		57.0-134	%	1	12/18/2012 18:52

Batch Information

Analytical Batch: **VMS2786**
 Analytical Method: **SW-846 8260B**
 Instrument: **MSD9**
 Analyst: **BWS**

Prep Batch: **VXX4446**
 Prep Method: **SW-846 5035 SL**
 Prep Date/Time: **12/17/2012 16:45**
 Prep Initial Wt./Vol.: **6.51 g**
 Prep Extract Vol: **5 mL**

Results of SB53-5 (2.5-5)

Client Sample ID: **SB53-5 (2.5-5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011020-F
 Lab Project ID: 31204011

Collection Date: 12/13/2012 08:10
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 82.20

Results by SW-846 8015C GRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Gasoline Range Organics (GRO)	ND		3.42	mg/kg	1	12/21/2012 19:16
Surrogates						
4-Bromofluorobenzene	107		70.0-130	%	1	12/21/2012 19:16

Batch Information

Analytical Batch: **VGC2293**
 Analytical Method: **SW-846 8015C GRO**
 Instrument: **GC7**
 Analyst: **MDY**

Prep Batch: **VXX4461**
 Prep Method: **SW-846 5035**
 Prep Date/Time: **12/17/2012 16:45**
 Prep Initial Wt./Vol.: **7.11 g**
 Prep Extract Vol: **5 mL**

Results of SB53-5 (2.5-5)

Client Sample ID: **SB53-5 (2.5-5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011020-B
 Lab Project ID: 31204011

Collection Date: 12/13/2012 08:10
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 82.20

Results by SW-846 8270D

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
1,2,4-Trichlorobenzene	ND		391	ug/Kg	1	01/2/2013 16:25
1,2-Dichlorobenzene	ND		391	ug/Kg	1	01/2/2013 16:25
1,3-Dichlorobenzene	ND		391	ug/Kg	1	01/2/2013 16:25
1,4-Dichlorobenzene	ND		391	ug/Kg	1	01/2/2013 16:25
2,4,5-Trichlorophenol	ND		391	ug/Kg	1	01/2/2013 16:25
2,4,6-Trichlorophenol	ND		391	ug/Kg	1	01/2/2013 16:25
2,4-Dichlorophenol	ND		391	ug/Kg	1	01/2/2013 16:25
2,4-Dinitrophenol	ND		1960	ug/Kg	1	01/2/2013 16:25
2,4-Dinitrotoluene	ND		391	ug/Kg	1	01/2/2013 16:25
2,6-Dinitrotoluene	ND		391	ug/Kg	1	01/2/2013 16:25
2-Chloronaphthalene	ND		391	ug/Kg	1	01/2/2013 16:25
2-Chlorophenol	ND		391	ug/Kg	1	01/2/2013 16:25
2-Methylnaphthalene	ND		391	ug/Kg	1	01/2/2013 16:25
2-Methylphenol	ND		391	ug/Kg	1	01/2/2013 16:25
2-Nitroaniline	ND		391	ug/Kg	1	01/2/2013 16:25
2-Nitrophenol	ND		391	ug/Kg	1	01/2/2013 16:25
3 and/or 4-Methylphenol	ND		391	ug/Kg	1	01/2/2013 16:25
3,3'-Dichlorobenzidine	ND		782	ug/Kg	1	01/2/2013 16:25
3-Nitroaniline	ND		1960	ug/Kg	1	01/2/2013 16:25
4,6-Dinitro-2-methylphenol	ND		1960	ug/Kg	1	01/2/2013 16:25
4-Chloro-3-methylphenol	ND		391	ug/Kg	1	01/2/2013 16:25
4-Chloroaniline	ND		391	ug/Kg	1	01/2/2013 16:25
4-Chlorophenyl phenyl ether	ND		391	ug/Kg	1	01/2/2013 16:25
Acenaphthene	ND		391	ug/Kg	1	01/2/2013 16:25
Acenaphthylene	ND		391	ug/Kg	1	01/2/2013 16:25
Anthracene	ND		391	ug/Kg	1	01/2/2013 16:25
Benzo(a)anthracene	ND		391	ug/Kg	1	01/2/2013 16:25
Benzo(a)pyrene	ND		391	ug/Kg	1	01/2/2013 16:25
Benzo(b)fluoranthene	ND		391	ug/Kg	1	01/2/2013 16:25
Benzo(g,h,i)perylene	ND		391	ug/Kg	1	01/2/2013 16:25
Benzo(k)fluoranthene	ND		391	ug/Kg	1	01/2/2013 16:25
Benzoic acid	ND		1960	ug/Kg	1	01/2/2013 16:25
Bis(2-Chloroethoxy)methane	ND		391	ug/Kg	1	01/2/2013 16:25
Bis(2-Chloroethyl)ether	ND		391	ug/Kg	1	01/2/2013 16:25
Bis(2-Chloroisopropyl)ether	ND		391	ug/Kg	1	01/2/2013 16:25
Bis(2-Ethylhexyl)phthalate	ND		391	ug/Kg	1	01/2/2013 16:25
4-Bromophenyl phenyl ether	ND		391	ug/Kg	1	01/2/2013 16:25
Butyl benzyl phthalate	ND		391	ug/Kg	1	01/2/2013 16:25
Chrysene	ND		391	ug/Kg	1	01/2/2013 16:25
Di-n-butyl phthalate	ND		391	ug/Kg	1	01/2/2013 16:25
Di-n-octyl phthalate	ND		391	ug/Kg	1	01/2/2013 16:25
Dibenz(a,h)anthracene	ND		391	ug/Kg	1	01/2/2013 16:25
Dibenzofuran	ND		391	ug/Kg	1	01/2/2013 16:25

Results of SB53-5 (2.5-5)

Client Sample ID: **SB53-5 (2.5-5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011020-B
 Lab Project ID: 31204011

Collection Date: 12/13/2012 08:10
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 82.20

Results by SW-846 8270D

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Diethyl phthalate	ND		391	ug/Kg	1	01/2/2013 16:25
Dimethyl phthalate	ND		391	ug/Kg	1	01/2/2013 16:25
2,4-Dimethylphenol	ND		391	ug/Kg	1	01/2/2013 16:25
Diphenylamine	ND		391	ug/Kg	1	01/2/2013 16:25
Fluoranthene	ND		391	ug/Kg	1	01/2/2013 16:25
Fluorene	ND		391	ug/Kg	1	01/2/2013 16:25
Hexachlorobenzene	ND		1960	ug/Kg	1	01/2/2013 16:25
Hexachlorobutadiene	ND		391	ug/Kg	1	01/2/2013 16:25
Hexachlorocyclopentadiene	ND		782	ug/Kg	1	01/2/2013 16:25
Hexachloroethane	ND		391	ug/Kg	1	01/2/2013 16:25
Indeno(1,2,3-cd)pyrene	ND		391	ug/Kg	1	01/2/2013 16:25
Isophorone	ND		391	ug/Kg	1	01/2/2013 16:25
Naphthalene	ND		391	ug/Kg	1	01/2/2013 16:25
4-Nitroaniline	ND		1960	ug/Kg	1	01/2/2013 16:25
Nitrobenzene	ND		391	ug/Kg	1	01/2/2013 16:25
4-Nitrophenol	ND		1960	ug/Kg	1	01/2/2013 16:25
Pentachlorophenol	ND		1960	ug/Kg	1	01/2/2013 16:25
Phenanthrene	ND		391	ug/Kg	1	01/2/2013 16:25
Phenol	ND		391	ug/Kg	1	01/2/2013 16:25
Pyrene	ND		391	ug/Kg	1	01/2/2013 16:25
n-Nitrosodi-n-propylamine	ND		391	ug/Kg	1	01/2/2013 16:25

Surrogates

2,4,6-Tribromophenol	92.0		41.0-129	%	1	01/2/2013 16:25
2-Fluorobiphenyl	87.0		48.0-123	%	1	01/2/2013 16:25
2-Fluorophenol	93.0		42.0-123	%	1	01/2/2013 16:25
Nitrobenzene-d5	89.0		46.0-117	%	1	01/2/2013 16:25
Phenol-d6	102		48.0-125	%	1	01/2/2013 16:25
Terphenyl-d14	87.0		44.0-140	%	1	01/2/2013 16:25

Batch Information

Analytical Batch: **XMS1781**
 Analytical Method: **SW-846 8270D**
 Instrument: **MSD6**
 Analyst: **CMP**

Prep Batch: **XXX3429**
 Prep Method: **SW-846 3541**
 Prep Date/Time: **12/20/2012 08:43**
 Prep Initial Wt./Vol.: **31.16 g**
 Prep Extract Vol: **10 mL**

Results of SB53-5 (2.5-5)

Client Sample ID: **SB53-5 (2.5-5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011020-B
 Lab Project ID: 31204011

Collection Date: 12/13/2012 08:10
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 82.20

Results by SW-846 8015C DRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Diesel Range Organics (DRO)	26.7		7.33	mg/kg	1	12/21/2012 9:01
Surrogates						
o-Terphenyl	72.7		40.0-140	%	1	12/21/2012 9:01

Batch Information

Analytical Batch: **XGC2804**
 Analytical Method: **SW-846 8015C DRO**
 Instrument: **GC6**
 Analyst: **DTF**

Prep Batch: **XXX3428**
 Prep Method: **SW-846 3541**
 Prep Date/Time: **12/19/2012 15:06**
 Prep Initial Wt./Vol.: **33.17 g**
 Prep Extract Vol: **10 mL**

Results of SB53-2 (2.5-5)

Client Sample ID: **SB53-2 (2.5-5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011021-E
 Lab Project ID: 31204011

Collection Date: 12/13/2012 09:00
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 79.30

Results by SW-846 8260B

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
1,1,1,2-Tetrachloroethane	ND		98.7	ug/Kg	100	12/18/2012 23:33
1,1,1-Trichloroethane	ND		98.7	ug/Kg	100	12/18/2012 23:33
1,1,2,2-Tetrachloroethane	ND		98.7	ug/Kg	100	12/18/2012 23:33
1,1,2-Trichloroethane	ND		98.7	ug/Kg	100	12/18/2012 23:33
1,1-Dichloroethane	ND		98.7	ug/Kg	100	12/18/2012 23:33
1,1-Dichloroethene	ND		98.7	ug/Kg	100	12/18/2012 23:33
1,1-Dichloropropene	ND		98.7	ug/Kg	100	12/18/2012 23:33
1,2,3-Trichlorobenzene	ND		98.7	ug/Kg	100	12/18/2012 23:33
1,2,3-Trichloropropane	ND		98.7	ug/Kg	100	12/18/2012 23:33
1,2,4-Trichlorobenzene	ND		98.7	ug/Kg	100	12/18/2012 23:33
1,2,4-Trimethylbenzene	ND		98.7	ug/Kg	100	12/18/2012 23:33
1,2-Dibromo-3-chloropropane	ND		493	ug/Kg	100	12/18/2012 23:33
1,2-Dibromoethane	ND		98.7	ug/Kg	100	12/18/2012 23:33
1,2-Dichlorobenzene	ND		98.7	ug/Kg	100	12/18/2012 23:33
1,2-Dichloroethane	ND		98.7	ug/Kg	100	12/18/2012 23:33
1,2-Dichloropropane	ND		98.7	ug/Kg	100	12/18/2012 23:33
1,3,5-Trimethylbenzene	ND		98.7	ug/Kg	100	12/18/2012 23:33
1,3-Dichlorobenzene	ND		98.7	ug/Kg	100	12/18/2012 23:33
1,3-Dichloropropane	ND		98.7	ug/Kg	100	12/18/2012 23:33
1,4-Dichlorobenzene	ND		98.7	ug/Kg	100	12/18/2012 23:33
2,2-Dichloropropane	ND		98.7	ug/Kg	100	12/18/2012 23:33
2-Butanone	ND		2470	ug/Kg	100	12/18/2012 23:33
2-Chlorotoluene	ND		98.7	ug/Kg	100	12/18/2012 23:33
2-Hexanone	ND		493	ug/Kg	100	12/18/2012 23:33
4-Chlorotoluene	ND		98.7	ug/Kg	100	12/18/2012 23:33
4-Isopropyltoluene	ND		98.7	ug/Kg	100	12/18/2012 23:33
4-Methyl-2-pentanone	ND		493	ug/Kg	100	12/18/2012 23:33
Acetone	ND		2470	ug/Kg	100	12/18/2012 23:33
Benzene	ND		98.7	ug/Kg	100	12/18/2012 23:33
Bromobenzene	ND		98.7	ug/Kg	100	12/18/2012 23:33
Bromochloromethane	ND		98.7	ug/Kg	100	12/18/2012 23:33
Bromodichloromethane	ND		98.7	ug/Kg	100	12/18/2012 23:33
Bromoform	ND		98.7	ug/Kg	100	12/18/2012 23:33
Bromomethane	ND		98.7	ug/Kg	100	12/18/2012 23:33
n-Butylbenzene	300		98.7	ug/Kg	100	12/18/2012 23:33
Carbon disulfide	ND		98.7	ug/Kg	100	12/18/2012 23:33
Carbon tetrachloride	ND		98.7	ug/Kg	100	12/18/2012 23:33
Chlorobenzene	ND		98.7	ug/Kg	100	12/18/2012 23:33
Chloroethane	ND		98.7	ug/Kg	100	12/18/2012 23:33
Chloroform	ND		98.7	ug/Kg	100	12/18/2012 23:33
Chloromethane	ND		98.7	ug/Kg	100	12/18/2012 23:33
Dibromochloromethane	ND		98.7	ug/Kg	100	12/18/2012 23:33
Dibromomethane	ND		98.7	ug/Kg	100	12/18/2012 23:33

Results of SB53-2 (2.5-5)

Client Sample ID: **SB53-2 (2.5-5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011021-E
 Lab Project ID: 31204011

Collection Date: 12/13/2012 09:00
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 79.30

Results by SW-846 8260B

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Dichlorodifluoromethane	ND		493	ug/Kg	100	12/18/2012 23:33
cis-1,3-Dichloropropene	ND		98.7	ug/Kg	100	12/18/2012 23:33
trans-1,3-Dichloropropene	ND		98.7	ug/Kg	100	12/18/2012 23:33
Diisopropyl Ether	ND		98.7	ug/Kg	100	12/18/2012 23:33
Ethyl Benzene	ND		98.7	ug/Kg	100	12/18/2012 23:33
Hexachlorobutadiene	ND		98.7	ug/Kg	100	12/18/2012 23:33
Isopropylbenzene (Cumene)	ND		98.7	ug/Kg	100	12/18/2012 23:33
Methyl iodide	ND		98.7	ug/Kg	100	12/18/2012 23:33
Methylene chloride	ND		493	ug/Kg	100	12/18/2012 23:33
Naphthalene	1450		98.7	ug/Kg	100	12/18/2012 23:33
Styrene	ND		98.7	ug/Kg	100	12/18/2012 23:33
Tetrachloroethene	ND		98.7	ug/Kg	100	12/18/2012 23:33
Toluene	ND		98.7	ug/Kg	100	12/18/2012 23:33
Trichloroethene	ND		98.7	ug/Kg	100	12/18/2012 23:33
Trichlorofluoromethane	ND		98.7	ug/Kg	100	12/18/2012 23:33
Vinyl chloride	ND		98.7	ug/Kg	100	12/18/2012 23:33
Xylene (total)	ND		197	ug/Kg	100	12/18/2012 23:33
cis-1,2-Dichloroethene	ND		98.7	ug/Kg	100	12/18/2012 23:33
m,p-Xylene	ND		197	ug/Kg	100	12/18/2012 23:33
n-Propylbenzene	ND		98.7	ug/Kg	100	12/18/2012 23:33
o-Xylene	ND		98.7	ug/Kg	100	12/18/2012 23:33
sec-Butylbenzene	ND		98.7	ug/Kg	100	12/18/2012 23:33
tert-Butyl methyl ether (MTBE)	ND		98.7	ug/Kg	100	12/18/2012 23:33
tert-Butylbenzene	ND		98.7	ug/Kg	100	12/18/2012 23:33
trans-1,2-Dichloroethene	ND		98.7	ug/Kg	100	12/18/2012 23:33
trans-1,4-Dichloro-2-butene	ND		493	ug/Kg	100	12/18/2012 23:33

Surrogates

1,2-Dichloroethane-d4	102		55.0-173	%	100	12/18/2012 23:33
4-Bromofluorobenzene	111		23.0-141	%	100	12/18/2012 23:33
Toluene d8	101		57.0-134	%	100	12/18/2012 23:33

Batch Information

Analytical Batch: **VMS2785**
 Analytical Method: **SW-846 8260B**
 Instrument: **MSD8**
 Analyst: **BWS**

Prep Batch: **VXX4448**
 Prep Method: **SW-846 5035 SM**
 Prep Date/Time: **12/17/2012 16:49**
 Prep Initial Wt./Vol.: **6.39 g**
 Prep Extract Vol: **5 mL**

Results of SB53-2 (2.5-5)

Client Sample ID: **SB53-2 (2.5-5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011021-F
 Lab Project ID: 31204011

Collection Date: 12/13/2012 09:00
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 79.30

Results by SW-846 8015C GRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Gasoline Range Organics (GRO)	22.4		3.80	mg/kg	1	12/21/2012 19:41
Surrogates						
4-Bromofluorobenzene	124		70.0-130	%	1	12/21/2012 19:41

Batch Information

Analytical Batch: **VGC2293**
 Analytical Method: **SW-846 8015C GRO**
 Instrument: **GC7**
 Analyst: **MDY**

Prep Batch: **VXX4461**
 Prep Method: **SW-846 5035**
 Prep Date/Time: **12/17/2012 16:49**
 Prep Initial Wt./Vol.: **6.64 g**
 Prep Extract Vol: **5 mL**

Results of SB53-2 (2.5-5)

Client Sample ID: **SB53-2 (2.5-5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011021-B
 Lab Project ID: 31204011

Collection Date: 12/13/2012 09:00
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 79.30

Results by SW-846 8015C DRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Diesel Range Organics (DRO)	308		7.83	mg/kg	1	12/21/2012 10:25
Surrogates						
o-Terphenyl	85.5		40.0-140	%	1	12/21/2012 10:25

Batch Information

Analytical Batch: **XGC2804**
 Analytical Method: **SW-846 8015C DRO**
 Instrument: **GC6**
 Analyst: **DTF**

Prep Batch: **XXX3428**
 Prep Method: **SW-846 3541**
 Prep Date/Time: **12/19/2012 15:06**
 Prep Initial Wt./Vol.: **32.22 g**
 Prep Extract Vol: **10 mL**

Results of TW54-1

Client Sample ID: **TW54-1**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011022-A
 Lab Project ID: 31204011

Collection Date: 12/12/2012 16:25
 Received Date: 12/15/2012 09:15
 Matrix: Water

Results by SW-846 8260B

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
1,1,1,2-Tetrachloroethane	ND		1.00	ug/L	1	12/18/2012 20:16
1,1,1-Trichloroethane	ND		1.00	ug/L	1	12/18/2012 20:16
1,1,2,2-Tetrachloroethane	ND		1.00	ug/L	1	12/18/2012 20:16
1,1,2-Trichloroethane	ND		1.00	ug/L	1	12/18/2012 20:16
1,1-Dichloroethane	ND		1.00	ug/L	1	12/18/2012 20:16
1,1-Dichloroethene	ND		1.00	ug/L	1	12/18/2012 20:16
1,1-Dichloropropene	ND		1.00	ug/L	1	12/18/2012 20:16
1,2,3-Trichlorobenzene	ND		1.00	ug/L	1	12/18/2012 20:16
1,2,3-Trichloropropane	ND		1.00	ug/L	1	12/18/2012 20:16
1,2,4-Trichlorobenzene	ND		1.00	ug/L	1	12/18/2012 20:16
1,2,4-Trimethylbenzene	ND		1.00	ug/L	1	12/18/2012 20:16
1,2-Dibromo-3-chloropropane	ND		5.00	ug/L	1	12/18/2012 20:16
1,2-Dibromoethane	ND		1.00	ug/L	1	12/18/2012 20:16
1,2-Dichlorobenzene	ND		1.00	ug/L	1	12/18/2012 20:16
1,2-Dichloroethane	ND		1.00	ug/L	1	12/18/2012 20:16
1,2-Dichloropropane	ND		1.00	ug/L	1	12/18/2012 20:16
1,3,5-Trimethylbenzene	ND		1.00	ug/L	1	12/18/2012 20:16
1,3-Dichlorobenzene	ND		1.00	ug/L	1	12/18/2012 20:16
1,3-Dichloropropane	ND		1.00	ug/L	1	12/18/2012 20:16
1,4-Dichlorobenzene	ND		1.00	ug/L	1	12/18/2012 20:16
2,2-Dichloropropane	ND		1.00	ug/L	1	12/18/2012 20:16
2-Butanone	ND		25.0	ug/L	1	12/18/2012 20:16
2-Chlorotoluene	ND		1.00	ug/L	1	12/18/2012 20:16
2-Hexanone	ND		5.00	ug/L	1	12/18/2012 20:16
4-Chlorotoluene	ND		1.00	ug/L	1	12/18/2012 20:16
4-Isopropyltoluene	ND		1.00	ug/L	1	12/18/2012 20:16
4-Methyl-2-pentanone	ND		5.00	ug/L	1	12/18/2012 20:16
Acetone	ND		25.0	ug/L	1	12/18/2012 20:16
Benzene	ND		1.00	ug/L	1	12/18/2012 20:16
Bromobenzene	ND		1.00	ug/L	1	12/18/2012 20:16
Bromochloromethane	ND		1.00	ug/L	1	12/18/2012 20:16
Bromodichloromethane	ND		1.00	ug/L	1	12/18/2012 20:16
Bromoform	ND		1.00	ug/L	1	12/18/2012 20:16
Bromomethane	ND		1.00	ug/L	1	12/18/2012 20:16
n-Butylbenzene	ND		1.00	ug/L	1	12/18/2012 20:16
Carbon disulfide	ND		1.00	ug/L	1	12/18/2012 20:16
Carbon tetrachloride	ND		1.00	ug/L	1	12/18/2012 20:16
Chlorobenzene	ND		1.00	ug/L	1	12/18/2012 20:16
Chloroethane	ND		1.00	ug/L	1	12/18/2012 20:16
Chloroform	ND		1.00	ug/L	1	12/18/2012 20:16
Chloromethane	ND		1.00	ug/L	1	12/18/2012 20:16
Dibromochloromethane	ND		1.00	ug/L	1	12/18/2012 20:16
Dibromomethane	ND		1.00	ug/L	1	12/18/2012 20:16

Results of TW54-1

Client Sample ID: **TW54-1**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011022-A
 Lab Project ID: 31204011

Collection Date: 12/12/2012 16:25
 Received Date: 12/15/2012 09:15
 Matrix: Water

Results by SW-846 8260B

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Dichlorodifluoromethane	ND		5.00	ug/L	1	12/18/2012 20:16
cis-1,3-Dichloropropene	ND		1.00	ug/L	1	12/18/2012 20:16
trans-1,3-Dichloropropene	ND		1.00	ug/L	1	12/18/2012 20:16
Diisopropyl Ether	ND		1.00	ug/L	1	12/18/2012 20:16
Ethyl Benzene	ND		1.00	ug/L	1	12/18/2012 20:16
Hexachlorobutadiene	ND		1.00	ug/L	1	12/18/2012 20:16
Isopropylbenzene (Cumene)	ND		1.00	ug/L	1	12/18/2012 20:16
Methyl iodide	ND		1.00	ug/L	1	12/18/2012 20:16
Methylene chloride	ND		5.00	ug/L	1	12/18/2012 20:16
Naphthalene	2.22		1.00	ug/L	1	12/18/2012 20:16
Styrene	ND		1.00	ug/L	1	12/18/2012 20:16
Tetrachloroethene	ND		1.00	ug/L	1	12/18/2012 20:16
Toluene	ND		1.00	ug/L	1	12/18/2012 20:16
Trichloroethene	ND		1.00	ug/L	1	12/18/2012 20:16
Trichlorofluoromethane	ND		1.00	ug/L	1	12/18/2012 20:16
Vinyl chloride	ND		1.00	ug/L	1	12/18/2012 20:16
Xylene (total)	ND		2.00	ug/L	1	12/18/2012 20:16
cis-1,2-Dichloroethene	ND		1.00	ug/L	1	12/18/2012 20:16
m,p-Xylene	ND		2.00	ug/L	1	12/18/2012 20:16
n-Propylbenzene	ND		1.00	ug/L	1	12/18/2012 20:16
o-Xylene	ND		1.00	ug/L	1	12/18/2012 20:16
sec-Butylbenzene	ND		1.00	ug/L	1	12/18/2012 20:16
tert-Butyl methyl ether (MTBE)	ND		1.00	ug/L	1	12/18/2012 20:16
tert-Butylbenzene	ND		1.00	ug/L	1	12/18/2012 20:16
trans-1,2-Dichloroethene	ND		1.00	ug/L	1	12/18/2012 20:16
trans-1,4-Dichloro-2-butene	ND		5.00	ug/L	1	12/18/2012 20:16
Surrogates						
1,2-Dichloroethane-d4	98.0		64.0-140	%	1	12/18/2012 20:16
4-Bromofluorobenzene	94.0		85.0-115	%	1	12/18/2012 20:16
Toluene d8	95.0		82.0-117	%	1	12/18/2012 20:16

Batch Information

Analytical Batch: **VMS2785**
 Analytical Method: **SW-846 8260B**
 Instrument: **MSD8**
 Analyst: **BWS**

Prep Batch: **VXX4445**
 Prep Method: **SW-846 5030B**
 Prep Date/Time: **12/18/2012 08:40**
 Prep Initial Wt./Vol.: **40 mL**
 Prep Extract Vol: **40 mL**



Results of TW54-1

Client Sample ID: TW54-1
Client Project ID: NCDOT U-3315
Lab Sample ID: 31204011022-D
Lab Project ID: 31204011

Collection Date: 12/12/2012 16:25
Received Date: 12/15/2012 09:15
Matrix: Water

Results by SW-846 8270D

Table with 7 columns: Parameter, Result, Qual, LOQ/CL, Units, DF, Date Analyzed. Lists various chemical compounds and their detection results.

Results of TW54-1

Client Sample ID: **TW54-1**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011022-D
 Lab Project ID: 31204011

Collection Date: 12/12/2012 16:25
 Received Date: 12/15/2012 09:15
 Matrix: Water

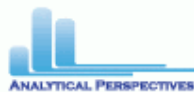
Results by SW-846 8270D

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Diethyl phthalate	ND		5.79	ug/L	1	01/2/2013 19:11
Dimethyl phthalate	ND		5.79	ug/L	1	01/2/2013 19:11
2,4-Dimethylphenol	ND		5.79	ug/L	1	01/2/2013 19:11
Diphenylamine	ND		5.79	ug/L	1	01/2/2013 19:11
Fluoranthene	46.5		5.79	ug/L	1	01/2/2013 19:11
Fluorene	ND		5.79	ug/L	1	01/2/2013 19:11
Hexachlorobenzene	ND		5.79	ug/L	1	01/2/2013 19:11
Hexachlorobutadiene	ND		5.79	ug/L	1	01/2/2013 19:11
Hexachlorocyclopentadiene	ND		11.6	ug/L	1	01/2/2013 19:11
Hexachloroethane	ND		5.79	ug/L	1	01/2/2013 19:11
Indeno(1,2,3-cd)pyrene	14.8		5.79	ug/L	1	01/2/2013 19:11
Isophorone	ND		5.79	ug/L	1	01/2/2013 19:11
Naphthalene	ND		5.79	ug/L	1	01/2/2013 19:11
4-Nitroaniline	ND		29.0	ug/L	1	01/2/2013 19:11
Nitrobenzene	ND		5.79	ug/L	1	01/2/2013 19:11
4-Nitrophenol	ND		29.0	ug/L	1	01/2/2013 19:11
Pentachlorophenol	ND		29.0	ug/L	1	01/2/2013 19:11
Phenanthrene	31.6		5.79	ug/L	1	01/2/2013 19:11
Phenol	ND		5.79	ug/L	1	01/2/2013 19:11
Pyrene	38.1		5.79	ug/L	1	01/2/2013 19:11
n-Nitrosodi-n-propylamine	ND		5.79	ug/L	1	01/2/2013 19:11
Surrogates						
2,4,6-Tribromophenol	110		29.3-152	%	1	01/2/2013 19:11
2-Fluorobiphenyl	94.0		50.0-107	%	1	01/2/2013 19:11
2-Fluorophenol	92.0		33.1-118	%	1	01/2/2013 19:11
Nitrobenzene-d5	95.0		46.0-118	%	1	01/2/2013 19:11
Phenol-d6	104		49.0-120	%	1	01/2/2013 19:11
Terphenyl-d14	48.0		22.1-142	%	1	01/2/2013 19:11

Batch Information

Analytical Batch: **XMS1781**
 Analytical Method: **SW-846 8270D**
 Instrument: **MSD6**
 Analyst: **CMP**

Prep Batch: **XXX3426**
 Prep Method: **SW-846 3520C**
 Prep Date/Time: **12/19/2012 14:49**
 Prep Initial Wt./Vol.: **863 mL**
 Prep Extract Vol: **5 mL**



Results of TW52-1

Client Sample ID: TW52-1
Client Project ID: NCDOT U-3315
Lab Sample ID: 31204011023-A
Lab Project ID: 31204011

Collection Date: 12/12/2012 16:45
Received Date: 12/15/2012 09:15
Matrix: Water

Results by SW-846 8260B

Parameter	Result	Qual	LOQ/CL	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND		5.00	ug/L	5	12/18/2012 22:44
1,1,1-Trichloroethane	ND		5.00	ug/L	5	12/18/2012 22:44
1,1,2,2-Tetrachloroethane	ND		5.00	ug/L	5	12/18/2012 22:44
1,1,2-Trichloroethane	ND		5.00	ug/L	5	12/18/2012 22:44
1,1-Dichloroethane	ND		5.00	ug/L	5	12/18/2012 22:44
1,1-Dichloroethene	ND		5.00	ug/L	5	12/18/2012 22:44
1,1-Dichloropropene	ND		5.00	ug/L	5	12/18/2012 22:44
1,2,3-Trichlorobenzene	ND		5.00	ug/L	5	12/18/2012 22:44
1,2,3-Trichloropropane	ND		5.00	ug/L	5	12/18/2012 22:44
1,2,4-Trichlorobenzene	ND		5.00	ug/L	5	12/18/2012 22:44
1,2,4-Trimethylbenzene	132		5.00	ug/L	5	12/18/2012 22:44
1,2-Dibromo-3-chloropropane	ND		25.0	ug/L	5	12/18/2012 22:44
1,2-Dibromoethane	ND		5.00	ug/L	5	12/18/2012 22:44
1,2-Dichlorobenzene	ND		5.00	ug/L	5	12/18/2012 22:44
1,2-Dichloroethane	ND		5.00	ug/L	5	12/18/2012 22:44
1,2-Dichloropropane	ND		5.00	ug/L	5	12/18/2012 22:44
1,3,5-Trimethylbenzene	31.2		5.00	ug/L	5	12/18/2012 22:44
1,3-Dichlorobenzene	ND		5.00	ug/L	5	12/18/2012 22:44
1,3-Dichloropropane	ND		5.00	ug/L	5	12/18/2012 22:44
1,4-Dichlorobenzene	ND		5.00	ug/L	5	12/18/2012 22:44
2,2-Dichloropropane	ND		5.00	ug/L	5	12/18/2012 22:44
2-Butanone	ND		125	ug/L	5	12/18/2012 22:44
2-Chlorotoluene	ND		5.00	ug/L	5	12/18/2012 22:44
2-Hexanone	ND		25.0	ug/L	5	12/18/2012 22:44
4-Chlorotoluene	ND		5.00	ug/L	5	12/18/2012 22:44
4-Isopropyltoluene	25.6		5.00	ug/L	5	12/18/2012 22:44
4-Methyl-2-pentanone	ND		25.0	ug/L	5	12/18/2012 22:44
Acetone	ND		125	ug/L	5	12/18/2012 22:44
Benzene	ND		5.00	ug/L	5	12/18/2012 22:44
Bromobenzene	ND		5.00	ug/L	5	12/18/2012 22:44
Bromochloromethane	ND		5.00	ug/L	5	12/18/2012 22:44
Bromodichloromethane	ND		5.00	ug/L	5	12/18/2012 22:44
Bromoform	ND		5.00	ug/L	5	12/18/2012 22:44
Bromomethane	ND		5.00	ug/L	5	12/18/2012 22:44
n-Butylbenzene	ND		5.00	ug/L	5	12/18/2012 22:44
Carbon disulfide	ND		5.00	ug/L	5	12/18/2012 22:44
Carbon tetrachloride	ND		5.00	ug/L	5	12/18/2012 22:44
Chlorobenzene	ND		5.00	ug/L	5	12/18/2012 22:44
Chloroethane	ND		5.00	ug/L	5	12/18/2012 22:44
Chloroform	ND		5.00	ug/L	5	12/18/2012 22:44
Chloromethane	ND		5.00	ug/L	5	12/18/2012 22:44
Dibromochloromethane	ND		5.00	ug/L	5	12/18/2012 22:44
Dibromomethane	ND		5.00	ug/L	5	12/18/2012 22:44

Print Date: 01/04/2013

N.C. Certification # 481

Results of TW52-1

Client Sample ID: **TW52-1**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011023-A
 Lab Project ID: 31204011

Collection Date: 12/12/2012 16:45
 Received Date: 12/15/2012 09:15
 Matrix: Water

Results by SW-846 8260B

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Dichlorodifluoromethane	ND		25.0	ug/L	5	12/18/2012 22:44
cis-1,3-Dichloropropene	ND		5.00	ug/L	5	12/18/2012 22:44
trans-1,3-Dichloropropene	ND		5.00	ug/L	5	12/18/2012 22:44
Diisopropyl Ether	ND		5.00	ug/L	5	12/18/2012 22:44
Ethyl Benzene	ND		5.00	ug/L	5	12/18/2012 22:44
Hexachlorobutadiene	ND		5.00	ug/L	5	12/18/2012 22:44
Isopropylbenzene (Cumene)	15.5		5.00	ug/L	5	12/18/2012 22:44
Methyl iodide	ND		5.00	ug/L	5	12/18/2012 22:44
Methylene chloride	ND		25.0	ug/L	5	12/18/2012 22:44
Naphthalene	9.35		5.00	ug/L	5	12/18/2012 22:44
Styrene	ND		5.00	ug/L	5	12/18/2012 22:44
Tetrachloroethene	ND		5.00	ug/L	5	12/18/2012 22:44
Toluene	ND		5.00	ug/L	5	12/18/2012 22:44
Trichloroethene	ND		5.00	ug/L	5	12/18/2012 22:44
Trichlorofluoromethane	ND		5.00	ug/L	5	12/18/2012 22:44
Vinyl chloride	ND		5.00	ug/L	5	12/18/2012 22:44
Xylene (total)	ND		10.0	ug/L	5	12/18/2012 22:44
cis-1,2-Dichloroethene	ND		5.00	ug/L	5	12/18/2012 22:44
m,p-Xylene	ND		10.0	ug/L	5	12/18/2012 22:44
n-Propylbenzene	12.2		5.00	ug/L	5	12/18/2012 22:44
o-Xylene	ND		5.00	ug/L	5	12/18/2012 22:44
sec-Butylbenzene	15.2		5.00	ug/L	5	12/18/2012 22:44
tert-Butyl methyl ether (MTBE)	ND		5.00	ug/L	5	12/18/2012 22:44
tert-Butylbenzene	ND		5.00	ug/L	5	12/18/2012 22:44
trans-1,2-Dichloroethene	ND		5.00	ug/L	5	12/18/2012 22:44
trans-1,4-Dichloro-2-butene	ND		25.0	ug/L	5	12/18/2012 22:44

Surrogates

1,2-Dichloroethane-d4	104		64.0-140	%	5	12/18/2012 22:44
4-Bromofluorobenzene	94.0		85.0-115	%	5	12/18/2012 22:44
Toluene d8	103		82.0-117	%	5	12/18/2012 22:44

Batch Information

Analytical Batch: **VMS2785**
 Analytical Method: **SW-846 8260B**
 Instrument: **MSD8**
 Analyst: **BWS**

Prep Batch: **VXX4445**
 Prep Method: **SW-846 5030B**
 Prep Date/Time: **12/18/2012 08:40**
 Prep Initial Wt./Vol.: **40 mL**
 Prep Extract Vol: **40 mL**

Results of TW52-1

Client Sample ID: **TW52-1**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011023-D
 Lab Project ID: 31204011

Collection Date: 12/12/2012 16:45
 Received Date: 12/15/2012 09:15
 Matrix: Water

Results by SW-846 8270D

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
1,2,4-Trichlorobenzene	ND		5.34	ug/L	1	01/2/2013 19:35
1,2-Dichlorobenzene	ND		5.34	ug/L	1	01/2/2013 19:35
1,3-Dichlorobenzene	ND		5.34	ug/L	1	01/2/2013 19:35
1,4-Dichlorobenzene	ND		5.34	ug/L	1	01/2/2013 19:35
2,4,5-Trichlorophenol	ND		5.34	ug/L	1	01/2/2013 19:35
2,4,6-Trichlorophenol	ND		5.34	ug/L	1	01/2/2013 19:35
2,4-Dichlorophenol	ND		5.34	ug/L	1	01/2/2013 19:35
2,4-Dinitrophenol	ND		26.7	ug/L	1	01/2/2013 19:35
2,4-Dinitrotoluene	ND		5.34	ug/L	1	01/2/2013 19:35
2,6-Dinitrotoluene	ND		5.34	ug/L	1	01/2/2013 19:35
2-Chloronaphthalene	ND		5.34	ug/L	1	01/2/2013 19:35
2-Chlorophenol	ND		5.34	ug/L	1	01/2/2013 19:35
2-Methylnaphthalene	8.76		5.34	ug/L	1	01/2/2013 19:35
2-Methylphenol	ND		5.34	ug/L	1	01/2/2013 19:35
2-Nitroaniline	ND		5.34	ug/L	1	01/2/2013 19:35
2-Nitrophenol	ND		5.34	ug/L	1	01/2/2013 19:35
3 and/or 4-Methylphenol	ND		5.34	ug/L	1	01/2/2013 19:35
3,3'-Dichlorobenzidine	ND		10.7	ug/L	1	01/2/2013 19:35
3-Nitroaniline	ND		26.7	ug/L	1	01/2/2013 19:35
4,6-Dinitro-2-methylphenol	ND		26.7	ug/L	1	01/2/2013 19:35
4-Chloro-3-methylphenol	ND		5.34	ug/L	1	01/2/2013 19:35
4-Chloroaniline	ND		26.7	ug/L	1	01/2/2013 19:35
4-Chlorophenyl phenyl ether	ND		5.34	ug/L	1	01/2/2013 19:35
Acenaphthene	12.3		5.34	ug/L	1	01/2/2013 19:35
Acenaphthylene	ND		5.34	ug/L	1	01/2/2013 19:35
Anthracene	15.4		5.34	ug/L	1	01/2/2013 19:35
Benzo(a)anthracene	49.6		5.34	ug/L	1	01/2/2013 19:35
Benzo(a)pyrene	43.8		5.34	ug/L	1	01/2/2013 19:35
Benzo(b)fluoranthene	54.9		5.34	ug/L	1	01/2/2013 19:35
Benzo(g,h,i)perylene	24.4		5.34	ug/L	1	01/2/2013 19:35
Benzo(k)fluoranthene	24.2		5.34	ug/L	1	01/2/2013 19:35
Benzoic acid	ND		5.34	ug/L	1	01/2/2013 19:35
Bis(2-Chloroethoxy)methane	ND		5.34	ug/L	1	01/2/2013 19:35
Bis(2-Chloroethyl)ether	ND		5.34	ug/L	1	01/2/2013 19:35
Bis(2-Chloroisopropyl)ether	ND		5.34	ug/L	1	01/2/2013 19:35
Bis(2-Ethylhexyl)phthalate	16.3		5.34	ug/L	1	01/2/2013 19:35
4-Bromophenyl phenyl ether	ND		5.34	ug/L	1	01/2/2013 19:35
Butyl benzyl phthalate	ND		5.34	ug/L	1	01/2/2013 19:35
Chrysene	47.5		5.34	ug/L	1	01/2/2013 19:35
Di-n-butyl phthalate	ND		5.34	ug/L	1	01/2/2013 19:35
Di-n-octyl phthalate	ND		5.34	ug/L	1	01/2/2013 19:35
Dibenz(a,h)anthracene	8.55		5.34	ug/L	1	01/2/2013 19:35
Dibenzofuran	8.12		5.34	ug/L	1	01/2/2013 19:35

Results of TW52-1

Client Sample ID: **TW52-1**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011023-D
 Lab Project ID: 31204011

Collection Date: 12/12/2012 16:45
 Received Date: 12/15/2012 09:15
 Matrix: Water

Results by SW-846 8270D

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Diethyl phthalate	32.1		5.34	ug/L	1	01/2/2013 19:35
Dimethyl phthalate	ND		5.34	ug/L	1	01/2/2013 19:35
2,4-Dimethylphenol	ND		5.34	ug/L	1	01/2/2013 19:35
Diphenylamine	ND		5.34	ug/L	1	01/2/2013 19:35
Fluoranthene	89.4		5.34	ug/L	1	01/2/2013 19:35
Fluorene	7.69		5.34	ug/L	1	01/2/2013 19:35
Hexachlorobenzene	ND		5.34	ug/L	1	01/2/2013 19:35
Hexachlorobutadiene	ND		5.34	ug/L	1	01/2/2013 19:35
Hexachlorocyclopentadiene	ND		10.7	ug/L	1	01/2/2013 19:35
Hexachloroethane	ND		5.34	ug/L	1	01/2/2013 19:35
Indeno(1,2,3-cd)pyrene	24.3		5.34	ug/L	1	01/2/2013 19:35
Isophorone	ND		5.34	ug/L	1	01/2/2013 19:35
Naphthalene	8.44		5.34	ug/L	1	01/2/2013 19:35
4-Nitroaniline	ND		26.7	ug/L	1	01/2/2013 19:35
Nitrobenzene	ND		5.34	ug/L	1	01/2/2013 19:35
4-Nitrophenol	ND		26.7	ug/L	1	01/2/2013 19:35
Pentachlorophenol	ND		26.7	ug/L	1	01/2/2013 19:35
Phenanthrene	69.4		5.34	ug/L	1	01/2/2013 19:35
Phenol	ND		5.34	ug/L	1	01/2/2013 19:35
Pyrene	77.3		5.34	ug/L	1	01/2/2013 19:35
n-Nitrosodi-n-propylamine	ND		5.34	ug/L	1	01/2/2013 19:35

Surrogates

2,4,6-Tribromophenol	120		29.3-152	%	1	01/2/2013 19:35
2-Fluorobiphenyl	90.0		50.0-107	%	1	01/2/2013 19:35
2-Fluorophenol	97.0		33.1-118	%	1	01/2/2013 19:35
Nitrobenzene-d5	103		46.0-118	%	1	01/2/2013 19:35
Phenol-d6	111		49.0-120	%	1	01/2/2013 19:35
Terphenyl-d14	41.0		22.1-142	%	1	01/2/2013 19:35

Batch Information

Analytical Batch: **XMS1781**
 Analytical Method: **SW-846 8270D**
 Instrument: **MSD6**
 Analyst: **CMP**

Prep Batch: **XXX3426**
 Prep Method: **SW-846 3520C**
 Prep Date/Time: **12/19/2012 14:49**
 Prep Initial Wt./Vol.: **936 mL**
 Prep Extract Vol: **5 mL**

Results of SB53-6 (0-2.5)

Client Sample ID: **SB53-6 (0-2.5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011024-A
 Lab Project ID: 31204011

Collection Date: 12/13/2012 09:28
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 80.20

Results by SW-846 8260B

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
1,1,1,2-Tetrachloroethane	ND		5.97	ug/Kg	1	12/18/2012 19:18
1,1,1-Trichloroethane	ND		5.97	ug/Kg	1	12/18/2012 19:18
1,1,2,2-Tetrachloroethane	ND		5.97	ug/Kg	1	12/18/2012 19:18
1,1,2-Trichloroethane	ND		5.97	ug/Kg	1	12/18/2012 19:18
1,1-Dichloroethane	ND		5.97	ug/Kg	1	12/18/2012 19:18
1,1-Dichloroethene	ND		5.97	ug/Kg	1	12/18/2012 19:18
1,1-Dichloropropene	ND		5.97	ug/Kg	1	12/18/2012 19:18
1,2,3-Trichlorobenzene	ND		5.97	ug/Kg	1	12/18/2012 19:18
1,2,3-Trichloropropane	ND		5.97	ug/Kg	1	12/18/2012 19:18
1,2,4-Trichlorobenzene	ND		5.97	ug/Kg	1	12/18/2012 19:18
1,2,4-Trimethylbenzene	ND		5.97	ug/Kg	1	12/18/2012 19:18
1,2-Dibromo-3-chloropropane	ND		35.8	ug/Kg	1	12/18/2012 19:18
1,2-Dibromoethane	ND		5.97	ug/Kg	1	12/18/2012 19:18
1,2-Dichlorobenzene	ND		5.97	ug/Kg	1	12/18/2012 19:18
1,2-Dichloroethane	ND		5.97	ug/Kg	1	12/18/2012 19:18
1,2-Dichloropropane	ND		5.97	ug/Kg	1	12/18/2012 19:18
1,3,5-Trimethylbenzene	ND		5.97	ug/Kg	1	12/18/2012 19:18
1,3-Dichlorobenzene	ND		5.97	ug/Kg	1	12/18/2012 19:18
1,3-Dichloropropane	ND		5.97	ug/Kg	1	12/18/2012 19:18
1,4-Dichlorobenzene	ND		5.97	ug/Kg	1	12/18/2012 19:18
2,2-Dichloropropane	ND		5.97	ug/Kg	1	12/18/2012 19:18
2-Butanone	ND		29.9	ug/Kg	1	12/18/2012 19:18
2-Chlorotoluene	ND		5.97	ug/Kg	1	12/18/2012 19:18
2-Hexanone	ND		14.9	ug/Kg	1	12/18/2012 19:18
4-Chlorotoluene	ND		5.97	ug/Kg	1	12/18/2012 19:18
4-Isopropyltoluene	ND		5.97	ug/Kg	1	12/18/2012 19:18
4-Methyl-2-pentanone	ND		14.9	ug/Kg	1	12/18/2012 19:18
Acetone	60.1		59.7	ug/Kg	1	12/18/2012 19:18
Benzene	ND		5.97	ug/Kg	1	12/18/2012 19:18
Bromobenzene	ND		5.97	ug/Kg	1	12/18/2012 19:18
Bromochloromethane	ND		5.97	ug/Kg	1	12/18/2012 19:18
Bromodichloromethane	ND		5.97	ug/Kg	1	12/18/2012 19:18
Bromoform	ND		5.97	ug/Kg	1	12/18/2012 19:18
Bromomethane	ND		5.97	ug/Kg	1	12/18/2012 19:18
n-Butylbenzene	ND		5.97	ug/Kg	1	12/18/2012 19:18
Carbon disulfide	ND		5.97	ug/Kg	1	12/18/2012 19:18
Carbon tetrachloride	ND		5.97	ug/Kg	1	12/18/2012 19:18
Chlorobenzene	ND		5.97	ug/Kg	1	12/18/2012 19:18
Chloroethane	ND		5.97	ug/Kg	1	12/18/2012 19:18
Chloroform	ND		5.97	ug/Kg	1	12/18/2012 19:18
Chloromethane	ND		5.97	ug/Kg	1	12/18/2012 19:18
Dibromochloromethane	ND		5.97	ug/Kg	1	12/18/2012 19:18
Dibromomethane	ND		5.97	ug/Kg	1	12/18/2012 19:18

Results of SB53-6 (0-2.5)

Client Sample ID: **SB53-6 (0-2.5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011024-A
 Lab Project ID: 31204011

Collection Date: 12/13/2012 09:28
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 80.20

Results by SW-846 8260B

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Dichlorodifluoromethane	ND		5.97	ug/Kg	1	12/18/2012 19:18
cis-1,3-Dichloropropene	ND		5.97	ug/Kg	1	12/18/2012 19:18
trans-1,3-Dichloropropene	ND		5.97	ug/Kg	1	12/18/2012 19:18
Diisopropyl Ether	ND		5.97	ug/Kg	1	12/18/2012 19:18
Ethyl Benzene	ND		5.97	ug/Kg	1	12/18/2012 19:18
Hexachlorobutadiene	ND		5.97	ug/Kg	1	12/18/2012 19:18
Isopropylbenzene (Cumene)	ND		5.97	ug/Kg	1	12/18/2012 19:18
Methyl iodide	ND		5.97	ug/Kg	1	12/18/2012 19:18
Methylene chloride	ND		23.9	ug/Kg	1	12/18/2012 19:18
Naphthalene	ND		5.97	ug/Kg	1	12/18/2012 19:18
Styrene	ND		5.97	ug/Kg	1	12/18/2012 19:18
Tetrachloroethene	ND		5.97	ug/Kg	1	12/18/2012 19:18
Toluene	ND		5.97	ug/Kg	1	12/18/2012 19:18
Trichloroethene	ND		5.97	ug/Kg	1	12/18/2012 19:18
Trichlorofluoromethane	ND		5.97	ug/Kg	1	12/18/2012 19:18
Vinyl chloride	ND		5.97	ug/Kg	1	12/18/2012 19:18
Xylene (total)	ND		11.9	ug/Kg	1	12/18/2012 19:18
cis-1,2-Dichloroethene	ND		5.97	ug/Kg	1	12/18/2012 19:18
m,p-Xylene	ND		11.9	ug/Kg	1	12/18/2012 19:18
n-Propylbenzene	ND		5.97	ug/Kg	1	12/18/2012 19:18
o-Xylene	ND		5.97	ug/Kg	1	12/18/2012 19:18
sec-Butylbenzene	ND		5.97	ug/Kg	1	12/18/2012 19:18
tert-Butyl methyl ether (MTBE)	ND		5.97	ug/Kg	1	12/18/2012 19:18
tert-Butylbenzene	ND		5.97	ug/Kg	1	12/18/2012 19:18
trans-1,2-Dichloroethene	ND		5.97	ug/Kg	1	12/18/2012 19:18
trans-1,4-Dichloro-2-butene	ND		29.9	ug/Kg	1	12/18/2012 19:18

Surrogates

1,2-Dichloroethane-d4	113		55.0-173	%	1	12/18/2012 19:18
4-Bromofluorobenzene	87.0		23.0-141	%	1	12/18/2012 19:18
Toluene d8	102		57.0-134	%	1	12/18/2012 19:18

Batch Information

Analytical Batch: **VMS2786**
 Analytical Method: **SW-846 8260B**
 Instrument: **MSD9**
 Analyst: **BWS**

Prep Batch: **VXX4446**
 Prep Method: **SW-846 5035 SL**
 Prep Date/Time: **12/17/2012 16:51**
 Prep Initial Wt./Vol.: **5.22 g**
 Prep Extract Vol: **5 mL**

Results of SB53-6 (0-2.5)

Client Sample ID: **SB53-6 (0-2.5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011024-E
 Lab Project ID: 31204011

Collection Date: 12/13/2012 09:28
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 80.20

Results by SW-846 8015C GRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Gasoline Range Organics (GRO)	ND		4.40	mg/kg	1	12/26/2012 14:57
Surrogates						
4-Bromofluorobenzene	104		70.0-130	%	1	12/26/2012 14:57

Batch Information

Analytical Batch: **VGC2296**
 Analytical Method: **SW-846 8015C GRO**
 Instrument: **GC7**
 Analyst: **MDY**

Prep Batch: **VXX4467**
 Prep Method: **SW-846 5035**
 Prep Date/Time: **12/17/2012 16:51**
 Prep Initial Wt./Vol.: **5.67 g**
 Prep Extract Vol: **5 mL**



Results of SB53-6 (0-2.5)

Client Sample ID: SB53-6 (0-2.5)
Client Project ID: NCDOT U-3315
Lab Sample ID: 31204011024-F
Lab Project ID: 31204011

Collection Date: 12/13/2012 09:28
Received Date: 12/15/2012 09:15
Matrix: Soil-Solid as dry weight
Solids (%): 80.20

Results by SW-846 8270D

Parameter	Result	Qual	LOQ/CL	Units	DF	Date Analyzed
1,2,4-Trichlorobenzene	ND		400	ug/Kg	1	01/2/2013 16:49
1,2-Dichlorobenzene	ND		400	ug/Kg	1	01/2/2013 16:49
1,3-Dichlorobenzene	ND		400	ug/Kg	1	01/2/2013 16:49
1,4-Dichlorobenzene	ND		400	ug/Kg	1	01/2/2013 16:49
2,4,5-Trichlorophenol	ND		400	ug/Kg	1	01/2/2013 16:49
2,4,6-Trichlorophenol	ND		400	ug/Kg	1	01/2/2013 16:49
2,4-Dichlorophenol	ND		400	ug/Kg	1	01/2/2013 16:49
2,4-Dinitrophenol	ND		2000	ug/Kg	1	01/2/2013 16:49
2,4-Dinitrotoluene	ND		400	ug/Kg	1	01/2/2013 16:49
2,6-Dinitrotoluene	ND		400	ug/Kg	1	01/2/2013 16:49
2-Chloronaphthalene	ND		400	ug/Kg	1	01/2/2013 16:49
2-Chlorophenol	ND		400	ug/Kg	1	01/2/2013 16:49
2-Methylnaphthalene	ND		400	ug/Kg	1	01/2/2013 16:49
2-Methylphenol	ND		400	ug/Kg	1	01/2/2013 16:49
2-Nitroaniline	ND		400	ug/Kg	1	01/2/2013 16:49
2-Nitrophenol	ND		400	ug/Kg	1	01/2/2013 16:49
3 and/or 4-Methylphenol	ND		400	ug/Kg	1	01/2/2013 16:49
3,3'-Dichlorobenzidine	ND		800	ug/Kg	1	01/2/2013 16:49
3-Nitroaniline	ND		2000	ug/Kg	1	01/2/2013 16:49
4,6-Dinitro-2-methylphenol	ND		2000	ug/Kg	1	01/2/2013 16:49
4-Chloro-3-methylphenol	ND		400	ug/Kg	1	01/2/2013 16:49
4-Chloroaniline	ND		400	ug/Kg	1	01/2/2013 16:49
4-Chlorophenyl phenyl ether	ND		400	ug/Kg	1	01/2/2013 16:49
Acenaphthene	ND		400	ug/Kg	1	01/2/2013 16:49
Acenaphthylene	ND		400	ug/Kg	1	01/2/2013 16:49
Anthracene	ND		400	ug/Kg	1	01/2/2013 16:49
Benzo(a)anthracene	682		400	ug/Kg	1	01/2/2013 16:49
Benzo(a)pyrene	865		400	ug/Kg	1	01/2/2013 16:49
Benzo(b)fluoranthene	961		400	ug/Kg	1	01/2/2013 16:49
Benzo(g,h,i)perylene	725		400	ug/Kg	1	01/2/2013 16:49
Benzo(k)fluoranthene	ND		400	ug/Kg	1	01/2/2013 16:49
Benzoic acid	ND		2000	ug/Kg	1	01/2/2013 16:49
Bis(2-Chloroethoxy)methane	ND		400	ug/Kg	1	01/2/2013 16:49
Bis(2-Chloroethyl)ether	ND		400	ug/Kg	1	01/2/2013 16:49
Bis(2-Chloroisopropyl)ether	ND		400	ug/Kg	1	01/2/2013 16:49
Bis(2-Ethylhexyl)phthalate	ND		400	ug/Kg	1	01/2/2013 16:49
4-Bromophenyl phenyl ether	ND		400	ug/Kg	1	01/2/2013 16:49
Butyl benzyl phthalate	ND		400	ug/Kg	1	01/2/2013 16:49
Chrysene	1010		400	ug/Kg	1	01/2/2013 16:49
Di-n-butyl phthalate	ND		400	ug/Kg	1	01/2/2013 16:49
Di-n-octyl phthalate	ND		400	ug/Kg	1	01/2/2013 16:49
Dibenz(a,h)anthracene	ND		400	ug/Kg	1	01/2/2013 16:49
Dibenzofuran	ND		400	ug/Kg	1	01/2/2013 16:49

Print Date: 01/04/2013

N.C. Certification # 481

Results of SB53-6 (0-2.5)

Client Sample ID: **SB53-6 (0-2.5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011024-F
 Lab Project ID: 31204011

Collection Date: 12/13/2012 09:28
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 80.20

Results by SW-846 8270D

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Diethyl phthalate	ND		400	ug/Kg	1	01/2/2013 16:49
Dimethyl phthalate	ND		400	ug/Kg	1	01/2/2013 16:49
2,4-Dimethylphenol	ND		400	ug/Kg	1	01/2/2013 16:49
Diphenylamine	ND		400	ug/Kg	1	01/2/2013 16:49
Fluoranthene	1270		400	ug/Kg	1	01/2/2013 16:49
Fluorene	ND		400	ug/Kg	1	01/2/2013 16:49
Hexachlorobenzene	ND		2000	ug/Kg	1	01/2/2013 16:49
Hexachlorobutadiene	ND		400	ug/Kg	1	01/2/2013 16:49
Hexachlorocyclopentadiene	ND		800	ug/Kg	1	01/2/2013 16:49
Hexachloroethane	ND		400	ug/Kg	1	01/2/2013 16:49
Indeno(1,2,3-cd)pyrene	590		400	ug/Kg	1	01/2/2013 16:49
Isophorone	ND		400	ug/Kg	1	01/2/2013 16:49
Naphthalene	ND		400	ug/Kg	1	01/2/2013 16:49
4-Nitroaniline	ND		2000	ug/Kg	1	01/2/2013 16:49
Nitrobenzene	ND		400	ug/Kg	1	01/2/2013 16:49
4-Nitrophenol	ND		2000	ug/Kg	1	01/2/2013 16:49
Pentachlorophenol	ND		2000	ug/Kg	1	01/2/2013 16:49
Phenanthrene	403		400	ug/Kg	1	01/2/2013 16:49
Phenol	ND		400	ug/Kg	1	01/2/2013 16:49
Pyrene	2110		400	ug/Kg	1	01/2/2013 16:49
n-Nitrosodi-n-propylamine	ND		400	ug/Kg	1	01/2/2013 16:49

Surrogates

2,4,6-Tribromophenol	93.0		41.0-129	%	1	01/2/2013 16:49
2-Fluorobiphenyl	83.0		48.0-123	%	1	01/2/2013 16:49
2-Fluorophenol	91.0		42.0-123	%	1	01/2/2013 16:49
Nitrobenzene-d5	87.0		46.0-117	%	1	01/2/2013 16:49
Phenol-d6	100		48.0-125	%	1	01/2/2013 16:49
Terphenyl-d14	80.0		44.0-140	%	1	01/2/2013 16:49

Batch Information

Analytical Batch: **XMS1781**
 Analytical Method: **SW-846 8270D**
 Instrument: **MSD6**
 Analyst: **CMP**

Prep Batch: **XXX3429**
 Prep Method: **SW-846 3541**
 Prep Date/Time: **12/20/2012 08:43**
 Prep Initial Wt./Vol.: **31.25 g**
 Prep Extract Vol: **10 mL**

Results of SB53-6 (0-2.5)

Client Sample ID: **SB53-6 (0-2.5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011024-F
 Lab Project ID: 31204011

Collection Date: 12/13/2012 09:28
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 80.20

Results by SW-846 8015C DRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Diesel Range Organics (DRO)	26.0		7.75	mg/kg	1	12/21/2012 10:53
Surrogates						
o-Terphenyl	75.5		40.0-140	%	1	12/21/2012 10:53

Batch Information

Analytical Batch: **XGC2804**
 Analytical Method: **SW-846 8015C DRO**
 Instrument: **GC6**
 Analyst: **DTF**

Prep Batch: **XXX3428**
 Prep Method: **SW-846 3541**
 Prep Date/Time: **12/19/2012 15:06**
 Prep Initial Wt./Vol.: **32.2 g**
 Prep Extract Vol: **10 mL**

Results of SB53-7 (0-2.5)

Client Sample ID: **SB53-7 (0-2.5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011025-A
 Lab Project ID: 31204011

Collection Date: 12/13/2012 09:50
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 87.00

Results by SW-846 8260B

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
1,1,1,2-Tetrachloroethane	ND		4.17	ug/Kg	1	12/18/2012 19:45
1,1,1-Trichloroethane	ND		4.17	ug/Kg	1	12/18/2012 19:45
1,1,2,2-Tetrachloroethane	ND		4.17	ug/Kg	1	12/18/2012 19:45
1,1,2-Trichloroethane	ND		4.17	ug/Kg	1	12/18/2012 19:45
1,1-Dichloroethane	ND		4.17	ug/Kg	1	12/18/2012 19:45
1,1-Dichloroethene	ND		4.17	ug/Kg	1	12/18/2012 19:45
1,1-Dichloropropene	ND		4.17	ug/Kg	1	12/18/2012 19:45
1,2,3-Trichlorobenzene	ND		4.17	ug/Kg	1	12/18/2012 19:45
1,2,3-Trichloropropane	ND		4.17	ug/Kg	1	12/18/2012 19:45
1,2,4-Trichlorobenzene	ND		4.17	ug/Kg	1	12/18/2012 19:45
1,2,4-Trimethylbenzene	ND		4.17	ug/Kg	1	12/18/2012 19:45
1,2-Dibromo-3-chloropropane	ND		25.0	ug/Kg	1	12/18/2012 19:45
1,2-Dibromoethane	ND		4.17	ug/Kg	1	12/18/2012 19:45
1,2-Dichlorobenzene	ND		4.17	ug/Kg	1	12/18/2012 19:45
1,2-Dichloroethane	ND		4.17	ug/Kg	1	12/18/2012 19:45
1,2-Dichloropropane	ND		4.17	ug/Kg	1	12/18/2012 19:45
1,3,5-Trimethylbenzene	ND		4.17	ug/Kg	1	12/18/2012 19:45
1,3-Dichlorobenzene	ND		4.17	ug/Kg	1	12/18/2012 19:45
1,3-Dichloropropane	ND		4.17	ug/Kg	1	12/18/2012 19:45
1,4-Dichlorobenzene	ND		4.17	ug/Kg	1	12/18/2012 19:45
2,2-Dichloropropane	ND		4.17	ug/Kg	1	12/18/2012 19:45
2-Butanone	ND		20.9	ug/Kg	1	12/18/2012 19:45
2-Chlorotoluene	ND		4.17	ug/Kg	1	12/18/2012 19:45
2-Hexanone	ND		10.4	ug/Kg	1	12/18/2012 19:45
4-Chlorotoluene	ND		4.17	ug/Kg	1	12/18/2012 19:45
4-Isopropyltoluene	ND		4.17	ug/Kg	1	12/18/2012 19:45
4-Methyl-2-pentanone	ND		10.4	ug/Kg	1	12/18/2012 19:45
Acetone	ND		41.7	ug/Kg	1	12/18/2012 19:45
Benzene	6.94		4.17	ug/Kg	1	12/18/2012 19:45
Bromobenzene	ND		4.17	ug/Kg	1	12/18/2012 19:45
Bromochloromethane	ND		4.17	ug/Kg	1	12/18/2012 19:45
Bromodichloromethane	ND		4.17	ug/Kg	1	12/18/2012 19:45
Bromoform	ND		4.17	ug/Kg	1	12/18/2012 19:45
Bromomethane	ND		4.17	ug/Kg	1	12/18/2012 19:45
n-Butylbenzene	ND		4.17	ug/Kg	1	12/18/2012 19:45
Carbon disulfide	ND		4.17	ug/Kg	1	12/18/2012 19:45
Carbon tetrachloride	ND		4.17	ug/Kg	1	12/18/2012 19:45
Chlorobenzene	ND		4.17	ug/Kg	1	12/18/2012 19:45
Chloroethane	ND		4.17	ug/Kg	1	12/18/2012 19:45
Chloroform	ND		4.17	ug/Kg	1	12/18/2012 19:45
Chloromethane	ND		4.17	ug/Kg	1	12/18/2012 19:45
Dibromochloromethane	ND		4.17	ug/Kg	1	12/18/2012 19:45
Dibromomethane	ND		4.17	ug/Kg	1	12/18/2012 19:45

Results of SB53-7 (0-2.5)

Client Sample ID: **SB53-7 (0-2.5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011025-A
 Lab Project ID: 31204011

Collection Date: 12/13/2012 09:50
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 87.00

Results by SW-846 8260B

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Dichlorodifluoromethane	ND		4.17	ug/Kg	1	12/18/2012 19:45
cis-1,3-Dichloropropene	ND		4.17	ug/Kg	1	12/18/2012 19:45
trans-1,3-Dichloropropene	ND		4.17	ug/Kg	1	12/18/2012 19:45
Diisopropyl Ether	ND		4.17	ug/Kg	1	12/18/2012 19:45
Ethyl Benzene	ND		4.17	ug/Kg	1	12/18/2012 19:45
Hexachlorobutadiene	ND		4.17	ug/Kg	1	12/18/2012 19:45
Isopropylbenzene (Cumene)	ND		4.17	ug/Kg	1	12/18/2012 19:45
Methyl iodide	ND		4.17	ug/Kg	1	12/18/2012 19:45
Methylene chloride	ND		16.7	ug/Kg	1	12/18/2012 19:45
Naphthalene	ND		4.17	ug/Kg	1	12/18/2012 19:45
Styrene	ND		4.17	ug/Kg	1	12/18/2012 19:45
Tetrachloroethene	ND		4.17	ug/Kg	1	12/18/2012 19:45
Toluene	ND		4.17	ug/Kg	1	12/18/2012 19:45
Trichloroethene	ND		4.17	ug/Kg	1	12/18/2012 19:45
Trichlorofluoromethane	ND		4.17	ug/Kg	1	12/18/2012 19:45
Vinyl chloride	ND		4.17	ug/Kg	1	12/18/2012 19:45
Xylene (total)	ND		8.34	ug/Kg	1	12/18/2012 19:45
cis-1,2-Dichloroethene	ND		4.17	ug/Kg	1	12/18/2012 19:45
m,p-Xylene	ND		8.34	ug/Kg	1	12/18/2012 19:45
n-Propylbenzene	ND		4.17	ug/Kg	1	12/18/2012 19:45
o-Xylene	ND		4.17	ug/Kg	1	12/18/2012 19:45
sec-Butylbenzene	ND		4.17	ug/Kg	1	12/18/2012 19:45
tert-Butyl methyl ether (MTBE)	ND		4.17	ug/Kg	1	12/18/2012 19:45
tert-Butylbenzene	ND		4.17	ug/Kg	1	12/18/2012 19:45
trans-1,2-Dichloroethene	ND		4.17	ug/Kg	1	12/18/2012 19:45
trans-1,4-Dichloro-2-butene	ND		20.9	ug/Kg	1	12/18/2012 19:45

Surrogates

1,2-Dichloroethane-d4	104		55.0-173	%	1	12/18/2012 19:45
4-Bromofluorobenzene	101		23.0-141	%	1	12/18/2012 19:45
Toluene d8	104		57.0-134	%	1	12/18/2012 19:45

Batch Information

Analytical Batch: **VMS2786**
 Analytical Method: **SW-846 8260B**
 Instrument: **MSD9**
 Analyst: **BWS**

Prep Batch: **VXX4446**
 Prep Method: **SW-846 5035 SL**
 Prep Date/Time: **12/17/2012 16:53**
 Prep Initial Wt./Vol.: **6.89 g**
 Prep Extract Vol: **5 mL**

Results of SB53-7 (0-2.5)

Client Sample ID: **SB53-7 (0-2.5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011025-E
 Lab Project ID: 31204011

Collection Date: 12/13/2012 09:50
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 87.00

Results by SW-846 8015C GRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Gasoline Range Organics (GRO)	ND		3.17	mg/kg	1	12/21/2012 20:32
Surrogates						
4-Bromofluorobenzene	106		70.0-130	%	1	12/21/2012 20:32

Batch Information

Analytical Batch: **VGC2293**
 Analytical Method: **SW-846 8015C GRO**
 Instrument: **GC7**
 Analyst: **MDY**

Prep Batch: **VXX4461**
 Prep Method: **SW-846 5035**
 Prep Date/Time: **12/17/2012 16:53**
 Prep Initial Wt./Vol.: **7.25 g**
 Prep Extract Vol: **5 mL**

Results of SB53-7 (0-2.5)

Client Sample ID: **SB53-7 (0-2.5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011025-F
 Lab Project ID: 31204011

Collection Date: 12/13/2012 09:50
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 87.00

Results by SW-846 8270D

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
1,2,4-Trichlorobenzene	ND		367	ug/Kg	1	01/2/2013 17:12
1,2-Dichlorobenzene	ND		367	ug/Kg	1	01/2/2013 17:12
1,3-Dichlorobenzene	ND		367	ug/Kg	1	01/2/2013 17:12
1,4-Dichlorobenzene	ND		367	ug/Kg	1	01/2/2013 17:12
2,4,5-Trichlorophenol	ND		367	ug/Kg	1	01/2/2013 17:12
2,4,6-Trichlorophenol	ND		367	ug/Kg	1	01/2/2013 17:12
2,4-Dichlorophenol	ND		367	ug/Kg	1	01/2/2013 17:12
2,4-Dinitrophenol	ND		1830	ug/Kg	1	01/2/2013 17:12
2,4-Dinitrotoluene	ND		367	ug/Kg	1	01/2/2013 17:12
2,6-Dinitrotoluene	ND		367	ug/Kg	1	01/2/2013 17:12
2-Chloronaphthalene	ND		367	ug/Kg	1	01/2/2013 17:12
2-Chlorophenol	ND		367	ug/Kg	1	01/2/2013 17:12
2-Methylnaphthalene	ND		367	ug/Kg	1	01/2/2013 17:12
2-Methylphenol	ND		367	ug/Kg	1	01/2/2013 17:12
2-Nitroaniline	ND		367	ug/Kg	1	01/2/2013 17:12
2-Nitrophenol	ND		367	ug/Kg	1	01/2/2013 17:12
3 and/or 4-Methylphenol	ND		367	ug/Kg	1	01/2/2013 17:12
3,3'-Dichlorobenzidine	ND		734	ug/Kg	1	01/2/2013 17:12
3-Nitroaniline	ND		1830	ug/Kg	1	01/2/2013 17:12
4,6-Dinitro-2-methylphenol	ND		1830	ug/Kg	1	01/2/2013 17:12
4-Chloro-3-methylphenol	ND		367	ug/Kg	1	01/2/2013 17:12
4-Chloroaniline	ND		367	ug/Kg	1	01/2/2013 17:12
4-Chlorophenyl phenyl ether	ND		367	ug/Kg	1	01/2/2013 17:12
Acenaphthene	ND		367	ug/Kg	1	01/2/2013 17:12
Acenaphthylene	ND		367	ug/Kg	1	01/2/2013 17:12
Anthracene	ND		367	ug/Kg	1	01/2/2013 17:12
Benzo(a)anthracene	ND		367	ug/Kg	1	01/2/2013 17:12
Benzo(a)pyrene	ND		367	ug/Kg	1	01/2/2013 17:12
Benzo(b)fluoranthene	ND		367	ug/Kg	1	01/2/2013 17:12
Benzo(g,h,i)perylene	ND		367	ug/Kg	1	01/2/2013 17:12
Benzo(k)fluoranthene	ND		367	ug/Kg	1	01/2/2013 17:12
Benzoic acid	ND		1830	ug/Kg	1	01/2/2013 17:12
Bis(2-Chloroethoxy)methane	ND		367	ug/Kg	1	01/2/2013 17:12
Bis(2-Chloroethyl)ether	ND		367	ug/Kg	1	01/2/2013 17:12
Bis(2-Chloroisopropyl)ether	ND		367	ug/Kg	1	01/2/2013 17:12
Bis(2-Ethylhexyl)phthalate	ND		367	ug/Kg	1	01/2/2013 17:12
4-Bromophenyl phenyl ether	ND		367	ug/Kg	1	01/2/2013 17:12
Butyl benzyl phthalate	ND		367	ug/Kg	1	01/2/2013 17:12
Chrysene	ND		367	ug/Kg	1	01/2/2013 17:12
Di-n-butyl phthalate	ND		367	ug/Kg	1	01/2/2013 17:12
Di-n-octyl phthalate	ND		367	ug/Kg	1	01/2/2013 17:12
Dibenz(a,h)anthracene	ND		367	ug/Kg	1	01/2/2013 17:12
Dibenzofuran	ND		367	ug/Kg	1	01/2/2013 17:12

Results of SB53-7 (0-2.5)

Client Sample ID: **SB53-7 (0-2.5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011025-F
 Lab Project ID: 31204011

Collection Date: 12/13/2012 09:50
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 87.00

Results by SW-846 8270D

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Diethyl phthalate	ND		367	ug/Kg	1	01/2/2013 17:12
Dimethyl phthalate	ND		367	ug/Kg	1	01/2/2013 17:12
2,4-Dimethylphenol	ND		367	ug/Kg	1	01/2/2013 17:12
Diphenylamine	ND		367	ug/Kg	1	01/2/2013 17:12
Fluoranthene	ND		367	ug/Kg	1	01/2/2013 17:12
Fluorene	ND		367	ug/Kg	1	01/2/2013 17:12
Hexachlorobenzene	ND		1830	ug/Kg	1	01/2/2013 17:12
Hexachlorobutadiene	ND		367	ug/Kg	1	01/2/2013 17:12
Hexachlorocyclopentadiene	ND		734	ug/Kg	1	01/2/2013 17:12
Hexachloroethane	ND		367	ug/Kg	1	01/2/2013 17:12
Indeno(1,2,3-cd)pyrene	ND		367	ug/Kg	1	01/2/2013 17:12
Isophorone	ND		367	ug/Kg	1	01/2/2013 17:12
Naphthalene	ND		367	ug/Kg	1	01/2/2013 17:12
4-Nitroaniline	ND		1830	ug/Kg	1	01/2/2013 17:12
Nitrobenzene	ND		367	ug/Kg	1	01/2/2013 17:12
4-Nitrophenol	ND		1830	ug/Kg	1	01/2/2013 17:12
Pentachlorophenol	ND		1830	ug/Kg	1	01/2/2013 17:12
Phenanthrene	ND		367	ug/Kg	1	01/2/2013 17:12
Phenol	ND		367	ug/Kg	1	01/2/2013 17:12
Pyrene	ND		367	ug/Kg	1	01/2/2013 17:12
n-Nitrosodi-n-propylamine	ND		367	ug/Kg	1	01/2/2013 17:12
Surrogates						
2,4,6-Tribromophenol	99.0		41.0-129	%	1	01/2/2013 17:12
2-Fluorobiphenyl	91.0		48.0-123	%	1	01/2/2013 17:12
2-Fluorophenol	94.0		42.0-123	%	1	01/2/2013 17:12
Nitrobenzene-d5	92.0		46.0-117	%	1	01/2/2013 17:12
Phenol-d6	103		48.0-125	%	1	01/2/2013 17:12
Terphenyl-d14	86.0		44.0-140	%	1	01/2/2013 17:12

Batch Information

Analytical Batch: **XMS1781**
 Analytical Method: **SW-846 8270D**
 Instrument: **MSD6**
 Analyst: **CMP**

Prep Batch: **XXX3429**
 Prep Method: **SW-846 3541**
 Prep Date/Time: **12/20/2012 08:43**
 Prep Initial Wt./Vol.: **31.38 g**
 Prep Extract Vol: **10 mL**

Results of SB53-7 (0-2.5)

Client Sample ID: **SB53-7 (0-2.5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011025-F
 Lab Project ID: 31204011

Collection Date: 12/13/2012 09:50
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 87.00

Results by SW-846 8015C DRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Diesel Range Organics (DRO)	13.8		7.05	mg/kg	1	12/21/2012 11:21
Surrogates						
o-Terphenyl	79.3		40.0-140	%	1	12/21/2012 11:21

Batch Information

Analytical Batch: **XGC2804**
 Analytical Method: **SW-846 8015C DRO**
 Instrument: **GC6**
 Analyst: **DTF**

Prep Batch: **XXX3428**
 Prep Method: **SW-846 3541**
 Prep Date/Time: **12/19/2012 15:06**
 Prep Initial Wt./Vol.: **32.59 g**
 Prep Extract Vol: **10 mL**



Results of **SB53-8 (6-8)**

Client Sample ID: **SB53-8 (6-8)**
Client Project ID: **NCDOT U-3315**
Lab Sample ID: 31204011026-A
Lab Project ID: 31204011

Collection Date: 12/13/2012 10:17
Received Date: 12/15/2012 09:15
Matrix: Soil-Solid as dry weight
Solids (%): 82.50

Results by **SW-846 8260B**

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
1,1,1,2-Tetrachloroethane	ND		4.16	ug/Kg	1	12/18/2012 20:11
1,1,1-Trichloroethane	ND		4.16	ug/Kg	1	12/18/2012 20:11
1,1,2,2-Tetrachloroethane	ND		4.16	ug/Kg	1	12/18/2012 20:11
1,1,2-Trichloroethane	ND		4.16	ug/Kg	1	12/18/2012 20:11
1,1-Dichloroethane	ND		4.16	ug/Kg	1	12/18/2012 20:11
1,1-Dichloroethene	ND		4.16	ug/Kg	1	12/18/2012 20:11
1,1-Dichloropropene	ND		4.16	ug/Kg	1	12/18/2012 20:11
1,2,3-Trichlorobenzene	ND		4.16	ug/Kg	1	12/18/2012 20:11
1,2,3-Trichloropropane	ND		4.16	ug/Kg	1	12/18/2012 20:11
1,2,4-Trichlorobenzene	ND		4.16	ug/Kg	1	12/18/2012 20:11
1,2,4-Trimethylbenzene	ND		4.16	ug/Kg	1	12/18/2012 20:11
1,2-Dibromo-3-chloropropane	ND		25.0	ug/Kg	1	12/18/2012 20:11
1,2-Dibromoethane	ND		4.16	ug/Kg	1	12/18/2012 20:11
1,2-Dichlorobenzene	ND		4.16	ug/Kg	1	12/18/2012 20:11
1,2-Dichloroethane	ND		4.16	ug/Kg	1	12/18/2012 20:11
1,2-Dichloropropane	ND		4.16	ug/Kg	1	12/18/2012 20:11
1,3,5-Trimethylbenzene	ND		4.16	ug/Kg	1	12/18/2012 20:11
1,3-Dichlorobenzene	ND		4.16	ug/Kg	1	12/18/2012 20:11
1,3-Dichloropropane	ND		4.16	ug/Kg	1	12/18/2012 20:11
1,4-Dichlorobenzene	ND		4.16	ug/Kg	1	12/18/2012 20:11
2,2-Dichloropropane	ND		4.16	ug/Kg	1	12/18/2012 20:11
2-Butanone	ND		20.8	ug/Kg	1	12/18/2012 20:11
2-Chlorotoluene	ND		4.16	ug/Kg	1	12/18/2012 20:11
2-Hexanone	ND		10.4	ug/Kg	1	12/18/2012 20:11
4-Chlorotoluene	ND		4.16	ug/Kg	1	12/18/2012 20:11
4-Isopropyltoluene	ND		4.16	ug/Kg	1	12/18/2012 20:11
4-Methyl-2-pentanone	ND		10.4	ug/Kg	1	12/18/2012 20:11
Acetone	ND		41.6	ug/Kg	1	12/18/2012 20:11
Benzene	ND		4.16	ug/Kg	1	12/18/2012 20:11
Bromobenzene	ND		4.16	ug/Kg	1	12/18/2012 20:11
Bromochloromethane	ND		4.16	ug/Kg	1	12/18/2012 20:11
Bromodichloromethane	ND		4.16	ug/Kg	1	12/18/2012 20:11
Bromoform	ND		4.16	ug/Kg	1	12/18/2012 20:11
Bromomethane	ND		4.16	ug/Kg	1	12/18/2012 20:11
n-Butylbenzene	ND		4.16	ug/Kg	1	12/18/2012 20:11
Carbon disulfide	ND		4.16	ug/Kg	1	12/18/2012 20:11
Carbon tetrachloride	ND		4.16	ug/Kg	1	12/18/2012 20:11
Chlorobenzene	ND		4.16	ug/Kg	1	12/18/2012 20:11
Chloroethane	ND		4.16	ug/Kg	1	12/18/2012 20:11
Chloroform	ND		4.16	ug/Kg	1	12/18/2012 20:11
Chloromethane	ND		4.16	ug/Kg	1	12/18/2012 20:11
Dibromochloromethane	ND		4.16	ug/Kg	1	12/18/2012 20:11
Dibromomethane	ND		4.16	ug/Kg	1	12/18/2012 20:11

Print Date: 01/04/2013

N.C. Certification # 481

Results of SB53-8 (6-8)

Client Sample ID: **SB53-8 (6-8)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011026-A
 Lab Project ID: 31204011

Collection Date: 12/13/2012 10:17
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 82.50

Results by SW-846 8260B

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Dichlorodifluoromethane	ND		4.16	ug/Kg	1	12/18/2012 20:11
cis-1,3-Dichloropropene	ND		4.16	ug/Kg	1	12/18/2012 20:11
trans-1,3-Dichloropropene	ND		4.16	ug/Kg	1	12/18/2012 20:11
Diisopropyl Ether	ND		4.16	ug/Kg	1	12/18/2012 20:11
Ethyl Benzene	ND		4.16	ug/Kg	1	12/18/2012 20:11
Hexachlorobutadiene	ND		4.16	ug/Kg	1	12/18/2012 20:11
Isopropylbenzene (Cumene)	ND		4.16	ug/Kg	1	12/18/2012 20:11
Methyl iodide	ND		4.16	ug/Kg	1	12/18/2012 20:11
Methylene chloride	ND		16.6	ug/Kg	1	12/18/2012 20:11
Naphthalene	ND		4.16	ug/Kg	1	12/18/2012 20:11
Styrene	ND		4.16	ug/Kg	1	12/18/2012 20:11
Tetrachloroethene	ND		4.16	ug/Kg	1	12/18/2012 20:11
Toluene	ND		4.16	ug/Kg	1	12/18/2012 20:11
Trichloroethene	ND		4.16	ug/Kg	1	12/18/2012 20:11
Trichlorofluoromethane	ND		4.16	ug/Kg	1	12/18/2012 20:11
Vinyl chloride	ND		4.16	ug/Kg	1	12/18/2012 20:11
Xylene (total)	ND		8.32	ug/Kg	1	12/18/2012 20:11
cis-1,2-Dichloroethene	ND		4.16	ug/Kg	1	12/18/2012 20:11
m,p-Xylene	ND		8.32	ug/Kg	1	12/18/2012 20:11
n-Propylbenzene	ND		4.16	ug/Kg	1	12/18/2012 20:11
o-Xylene	ND		4.16	ug/Kg	1	12/18/2012 20:11
sec-Butylbenzene	ND		4.16	ug/Kg	1	12/18/2012 20:11
tert-Butyl methyl ether (MTBE)	ND		4.16	ug/Kg	1	12/18/2012 20:11
tert-Butylbenzene	ND		4.16	ug/Kg	1	12/18/2012 20:11
trans-1,2-Dichloroethene	ND		4.16	ug/Kg	1	12/18/2012 20:11
trans-1,4-Dichloro-2-butene	ND		20.8	ug/Kg	1	12/18/2012 20:11

Surrogates

1,2-Dichloroethane-d4	103		55.0-173	%	1	12/18/2012 20:11
4-Bromofluorobenzene	101		23.0-141	%	1	12/18/2012 20:11
Toluene d8	103		57.0-134	%	1	12/18/2012 20:11

Batch Information

Analytical Batch: **VMS2786**
 Analytical Method: **SW-846 8260B**
 Instrument: **MSD9**
 Analyst: **BWS**

Prep Batch: **VXX4446**
 Prep Method: **SW-846 5035 SL**
 Prep Date/Time: **12/17/2012 16:59**
 Prep Initial Wt./Vol.: **7.28 g**
 Prep Extract Vol: **5 mL**

Results of SB53-8 (6-8)

Client Sample ID: **SB53-8 (6-8)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011026-E
 Lab Project ID: 31204011

Collection Date: 12/13/2012 10:17
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 82.50

Results by SW-846 8015C GRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Gasoline Range Organics (GRO)	ND		3.53	mg/kg	1	12/21/2012 20:57
Surrogates						
4-Bromofluorobenzene	107		70.0-130	%	1	12/21/2012 20:57

Batch Information

Analytical Batch: **VGC2293**
 Analytical Method: **SW-846 8015C GRO**
 Instrument: **GC7**
 Analyst: **MDY**

Prep Batch: **VXX4461**
 Prep Method: **SW-846 5035**
 Prep Date/Time: **12/17/2012 16:59**
 Prep Initial Wt./Vol.: **6.87 g**
 Prep Extract Vol: **5 mL**

Results of SB53-8 (6-8)

Client Sample ID: **SB53-8 (6-8)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011026-F
 Lab Project ID: 31204011

Collection Date: 12/13/2012 10:17
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 82.50

Results by SW-846 8270D

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
1,2,4-Trichlorobenzene	ND		382	ug/Kg	1	01/2/2013 17:36
1,2-Dichlorobenzene	ND		382	ug/Kg	1	01/2/2013 17:36
1,3-Dichlorobenzene	ND		382	ug/Kg	1	01/2/2013 17:36
1,4-Dichlorobenzene	ND		382	ug/Kg	1	01/2/2013 17:36
2,4,5-Trichlorophenol	ND		382	ug/Kg	1	01/2/2013 17:36
2,4,6-Trichlorophenol	ND		382	ug/Kg	1	01/2/2013 17:36
2,4-Dichlorophenol	ND		382	ug/Kg	1	01/2/2013 17:36
2,4-Dinitrophenol	ND		1910	ug/Kg	1	01/2/2013 17:36
2,4-Dinitrotoluene	ND		382	ug/Kg	1	01/2/2013 17:36
2,6-Dinitrotoluene	ND		382	ug/Kg	1	01/2/2013 17:36
2-Chloronaphthalene	ND		382	ug/Kg	1	01/2/2013 17:36
2-Chlorophenol	ND		382	ug/Kg	1	01/2/2013 17:36
2-Methylnaphthalene	ND		382	ug/Kg	1	01/2/2013 17:36
2-Methylphenol	ND		382	ug/Kg	1	01/2/2013 17:36
2-Nitroaniline	ND		382	ug/Kg	1	01/2/2013 17:36
2-Nitrophenol	ND		382	ug/Kg	1	01/2/2013 17:36
3 and/or 4-Methylphenol	ND		382	ug/Kg	1	01/2/2013 17:36
3,3'-Dichlorobenzidine	ND		764	ug/Kg	1	01/2/2013 17:36
3-Nitroaniline	ND		1910	ug/Kg	1	01/2/2013 17:36
4,6-Dinitro-2-methylphenol	ND		1910	ug/Kg	1	01/2/2013 17:36
4-Chloro-3-methylphenol	ND		382	ug/Kg	1	01/2/2013 17:36
4-Chloroaniline	ND		382	ug/Kg	1	01/2/2013 17:36
4-Chlorophenyl phenyl ether	ND		382	ug/Kg	1	01/2/2013 17:36
Acenaphthene	ND		382	ug/Kg	1	01/2/2013 17:36
Acenaphthylene	ND		382	ug/Kg	1	01/2/2013 17:36
Anthracene	ND		382	ug/Kg	1	01/2/2013 17:36
Benzo(a)anthracene	ND		382	ug/Kg	1	01/2/2013 17:36
Benzo(a)pyrene	ND		382	ug/Kg	1	01/2/2013 17:36
Benzo(b)fluoranthene	ND		382	ug/Kg	1	01/2/2013 17:36
Benzo(g,h,i)perylene	ND		382	ug/Kg	1	01/2/2013 17:36
Benzo(k)fluoranthene	ND		382	ug/Kg	1	01/2/2013 17:36
Benzoic acid	ND		1910	ug/Kg	1	01/2/2013 17:36
Bis(2-Chloroethoxy)methane	ND		382	ug/Kg	1	01/2/2013 17:36
Bis(2-Chloroethyl)ether	ND		382	ug/Kg	1	01/2/2013 17:36
Bis(2-Chloroisopropyl)ether	ND		382	ug/Kg	1	01/2/2013 17:36
Bis(2-Ethylhexyl)phthalate	ND		382	ug/Kg	1	01/2/2013 17:36
4-Bromophenyl phenyl ether	ND		382	ug/Kg	1	01/2/2013 17:36
Butyl benzyl phthalate	ND		382	ug/Kg	1	01/2/2013 17:36
Chrysene	ND		382	ug/Kg	1	01/2/2013 17:36
Di-n-butyl phthalate	ND		382	ug/Kg	1	01/2/2013 17:36
Di-n-octyl phthalate	ND		382	ug/Kg	1	01/2/2013 17:36
Dibenz(a,h)anthracene	ND		382	ug/Kg	1	01/2/2013 17:36
Dibenzofuran	ND		382	ug/Kg	1	01/2/2013 17:36

Results of SB53-8 (6-8)

Client Sample ID: **SB53-8 (6-8)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011026-F
 Lab Project ID: 31204011

Collection Date: 12/13/2012 10:17
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 82.50

Results by SW-846 8270D

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Diethyl phthalate	ND		382	ug/Kg	1	01/2/2013 17:36
Dimethyl phthalate	ND		382	ug/Kg	1	01/2/2013 17:36
2,4-Dimethylphenol	ND		382	ug/Kg	1	01/2/2013 17:36
Diphenylamine	ND		382	ug/Kg	1	01/2/2013 17:36
Fluoranthene	ND		382	ug/Kg	1	01/2/2013 17:36
Fluorene	ND		382	ug/Kg	1	01/2/2013 17:36
Hexachlorobenzene	ND		1910	ug/Kg	1	01/2/2013 17:36
Hexachlorobutadiene	ND		382	ug/Kg	1	01/2/2013 17:36
Hexachlorocyclopentadiene	ND		764	ug/Kg	1	01/2/2013 17:36
Hexachloroethane	ND		382	ug/Kg	1	01/2/2013 17:36
Indeno(1,2,3-cd)pyrene	ND		382	ug/Kg	1	01/2/2013 17:36
Isophorone	ND		382	ug/Kg	1	01/2/2013 17:36
Naphthalene	ND		382	ug/Kg	1	01/2/2013 17:36
4-Nitroaniline	ND		1910	ug/Kg	1	01/2/2013 17:36
Nitrobenzene	ND		382	ug/Kg	1	01/2/2013 17:36
4-Nitrophenol	ND		1910	ug/Kg	1	01/2/2013 17:36
Pentachlorophenol	ND		1910	ug/Kg	1	01/2/2013 17:36
Phenanthrene	ND		382	ug/Kg	1	01/2/2013 17:36
Phenol	ND		382	ug/Kg	1	01/2/2013 17:36
Pyrene	ND		382	ug/Kg	1	01/2/2013 17:36
n-Nitrosodi-n-propylamine	ND		382	ug/Kg	1	01/2/2013 17:36

Surrogates

2,4,6-Tribromophenol	93.0		41.0-129	%	1	01/2/2013 17:36
2-Fluorobiphenyl	87.0		48.0-123	%	1	01/2/2013 17:36
2-Fluorophenol	92.0		42.0-123	%	1	01/2/2013 17:36
Nitrobenzene-d5	90.0		46.0-117	%	1	01/2/2013 17:36
Phenol-d6	100		48.0-125	%	1	01/2/2013 17:36
Terphenyl-d14	87.0		44.0-140	%	1	01/2/2013 17:36

Batch Information

Analytical Batch: **XMS1781**
 Analytical Method: **SW-846 8270D**
 Instrument: **MSD6**
 Analyst: **CMP**

Prep Batch: **XXX3429**
 Prep Method: **SW-846 3541**
 Prep Date/Time: **12/20/2012 08:43**
 Prep Initial Wt./Vol.: **31.75 g**
 Prep Extract Vol: **10 mL**

Results of SB53-8 (6-8)

Client Sample ID: **SB53-8 (6-8)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011026-F
 Lab Project ID: 31204011

Collection Date: 12/13/2012 10:17
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 82.50

Results by SW-846 8015C DRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Diesel Range Organics (DRO)	ND		7.50	mg/kg	1	12/21/2012 11:49
Surrogates						
o-Terphenyl	82.4		40.0-140	%	1	12/21/2012 11:49

Batch Information

Analytical Batch: **XGC2804**
 Analytical Method: **SW-846 8015C DRO**
 Instrument: **GC6**
 Analyst: **DTF**

Prep Batch: **XXX3428**
 Prep Method: **SW-846 3541**
 Prep Date/Time: **12/19/2012 15:06**
 Prep Initial Wt./Vol.: **32.29 g**
 Prep Extract Vol: **10 mL**



Results of **SB53-9 (2.5-5)**

Client Sample ID: **SB53-9 (2.5-5)**
Client Project ID: **NCDOT U-3315**
Lab Sample ID: 31204011027-A
Lab Project ID: 31204011

Collection Date: 12/13/2012 10:39
Received Date: 12/15/2012 09:15
Matrix: Soil-Solid as dry weight
Solids (%): 81.50

Results by **SW-846 8260B**

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
1,1,1,2-Tetrachloroethane	ND		4.42	ug/Kg	1	12/18/2012 20:37
1,1,1-Trichloroethane	ND		4.42	ug/Kg	1	12/18/2012 20:37
1,1,2,2-Tetrachloroethane	ND		4.42	ug/Kg	1	12/18/2012 20:37
1,1,2-Trichloroethane	ND		4.42	ug/Kg	1	12/18/2012 20:37
1,1-Dichloroethane	ND		4.42	ug/Kg	1	12/18/2012 20:37
1,1-Dichloroethene	ND		4.42	ug/Kg	1	12/18/2012 20:37
1,1-Dichloropropene	ND		4.42	ug/Kg	1	12/18/2012 20:37
1,2,3-Trichlorobenzene	ND		4.42	ug/Kg	1	12/18/2012 20:37
1,2,3-Trichloropropane	ND		4.42	ug/Kg	1	12/18/2012 20:37
1,2,4-Trichlorobenzene	ND		4.42	ug/Kg	1	12/18/2012 20:37
1,2,4-Trimethylbenzene	ND		4.42	ug/Kg	1	12/18/2012 20:37
1,2-Dibromo-3-chloropropane	ND		26.5	ug/Kg	1	12/18/2012 20:37
1,2-Dibromoethane	ND		4.42	ug/Kg	1	12/18/2012 20:37
1,2-Dichlorobenzene	ND		4.42	ug/Kg	1	12/18/2012 20:37
1,2-Dichloroethane	ND		4.42	ug/Kg	1	12/18/2012 20:37
1,2-Dichloropropane	ND		4.42	ug/Kg	1	12/18/2012 20:37
1,3,5-Trimethylbenzene	ND		4.42	ug/Kg	1	12/18/2012 20:37
1,3-Dichlorobenzene	ND		4.42	ug/Kg	1	12/18/2012 20:37
1,3-Dichloropropane	ND		4.42	ug/Kg	1	12/18/2012 20:37
1,4-Dichlorobenzene	ND		4.42	ug/Kg	1	12/18/2012 20:37
2,2-Dichloropropane	ND		4.42	ug/Kg	1	12/18/2012 20:37
2-Butanone	ND		22.1	ug/Kg	1	12/18/2012 20:37
2-Chlorotoluene	ND		4.42	ug/Kg	1	12/18/2012 20:37
2-Hexanone	ND		11.0	ug/Kg	1	12/18/2012 20:37
4-Chlorotoluene	ND		4.42	ug/Kg	1	12/18/2012 20:37
4-Isopropyltoluene	ND		4.42	ug/Kg	1	12/18/2012 20:37
4-Methyl-2-pentanone	ND		11.0	ug/Kg	1	12/18/2012 20:37
Acetone	ND		44.2	ug/Kg	1	12/18/2012 20:37
Benzene	ND		4.42	ug/Kg	1	12/18/2012 20:37
Bromobenzene	ND		4.42	ug/Kg	1	12/18/2012 20:37
Bromochloromethane	ND		4.42	ug/Kg	1	12/18/2012 20:37
Bromodichloromethane	ND		4.42	ug/Kg	1	12/18/2012 20:37
Bromoform	ND		4.42	ug/Kg	1	12/18/2012 20:37
Bromomethane	ND		4.42	ug/Kg	1	12/18/2012 20:37
n-Butylbenzene	ND		4.42	ug/Kg	1	12/18/2012 20:37
Carbon disulfide	ND		4.42	ug/Kg	1	12/18/2012 20:37
Carbon tetrachloride	ND		4.42	ug/Kg	1	12/18/2012 20:37
Chlorobenzene	ND		4.42	ug/Kg	1	12/18/2012 20:37
Chloroethane	ND		4.42	ug/Kg	1	12/18/2012 20:37
Chloroform	ND		4.42	ug/Kg	1	12/18/2012 20:37
Chloromethane	ND		4.42	ug/Kg	1	12/18/2012 20:37
Dibromochloromethane	ND		4.42	ug/Kg	1	12/18/2012 20:37
Dibromomethane	ND		4.42	ug/Kg	1	12/18/2012 20:37

Print Date: 01/04/2013

N.C. Certification # 481

Results of SB53-9 (2.5-5)

Client Sample ID: **SB53-9 (2.5-5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011027-A
 Lab Project ID: 31204011

Collection Date: 12/13/2012 10:39
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 81.50

Results by SW-846 8260B

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Dichlorodifluoromethane	ND		4.42	ug/Kg	1	12/18/2012 20:37
cis-1,3-Dichloropropene	ND		4.42	ug/Kg	1	12/18/2012 20:37
trans-1,3-Dichloropropene	ND		4.42	ug/Kg	1	12/18/2012 20:37
Diisopropyl Ether	ND		4.42	ug/Kg	1	12/18/2012 20:37
Ethyl Benzene	ND		4.42	ug/Kg	1	12/18/2012 20:37
Hexachlorobutadiene	ND		4.42	ug/Kg	1	12/18/2012 20:37
Isopropylbenzene (Cumene)	ND		4.42	ug/Kg	1	12/18/2012 20:37
Methyl iodide	ND		4.42	ug/Kg	1	12/18/2012 20:37
Methylene chloride	ND		17.7	ug/Kg	1	12/18/2012 20:37
Naphthalene	ND		4.42	ug/Kg	1	12/18/2012 20:37
Styrene	ND		4.42	ug/Kg	1	12/18/2012 20:37
Tetrachloroethene	ND		4.42	ug/Kg	1	12/18/2012 20:37
Toluene	ND		4.42	ug/Kg	1	12/18/2012 20:37
Trichloroethene	ND		4.42	ug/Kg	1	12/18/2012 20:37
Trichlorofluoromethane	ND		4.42	ug/Kg	1	12/18/2012 20:37
Vinyl chloride	ND		4.42	ug/Kg	1	12/18/2012 20:37
Xylene (total)	ND		8.83	ug/Kg	1	12/18/2012 20:37
cis-1,2-Dichloroethene	ND		4.42	ug/Kg	1	12/18/2012 20:37
m,p-Xylene	ND		8.83	ug/Kg	1	12/18/2012 20:37
n-Propylbenzene	ND		4.42	ug/Kg	1	12/18/2012 20:37
o-Xylene	ND		4.42	ug/Kg	1	12/18/2012 20:37
sec-Butylbenzene	ND		4.42	ug/Kg	1	12/18/2012 20:37
tert-Butyl methyl ether (MTBE)	ND		4.42	ug/Kg	1	12/18/2012 20:37
tert-Butylbenzene	ND		4.42	ug/Kg	1	12/18/2012 20:37
trans-1,2-Dichloroethene	ND		4.42	ug/Kg	1	12/18/2012 20:37
trans-1,4-Dichloro-2-butene	ND		22.1	ug/Kg	1	12/18/2012 20:37

Surrogates

1,2-Dichloroethane-d4	105		55.0-173	%	1	12/18/2012 20:37
4-Bromofluorobenzene	102		23.0-141	%	1	12/18/2012 20:37
Toluene d8	103		57.0-134	%	1	12/18/2012 20:37

Batch Information

Analytical Batch: **VMS2786**
 Analytical Method: **SW-846 8260B**
 Instrument: **MSD9**
 Analyst: **BWS**

Prep Batch: **VXX4446**
 Prep Method: **SW-846 5035 SL**
 Prep Date/Time: **12/17/2012 17:02**
 Prep Initial Wt./Vol.: **6.95 g**
 Prep Extract Vol: **5 mL**

Results of SB53-9 (2.5-5)

Client Sample ID: **SB53-9 (2.5-5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011027-E
 Lab Project ID: 31204011

Collection Date: 12/13/2012 10:39
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 81.50

Results by SW-846 8015C GRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Gasoline Range Organics (GRO)	ND		3.45	mg/kg	1	12/21/2012 21:22
Surrogates						
4-Bromofluorobenzene	109		70.0-130	%	1	12/21/2012 21:22

Batch Information

Analytical Batch: **VGC2293**
 Analytical Method: **SW-846 8015C GRO**
 Instrument: **GC7**
 Analyst: **MDY**

Prep Batch: **VXX4461**
 Prep Method: **SW-846 5035**
 Prep Date/Time: **12/18/2012 16:51**
 Prep Initial Wt./Vol.: **7.12 g**
 Prep Extract Vol: **5 mL**

Results of SB53-9 (2.5-5)

Client Sample ID: **SB53-9 (2.5-5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011027-F
 Lab Project ID: 31204011

Collection Date: 12/13/2012 10:39
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 81.50

Results by SW-846 8270D

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
1,2,4-Trichlorobenzene	ND		387	ug/Kg	1	01/2/2013 18:00
1,2-Dichlorobenzene	ND		387	ug/Kg	1	01/2/2013 18:00
1,3-Dichlorobenzene	ND		387	ug/Kg	1	01/2/2013 18:00
1,4-Dichlorobenzene	ND		387	ug/Kg	1	01/2/2013 18:00
2,4,5-Trichlorophenol	ND		387	ug/Kg	1	01/2/2013 18:00
2,4,6-Trichlorophenol	ND		387	ug/Kg	1	01/2/2013 18:00
2,4-Dichlorophenol	ND		387	ug/Kg	1	01/2/2013 18:00
2,4-Dinitrophenol	ND		1940	ug/Kg	1	01/2/2013 18:00
2,4-Dinitrotoluene	ND		387	ug/Kg	1	01/2/2013 18:00
2,6-Dinitrotoluene	ND		387	ug/Kg	1	01/2/2013 18:00
2-Chloronaphthalene	ND		387	ug/Kg	1	01/2/2013 18:00
2-Chlorophenol	ND		387	ug/Kg	1	01/2/2013 18:00
2-Methylnaphthalene	ND		387	ug/Kg	1	01/2/2013 18:00
2-Methylphenol	ND		387	ug/Kg	1	01/2/2013 18:00
2-Nitroaniline	ND		387	ug/Kg	1	01/2/2013 18:00
2-Nitrophenol	ND		387	ug/Kg	1	01/2/2013 18:00
3 and/or 4-Methylphenol	ND		387	ug/Kg	1	01/2/2013 18:00
3,3'-Dichlorobenzidine	ND		774	ug/Kg	1	01/2/2013 18:00
3-Nitroaniline	ND		1940	ug/Kg	1	01/2/2013 18:00
4,6-Dinitro-2-methylphenol	ND		1940	ug/Kg	1	01/2/2013 18:00
4-Chloro-3-methylphenol	ND		387	ug/Kg	1	01/2/2013 18:00
4-Chloroaniline	ND		387	ug/Kg	1	01/2/2013 18:00
4-Chlorophenyl phenyl ether	ND		387	ug/Kg	1	01/2/2013 18:00
Acenaphthene	ND		387	ug/Kg	1	01/2/2013 18:00
Acenaphthylene	ND		387	ug/Kg	1	01/2/2013 18:00
Anthracene	ND		387	ug/Kg	1	01/2/2013 18:00
Benzo(a)anthracene	ND		387	ug/Kg	1	01/2/2013 18:00
Benzo(a)pyrene	ND		387	ug/Kg	1	01/2/2013 18:00
Benzo(b)fluoranthene	ND		387	ug/Kg	1	01/2/2013 18:00
Benzo(g,h,i)perylene	ND		387	ug/Kg	1	01/2/2013 18:00
Benzo(k)fluoranthene	ND		387	ug/Kg	1	01/2/2013 18:00
Benzoic acid	ND		1940	ug/Kg	1	01/2/2013 18:00
Bis(2-Chloroethoxy)methane	ND		387	ug/Kg	1	01/2/2013 18:00
Bis(2-Chloroethyl)ether	ND		387	ug/Kg	1	01/2/2013 18:00
Bis(2-Chloroisopropyl)ether	ND		387	ug/Kg	1	01/2/2013 18:00
Bis(2-Ethylhexyl)phthalate	ND		387	ug/Kg	1	01/2/2013 18:00
4-Bromophenyl phenyl ether	ND		387	ug/Kg	1	01/2/2013 18:00
Butyl benzyl phthalate	ND		387	ug/Kg	1	01/2/2013 18:00
Chrysene	ND		387	ug/Kg	1	01/2/2013 18:00
Di-n-butyl phthalate	ND		387	ug/Kg	1	01/2/2013 18:00
Di-n-octyl phthalate	ND		387	ug/Kg	1	01/2/2013 18:00
Dibenz(a,h)anthracene	ND		387	ug/Kg	1	01/2/2013 18:00
Dibenzofuran	ND		387	ug/Kg	1	01/2/2013 18:00

Results of SB53-9 (2.5-5)

Client Sample ID: **SB53-9 (2.5-5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011027-F
 Lab Project ID: 31204011

Collection Date: 12/13/2012 10:39
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 81.50

Results by SW-846 8270D

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Diethyl phthalate	ND		387	ug/Kg	1	01/2/2013 18:00
Dimethyl phthalate	ND		387	ug/Kg	1	01/2/2013 18:00
2,4-Dimethylphenol	ND		387	ug/Kg	1	01/2/2013 18:00
Diphenylamine	ND		387	ug/Kg	1	01/2/2013 18:00
Fluoranthene	ND		387	ug/Kg	1	01/2/2013 18:00
Fluorene	ND		387	ug/Kg	1	01/2/2013 18:00
Hexachlorobenzene	ND		1940	ug/Kg	1	01/2/2013 18:00
Hexachlorobutadiene	ND		387	ug/Kg	1	01/2/2013 18:00
Hexachlorocyclopentadiene	ND		774	ug/Kg	1	01/2/2013 18:00
Hexachloroethane	ND		387	ug/Kg	1	01/2/2013 18:00
Indeno(1,2,3-cd)pyrene	ND		387	ug/Kg	1	01/2/2013 18:00
Isophorone	ND		387	ug/Kg	1	01/2/2013 18:00
Naphthalene	ND		387	ug/Kg	1	01/2/2013 18:00
4-Nitroaniline	ND		1940	ug/Kg	1	01/2/2013 18:00
Nitrobenzene	ND		387	ug/Kg	1	01/2/2013 18:00
4-Nitrophenol	ND		1940	ug/Kg	1	01/2/2013 18:00
Pentachlorophenol	ND		1940	ug/Kg	1	01/2/2013 18:00
Phenanthrene	ND		387	ug/Kg	1	01/2/2013 18:00
Phenol	ND		387	ug/Kg	1	01/2/2013 18:00
Pyrene	ND		387	ug/Kg	1	01/2/2013 18:00
n-Nitrosodi-n-propylamine	ND		387	ug/Kg	1	01/2/2013 18:00

Surrogates

2,4,6-Tribromophenol	98.0		41.0-129	%	1	01/2/2013 18:00
2-Fluorobiphenyl	94.0		48.0-123	%	1	01/2/2013 18:00
2-Fluorophenol	94.0		42.0-123	%	1	01/2/2013 18:00
Nitrobenzene-d5	92.0		46.0-117	%	1	01/2/2013 18:00
Phenol-d6	102		48.0-125	%	1	01/2/2013 18:00
Terphenyl-d14	90.0		44.0-140	%	1	01/2/2013 18:00

Batch Information

Analytical Batch: **XMS1781**
 Analytical Method: **SW-846 8270D**
 Instrument: **MSD6**
 Analyst: **CMP**

Prep Batch: **XXX3429**
 Prep Method: **SW-846 3541**
 Prep Date/Time: **12/20/2012 08:43**
 Prep Initial Wt./Vol.: **31.77 g**
 Prep Extract Vol: **10 mL**

Results of SB53-9 (2.5-5)

Client Sample ID: **SB53-9 (2.5-5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011027-F
 Lab Project ID: 31204011

Collection Date: 12/13/2012 10:39
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 81.50

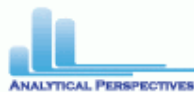
Results by SW-846 8015C DRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Diesel Range Organics (DRO)	ND		7.65	mg/kg	1	12/26/2012 16:50
Surrogates						
o-Terphenyl	83.2		40.0-140	%	1	12/26/2012 16:50

Batch Information

Analytical Batch: **XGC2809**
 Analytical Method: **SW-846 8015C DRO**
 Instrument: **GC6**
 Analyst: **DTF**

Prep Batch: **XXX3428**
 Prep Method: **SW-846 3541**
 Prep Date/Time: **12/19/2012 15:06**
 Prep Initial Wt./Vol.: **32.09 g**
 Prep Extract Vol: **10 mL**



Results of SB52-1 (0-2.5)

Client Sample ID: **SB52-1 (0-2.5)**
Client Project ID: **NCDOT U-3315**
Lab Sample ID: 31204011028-A
Lab Project ID: 31204011

Collection Date: 12/13/2012 12:15
Received Date: 12/15/2012 09:15
Matrix: Soil-Solid as dry weight
Solids (%): 89.40

Results by SW-846 8015C GRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Gasoline Range Organics (GRO)	ND		3.13	mg/kg	1	12/21/2012 21:47

Surrogates

4-Bromofluorobenzene	106		70.0-130	%	1	12/21/2012 21:47
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Batch Information

Analytical Batch: **VGC2293**
Analytical Method: **SW-846 8015C GRO**
Instrument: **GC7**
Analyst: **MDY**

Prep Batch: **VXX4461**
Prep Method: **SW-846 5035**
Prep Date/Time: **12/17/2012 17:05**
Prep Initial Wt./Vol.: **7.14 g**
Prep Extract Vol: **5 mL**

Results of SB52-1 (0-2.5)

Client Sample ID: **SB52-1 (0-2.5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011028-C
 Lab Project ID: 31204011

Collection Date: 12/13/2012 12:15
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 89.40

Results by SW-846 8015C DRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Diesel Range Organics (DRO)	ND		7.11	mg/kg	1	12/26/2012 17:17
Surrogates						
o-Terphenyl	81.8		40.0-140	%	1	12/26/2012 17:17

Batch Information

Analytical Batch: **XGC2809**
 Analytical Method: **SW-846 8015C DRO**
 Instrument: **GC6**
 Analyst: **DTF**

Prep Batch: **XXX3428**
 Prep Method: **SW-846 3541**
 Prep Date/Time: **12/19/2012 15:06**
 Prep Initial Wt./Vol.: **31.44 g**
 Prep Extract Vol: **10 mL**

Results of SB52-2 (0-2.5)

Client Sample ID: **SB52-2 (0-2.5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011029-A
 Lab Project ID: 31204011

Collection Date: 12/13/2012 12:35
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 84.50

Results by SW-846 8015C GRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Gasoline Range Organics (GRO)	ND		3.79	mg/kg	1	12/21/2012 22:12
Surrogates						
4-Bromofluorobenzene	106		70.0-130	%	1	12/21/2012 22:12

Batch Information

Analytical Batch: **VGC2293**
 Analytical Method: **SW-846 8015C GRO**
 Instrument: **GC7**
 Analyst: **MDY**

Prep Batch: **VXX4461**
 Prep Method: **SW-846 5035**
 Prep Date/Time: **12/17/2012 17:06**
 Prep Initial Wt./Vol.: **6.24 g**
 Prep Extract Vol: **5 mL**

Results of SB52-2 (0-2.5)

Client Sample ID: **SB52-2 (0-2.5)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011029-C
 Lab Project ID: 31204011

Collection Date: 12/13/2012 12:35
 Received Date: 12/15/2012 09:15
 Matrix: Soil-Solid as dry weight
 Solids (%): 84.50

Results by SW-846 8015C DRO

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Diesel Range Organics (DRO)	ND		7.22	mg/kg	1	12/26/2012 17:46
Surrogates						
o-Terphenyl	82.0		40.0-140	%	1	12/26/2012 17:46

Batch Information

Analytical Batch: **XGC2809**
 Analytical Method: **SW-846 8015C DRO**
 Instrument: **GC6**
 Analyst: **DTF**

Prep Batch: **XXX3428**
 Prep Method: **SW-846 3541**
 Prep Date/Time: **12/19/2012 15:06**
 Prep Initial Wt./Vol.: **32.76 g**
 Prep Extract Vol: **10 mL**

Results of Trip Blank (not on COC)

Client Sample ID: **Trip Blank (not on COC)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011030-A
 Lab Project ID: 31204011

Collection Date: 12/11/2012 00:00
 Received Date: 12/15/2012 09:15
 Matrix: Water

Results by SW-846 8260B

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
1,1,1,2-Tetrachloroethane	ND		1.00	ug/L	1	12/18/2012 19:52
1,1,1-Trichloroethane	ND		1.00	ug/L	1	12/18/2012 19:52
1,1,2,2-Tetrachloroethane	ND		1.00	ug/L	1	12/18/2012 19:52
1,1,2-Trichloroethane	ND		1.00	ug/L	1	12/18/2012 19:52
1,1-Dichloroethane	ND		1.00	ug/L	1	12/18/2012 19:52
1,1-Dichloroethene	ND		1.00	ug/L	1	12/18/2012 19:52
1,1-Dichloropropene	ND		1.00	ug/L	1	12/18/2012 19:52
1,2,3-Trichlorobenzene	ND		1.00	ug/L	1	12/18/2012 19:52
1,2,3-Trichloropropane	ND		1.00	ug/L	1	12/18/2012 19:52
1,2,4-Trichlorobenzene	ND		1.00	ug/L	1	12/18/2012 19:52
1,2,4-Trimethylbenzene	ND		1.00	ug/L	1	12/18/2012 19:52
1,2-Dibromo-3-chloropropane	ND		5.00	ug/L	1	12/18/2012 19:52
1,2-Dibromoethane	ND		1.00	ug/L	1	12/18/2012 19:52
1,2-Dichlorobenzene	ND		1.00	ug/L	1	12/18/2012 19:52
1,2-Dichloroethane	ND		1.00	ug/L	1	12/18/2012 19:52
1,2-Dichloropropane	ND		1.00	ug/L	1	12/18/2012 19:52
1,3,5-Trimethylbenzene	ND		1.00	ug/L	1	12/18/2012 19:52
1,3-Dichlorobenzene	ND		1.00	ug/L	1	12/18/2012 19:52
1,3-Dichloropropane	ND		1.00	ug/L	1	12/18/2012 19:52
1,4-Dichlorobenzene	ND		1.00	ug/L	1	12/18/2012 19:52
2,2-Dichloropropane	ND		1.00	ug/L	1	12/18/2012 19:52
2-Butanone	ND		25.0	ug/L	1	12/18/2012 19:52
2-Chlorotoluene	ND		1.00	ug/L	1	12/18/2012 19:52
2-Hexanone	ND		5.00	ug/L	1	12/18/2012 19:52
4-Chlorotoluene	ND		1.00	ug/L	1	12/18/2012 19:52
4-Isopropyltoluene	ND		1.00	ug/L	1	12/18/2012 19:52
4-Methyl-2-pentanone	ND		5.00	ug/L	1	12/18/2012 19:52
Acetone	ND		25.0	ug/L	1	12/18/2012 19:52
Benzene	ND		1.00	ug/L	1	12/18/2012 19:52
Bromobenzene	ND		1.00	ug/L	1	12/18/2012 19:52
Bromochloromethane	ND		1.00	ug/L	1	12/18/2012 19:52
Bromodichloromethane	ND		1.00	ug/L	1	12/18/2012 19:52
Bromoform	ND		1.00	ug/L	1	12/18/2012 19:52
Bromomethane	ND		1.00	ug/L	1	12/18/2012 19:52
n-Butylbenzene	ND		1.00	ug/L	1	12/18/2012 19:52
Carbon disulfide	ND		1.00	ug/L	1	12/18/2012 19:52
Carbon tetrachloride	ND		1.00	ug/L	1	12/18/2012 19:52
Chlorobenzene	ND		1.00	ug/L	1	12/18/2012 19:52
Chloroethane	ND		1.00	ug/L	1	12/18/2012 19:52
Chloroform	ND		1.00	ug/L	1	12/18/2012 19:52
Chloromethane	ND		1.00	ug/L	1	12/18/2012 19:52
Dibromochloromethane	ND		1.00	ug/L	1	12/18/2012 19:52
Dibromomethane	ND		1.00	ug/L	1	12/18/2012 19:52

Results of Trip Blank (not on COC)

Client Sample ID: **Trip Blank (not on COC)**
 Client Project ID: **NCDOT U-3315**
 Lab Sample ID: 31204011030-A
 Lab Project ID: 31204011

Collection Date: 12/11/2012 00:00
 Received Date: 12/15/2012 09:15
 Matrix: Water

Results by SW-846 8260B

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Dichlorodifluoromethane	ND		5.00	ug/L	1	12/18/2012 19:52
cis-1,3-Dichloropropene	ND		1.00	ug/L	1	12/18/2012 19:52
trans-1,3-Dichloropropene	ND		1.00	ug/L	1	12/18/2012 19:52
Diisopropyl Ether	ND		1.00	ug/L	1	12/18/2012 19:52
Ethyl Benzene	ND		1.00	ug/L	1	12/18/2012 19:52
Hexachlorobutadiene	ND		1.00	ug/L	1	12/18/2012 19:52
Isopropylbenzene (Cumene)	ND		1.00	ug/L	1	12/18/2012 19:52
Methyl iodide	ND		1.00	ug/L	1	12/18/2012 19:52
Methylene chloride	ND		5.00	ug/L	1	12/18/2012 19:52
Naphthalene	ND		1.00	ug/L	1	12/18/2012 19:52
Styrene	ND		1.00	ug/L	1	12/18/2012 19:52
Tetrachloroethene	ND		1.00	ug/L	1	12/18/2012 19:52
Toluene	ND		1.00	ug/L	1	12/18/2012 19:52
Trichloroethene	ND		1.00	ug/L	1	12/18/2012 19:52
Trichlorofluoromethane	ND		1.00	ug/L	1	12/18/2012 19:52
Vinyl chloride	ND		1.00	ug/L	1	12/18/2012 19:52
Xylene (total)	ND		2.00	ug/L	1	12/18/2012 19:52
cis-1,2-Dichloroethene	ND		1.00	ug/L	1	12/18/2012 19:52
m,p-Xylene	ND		2.00	ug/L	1	12/18/2012 19:52
n-Propylbenzene	ND		1.00	ug/L	1	12/18/2012 19:52
o-Xylene	ND		1.00	ug/L	1	12/18/2012 19:52
sec-Butylbenzene	ND		1.00	ug/L	1	12/18/2012 19:52
tert-Butyl methyl ether (MTBE)	ND		1.00	ug/L	1	12/18/2012 19:52
tert-Butylbenzene	ND		1.00	ug/L	1	12/18/2012 19:52
trans-1,2-Dichloroethene	ND		1.00	ug/L	1	12/18/2012 19:52
trans-1,4-Dichloro-2-butene	ND		5.00	ug/L	1	12/18/2012 19:52

Surrogates

1,2-Dichloroethane-d4	110		64.0-140	%	1	12/18/2012 19:52
4-Bromofluorobenzene	94.0		85.0-115	%	1	12/18/2012 19:52
Toluene d8	107		82.0-117	%	1	12/18/2012 19:52

Batch Information

Analytical Batch: **VMS2785**
 Analytical Method: **SW-846 8260B**
 Instrument: **MSD8**
 Analyst: **BWS**

Prep Batch: **VXX4445**
 Prep Method: **SW-846 5030B**
 Prep Date/Time: **12/18/2012 08:40**
 Prep Initial Wt./Vol.: **40 mL**
 Prep Extract Vol: **40 mL**



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1 CLIENT: <u>CARDNO ATC</u> <u>NCDET</u> <u>0-3315</u>		SGS Reference: <u>31204011</u>		PAGE <u>1</u> OF <u>3</u>
CONTACT: <u>JUSTIN W BRYAN</u> PHONE NO <u>(919) 871-0999</u>		SAMPLE TYPE: <u>NO</u>		Preservatives Used: <u>DRG</u> Analysis Required: <u>(3)</u>
PROJECT: <u>SITE/PWSID#:</u>		C= COMP G= GRAB		
REPORTS TO:		CONTAINERS: <u>3</u>		REMARKS
INVOICE TO:		QUOTE #:		
P.O. NUMBER:		MATRIX: <u>S</u>		
LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	
	<u>SB57-1 (0-2.5)</u>	<u>12/11/12</u>	<u>1355</u>	
	<u>SB57-2 (0-2.5)</u>		<u>1430</u>	
	<u>SB57-3 (0-2.5)</u>		<u>1450</u>	
	<u>SB57-4 (0-2.5)</u>		<u>1525</u>	
	<u>SB57-5 (0-2.5)</u>		<u>1550</u>	
	<u>SB57-6 (6-8)</u>		<u>1620</u>	
	<u>SB57-7 (6-8)</u>	<u>12/12/12</u>	<u>0815</u>	
	<u>SB57-8 (6-8)</u>		<u>0835</u>	
	<u>SB57-9 (6-8)</u>		<u>0900</u>	
	<u>SB57-10 (5-6)</u>		<u>0920</u>	
5 Collected/Relinquished By: (1) <u>[Signature]</u>		Date: <u>12/11/12</u>	Time: <u>1200</u>	Received By: <u>[Signature]</u>
Relinquished By: (2) <u>[Signature]</u>		Date: <u>12/11/12</u>	Time: <u>1345</u>	Received By:
Relinquished By: (3)		Date:	Time:	Received By:
Relinquished By: (4)		Date: <u>12/15/12</u>	Time: <u>0915</u>	Received By: <u>Boulouk Hayer</u>
Shipping Carrier: <u>FedEx</u>		Shipping Ticket No:		Samples Received Cold? (Circle) <u>YES</u> , NO
Special Deliverable Requirements:		Special Instructions:		Temperature °C: <u>1.9, 2.3</u>
Chain of Custody Seal: (Circle) <u>ABSENT</u>		Requested Turnaround Time: <u>RUSH</u> <u>1/31/13</u>		Chain of Custody Seal: (Circle) <u>INTACT</u> , <u>BROKEN</u>

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

White - Retained by Lab
 Pink - Retained by Client



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1 CLIENT: NOOT USSIS PHONE NO. () SITE/PWSID# : FAX NO. () QUOTE # : P.O. NUMBER :

CONTACT: PROJECT: REPORTS TO: INVOICE TO:

SGS Reference: 31204011 PAGE 2 OF 3

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	CONTAINERS			REMARKS
					No	C= COMP	G= GRAB	
	TW54-1 (0-2.5)	12/12/12	1000	S	7	G		
	TW52-1 (2.5-5)		1030		7			
	SB54-1 (2.5-5)		1235		3			
	SB54-2 (0-2.5)		1305		3			
	SB54-3 (0-2.5)		1320		3			
	SB54-4 (0-2.5)		1350		3			
	SB53-1 (0-2.5)		1410		6			
	SB53-3 (0-2.5)		1520		6			
	SB53-4 (0-2.5)		1550		6			
	SB53-5 (2.5-5)	12/13/12	0810		7			

2

3

4

5

Shipping Carrier: FedEx Samples Received Cold? (Circled) YES NO

Shipping Ticket No. 19,2.3. Temperature °C: 19,2.3.

Special Deliverable Requirements: Chain of Custody Seal: (Circle) ABSENT

Special Instructions: INTACT BROKEN

Requested Turnaround Time: RUSH Date Needed: 12/15/12

Collected/Relinquished By: (1) [Signature] Received By: [Signature]

Relinquished By: (2) [Signature] Received By: Balena Blayn

Relinquished By: (3) Received By:

Relinquished By: (4) Received By:



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1 CLIENT: McDuff U-3315 PHONE NO.:() SITE/PWSID#: FAX NO.:() QUOTE #: P.O. NUMBER:

2

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	No CONTAINERS	SAMPLE TYPE	C= COMP	G= GRAB	Preservatives Used	Analysis Required	REMARKS
	SB53-2 (2.5-5)	12/13/12	0900	S	6	G			X	X	
	TW 54-1	12/12/12	1625	GW	5	G			X	X	
	TW 52-1	12/12/12	1645	GW	5	G			X	X	
	SB53-6(0-2.5)	12/13/12	0928	S	7	G			X	X	
	SB53-7(0-2.5)	12/13/12	0950	S	7	G			X	X	
	SB53-8(6-8)	12/13/12	1017	S	7	G			X	X	
	SB53-9(2.5-5)	12/13/12	1039	S	7	G			X	X	
	SB52-1(0-2.5)	12/13/12	1215	S	3	G			X	X	
	SB52-2(0-2.5)	12/13/12	1235	S	3	G			X	X	

3

SGS Reference: 31204011 PAGE 3 OF 3

4

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

Shipping Ticket No.: 1923 Temperature C: 1.9, 2.3

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

Special Instructions:

Requested Turnaround Time: RUSH ASTD Date Needed

5

Collected/Relinquished By: (1) W. King Received By: W. King Time: 1200 Date: 12/11/12

Relinquished By: (2) W. King Received By: W. King Time: 1345 Date: 12/14/12

Relinquished By: (3) Received By: Time: Date:

Relinquished By: (4) Boulana Hagen Received By: Boulana Hagen Time: 0915 Date: 12/15/12

SGS North America Inc.

Sample Receipt Checklist (SRC)

Client: NCDOT - ATC Work Order No.: 31204011

1. Shipped
 Hand Delivered
2. COC Present on Receipt
 No COC
 Additional Transmittal Forms
3. Custody Tape on Container
 No Custody Tape
4. Samples Intact
 Samples Broken / Leaking
5. Chilled on Receipt Actual Temp.(s) in °C: 2.4
 Ambient on Receipt
 Walk-in on Ice; Coming down to temp.
 Received Outside of Temperature Specifications
6. Sufficient Sample Submitted
 Insufficient Sample Submitted
7. Chlorine absent
 HNO3 < 2
 HCL < 2
 Additional Preservatives verified (see notes)
8. Received Within Holding Time
 Not Received Within Holding Time
9. No Discrepancies Noted
 Discrepancies Noted
 NCDENR notified of Discrepancies*
10. No Headspace present in VOC vials
 Headspace present in VOC vials >6mm

Notes: _____

Comments: Lid cracked on sample SB53-4 (0-2.5) replaced in lab

Inspected and Logged in by: JJ
Date: Mon-12/17/12 00:00

APPENDIX E
VOLUMETRIC CALCULATIONS

parcel_52-53-54-57_volume_130124

** Parcels 52, 53, 54, and 57 **
**

AREA #1 - SB57-5

CONTAMINATED SOILS:
706.86 Sq. Ft. x 2.5 Ft. depth = 1767.15 C. Ft. = 65.45 Cubic Yards

NO CUT DUE TO CONSTRUCTION

AREA #2 - TW54-1

CONTAMINATED SOILS:
706.86 Sq. Ft. x 2.5 Ft. depth = 1767.15 C. Ft. = 65.45 Cubic Yards

CUT DUE TO CONSTRUCTION:
706.86 Sq. Ft. x 0.9 Ft. depth = 636.17 C. Ft. = 23.56 Cubic Yards

Note: THE 65.45 CY INCLUDES THE 23.56 CY

AREA #3 - SB54-2

CONTAMINATED SOILS:
645.56 Sq. Ft. x 2.5 Ft. depth = 1613.90 C. Ft. = 59.77 Cubic Yards

CUT DUE TO CONSTRUCTION:
334.19 Sq. Ft. x 0.3 Ft. depth = 100.26 C. Ft. = 3.71 Cubic Yards

Note: THE 59.77 CY INCLUDES THE 3.71 CY

AREA #4 - SB53-1, 2, 3, 5, 6, 7 AND TW52-1

DOWN TO 2.5' DEPTH
4996.31 Sq. Ft. x 2.5 Ft. depth = 12490.78 C. Ft. = 462.62 Cubic Yards

CUT DUE TO CONSTRUCTION:
4996.31 Sq. Ft. x 1.4 Ft. depth = 6994.83 C. Ft. = 259.07 Cubic Yards

Note: THE 462.62 CY INCLUDES THE 259.07 CY

ADDITIONAL DOWN TO 5.0' DEPTH FOR SB53-2 AND SB53-5
1361.46 Sq. Ft. x 2.5 Ft. depth = 3403.65 C. Ft. = 126.06 Cubic Yards

ADDITIONAL DOWN TO 5.0' DEPTH FOR TW52-1
706.86 Sq. Ft. x 2.5 Ft. depth = 1767.15 C. Ft. = 65.45 Cubic Yards

EXTRA DEPTH FOR 36" STORM PIPE CONSTRUCTION (WIDTH OF PIPE=3.67')
PIPE IS APPROXIMATELY 6' DEEP

parcel_52-53-54-57_volume_130124

EXTRA DEPTH THROUGH 2.5' DEEP AREA = 6' - 2.5' = 3.5'

TOTAL PIPE LENGTH THROUGH 2.5' AREA = 51.3'

(Pipe Length) x (Pipe Width) x (Extra Depth) = Extra Vol. for pipe construction

51.3' X 3.67' X 3.5' = 658.95 Sq. Ft. = 24.40 Cubic Yards

EXTRA DEPTH THROUGH 5.0' DEEP AREA = 6' - 5' = 1.0'

TOTAL PIPE LENGTH THROUGH 5.0' AREA = 67.0'

67.0' X 3.67' X 1.0' = 245.89 Sq. Ft. = 9.11 Cubic Yards

PIPE VOLUME IN CONTAMINATED SOILS

2.5' DEPTH AREA:

51.3' X 3.67' X 2.5' = 470.68 Sq. Ft. = 17.43 Cubic Yards

5.0' DEPTH AREA:

67.0' X 3.67' X 5.0' = 1229.45 Sq. Ft. = 45.54 Cubic Yards

PIPE VOLUME INCLUDED IN CONSTRUCTION CUT

(44.5' + 37.0') x 3.67' x 1.4' = 418.75 Sq. Ft. = 15.51 Cubic Yards

ESTIMATED TOTAL VOLUME OF IMPACTED SOIL

ATC's calculations assume the following:

- impacted soil does not extend beyond the "Estimated Extent of Impacted Soil" depicted on this figure
- impacted soil does not extend beyond the eastern property boundary as defined by a building foundation
- impacted soil does not extend more than 15 feet radially from TW54-1 and SB57-5
- a radius of 15 feet and depth of 2.5 feet below ground surface were used to calculate volumes for TW54-1 and SB57-5
- calculations were made based on a cylindrical volume ($V = h\pi r^2$)
- the remaining calculations were made based on the area of the "Estimated Extent of Impacted Soil" multiplied by the estimated depth of impacted soil

Estimated Extent of Impacted Soil

ESTIMATED TOTAL VOLUME OF IMPACTED SOIL TO BE HANDLED DURING PROPOSED CONSTRUCTION

ATC's calculations assume the following:

- impacted soil does not extend beyond the "Estimated Extent of Impacted Soil" depicted on this figure
- depths were estimated using known ground surface elevations as well as proposed drainage construction details such as size and elevation, and/or cut depths, and/or proposed utility easements
- calculations were made in MicroStation using GEOPAK

